

**Panama: 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 Data Module for Panama was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on October 16, 2006. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Panama 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 (DQAF) are also included.

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PANAMA

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

Prepared by the Statistics Department

Approved by Lucie Laliberté and Guy M. Meredith

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

The 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 Controller General of the Republic of Panama (CG), Ministry of Economy and Finance (MEF), and Superintendency of Banks of Panama (SBP).

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

CG: <http://www.contraloria.gob.pa>
MEF: <http://www.mef.gob.pa>
SBP: <http://www.superbancos.gob.pa>

This report is based on information provided prior to and during a staff mission that took place during February 7–23, 2006, and publicly available information. The mission team comprised Messrs. Anthony Pellechio (Head), Antonio Galicia-Escotto, José Carlos Moreno, and Ms. Lisbeth Rivas (all STA), Messrs. Federico Dorin and Héctor Hernández (Experts), and Mrs. Lady Rodriguez (STA-Senior Administrative Assistant).

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ACRONYMS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
<i>BPM5</i>	<i>Balance of Payments Statistics Manual, fifth edition</i>
CFZ	Colón Free Zone
CG	Controller General of the Republic of Panama
COFOG	Classification of Functions of Government
COICOP	Classification of Individual Consumption by Purpose
CPC	Central Product Classification
CPI	Consumer Price Index
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
DSC	Directory of Statistics and Census
FISIM	Financial intermediation services indirectly measured
GDDS	General Data Dissemination System
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics, 1986</i>
HIES	National Household Income and Expenditure Survey
IIP	International Investment Position
ISIC	National Standard Industrial Classification of All Economic Activities (National version of the ISIC)
MEF	Ministry of Economy and Finance
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
NFPS	Nonfinancial Public Sector
NSIS	National Statistics Institute of Spain
NSS	National Statistics System
NSSD	National Strategy for Statistical Development
PCA	Panama Canal Authority
PPI	Producer Price Index
ROSC	Report on the Observance of Standards and Codes
SBP	Superintendency of Banks of Panama
WPI	Wholesale Price Index

I. OVERALL ASSESSMENT

1. The data module of the Report on the Observance of Standards and Codes (ROSC) describes a statistical system established by a legal framework that generally provides the necessary authority for the collection and compilation of statistics. Panama has a well-developed macroeconomic statistical system and the government recognizes the importance of good statistics for policy and investment decisions. Although the legal framework assigns responsibility for providing socio-economic statistics to the Controller General of the Republic of Panama (CG), the scope of these statistics is not specified. In practice, the CG compiles and disseminates national accounts, consumer price index (CPI), fiscal, and external statistics. The MEF compiles and disseminates fiscal statistics. Given Panama's long history of dollarization and absence of a central bank, there is no assignment of responsibility for compiling and disseminating a complete set of monetary statistics. Instead, the Superintendency of Banks of Panama (SBP) provides banking sector statistics in line with its functions. Consequently, statistical practices for some elements of the DQAF do not apply to this sector (Box 1). Opportunities exist for improving the methodological basis and source data for most datasets. The CG faces resource limitations that at times compromise the standards of the statistics they compile. All statistical agencies are committed to further statistical progress by promoting implementation of the National Strategy for Statistical Development (NSSD).

Box 1. Panama: DQAF Assessment in the Absence of a Central Bank

Panama has a long history as a fully dollarized economy without a central bank. The Superintendency of Banks is the official agency designated by law, in its supervisory role for banks, to compile and disseminate banking sector statistics. These statistics do not conform to the methodology in the *Monetary and Financial Statistics Manual (MFSM)*. Panamanian law does not assign responsibility to any agency to disseminate monetary statistics, which have a broader coverage and different analytical approach than banking sector statistics¹. In Panama's case, it is not possible to apply the following elements of the DQAF for monetary statistics:

- internationally accepted concepts and definitions for monetary statistics, such as net foreign assets, net credit to the government, broad money, etc.;
- classification of financial instruments and sectorization by counterparty; and
- reconciliation by users with other statistical methodologies and data sources, although banking sector data are broadly consistent.

2. Panama has participated in the GDDS since December 2000. Its metadata are regularly updated on the Dissemination Standards Bulletin Board (DSBB). Panama's metadata are compared to the GDDS coverage, periodicity, and timeliness of data (Appendix). Panama meets GDDS standards for all core real sector categories, except for recommended extensions such as the producer price index (PPI). Panama exceeds GDDS recommendations in regard to: GDP estimates and the CPI, in that quarterly GDP estimates

¹ Monetary statistics focus on defining measures of liquidity, such as broad money, and credit and debt aggregates by institutional sectors of an economy while banking sector statistics focus on financial supervision.

at constant prices are compiled and the timeliness of the CPI is only 15 days; public debt data, which are disseminated on a monthly basis; and balance of payments (BOP) and international investment position (IIP), which are disseminated on a quarterly basis.

3. The remainder of this section presents the mission's main conclusions, applying the IMF's Data Quality Assessment Framework (DQAF), July 2003 version. The presentation is in the context of the DQAF's quality dimensions, by agency for the first two dimensions and across datasets for the remaining four. Section II provides a summary assessment by dataset based on a four-point scale and by agency and dataset in a tabular format based on the DQAF. Staff recommendations follow in Section III. The authorities' response to this report and detailed assessments by sectors are presented in separate documents.

4. **Prerequisites of quality and assurances of integrity**

- The **CG** operates under a legal framework assigning clear responsibility for compiling and disseminating socio-economic statistics, without specifying scope. The law includes provisions for ensuring timely submission from data reporters, but the nominal amounts of penalties are outdated. The confidentiality of reporters' responses is established by law. The CG has achieved de facto independence based on its long tradition of professionalism and has fostered adherence to ethical standards. Staff are well trained and highly professional. While computing equipment and software in some areas are adequate, staff, transportation resources and office facilities are not. Salaries are not competitive in the public administration. Staff performance is evaluated, with criteria for salary increases and bonuses that are difficult to meet. In some areas of the Directory of Statistics and Census (DSC), under the umbrella of the CG, almost half of the staff works on a contractual basis, which presents the risk of loss of experience in collecting, processing, and compiling statistics, potentially affecting quality. Budget resources are not fully sufficient for conducting surveys, most seriously for the CPI and BOP. Subject to resource limitations, data sources and methodologies are selected based on statistical considerations. The CG is committed to open communication with users and providing service, meeting their needs by responding to requests for data and metadata. In the framework of the NSSD, five seminars with users and two surveys, one for data producers and another for users, were conducted in 2005 for consulting them and identifying new data requirements, as well as establish relationships among data producers. Users' committees are usually established when a new survey is conducted. An inter-institutional committee on national accounts meets periodically. As international best practice recommends, government agencies do not have any privileges over the public in access to data. Appropriate quality management processes are in place, but the monitoring of financial needs is not done regularly.
- The **MEF** has authority to manage information related to its legal responsibility for managing public finances and public debt. The MEF collaborates with the CG and shares data as needed to produce consistent fiscal statistics. The confidentiality of data sources is protected by various legal provisions, including the statistics laws. Staff size is adequate, with compensation above the salary level of other public entities. Staff are trained throughout their employment and oriented to meet

professional standards and produce quality work, but programs for evaluating staff performance and measuring and improving the quality of work are lacking. Computing and office resources are of very high quality. While there is no established procedure for identifying the needs of users, their suggestions on the format for disseminating relevant fiscal statistics are incorporated. Production of statistics is legally protected from political interference.

- The **SBP** is the official agency compiling and disseminating banking sector statistics. The SBP collaborates with the CG and MEF, and international agencies, including the Fund, in providing analytically useful data for macroeconomic analysis. Staff size is adequate and salaries are competitive. Staff are expected to meet high standards for professional and ethical behavior, and have guidelines outlining correct behavior when confronted with potential conflict of interest. Computing equipment and software are up to date and appropriate. The SBP does not have regular formal consultation with private users on data needs. SBP's independence is supported by law. Information is provided transparently and free of charge, without prior access for government agencies.

5. **Methodologies** for compiling macroeconomic statistics broadly conform with internationally accepted standards, specifically, the *System of National Accounts 1993 (1993 SNA)*, *Consumer Price Index Manual, 2004 (CPI 2004)*, and the fifth edition of the *Balance of Payments Manual (BPM5)*. However, some shortcomings exist. Quarterly GDP estimates, introduced in 2005 at constant prices beginning in 1996, apply outdated input/output ratios from 1996. CPI coverage falls short of international standard practices, for example, by excluding certain types of households (rural, one-person, lowest and highest deciles of the income distribution). Some methodological issues exist regarding the treatment of missing prices and quality adjustments. The MEF follows *A Manual on Government Finance Statistics, 1986 (GFSM 1986)*. The CG adjusts data provided by MEF to present fiscal statistics on a mixed cash and accrual basis. There is no official commitment to implement a plan to migrate to *Government Finance Statistics Manual 2001 (GFSM 2001)*. Nonfinancial public sector (NFPS) statistics are disseminated excluding the Panama Canal Authority (PCA) and using only financing data for institutions not in the sample of non-budgetary institutions. The concepts and definition for monetary statistics are not applicable to banking sector statistics disseminated by the SBP, although the scope and basis for recording are broadly consistent with the *MFSM*. Methodological shortcomings in BOP statistics include recording on a cash basis of interest on external public debt and not excluding resident holdings, and not compiling FDI abroad. The basis for recording in all datasets could come closer to internationally accepted methodological guidelines.

6. **Accuracy and reliability** are broadly adequate, with improvement needed in most datasets. Banking sector statistics were rated the highest in this dimension. Statistical surveys in the main sectors are conducted on a timely basis. Shortcomings in national accounts, the CPI, and balance of payments statistics are partly attributable to insufficient budget resources for conducting surveys. As a result of periodic shortfalls, price data are not always collected on the same date every month. The base year of 1996 for constant price estimates of GDP is outdated. The 2001 business register for conducting national accounts surveys is updated only with new enterprises, but does not exclude enterprises that have gone out of business.

The household income and expenditure survey is conducted every 10 years. Discrepancies between GDP estimates based on the production and expenditure approaches can not be investigated as some expenditure components are not derived independently. Surveys for BOP statistics are incomplete, not providing data on some private sector services and financial transactions, such as direct investment abroad. Problems with source data from the free trade zones compromise the adequacy of trade statistics. Processes for assessment and validation of source data are needed. With the exception of major revisions for the national accounts and CPI, regular revision studies are not conducted.

7. **Serviceability** of published macroeconomic statistics is satisfactory. The GDDS recommendations for periodicity and timeliness are met and, as mentioned, exceeded for GDP, the CPI, public debt, BOP, and IIP statistics. The timeliness of disseminated banking sector statistics should be improved owing to early availability of source data. Statistics within datasets are consistent, but some discrepancies exist across datasets, for which explanatory notes are not always provided. Revision studies when conducted are not made public, except for the CPI.

8. **Accessibility** of macroeconomic statistics is good, as they are released to all users on a preannounced schedule, except for GFS flows disseminated by the MEF and banking sector statistics. Summary metadata for all sectors are available in the GDDS, but detailed methodology is only available for national accounts, CPI, and BOP. Prompt and knowledgeable service and support are provided to users. Unpublished non-confidential data are generally made available on request from users, but such availability is not publicized.

9. To expand the basis for the assessment, the mission conducted a user survey and held meetings with users to ascertain their views. Overall, users found macroeconomic statistics accurate and reliable, and statistics agencies professional and helpful in providing data. They were satisfied with access to statistics, making about equal use of official websites, printed copies, and e-mail correspondence. Generally users, especially in private industry and the financial sector, would appreciate greater periodicity and timeliness in dissemination of data. Some noted a need for improvement in the consistency of statistics, including adjustment of historical fiscal series when methodological changes are introduced. Users noted areas for improvement in all datasets. Specifically, they indicated a need for better adherence to calendars for the release and revision of data, with a need for improvement in revision policy for fiscal statistics. Despite this shortcoming, they gave credit to statistical agencies, especially the CG, for providing additional breakdowns and explaining revisions on request.

II. ASSESSMENT BY AGENCY AND DATASET

10. 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 DQAF, July 2003. In this section, the results are presented at the level of the DQAF elements and using a four-level rating scale (Table 1). Assessments of the prerequisites of data quality and the assurances of integrity (Dimensions “0” and “1” of the DQAF) for the CG, MEF, and SBP are presented in Tables 2a–c, respectively. For each dataset, the assessments of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions “2” to “5” of the DQAF) are shown in Tables 3a–e.

Table 1. Panama: Data Quality Assessment Framework²—Summary Results

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

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. **Not applicable:** used only exceptionally when statistical practices do not apply to a country's circumstances.

² July 2003 version.

Table 2a. Panama: Assessment of Data Quality—Dimensions 0 and 1—Controller General of the Republic of Panama

<p>0. Prerequisites of quality</p> <p>Legal and institutional environment. Article 280 of the 1972 Constitution and the Presidential Decrees 7 and 194 of 1960 and 1997, respectively, and the Law 32 of 1984 assign the task to the CG to compile and disseminate national statistics in Panama. To fulfill its mandate, the CG, through the DSC, conducts and coordinates economic and social statistical activities in general, and is authorized to request data from public and private entities. The legal framework assigns responsibilities for the compilation of socio-economic statistics. Although the scope of these statistics is not clearly specified, the CG compiles and disseminates real, fiscal, and external sector statistics. In accordance with the Presidential Decree 7, the CG guarantees the confidentiality of the data used, and establishes sanctions on reporters for noncompliance, although the sanctions have become outdated. The CG and the rest of agencies of the National Statistics System (NSS) are promoting implementation of the NSSD aimed at reinforcing the NSS, standardizing statistics in the Central American region, and improving management among national agencies, in the framework of PARIS21.</p> <p>Resources. Although a core staff with adequate experience and training is maintained for compiling statistics, financial resources are insufficient for conducting surveys related to GDP, CPI, and BOP and updating computing resources. Heavy reliance on temporary employees in some areas of the DSC and insufficient transportation equipment and staff in regional offices pose a potential risk to the timeliness of quarterly GDP, CPI, and BOP. Work space and access to the Internet and direct phone lines in some DSC units are limited. Budget execution and resource needs are not monitored regularly.</p> <p>Relevance was investigated in 2005 through seminars and surveys to data producers and users. Information on specific needs is sought by informal contacts with users and data providers as well as by monitoring the electronic mailbox on the CG website and data requests. Users are kept informed on the current work programs through the website and publications, which include press releases and advance release calendars. Some statistical units in the DSC create users' committees when new surveys are to be conducted. An inter-institutional committee on national accounts meets periodically.</p> <p>Other quality management is reflected in the CG's five-year strategic planning system and annual work programs developed by each statistical unit. There is need for formal processes and routines for quality control.</p>	<p>1. Assurances of integrity</p> <p>Professionalism is ensured by a range of measures. The Law of the CG gives technical independence and autonomy to its staff. The Law also ensures that CG management is supportive of professionalism through recruitment criteria that focus on relevant academic skills. Staff involved in compiling statistics in CG are given opportunities to enhance their professionalism through participation in external courses and on-the-job training. No external agencies may interfere with the compilation and dissemination of data produced. Subject to resource limitations, only statistical considerations are taken into account when choosing data sources and statistical techniques, as well as making decisions on disseminating data.</p> <p>Transparency. Electronic publications make reference to the NSSD. The "Road Map," which mainly describes the work plan for developing the NSS, is available on the CG website. Although there is public access to the legal framework for the compilation and dissemination of data, this information is not posted on the CG website. Government agencies do not have pre-release access to the data. Some publications do not identify where additional information on the CG and its publications can be found. There is no pre-announced notification to users on changes in data and methodologies.</p> <p>Ethical standards. The behavior of the CG staff is governed by the Code of Ethics of Public Servants and by the CG's By-Laws, which cover conflict of interest, outside employment, and disciplinary actions among others. Ethics is one of the Ten Commandments in the CG that are publicized widely. New staff and current staff are periodically reminded about the importance of observance of ethics to achieve institutional excellence.</p>
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Table 2b. Panama: Assessment of Data Quality—Dimensions 0 and 1—Ministry of Economy and Finance

1. Assurances of integrity	0. Prerequisites of quality
<p>Professionalism. There is a strong culture of professionalism and independence in the statistical work, which is supported by the Transparency Law and the Code of Ethics of Public Servants. Within resource limitations, only statistical criteria govern the decisions on collection, compilation and dissemination. The units in charge of the production of statistics monitor possible errors in interpretation by users. These units provide advice and offer statements to correct misinterpretation in a timely manner.</p> <p>Transparency. The legal standards that regulate the collection, compilation, and dissemination of statistical information appear on the MEF website. However, the specific articles or sections that support the production of statistics are not identified. Statistical information is delivered simultaneously to all interested parties, including the authorities from the executive and legislative branches. All statistical products clearly identify the producing unit, correctly allocating the responsibility and ownership in joint publications. The use of figures is constantly monitored. Minor methodological changes introduced to date have been reported in the publications where they were incorporated. No important methodological changes have been introduced in the past few years.</p> <p>Ethical standards. The Transparency Law and the Code of Ethics of Public Servants establish clear standards that protect the production of statistics in the presence of any type of political interference. These laws also contain regulations to guard against conflict of interest. There is a strong organizational culture of respect towards professional independence and probity in the production of statistics, which favors the application of the legal standards.</p>	<p>Legal and institutional environment. The laws give the MEF the mandate to produce government finance statistics. However, the Constitution gives the CG responsibility for the national statistics system. The MEF and CG cooperate to produce fiscal statistics, supported by legal regulations. Meetings are held with respondents and users to facilitate collection of source data and to improve the understanding and use of the published records. The Presidential Decree 7 of 1960 and the Transparency Law ensure the respondents complete confidentiality. Access to source data generation systems is direct and free flowing.</p> <p>Resources. Staff are adequate for the production of GFS and compensation is better than average wages in public administration. There is no staff assessment system in place. The physical equipment, including computers, is of excellent quality, although access to the Internet is limited. Financial resources are sufficient to support fully statistical production. There is no system in place for monitoring and, therefore, enhancing the efficient use of resources.</p> <p>Relevance. Staff participate in workshops and seminars on the production of GFS relevant to users. A specific procedure established by the Transparency Law is available to meet the requirements of the users, whose suggestions or comments are included in the dissemination forms when relevant.</p> <p>Other quality management. There is awareness regarding the importance of quality, although there is no specific improvement program or system for quality measurement. Compiling units assume the initiative in view of the lack of an institutional policy. Assessments of annual processes are performed, focusing on only one issue at a time. No progress has been made on implementing the recommendations of the 2004 GFS mission, which included adoption of a <i>GF-SM 2001</i> migration plan, expansion of the institutional sample, full cash flow compilation for all institutions, and review of procedures for data collection improvement.</p>

Table 2c. Panama: Assessment of Data Quality—Dimensions 0 and 1—Superintendency of Banks of Panama

<p>0. Prerequisites of quality</p> <p>Legal and institutional environment. The SBP is the official agency collecting, compiling, and disseminating banking sector statistics. The legal basis for the compilation and dissemination of monetary statistics, which have a broader coverage and different analytical approach than banking sector statistics, is not clearly assigned to the SBP or any other official agency.</p> <p>Even though the responsibility for compiling monetary statistics is not clearly assigned to the SBP by law, this agency collaborates with international organizations, such as the IMF, in providing data that are analytically useful for macroeconomic analysis. However, these data are not published in national sources following the framework and methodology of international statistical standards, such as the <i>MFSM</i> or the <i>1993 SNA</i>.</p> <p>Resources. The number of employees involved in the compilation of monthly and quarterly statistics is adequate, and salaries are competitive compared to other public and private institutions. Compilers use modern personal computers and adequate software. Financial resources are broadly adequate to support the current programs for compiling statistics. However, the workspace is less than adequate to facilitate the efficient compilation of statistics.</p> <p>Relevance. In addition to feedback from internal users, obtained through an annual evaluation of the statistical products, the SBP conducts periodic meetings (once a year) and regular telephone contacts with the staff of the CG and MEF to improve the quality and timeliness of the specific reports required by them. However, the SBP does not have a proactive policy of regularly consulting private sector users.</p> <p>Other quality management. To improve staff productivity, achieve excellence, and guarantee user satisfaction through the highest quality of its services, the SBP holds an annual meeting, with participation of all staff. The Economic Studies Department carries out detailed analyses of the quality of the data processed every quarter.</p>	<p>1. Assurances of integrity</p> <p>Professionalism. The statutory provisions under which the SBP compiles banking sector statistics are adequate to support its independence. In this regard, the choice, tenure, and reporting arrangements of the Superintendent are supportive of the professional independence of the SBP. The Superintendent's tenure (five years according to Article 11 of the Decree-Law No. 9 of 1998 on the Banking Regime and on the Superintendency of Banks (DL-9)) does not coincide with that of current government. The Directors' tenure is eight years (Article 9). Qualifications and other requirements for hiring the Superintendent and Directors are also regulated in Articles 10 and 8, respectively; conflict of interest is addressed in Article 12. Removal of Superintendent and Directors is addressed in Articles 14 and 15.</p> <p>The SBP comments on errors of interpretation and misuse of statistics when necessary.</p> <p>Transparency. The DL-9, which is available on the SBP website, contains the terms and conditions under which statistics are collected, processed, and disseminated. Chapter VIII of the DL-9 on "documents and reports" deals with aspects of banking sector reporting requirements, describing the types of information that the SBP is entitled to request from the banks and disclose to the public. All information produced by the SBP is disseminated free of charge.</p> <p>No government official outside the SBP has regular access to banking sector statistics prior to their release on the Web. Major changes on banking sector statistics are not always pre-announced.</p> <p>Ethical standards. There are clear guidelines outlining correct behavior when the staff is confronted with potential conflict of interest situations. In addition to Article 12 of the DL-9 regulating conflict of interests of the Superintendent and directors, the Working Internal Regulation No. 14-98 of August 27, 1998 describes the rights and obligations of the SBP staff (Chapter 7). The regulation is made known to the staff when they join the Institution. This regulation also includes sanctions for misconduct in Chapter 9.</p>
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Table 3a. Panama: 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. National accounts are compiled broadly in accordance with the <i>1993 SNA</i>.</p> <p>Scope. The <i>1993 SNA</i> tables and accounts that the ISWGNA specifies as minimum requirements are compiled on a regular basis. Quarterly GDP is compiled at constant prices. The Colón Free Zone (CFZ) is included as part of the economy. Delimitation of production and assets boundaries are in line with the <i>1993 SNA</i>, with some minor exceptions.</p> <p>Classification/sectorization. The national classification systems of activities and products have a strong correspondence with ISIC Rev. 3 and CPC, respectively. COFOG is used to classify government expenditure by functions and the COICOP is applied for households' final consumption by purpose.</p> <p>Basis for recording. Although recording broadly accords with the accrual and valuation principles of the <i>1993 SNA</i>, some government transactions and external transactions are recorded on a cash basis. Surveys do not clarify that the valuation of output and sales should exclude taxes and subsidies on products, and intermediate consumption should exclude deductible VAT. Work in-progress is recorded in the period it is produced. Transactions between establishments are not recorded on a gross basis.</p>	<p>Source data are based on data from census, surveys, and administrative records. Surveys provide adequate data for production accounts. The 2001 business register is updated only with new enterprises, but does not exclude enterprises that have gone out of business. HIES is conducted every 10 years instead of five years. The household survey is only conducted during August. PPI is partially compiled (in some cases prices include sales taxes and margins). Export and import price indexes are being developed.</p> <p>Assessment of source data. Outliers are confirmed with respondents and corrected. Information on sampling and non-sampling errors for surveys is unavailable.</p> <p>Statistical techniques. The base year is outdated (1996). An estimate of non-observed activities is included. Output estimates are compiled at 3 or 4-digit ISIC level. Proper procedures are not followed for compiling output volume measures (deflated by WPI) and taxes/subsidies on products (deflated by CPI). Household final consumption expenditure is not derived independently.</p> <p>Assessment and validation of intermediate data and statistical outputs. The supply and use framework is not used to investigate discrepancies and make the statistical outputs consistent. Statistical discrepancies are assumed to be part of expenditure on GDP.</p> <p>Revision studies on annual estimates are not prepared, except for changes in the base year.</p>	<p>Periodicity and timeliness exceed GDDS recommendations.</p> <p>Consistency. A reconciliation framework (supply and use tables) is lacking (except in the base year). Discrepancies between the supply and expenditure approaches are adjusted as part of the final household consumption expenditure estimates, because supply sources are considered more reliable than those on the expenditure side. National accounts statistics are generally consistent with the balance of payments (BOP) statistics, except in the case of an adjustment for the underrecording of exports made by the companies of the CFZ and exports of financial services indirectly measured (FISIM); BOP statistics do not include these operations and national accounts do. The coverage of the public sector in the national accounts is more comprehensive than that of the fiscal statistics.</p> <p>Revision policy and practice. The revision cycle follows a regular schedule and is made known to the public. The change of base year does not follow a regular schedule. Only analysis and causes of major revisions are made public.</p>	<p>Data accessibility. National accounts are published in hard copy and on the website, http://www.contraloria.gob.pa. Longer series, more detail, and unpublished data are available upon request. Household final consumption is published only at aggregate level. Dissemination media is not adequate for users (PDF instead Excel).</p> <p>Metadata accessibility. Detailed methodology is available on the CG website. GDDS metadata is updated regularly (December 2005).</p> <p>Assistance to users. Some statistical publications do not provide the address, phone number or e-mail of specific individuals who may be contacted for enquiries. A catalogue of publications and documents is available to users. Prompt and knowledgeable service and support on the national accounts data are available to users through the Center of Statistical Information (CSI) and key personnel are listed in the national accounts methodology. Assistance to users is monitored through data requests. The CG By-Law establishes that all inquiries should be attended within seven business days.</p>

Table 3b. Panama: 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 for detailed analysis of price movements.</p> <p>Scope. CPI weights only cover urban households. No account is taken of one-person households, nor of households in the lowest and highest deciles of the income distribution. Imputed rent of owner-occupied housing and own-account production of market goods for own final consumption are excluded, which deviates from international standard practices.</p> <p>Classification/sectorization. CPI is classified using the Panamanian version of the COICOP, with departures from the standard COICOP (e.g., tobacco, alcoholic beverages, communications, hotels, and restaurants are not classified in corresponding groups).</p> <p>Basis for recording. Prices and weights are recorded using market or transaction values including discounts only if they are applied for more than a month. Durable items such as automobiles were not recorded on a net basis in the 1997–98 HIES.</p>	<p>Source data are broadly adequate. The sampling frame for the 1997–98 HIES was the 1990 population census, with an adjustment based on updated maps. Only urban areas with 1,500 inhabitants or more were covered. HIESs have been conducted every 10 years instead of every five years. There is a plan to conduct a HIES in 2007–08. A good practice is that purchases in all markets are reflected in CPI weights. Price data are not always collected on the same date every month and during the last week of the month.</p> <p>Assessment of source data. The share of consumption expenditure not covered by the index is more than 40 percent. Validation includes routine checks for extreme values, consistency, and incompleteness. Non-sampling errors are not calculated.</p> <p>Statistical techniques. The use of the geometric mean for price changes is a sound practice. Nonetheless, it is only used for heterogeneous products. Previous price data are imputed for missing prices introducing a possible bias in the index. Changes in product specifications are introduced, but changes in quality are not excluded. New products are introduced only when a major revision is carried out. The current weight reference and price reference periods are not the same.</p> <p>Assessment and validation of intermediate data and outputs. CPI is compared with the WPI. Price data are validated with those from ministries and other surveys.</p> <p>Revision studies. A study on the last major revision (October 2002=100) was carried out. Monthly CPI data are final, but revised in event of errors. Notes on price data adjustments are not stored in the database. Weights are not periodically assessed for bias.</p>	<p>Periodicity and timeliness. Price collection is daily during the first three weeks of the month. The monthly CPI is published 15 days following the reference month, exceeding GDDS standards.</p> <p>Consistency. The CPI is internally consistent by category of expenditure and geographical area. Continuous historical series for Panama and San Miguelito, with October 2002 as the reference base, are available. These data were linked to the previous series that had 1987 as reference base. The CPI is consistent with the price deflator of private final consumption of the national accounts and the WPI.</p> <p>Revision policy and practice. CPI data are considered final. The change in the price reference base does not follow a well-established schedule.</p>	<p>Data accessibility. An executive summary on the CPI, which contains an analysis of current trends that facilitate dissemination in the media, is posted on the CG website and sent to a list of permanent users. Comprehensive statistics are available monthly on the CG website and in a hard-copy publication disseminated quarterly. Although the publication format meets standards, certain relevant series (food items) are not seasonally adjusted. A hard-copy publication of the new series is being reviewed for publication. Time series can be accessed through the CG library and in the publication <i>Panama en Cifras</i>. Unpublished non-confidential data are available to users upon request, but the availability of this information is not publicized. The 2006 dissemination calendar is available on the CG website.</p> <p>Metadata accessibility. Detailed information on CPI methodology is available on the CG website. Metadata have been prepared in the context of GDDS participation. Complete metadata on the 1997–98 HIES have not been published.</p> <p>Assistance to users. Prompt service is available through the CG's Center of Statistical Information and its library. A catalogue of publications is available to users. The CG website has an e-mail address for inquiries. However, contact points are not publicized in all publications. The CG, jointly with the Ministry of Education, are working to develop a program for promoting a statistical culture.</p>

Table 3c. Panama: 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. Presentation of GFS follows the <i>GFSM 1986</i> recommendations. There is no plan to migrate to <i>GFSM 2001</i>.</p> <p>Scope. GFS disseminated by the MEF cover the NFPS, but full, consolidated revenue and expenditure breakdowns are not available. The PCA is not included. Debt statistics are complete. The CG disseminates GFS flows, which are consolidated for the NFPS; no breakdown of transfers is given which allows for consolidations for the general government and the central government.</p> <p>Classification/sectorization. Public debt statistics follow the <i>GFSM 1986</i>. The distinction between external and internal debt is determined on the basis of the place where debt was issued. GFS flow data of the MEF do not show breakdowns of income and expenditure for all NFPS institutions. The GFS should exclude two financial institutions.</p> <p>Basis for recording. The <i>GFSM 1986</i> recommendations are followed. Exceptions are expenditure data for the CG, which are registered on a commitment basis, and MEF interest expenditures, which include capitalized interests on Inter-American Development Bank loans.</p>	<p>Source data. The source data for NFPS are complete; they are appropriately available and permit the execution of consolidations necessary to compile the different levels of government. The declaration forms are corrected when an error is detected.</p> <p>Assessment of source data. Source data are not periodically assessed. Revisions occur to correct errors or inconsistencies.</p> <p>Statistical techniques. Procedures applied by the MEF follow <i>GFSM 1986</i>. However, the data adjustment and transformation procedures do not include sufficient information on the structure of revenue and expenditure within the NFPS.</p> <p>Assessment and validation of intermediate data and statistical outputs. Regular reconciliation processes are carried out between MEF and CG. Discrepancies are corrected. Any adjustments usually correspond to the replacement of preliminary data for revised data. No intermediate data revisions are made.</p> <p>Revision studies. No data revision studies are carried out by either the MEF or CG. Any detected error is corrected and notes are included in the process sheets in order to report on the used criteria and avoid repeating the error.</p>	<p>Periodicity and timeliness. The MEF and CG meet GDDS recommendations for periodicity and timeliness. Public debt data prepared by the MEF exceed the GDDS recommendations as they are published every month with a lag of less than one month.</p> <p>Consistency. Detailed data compiled by the MEF and CG are consistent with aggregated data presented in the summary tables. Flow data statistics and balances can be reconciled. There is consistency with other statistics because GFS data are used as a source for Balance of Payments and National Accounts. There is no formal reconciliation process with banking statistics. Historical series are not corrected when methodological changes are introduced.</p> <p>Revision policy and practice. There is no revision program for results; this is only done when an error is detected or to replace preliminary for revised data. The preliminary or revised status of the data is clearly identified. The users have access to methodological notes included in the published tables, but there is no systematized process for revisions.</p>	<p>Data accessibility. Statistics are disseminated by the MEF on its website and through press conferences. The information is delivered to all interested parties at the same time. The available data are clear; however, they are not available in spreadsheet form, with the exception of monthly public debt data. No historical database is directly available for users. More detailed information can be obtained by request.</p> <p>Metadata accessibility. There are no documents regarding methodological aspects of the compiled series. The GDDS is continuously updated, but there is no link from the MEF or CG websites. The publications have added detailed information about certain topics and additional information may be requested, but its availability is not advertised.</p> <p>Assistance to users. The MEF and CG offer general points of contact that works well and users receive responses within a short period of time. There are legal regulations for requesting and obtaining historical information. Flow information is disseminated within the sections of different MEF units; no information is given on its existence or on how to access it.</p>

Table 3d. Panama: 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. The framework, concepts, and definitions for monetary statistics are not applicable to the statistics on the banking sector disseminated by the SBP. The balance sheet of banks under a general license (those that may conduct financial operations with residents and nonresidents) is the closest account to a depository corporations survey recommended by international statistical standards.</p> <p>Scope. The scope of the data is broadly consistent with the guidelines of the <i>MFSM</i>. Finance companies and saving and credit cooperatives are not covered in the banking sector statistics. However, the relative importance of the institutions not covered is very small.</p> <p>Classification/sectorization. The classification of financial instruments and sectorization systems used for monetary statistics are not applicable to the statistics on the banking sector disseminated by the SBP.</p> <p>Basis for recording is broadly consistent with the <i>MFSM</i>. Market prices are used when possible. Accrual accounting is largely applied, although some interest arrears are recorded off balance sheet. Grossing and netting procedures follow largely the <i>MFSM</i>, although a consolidated statement of the banking sector is not disseminated.</p>	<p>Source data. Source data provide sufficient detail to identify financial instruments and counterpart sectors, and reasonably approximate the definitions, valuation, and time of recording recommended in the <i>MFSM</i>. Although financial derivatives and insurance technical reserves cannot be identified, their relative importance is small. Source data are timely.</p> <p>Assessment of source data. Assessment of source data is sound. Balance sheets are routinely reviewed and banks consulted for clarification when unusual data movements are detected.</p> <p>Statistical techniques. Statistical techniques are generally sound. For the most part the compilation process is automated and electronic compilation procedures minimize compilation errors.</p> <p>Assessment and validation of intermediate data and statistical outputs are conducted routinely. Monthly information is validated against more detailed quarterly data when they are received.</p> <p>Revision studies. Banking sector statistics are not subject to formal revision cycles in the statistical sense as data are deemed final when first released.</p>	<p>Periodicity and timeliness meet recommendations of the GDDS. However, timeliness of disseminated statistics could improve (from two months to one month) as prompt source data are available.</p> <p>Consistency. Monetary statistics are consistent within the dataset and over time. Even if data are consistent over time, with historical series beginning in 1970, no data on the banking sector are readily available in electronic form before 1998. Banking statistics are not reconcilable with other sectoral statistics because their analytical framework does not correspond to monetary analysis.</p> <p>Revision policy and practice. A revisions policy for banking sector statistics is not needed because preliminary data do not exist. The compiler only publishes the data that have been already validated and approved by the corresponding department in the SBP, which is final.</p>	<p>Data accessibility. Presentation of disseminated statistics is generally clear and meaningful. Data are disseminated in PDF format, not in spreadsheets. Although there is no pre-announced release schedule, data are disseminated on the SBP website at regular intervals (monthly and quarterly). Owing to occasional longer than usual delays in the dissemination of the data, some users in the public sector have obtained data (as inputs to their own publications and analysis) before their dissemination. Users can obtain unpublished data on request, although this possibility is not publicized.</p> <p>Metadata accessibility. Methodological notes on banking sector statistics are not available, although the banking law available in the SBP webpage contains descriptions on classification of loans, securities, capital adequacy and other topics.</p> <p>Assistance to users. Assistance to users is provided on request in a timely manner (less than three days) through a contact point available on the SBP website. Catalogues of publications are not needed because the SBP only publishes data on its website.</p>

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

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions. The CG complies the balance of payments statistics in broad conformity with the guidelines of <i>BPM5</i>, with the important exception that holdings by residents of government bonds issued abroad are not excluded from the financial account.</p> <p>Scope. Coverage of the free trade zone is insufficient due to unrecorded transactions between free trade zone enterprises. Unrecorded trade is not compiled. Recording of some private sector activities is incomplete such as construction, professional, and merchanting services, as well as compensation of employees and direct investment abroad.</p> <p>Classification/sectorization are broadly in line with <i>BPM5</i> guidelines. Both analytic and standard presentations of the balance of payments and IIP are available in quarterly and annual publications of the DSC.</p> <p>Basis for recording is mixed. The principle of market valuation is generally used. External debt is recorded at face value when issued, but adjusted to market value when redeemed. Recording is mostly done on an accrual basis; however, interest on external public debt are recorded when paid.</p>	<p>Source data. The composition of data sources (surveys and administrative records) is adequate, although it does not cover some private sector services and financial transactions. Difficulties in source data from the free trade zone do not ensure adequate trade estimates.</p> <p>Assessment of source data. Accuracy of data from surveys is routinely assessed to monitor sampling and non-sampling errors. A range of comprehensive checks for internal consistency are conducted and routine queries are made when large transactions take place.</p> <p>Statistical techniques. Compilation procedures for surveys and administrative records are sound and, in general, consistent with international practices. Reconciliation of quarterly and annual data is done through simple procedures. No comprehensive estimates of border transactions and smuggling are made.</p> <p>Assessment and validation of intermediate data and statistical outputs. Intermediate results are validated only when extreme values are observed. Cross-checks verifications are insufficient with other administrative records available from government agencies.</p> <p>Revision studies. Internal records are kept, but no formal analysis of revisions and their magnitude are conducted.</p>	<p>Periodicity and timeliness of balance of payments and international investment position statistics exceed recommendations of GDDS.</p> <p>Consistency. Data are consistent within the dataset and over a reasonable period of time. Financial transactions are reconciled with changes in the international investment position. Statistics are reconcilable with other statistical sectors, although there are no explanatory notes addressing discrepancies.</p> <p>Revision policy and practice. The revision cycle for balance of payments and international investment position follows a regular schedule, but it is not made known to the public. Users are informed when data are preliminary or revised. No formal analysis of revisions are made public.</p>	<p>Data accessibility. Data access is provided through the CG website and in hard-copy publications. Statistics are released on a pre-announced schedule through a press release at the beginning of the year. The statistics are made available to all users at the same time. No specific reference is made in CG publications to the availability of unpublished sub-aggregates, even though these are available on request.</p> <p>Metadata accessibility. Metadata on balance of payments are available in biannual reports. CG website lacks this information. Working papers or other specialized studies are not disseminated.</p> <p>Assistance to users. Prompt and knowledgeable service and support are available to the users through the Integrated Correspondence System in DSC. CG's By-Laws regulate that a response to the user should be drafted within seven working days of receipt of the request.</p>

III. STAFF'S RECOMMENDATIONS

11. The staff has recommendations based on the review of Panama's statistical practices, discussions with the data producing agencies, and responses from data users. The broad aim is to increase further Panama's adherence to internationally accepted statistical practices and, in the staff's view, enhance the analytical usefulness of Panama's statistics. In each category below, recommendations are listed from higher to lower priority. Some additional technical suggestions are included in the detailed assessments volume.

Cross-cutting Recommendations

- Proceed with the amendment to the Law of the CG aimed at creating the National Institute of Statistics, strengthening institutional and financial independence of the DSC, reinforcing the legal basis for the compilation and dissemination of macroeconomic data, and increasing sanctions for non-response to surveys. These sanctions should be adjusted annually using the inflation rate.
- Provide sufficient budgetary, human, and information technology resources to the DSC to ensure the production of essential source data and improve quality in all areas of macroeconomic statistics.
- Publish the main articles of the legal framework on obligatory reporting, confidentiality, and sanctions for noncompliance on the CG website.
- Assign to a government agency responsibility for compiling and disseminating monetary and financial statistics, with a macroeconomic approach and comprehensive coverage, that is, including all relevant institutions in the Panamanian financial sector, on at least an annual basis.
- Make widely available an explicit statistical revisions policy, identifying which data have been revised significantly and describing the data revision procedures employed. Give advance notice of changes in methodology, source data, and statistical techniques employed to produce macroeconomic statistics and meet with potential users of the statistics and conduct users' surveys regularly.
- Improve the efficiency of institutional mechanisms of coordination among agencies producing statistics in the context of the NSSD. Conduct periodic reviews of staff in the MEF and SBP.

National Accounts

- Implement annual supply and use framework to investigate discrepancies and improve consistency.
- Update the base year and establish a schedule for regular updating, preferably every five years.
- Adjust prices in the valuation of the sales in censuses and surveys for the tax on the transference of goods and services (TTGS) and other relevant taxes and subsidies. Use purchasers' prices adjusted for the TTGS in the valuation of purchases of inputs and nonfinancial assets.

- Taxes and subsidies on products at constant prices should be estimated by applying base year tax and subsidy rates or by extrapolating base year taxes and subsidies.
- Record in national accounts the produced assets transferred by the rest of the world to the Inter-Oceanic Region of Panama as fixed capital formation, imports, and a capital transfer in the period of transfer.
- Conduct a quarterly household survey with national coverage regularly.

Consumer Price Indices

- Allocate needed human resources and computer and transportation equipment to the Price and Standard of Living Section (PSLS) and the regional offices of the CG for conducting price investigations and CPI compilation.
- Collect price data during all four weeks of the month and on the same date for each item and informant. For items' prices that are collected quarterly, distribute the sample across the quarter.
- Apply the standard COICOP to classify the CPI, especially in the case of tobacco, alcoholic beverages, communications, restaurants, and hotels. Include net purchases of vehicles and second-hand durable goods in the CPI weights. Apply the price geometric mean to all items in the CPI.
- Closely monitor markets to identify the need to incorporate new products and quality changes in the CPI and improve price imputation methods for missing prices. Use results from the standard of living survey to update CPI weights.
- Provide publications on the CPI methodology and series and on the 1997–98 HIES's methodology. Include notes on data adjustments in the CPI data base.
- Study the inclusion of estimated rentals of owner-occupied dwellings and goods produced for own final consumption in CPI weights, using information on these items available in the 1997–98 HIES. Study the gains in accuracy that could be derived from information on rural household consumption expenditure in the 2007–08 HIES.
- Conduct the 2007–08 HIES as planned to update CPI weights and include expenditures of all households in the income distribution. This survey and update should be conducted every five years.

Government Finance Statistics

- Implement recommendations of the 2004 GFS technical assistance mission, which included adoption of a *GFSM 2001* migration plan, expansion of the institutional sample, full cash flow compilation for all institutions, and review of procedures for data collection improvement.
- Exclude two financial institutions from general government and classify them as public financial corporations.
- Adapt the functional expenditure classification format to *GFSM 1986*.

- Prepare and publish documents on methodology that explain the criteria and techniques for collection and compilation of government finance statistics. Produce detailed consolidated revenue and expenditure statistics to the extent data are available to the MEF. Adjust historical fiscal series to the extent practicable when methodological changes are introduced.
- Release a calendar of publications for government finance statistics prepared by the MEF.
- Increase the sample of institutions, ideally compiling full information on income, expenditure, and financing for all decentralized institutions, municipalities, and non-financial public enterprises.
- Improve coordination between the MEF and CG regarding the production of government finance statistics and avoid duplication of effort.

Monetary Statistics

- Although meeting the GDDS standard, the timeliness of disseminated banking sector statistics (aggregated data) should be improved from two months to one month given the very early availability of source data and users' request for more timely data.
- Make available to users historical series on banking sector statistics from 1970.
- Establish formal mechanisms for consulting private sector users to identify new data requirements.
- Avoid the release, under any circumstance, of unpublished data to users before official dissemination on the SBP webpage.
- Prepare and disseminate methodological notes describing the characteristics of the financial sector in Panama and disseminated data, particularly when concepts and definitions differ from international accounting standards.
- Revise the reporting requirements and chart of accounts for banks to include the identification and sectorization of financial derivatives and insurance reserves, and distinguish depository corporations and other financial corporations in the sectorization of the accounts (currently banks and other).

Balance of Payments Statistics

- Improve the scope of data sources for compiling construction, communication, professional and merchanting services, as well as compensation of employees and direct investment abroad.
- Improve quality and timeliness of transactions data from the free trade zone, including goods procured in ports.
- Compile public external debt data on an accrual basis.
- Develop a methodology to include unrecorded trade in the balance of payments.
- Standardize metadata in both electronic and hard-copy publications and make them available on a continuous basis.

Table 4. Panama: Practices Compared to the GDDS Coverage, Periodicity, and Timeliness of Data

GDDS Data Category	Coverage (meets GDDS)	Periodicity		Timeliness	
		GDDS	Panama	GDDS	Panama
COMPREHENSIVE FRAMEWORK					
Real sector: National Accounts	Y	A	A	10–14 months	Pre. 7M, Final 21M
Fiscal sector: Central govt. operations	Y	A	Q, A	6–9 months	Q:45D-2M,
General govt. operations	Y	A	Q, A	6–9 months	A:2M
Central govt. debt	Y	A	Ext.Debt: M, Q Dom.Debt: Q	6–9 months	M:21D, Q:30D
Financial sector: Depository Corporations Survey	N	M	N/A	2–3 months	N/A
External sector: Balance of payments	Y	A	Q, A	6–9 months	45-90D
IIP	Y	A	Q, A	6–9 months	45-90D
DATA CATEGORIES AND INDICATORS					
Real Sector					
National accounts aggregates:					
GDP (nominal and real)	Y	A (Q)	A	6–9 months	Real est. 60 D
Gross national income, capital formation, saving	Y	A	A	6–9 months	Pre. 7M, Final 21M
Production index/indices					
Manufacturing or industrial production index/indices	Y	M	Q	6–12 weeks	75D
Primary commodity, agricultural, or other indices, as relevant	Y	As relevant	M	6–12 weeks	52D
Price indices:^{1/}					
Consumer price index	Y	M	M	1–2 months	15D
WPI for agriculture ^{2/}	Y	M	M, Q	1–2 months	30D, 90D
WPI for manufacturing ^{2/}	Y	M	M, Q ^{3/}	1–2 months	30D, 90D
Labor market indicators:					
Employment	Y	A	Q	6–9 months	Pre:3W;Finl 8M
Unemployment	Y	A	A	6–9 months	3W; 8M
Wages/earnings (all sectors)	Y	A	A	6–9 months	7M
Fiscal Sector					
Central government aggregates:					
Central govt. budgetary aggregates: revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency)	Y	Q	Q, A	1 quarter	Q:45D-2M A:2M
Interest payments	Y	Q	Q, A	1 quarter	Q:45D-2M; A:2M
Central government debt:					
Central govt. debt: domestic and foreign debt, as relevant, with appropriate breakdowns (debt holder, instrument, currency)	Y	A (Q)	Ext.Debt: M, Q; Dom: Q	1–2 quarters	M:21D Q:30D
Government guaranteed debt	N	A (Q)	N/A	1–2 quarters	N/A
Financial Sector					
Broad money and credit aggregates	Y	M	M, Q	1–3 months	M:2M;Q:2M
Central bank (National Bank of Panama) aggregates	Y	M	M, Q	1–2 months	M:2M;Q:2M
Interest rates:					
Short- and long-term govt. security rates, policy variable rate	Y	M	M	^{4/}	2M
Money or interbank market rates and a range of deposit and lending rates	Y	M	M	^{4/}	2M
Stock market:					
Share price index, as relevant	Y	M	D	^{4/}	Same Day
External Sector					
Balance of payments aggregates	Y	A (Q)	Q, A	6 months	45-90D
International investment positions	NA	NA	Q, A	NA	45-90 D
Public and publicly guaranteed external debt outstanding, with maturity breakdown	N	Q	N/A	1–2 quarters	N/A
Public and publicly guaranteed debt service schedule	N	6 M	N/A	3–6 months	N/A
Private external debt not publicly guaranteed	N	A	N/A	6–9 months	N/A
International reserves:					
Gross official reserves denominated in U.S. dollars	Y	M	Q	1–4 months	49–90 D
Reserve-related liabilities	N	M	N/A	1–4 months	N/A
Merchandise trade:					
Total exports and total imports	Y	M	M, Q, A	8 wks–3 months	3M
Major commodity breakdowns with longer time lapse	Y	M	M, Q, A	8 wks–3 months	3M
Exchange rates: spot rates	N	Daily	N/A	^{4/}	N/A

Italics indicate encouraged categories.

^{1/} Assessment of labor market indicators is not included in the scope of a ROSC mission.

^{2/} The WPI for agriculture and manufacturing are included in a WPI disseminated on a quarterly basis.

^{3/} The WPI for manufacturing is compiled monthly, but disseminated quarterly.

^{4/} Dissemination as part of a high-frequency (e.g., monthly) publication.

INTERNATIONAL MONETARY FUND

PANAMA

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

October 16, 2006

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I. CONTROLLER GENERAL OF THE REPUBLIC OF PANAMA

A. Introduction

1. The Directory of Statistics and Census (DSC) of the Office of the Controller General of the Republic of Panama is constitutionally responsible for “compiling and directing the national statistics” and thanks the International Monetary Fund (IMF) for its comments on the quality of the Panamanian statistics, so that it can make all the improvements required to provide users with the most useful information.

2. For a faster response, and to ensure that it is based on the proper interpretation, it is recommended that documents translated into Spanish be used when our institution is requested to comment on future reports.

B. Comments on the Quality of the Economic Statistics System

3. Since 2004, the DSC has been conducting a program entitled National Strategy for Statistical Development (NSSD) at the regional level (Central America), aimed at the full integration, efficiency and functionality of the National Statistics System (NSS), and which would make it possible to benefit from work and generate new sources of useful data for the macroeconomic statistics. Since 1997, there have been strategic plans for each administrative unit of the DSC, including its mission and vision, and a National Statistics Plan with budget lines for ongoing improvement of statistics as a national system.

4. Efforts are being made to consolidate the DSC as an institute with greater autonomy and an updated organizational structure. To that end, a detailed study is being conducted internally with the chiefs on the description of the processes used to obtain each data series produced, the aim being to detect any missing or redundant processes. A preliminary draft modernizing the law on national statistics, including penalties and other issues, was developed and submitted to the Executive. We hope it will soon be sent to the National Assembly. There are also rules that guarantee the confidentiality of the data, the obligation to report, as well as ethical requirements of public servants.

5. Our country is making efforts and has allocated resources of its own and from international technical assistance to improving statistics—with the support of consultants hired to cover the most important issues—and to training experts at home and abroad. It is also working to meet its commitments under the data dissemination rules recommended by the IMF timetable. For this reason, the data are disseminated to the general public in accordance with an advance release calendar, which is strictly followed. They are also accessible via the Internet and there is transparency in the methodologies. In addition, meetings are held to share data through committees comprising producers of statistics, users, and data providers.

6. Although it has been possible to provide most staff with computer equipment and technical support is available from computer experts, there is a need for updates and for hardware at external data sources of administrative records in various institutions, a need that

has been detected by the National Strategy for Statistical Development (NSSD) There are limitations on logistical resources, mainly the transportation needed to mobilize technical personnel compiling statistical data.

7. Regarding the methodological aspects, updates are performed and the international standards recommended in *1993 SNA* and the *BPM5* and *GFSM 2001* manuals are being gradually incorporated.

C. Improvement in Basic National Accounts and Balance of Payments Statistics

8. With respect to macroeconomic source data, efforts are being made to improve surveys, beginning with the current review and updating of the Statistical Directory of Businesses and Sites. The design and content of questionnaires was also revised to meet national accounts and balance of payments needs.

9. The Household Income and Expenditure Survey will be conducted in 2007 to provide updated data on patterns and levels of household consumption. The recommendations of the ROSC report are being considered in this regard, to increase the periodicity of such statistics and to provide data on private final consumption more frequently than every 10 years.

10. Starting this year, the National Household Income and Expenditure Survey (HIES) on employment is conducted twice a year in March and in August, using the multipurpose survey approach in March, which includes modules for researching other useful data. The August HIES is designed to examine manpower only.

11. From this year on, the Quarterly Construction Census will be carried out in the urban areas of Panama City and San Miguelito, based on horizontal cooperation with the National Administrative Department of Statistics (DANE) of Colombia. The aim is to properly monitor the real progress of construction work in the most impacted areas of the capital.

12. A joint effort is being conducted with the Colon Free Zone (CFZ) Administration to improve the quality and timeliness of the data.

13. We have succeeded in implementing quarterly integrated indices of manufacturing industry (value, volume and price), which are better than the previous volume-only indices. The local (non-free zone) foreign trade indices are also being consolidated (value, volume and unit value), and the CFZ indices will follow, with international assistance. A consultancy in producer price indices (PPI) is planned for this year.

D. National Accounts

14. The National Accounts (NA) are prepared with the methodologies recommended on the basis of the progressive implementation of the 1993 SNA, with the support of consultants recommended by ECLAC. Progress has been made in changing the current base year 1996, obtaining a Supply and Use Tables (SUT) for goods and services, improving the source data, quarterly GDP, the monthly index of economic activity (MIEA), making progress with the

satellite accounts (tourism and environment), regional GDP, and breakdowns of some of the accounts by institutional sector.

15. Regarding the ROSC comments on the prerequisites of quality, there will be an increase in the penalties for failure to report data based on the new preliminary draft of the statistics law.

16. Work is being done on correcting, updating and reorganizing the contents of the DSC webpage and mechanisms are being put in place for improving the systems for consulting data online.

17. With respect to improvements in the responses to the economic surveys, a targeted consultancy took place in April of this year, which succeeded in improving the capture of data on production, excluding taxes and other adjusted variables.

18. The work on satellite accounts on tourism is advancing, in compliance with the interinstitutional agreement with the Panamanian Tourism Institute (IPAT), with the conduct of surveys on incoming and outgoing tourism. The DSC is carrying out a survey of domestic tourism (ETI), which will be used to feed data into the system, in addition to broadening the analytical base. Furthermore, the interinstitutional agreement with the National Environmental Authority (ANAM) is making progress towards the establishment of satellite accounts on the environment.

19. Jointly with the Ministry of Economy and Finance (MEF), we are also moving towards having the first complete regional (provincial) GDP series, which will enhance analysis and contribute to the follow-up of special studies, as well as increasing the sources for reference and calculation of the national accounts.

20. DANE provided an international consultant for the estimation of quarterly GDP on the demand side. This work is progressing and should be published in 2007. There are plans to continue producing quarterly GDP at current prices.

21. In the present series (base 1996), only an SUT was prepared for the base year. After the studies initiated on the basis of the NA consultancy last April to change the base to a more recent year, there are plans to produce an SUT and balances for each year at current and constant prices, which will provide more consistency in the series. There are also plans to conduct surveys to monitor private final consumption. The central frame of reference for the SNA was also completed with the integrated institutional sectors table. Other proposed studies are of trade margins and outlets, transport, downstream studies, studies of changes in stocks, administrative concessions, improvements in the allocation of Financial Intermediation Services Indirectly Measured (FISIM), permanent inventory, and chained indices.

22. A consultant will be available by August to improve the presentation of the website and its access by users. Since last May, printed bulletins have included the list of direct

contacts for publications. Future publications will be posted on the Internet. Existing metadata published by the IMF will also be posted on the DSC portal.

E. Balance of Payments

23. Balance of Payments Statistics have been published since 1998 in accordance with the Fifth edition of the IMF Balance of Payments Manual (*BPM5*), with the support of consultants recommended by the IMF and the use of other related methodologies. Since then, important changes have been made in data coverage and sources, which are reflected in the annual and quarterly publications of the balance of payments. Our website also shows the International Investment Position.

24. Further to the ROSC comments on methodological soundness, investments of residents in Panama are being excluded from these statistics starting this year. In order to make this change, the new form of the Coordinated Portfolio Investment Survey (CPIS), which contains the breakdown of investments by financial corporations at December 31, 2005, was revised and implemented. The data from 2001-2005 obtained through this survey will be included for the first time in the Balance of Payments and International Investment Position statistics, which will be published in *Panamá en Cifras* this year. There are also plans to include data on the debt of private sector enterprises taken mainly from the information declared by other participating countries in the CPIS, which is available on the IMF website.

25. As regards scope and coverage, we participated in revision and capacity building for the Directory of Businesses, which improved the concepts and definitions of the questions relating to transactions in goods, services, assets and liabilities with the rest of the world. We expect to be able to capture these transactions, especially those regarding enterprises that provide or receive telecommunications and computer services, direct investment from Panama abroad, and professional services, etc.

26. We are also participating in the design and training for the Construction Census, which will be carried out this year. It will capture and include for the first time data related to services provided to or received from nonresidents, as well as foreign direct investment in this activity.

27. Meetings are planned with the staff of the Public Debt Directorate of the Ministry of Economy and Finance to share information on the methodology for recording and requesting details on interest due but not paid on the external debt (government bonds). To date, the balance of payments only records interest that is actually paid.

28. Regarding statistics on trade flows from the Colon Free Zone, we are coordinating with the Foreign Trade Section regarding the existing lag time for that data. It is estimated that the data will become current by October of this year. The Administration of the Colon Free Zone was advised to include the staff needed to prevent such delays in the 2007 budget.

29. We are participating in drawing up a survey of incoming and outgoing tourism, to be conducted in August, with a view to improving the data on expenditure by foreign residents on trips to Panama, as well as spending by Panamanian residents on their trips abroad.

30. A question was included in the Domestic Tourism Survey (ETI) that the DSC is currently conducting, to obtain information on the income received by household members who move to other countries to work for periods of less than one year, and to be able to record the credit side of the item on compensation of employees.

31. There are plans to include the methodology of these statistics on the institution's website next month.

F. Government Finance Statistics

32. Regarding the GFS, the MEF was once again invited, as the authority that manages the SIAFPA (information system that supports government management), to begin the cycle of meetings to coordinate the review of the manuals, standards, compilation methodology, coverage, instructions and other tasks required to implement the 2001 *Government Finance Statistics Manual (GFSM 2001)*. As a priority, the highest government authorities, especially the agencies that manage fiscal information, must be committed to the importance of beginning implementation of *GFSM 2001*.

33. The Office of the Controller General of the Republic (CG) formed an internal working group, which drew up an action plan as part of a work program identifying the required items or points, feasibility and/or deadlines, offices in charge, and resources needed to implement the manual.

34. Two technical staffers recently attended a six-week course on the new IMF *GFSM 2001*. However, a consultancy is considered advisable to expedite and facilitate implementation of *GFSM 2001*.

G. Consumer Price Indices

35. Regarding statistics on price indices, the Prices and Cost of Living Section for the first time calculated the Urban and Other Urban National Consumer Price Index (CPI) with the new base of October 2002. The index has been previously prepared only for the districts of Panama City and San Miguelito.

36. International agencies should agree on their technical recommendations. In this case we have implemented the suggestions of an international consultant that we should exclude from the index weights the spending of households in the lowest and highest ten percentiles; the rents imputed to owner-occupied housing; and home production of market goods for home final consumption.

37. The classifier used for grouping the goods and services in the CPI is the Classification of Individual Consumption by Purpose (COICOP) recommended by the United Nations for

the 1993 System of National Accounts, with some variants based on the reality of our country and for comparability purposes.

38. Work in NSSD is continuing. Working committees with users are to be formed starting 2007.

39. We coordinated with the IT Statistics Services Department and solved the problem of corrections to prices after calculation, as well as that of maintaining a record of the reasons for the changes.

40. The publications now include a list of contact persons, with the names of section heads and the list is sent to users with the most updated information in the office. Work is being done on the accessibility and presentation of the webpage.

41. The households in the top and bottom ten percentiles will be included in the results of the Household Income and Expenditure Survey (EIGH) to be conducted in 2007-08.

42. Offers from the first month are being considered, in particular when a price collector does not have the price for the current month; items in the food and beverages division are estimated using the average of the prices reported by other collectors.

43. The methodology for the HIES is being prepared as is the publication of "Other Urban" data.

II. MINISTRY OF ECONOMY AND FINANCE

44. As indicated by the CG on letter dated July 14, 2006, there is a broad interest to enhance the quality of Panama's statistical information. This interest may be evidenced, among others, by the implementation of the NSSD, adjustments being made to the Fiscal Responsibility Law in connection with transparency, as well as the assignment of a working group at the CG to develop a migration action plan.

45. Even though it has been outlined that "there is no official commitment to implement a plan to migrate to GFSM 2001," it is our strong belief that the actions currently undertaken will create the basis needed to be better prepared for the further migration to GFSM 2001 and the adherence to internationally accepted statistical practices. Moreover the CG publishes documents on methodology that explain the criteria for collection and compilation of national statistics.

46. The remaining recommendations, which included exclusion of two financial institutions from general government, adoption of the functional expenditure classification format of *GFSM 1986*, expansion of the institutional sample and full cash flow compilation for all institutions, could certainly be analyzed from a technical perspective and implemented as long as they are internally authorized.

III. SUPERINTENDENCY OF BANKS OF PANAMA

47. We restate our cooperation on projects related to the banking statistics.
48. The following items are in the Report:
49. The section 4.2 regarding “Consistency” indicates that there is no available data on the banking sector in electronic form before 1998.
50. The section 5.2 regarding “Metadata accessibility” indicates that although the banking law available in the SBP webpage contains descriptions on classification of loans, securities, capital adequacy and other topics, methodological notes on banking sectors statistics are not available.
51. Regarding both items it is important to mention that from April, 2006 and as requested by the International Monetary Fund Consultant, we have published the statistics from the year 1970 up to date on the web page of the Superintendency of Banks. We will also publish a series of methodological notes related to the Account Manual of the Balance Sheet, Income Statement, Credits by economic sectors and Investments by categories and titles.
52. About action plans for future statistical development we are also improving the official Account Manual.

INTERNATIONAL MONETARY FUND

PANAMA

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by Lucie Laliberté and Guy M. Meredith

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

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ACRONYMS

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
CFZ	Colón Free Zone
COFOG	Classification of Functions of the Government
COICOP	Classification of Individual Consumption by Purpose
CPC	Central Product Classification
CPI	Consumer Price Index
DCSS	Department of Computerized Statistical Services
DQAF	Data Quality Assessment Framework
DSC	Directory of Statistics and Census
FISIM	Financial intermediation services indirectly measured
FTS	Foreign Trade Section of the DSC
GDDS	General Data Dissemination System
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual on Government Finance Statistics, 1986</i>
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
GSTT	Goods and Services Transfer Tax (Panama's VAT)
HES	Households and Employment Survey
HIES	National Household Income and Expenditure Survey
IIP	International Investment Position
ISIC	National Standard Industrial Classification of All Economic Activities (National version of the ISIC)
IPCAMMOC	Price index of apparent consumption of construction materials and labor
ITCNA	Interagency Technical Committee on the National Accounts
LSS	Living Standards Survey
MAD	Ministry of Agricultural Development
MEF	Ministry of Economy and Finance
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MIEA	Monthly Index of Economic Activity
NBP	National Bank of Panama
NFPS	Nonfinancial Public Sector
NIS	National Income Section of the CG
NPHC	National Population and Housing Census
NPISH	Nonprofit institutions serving households
NSIS	National Statistics Institute of Spain
NSS	National Statistics System
NSSD	National Strategy for Statistical Development
PCA	Panama Canal Authority
PPI	Producer Price Index
QESOS	Quarterly Employment, Sales and Output Survey
ROSC	Report on the Observance of Standards and Codes
SBP	Superintendency of Banks of Panama
SNB	Survey of Nonfinancial Businesses
SUT	Supply and use tables
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 Panama's 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

Responsibilities for the collection, processing and dissemination of the statistics are identified in the following laws and regulations:

- National Statistics Law of February 25, 1960 (Decree 7 (Article 1));
- the Political Constitution of 1972 (Article 280, Section 1, Chapter 3);
- the Organic Law of the Office of the Comptroller General of the Republic of November 8, 1984 (Law 32, Article 11, Section 11 and Article 53); and
- the Internal Regulations of the Office of the Comptroller General of the Republic of September 16, 1997 (Decree 194, Article 1).

These instruments make the Office of the Comptroller General of the Republic (CG) the agency responsible for “directing and compiling the national statistics.” Article 1 of Decree 7 provides that this task is to be exercised “by means of a body known as the Directory of Statistics and Census” (DSC) and Decree 69 of March 31, 1998 makes the DSC “responsible for directing and shaping the processes inherent to national statistics.”

The process of compiling the national statistics includes:

- (i) “Activities relating to the compilation, preparation, analysis and publication of statistics by any official national or municipal body or autonomous or semiautonomous agency” (Article 2 of Decree 7); and
- (ii) “Processes intended for the collection, preparation, analysis and publication of data relating to facts of national or regional interest that can be quantified, and comparison of the figures relating to them” (Article 53 of Law 32).

Article 22 of Decree 7 provides that the DSC “shall produce such publications as it deems appropriate for the disclosure of everything related to the national statistics” and Article 23 provides that “publications of the Directory of Statistics and Census are official and shall be used in official acts that must be based on statistical data.”

The national accounts have been compiled, processed and disseminated since 1946 by the National Income Section (NIS) of the DSC. However, there is no law specifically assigning this responsibility. There is only reference to keeping the national accounts of the State (Article 11 of Law 32), while Article 15 of Law 7 provides that the CG is to have the following functions: “compile, prepare, analyze and publish such statistics as it deems appropriate for resolving economic and social problems,” from which it may be assumed that the national accounts are included implicitly within its functions.

There are operating mechanisms, both internal and external to the DSC, that guarantee consistency of methods and results. Internal mechanisms cover the full range of procedures, from design and application of surveys to their use in macroeconomic statistics. External mechanisms consist of committees with representatives of the public and private sectors. For the national accounts, the committee is known as the Interagency Technical Committee on the National Accounts (ITCNA).¹

Situations that gave rise to conflict between the DSC’s power to prepare statistics and other legislation (Banking Act) or entities (Regulatory Body for Public Services, ERSP) were resolved through negotiations that gave the DSC access to aggregate data in a manner that prevented individual reporters from being identified.

There is no conflict of interest in the access to tax information.

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

Statistical coordination between the DSC and other public entities is established by Article 54 of Law 32: “In pursuit of its mission, the Office of the Comptroller General shall direct and coordinate the statistics produced by public entities,” and by Article 2 of Law 7 mentioned in section 0.1.1.

¹ This consists of representatives of the MEF, the National University of Panama, the Technological University of Panama, the Chamber of Commerce, the Construction Council, the industrialists’ association, the SPIA group, the stock exchange, INDESA Capital (a private consulting firm) and the Panamanian Association of Business Executives (APEDE). Personnel from the balance of payments, foreign trade and economic indicators sections of the DSC also participate.

The flow of core information is timely and efficient for most surveys prepared by the DSC. The fact that the DSC is part of the CG facilitates access to government accounting information.

The mechanisms for facilitating data sharing include the committees mentioned in section 0.1.1, and they have legal force, since Article 11 (11) of Law 32 grants the CG the power to “create the necessary technical committees to improve the national statistics.” The DSC conducts regular controls of the information received, in order to guarantee efficiency and timeliness.

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

Legislation gives broad protection of the confidentiality of information. Article 12 of Decree 7 and Article 125 of Decree 194 provide that individual data referring to natural or legal persons are “strictly confidential,” and Article 54 of Law 32 provides that “the Comptroller’s Office must maintain the secrecy and confidentiality of the information obtained.”

Statistical secrecy is mentioned in Article 13 of Decree 7, which provides that individual data obtained for producing national statistics “may not be produced in court and may not be used for purposes of tax collection, for judicial investigations, or for any purpose other than those of a statistical nature,” and Article 13 of Law 6 (the Transparency Act of January 22, 2002) provides that “if information of a confidential nature is to be part of judicial proceedings, the competent authorities shall make due provision to maintain the confidentiality of that information, and to restrict it to the parties involved in the process, establishing the grounds for denial, consistent with this law.”

In the circulars that are sent out prior to the surveys, reporters are informed of their rights and obligations with respect to supplying information, and they are told that the information they provide will be used for statistical purposes. The surveys carry a heading with the following wording: “The information requested is confidential (Decree 7 of February 25, 1960).”

It is a legal obligation of CG personnel to respect confidentiality. Article 78 of Decree 194, dealing with “Duties, Rights and Prohibitions of Public Servants of the Office of the Comptroller General,” requires them to “respect the required confidentiality of information relating to their work, as well as confidential administrative matters the disclosure of which could be harmful to the institution.” Article 13 of Law 6 provides that “the information defined by this law as confidential may not be disclosed under any circumstances by agents of the State.”

Legislation provides for penalties to be imposed on personnel who disclose confidential data. Article 14 of Decree 7 provides that “an employee in the service of a statistics office who discloses information deemed confidential shall be dismissed from employment” and “for purposes of this article, individual information will be deemed to have been disclosed if,

through the employee's intentional act or negligence, that information comes to the knowledge of a person other than the employee of a statistics office authorized to have such knowledge by reason of his functions." Article 86 (g) of Decree 194 provides that grounds for dismissal include "disclosure, without prior authorization, of matters relating to the nature of the work performed, as well as administrative matters the disclosure of which would be harmful to the institution." Article 125 stipulates the same conditions for dismissal of employees and definition for disclosure of individual information as cited above for Article 14 of Decree 7.

The confidentiality of information is protected by restricting its access to supervisors of each coordination group, who maintain control over access to the database.

In cases where the universe of reporters consists of fewer than three units "only data corresponding to the aggregated information may be published or provided, except with the written authorization of the reporters." In such cases, "it will be aggregated to a nearby similar category or to the "others" category" (Article 125 of Decree 194).

Before publication, staff examine all data to ensure that confidential information is not indirectly disclosed.

In the case of investigations that require individual records, the DSC will, upon request, process the information and deliver it in aggregated form (for example by activity classification groups), so as not to compromise its confidentiality.

The confidentiality of the data compiled through surveys is protected in an appropriate manner during storage. Reporting forms are stored in the offices of the DSC or in a dedicated warehouse with restricted access. Information in written form is destroyed, by shredding or incineration, after five years.

Access to the CG is subject to strong security measures. An identification card is issued, and there is a security force consisting of around 30 persons located in strategic areas of the CG. Persons not related to the entity are prohibited from entering or remaining on the premises without authorization. Access to databases is restricted by the use of secret keys. The National Computerization Directorate of the CG is responsible for data security and the Department of Computerized Statistical Services (DCSS) of the DSC is responsible for dealing with any problems that may arise in the computer programs.

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

Law 32 gives the CG authority to compile data for the national statistics. Article 54 of that law provides that the CG "shall request information for statistical purposes from public and private entities or persons. Such entities and persons must supply the information so requested." Data collection activities must respect the underlying legal authority, pursuant to Article 1 of Decree 7 of 1960. The reporter has a legal obligation to provide data and there

are sanctions for noncompliance, either through refusal to report or through the reporting of inaccurate data. Reporters' response obligations are regulated by Article 8 of Decree 7, which provides that "all dependencies of the State, legal persons domiciled in Panama or conducting business there, and natural persons within the national territory must provide the data and reports requested for compiling the national statistics, unless those reports are restricted for reasons of national security."

The sanctions are spelled out in Article 9 of that Decree: "Heads of public offices and other persons who fail to supply the data and reports referred to in Article 8, or who deliberately or through extreme negligence provide false information, are liable to a fine of B/ 5-100," and "payment of the fine does not exempt that person from the obligation to provide true reports and data." The amount of the fines has not been updated since 1960 and there is no mechanism for updating it (for example, using the Consumer Price Index (CPI)). For the most part, the fines are not applied in practice.

Careful efforts by the DSC have eliminated the duplication of requests and the excessive reporting burdens that existed until a few years ago.

Survey design takes account of reporters' own terminology and the logical sequence of questions facilitates response. When the survey is not to be completed by a DSC employee, the user is helped to complete the forms, which carry telephone numbers, names and e-mail addresses of persons who can be consulted. The questionnaires are accompanied by notes explaining the purpose of the survey and their importance for the production of national statistics, and the most recent information supplied by the reporter. In some cases, published statistical documents are included so that the reporter can see how the information is used.

0.2 Resources

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

In theory, the NIS has a staff complement of 31 positions, of which 28 are filled and three are vacant. Of those 28 persons, 18 are permanent employees and 10 are on contract. The following table summarizes the human resources of the NIS:

National Income Section	Permanent	Contract	Total
Technical staff with Bachelor's or higher degree	13	10	23
Technical staff with no university degree	4	0	4
Assistants	1	0	1
Total	18	10	28

The staffing level is considered somewhat low for certain tasks, such as updating the base year, balancing annual supply and use tables by product, or producing institutional sector

accounts. Technical staff qualifications are adequate: about 85 percent have a bachelor's degree or higher (Master's or doctorate). A training committee² oversees continuous training for personnel, which is provided in a transparent manner through an annual training program that is available to all staff (see section 1.1.1). In addition, staff receive incentives to seek their own training; the performance appraisal awards 30 percent of the overall score for professional development efforts.

Salaries for permanent staff are not competitive within the public administration as a whole. Contract staff receive remuneration that is 30 percent to 40 percent below that of their permanent staff counterparts in similar positions. The core staff has remained stable in recent years, and the average length of service is 15 years.

The following table shows the staffing complement by years of service:

Years of service	Permanent	Contract	Total
0-5	1	6	7
6-10	3	4	7
11-15	3	0	3
16-20	0	0	0
More than 20	11	0	11
Total	18	10	28
Percentages of total			
0-5	3.6	21.4	25.0
6-10	10.7	14.3	25.0
11-15	10.7	-	10.7
16-20	-	-	-
More than 20	39.3	-	39.3
Total	64.3	35.7	100.0

Task rotation is encouraged within the NIS in order to improve staff motivation.

Computing resources are adequate for compiling and disseminating the national accounts, and they are efficiently distributed based on each person's tasks. The unit has 27 Pentium IV computers³ and two printers. Memory capacity is adequate for handling the databases. There is a general server and a database that affords prompt and secure access. Computer programs for compiling and analyzing statistical series are adequate. However, access to the Internet and open e-mail is limited to senior employees. Computer resources are protected; the DCSS performs daily backups of all data in the national accounts server.

² Headed by the Director of the DSC and including the Coordinator of the Training Office, Department Heads, and Regional Office Heads.

³ Most of these were purchased under an assistance program from the World Bank.

The office has a floor area of 150 m², or an average of 5.4 m² per person, which is inadequate. There is no proper meeting room. Offices are well lit and have air-conditioning. Office furnishings and equipment are adequate for ongoing activities, although they are considered outdated.

Transportation services for data collection are not adequate. The means for performing this task are frequently unavailable. However, the situation is resolved through the issuance of taxi chits for staff travel.

Funding is inadequate to cover all the needs of the statistics program, and the budget is subject to frequent cuts that have an impact on planned activities, in particular, conduct of the surveys. A strategic five-year plan is prepared in coordination with the rest of the DSC, and this facilitates planning of statistical improvements.

0.2.2 Measures to ensure efficient use of resources are implemented

Permanent staff are subject to annual appraisals,⁴ in which performance accounts for 70 percent and professional development for 30 percent. The performance evaluation has four classifications: excellent, good, satisfactory (“regular”), and poor. “Excellent” ratings are not limited to any quota. Appraisal scores are averaged every two years and if they are positive (excellent, good or satisfactory) a biennial salary increase is awarded, based on the employee’s job level and a pre-established pay scale that is public knowledge. However, a good performance rating will not translate into a salary increase if the employee has not taken a professional development course. This factor may constitute a ceiling on salary increases, especially for employees with the highest professional qualifications (Master’s or doctoral degrees). A poor annual appraisal constitutes a warning. In extreme cases, it may be grounds for dismissal. Contract staff are evaluated on the same terms as permanent staff, but the results have no consequences for their pay.

Internal working meetings are held to review the efficiency of work processes. These meetings are mandated by Article 17 of the Internal Regulations of the CG: “Directors, Department Heads and Section Heads must meet with their immediate subordinates at least once a month in order to coordinate and improve their work.” The NIS frequently resorts to international experts to evaluate and implement compilation systems. Recent examples relate to quarterly GDP estimates and the annual accounts (involving in both cases assistance from the United Nations Economic Commission for Latin America and the Caribbean), and the preparation of a computer program for benchmarking and seasonal adjustment of series (with financial assistance from the World Bank). In previous years (1997 and 2001), technical assistance was requested from the IMF.

⁴ Quarterly appraisals are now being considered.

The costs of compiling the statistics can be identified through the annual budget, but they are not regularly assessed, monitored, or 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

Data users are consulted and kept informed on specific aspects of current data through a formal mechanism, the ITCNA, the makeup of which was described in section 0.1.1, and which meets prior to each new census or survey.

The DSC has a wide-ranging mechanism for consultation, follow-up, coordination and improvement of statistics, known as the National Strategy of Statistical Development (NSSD). The NSSD was created in 2003, within the regional framework of Central America,⁵ by the PARIS21 group⁶ and receives funding from the World Bank. The general objective of NSSD in Panama is “to adopt a national strategy among statistics producers, users and partners to develop Panamanian statistics.”⁷ Through NSSD, the DSC has conducted opinion surveys of users and suppliers of statistical information in the public and private sectors.

Mention should also be made of the recently held “Seminar on National Accounts for Users and Suppliers,”⁸ and participation in the annual conferences of the Faculty of Economics of the University of Panama.

NIS staff regularly take part in statistics meetings and seminars organized by international and regional agencies, in particular ECLAC and the National Statistics Institute (NSIS) of Spain.

⁵ Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

⁶ A worldwide consortium of statisticians, users and organizations from various countries interested in developing statistics to improve human welfare.

⁷ “*ENDE Panamá*,” brochure published by the DSC.

⁸ The seminar lasted one week and was held in October 2004 in a hotel.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

Improving the quality of service is one of the principal objectives of the DSC, as confirmed in its Strategic Five-year Plan. The authorities make an effort during the staff seminars to foster an appreciation of the need to evaluate the quality of statistical products using statistical techniques for detecting extreme points and checking the consistency of basic information from the various sources used.

A program to assess quality is not in place. Attempts were made in the past⁹ to establish a Total Quality System, but they have been discontinued. As a positive result of those efforts, working methods are in place for achieving quality. The bodies described above (ITCNA and NSSD) demonstrate the intent of DSC to foster quality.

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

Statistical quality is systematically monitored through the submission of monthly activity reports by the NIS, detailing the work performed, response to users' requests, and the training program. The NIS makes efforts to update its estimation methods: recent examples include updating of the base year and dissemination of quarterly estimates. However, there are no quality monitoring procedures in place to inform management on the quality achieved, for example, using reporters' response rates or editing rates. The NIS has a long tradition of hiring experts to provide advice on statistical quality.

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

Quality issues are considered in planning the statistical program. These include quality improvements identified during ongoing monitoring and in periodic reviews, information on quality standards, and emerging user requirements. These quality improvements constitute one of the objectives of the current Strategic Plan 2005–2009. The NIS considers the trade-off between timeliness and accuracy/reliability of the data, and advises users as to whether the data are estimated, preliminary or revised.

⁹ *Sistema de Calidad Total*, delivered by the IMMECA Group of Mexico, in 1997.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Article 1 of Law 32 guarantees the professional independence of the CG, defining it as “an independent government agency of a technical nature.” Article 4 of Law 7 gives the CG powers that reinforce its professional independence:

- (a) “To request that any statistical research not be undertaken or, once initiated, that it be suspended, or that work on a statistical series should not begin or that, once begun, it should be suspended, when such research or series would result in duplication;
- (b) To request changes in the forms, definitions, classifications and instructions now used or to be used for collecting statistical data;
- (c) To issue an opinion on statistical publications.”

Article 4 also provides that “requests from the Office of the Comptroller General referred to in sections (a) and (b) of this article have mandatory force for the office to which they are addressed,” a provision that eliminates interference by others in the compiling and dissemination of statistical information.

There is no law stipulating the length of tenure of DSC managers, but the mechanisms for appointment and removal are applied in ways that support professional independence. Article 35 of Decree 7 provides that the DSC “shall be headed by an employee to be known as the Director of Statistics and Census, who must be a Panamanian citizen with a background and training in statistics and the capacity to perform executive functions.”

Staff are hired on the basis of profiles established by agreement with the requesting area. Article 22 of Decree 194 provides that “the system for recruitment and selection of internal and external personnel shall take account of personal and professional qualities through an analysis of background (formal and informal education and working experience), psychological and knowledge testing, and interviews, in order to determine aptitudes, traits and knowledge, consistent with the nature of the tasks and the minimum requirements established by the job classification system. The Human Resources Director shall provide a shortlist of the best-qualified candidates to the selection committee for purposes of the final interview. The selection committee shall consist of the Director or a person appointed by the Director, and the human resources analyst.”

Promotions are awarded in accordance with the performance and professional development appraisal (see section 0.2.2). The training committee evaluates and plans training, in the country and abroad, in response to the needs of each unit.

Staff are encouraged to participate in seminars and professional development activities. Members of the NIS attend meetings of national accounts experts organized by ECLAC, as well as regional meetings hosted by the Central American Monetary Council, and courses offered by the NSIS of Spain.

Processes and activities in the workplace go some way toward promoting a culture of professionalism. While there is a policy for continuous training, the authors of methodological papers are not identified in DSC publications, and this discourages research. However, the author of a research paper may have it recorded with the Human Resources Directorate, which will then take account of that work in the appraisal of professional development.

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

Choices of source data, whether surveys or administrative records, and of the statistical methodologies to be used, are based on measurement objectives and data requirements. Cost considerations also come into play in selecting sources and methods. Dissemination decisions are informed solely by statistical considerations, pursuant to Article 13 of Law 7 (see section 0.1.3).

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

Information is made public through press releases, which include explanatory commentaries designed to prevent interpretation errors by journalists. The DCS of the CG is responsible for monitoring daily media coverage and tracking the impact of DSC press releases. If it finds a significant error of interpretation, it will issue clarifications in the form of a press release signed by the Comptroller General or the Director of the DSC.

1.2 Transparency

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

The terms and conditions under which statistics are collected, processed and disseminated are not available to the public on the DSC web page. The DSC makes a determined and ongoing effort, through public statements and meetings, to provide information on the terms and conditions under which it operates. Publications do not always indicate where further information can be obtained on the entity responsible for preparing the data.

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

The government has access to the statistics at the same time as other users.

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

All statistical products are clearly identified with the DSC logo. In the case of joint publications, the part attributable to each entity is identified by its logo. When its data are used by another agency, the DSC requests that the source be identified.

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

When major changes are introduced in methodology and data sources, notice is provided at the time the series is released, but not in advance. However, in some cases they are reported in national accounts seminars.

1.3 Ethical standards

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

Staff of the CG are subject to the ethical guidelines established in Executive Decree 246 (December 15, 2004), establishing the Uniform Code of Ethics for Public Servants working in government entities, and CG Decree 194. Both of these documents are given to all staff of the CG. The rules of conduct are posted in visible places in all offices of the CG. These rules cover three aspects: “Our 10 Commandments,” “Our Duties,” and “Restrictions.” Staff are reminded of the ethical standards they must meet, at working meetings and through memorandums.

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 1993 SNA was adopted in 2004, at which time the year 1996 was established as the new base year for the national accounts.

2.2 *Scope*

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

The 1993 SNA tables and accounts that the ISWGNA¹⁰ determined as *minimum requirements* are compiled on a regular basis, as listed below:

- annual value-added and GDP at current and constant prices by activity;
- annual expenditure of GDP at current and constant prices;
- annual value-added components at current prices by activity;
- sequence of accounts for the total economy (until net lending) with an annual frequency; and
- annual rest of the world accounts (until net lending).

The 1993 SNA tables and accounts that the ISWGNA determined as *recommended* are not fully compiled and only include quarterly value-added and GDP at constant prices by activity. There is no compilation of:

- quarterly value-added and GDP at current prices by activity;
- quarterly expenditure of GDP at current and constant prices;¹¹ or
- annual supply and use tables.¹²

The dissemination of the constituent units of the economy is partially in accordance with the 1993 SNA guidelines. Coverage of the economy includes the Colón Free Zone (CFZ) and the Petroleum Free Zone, but does not include the remuneration of persons working abroad,¹³ because there have been problems in capturing these data for the balance of payments in recent years.

The production boundary is in accordance with the 1993 SNA. It includes the following items for purposes of output measurement:

- own-account production of all goods for own final consumption (in particular farm production);

¹⁰ Inter-Secretariat Working Group on National Accounts.

¹¹ This is planned for implementation in 2006.

¹² Only for the base year 1996.

¹³ In particular those working in Costa Rica and Colombia.

- output of goods for own-account fixed capital formation (compiled through the survey of nonfinancial businesses, SNB);
- production of computer software (surveyed in the SNB); and
- illegal output sold to willing buyers: diversions from the CFZ to the rest of the country are measured.¹⁴ Other illegal output is not explicitly measured, although it is measured implicitly through inclusion in GDP for the base year, because the underground economy was incorporated into the 1996 base.

The production of literary or artistic originals, research and development for own account, and mineral exploration are not included because they are not deemed important in the country.

The assets boundary is partially in accordance with the *1993 SNA*; it includes only agricultural work in progress. It should include financial leasing¹⁵ and computer systems and programs and databases (purchased or built in-house),¹⁶ which could be of some importance. Defense-related assets that could be used for civilian purposes are considered of little importance and are excluded, as are valuables and historical monuments, entertainment, literary or artistic originals, patented entities and mineral exploration.

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 sectorization used for compiling the national accounts are generally in accord:

- the *1993 SNA* is used to classify institutional units and transactions;

¹⁴ The estimate is based on comparing sales figures and changes in inventories that CFZ firms declare in the SNB, and foreign trade figures (imports and re-exports). This approach assumes that CFZ firms import goods, which they declare to customs, but which instead of being re-exported are sold on the domestic market in Panama.

¹⁵ Chapter VII, Purchases and Expenditures, of the SNB asks for data on the value of financial leases, disaggregated into principal and interest. However, firms have had difficulty in answering this question, and the response rate is low.

¹⁶ Although this is explicitly measured in output, there is no indication on the demand side in the SNB table of assets.

- the International Standard Industrial Classification (ISIC) Rev. 3 is used to classify economic activities, through its Panamanian adaptation, the National Standard Industrial Classification of All Economic Activities (ISICF);
- the Central Product Classification (CPC) Rev. 1.0 Prov. is used to classify products, in its national adaptation, the National Classifier of Goods and Services;
- the Classification of Individual Consumption by Purpose (COICOP) is used to classify household consumption; and
- the Classification of Functions of the Government (COFOG) is used to classify the functions of government.

The *1993 SNA* is not used for other flows, except for government and financial corporations. Imports and exports of goods are classified by economic use or destination (CUODE).

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The surveys do not specify that sales must be valued exclusive of product taxes and subsidies. Consequently, in some activities output is measured at producer prices or even at market prices, instead of at basic prices. Some reporters may include the goods and services transfer tax (GSTT, the local name of the value-added tax) in their value of output, although DSC survey administrators take care to ensure that these are excluded from sales declarations.

Output for own use is valued at equivalent market prices, where the information sources so permit. If they are not deductible, sales and excise taxes are included in the valuation of intermediate consumption.

The surveys do not mention that the reporter must exclude the deductible portion of the GSTT when valuing purchases. This may produce distortions in the valuation of intermediate consumption of nonexempt activities or products, which will then be valued at market prices instead of purchaser's prices. The same observation applies to the valuation of final uses, which should exclude the deductible portion of the GSTT, a fact not mentioned in the surveys.

No corrections are made for transfer prices, since the enterprise, as opposed to establishment, is the statistical unit of measurement in the surveys; no breakdown of output and intermediate consumption by production site is requested in the surveys.

Information on insurance and freight is available for merchandise imports, calculated by the Foreign Trade Section (FTS). Total imports and exports are valued on an FOB basis. Transactions in foreign currency are converted to the national currency (the balboa) at the prevailing exchange rate, which is one balboa to one U.S. dollar.

2.4.2 Recording is done on an accrual basis

Transactions and flows are recorded on an accrual basis, with the exception of government revenues, taxes and certain external operations (interest on the public debt and payments of dividends), which are recorded on a cash basis. Work in progress (farm crops and construction) is recorded in the period it is produced.

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

Grossing and netting procedures are not in accordance with the *1993 SNA*. The firm is surveyed, not individual production sites within the same enterprise. However, there are few firms engaged in multiple activities, implying that there are no significant transactions at transfer prices. Consumption of fixed capital is estimated so that macroeconomic aggregates can be estimated in net/gross figures.

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 annual and quarterly collection programs used to compile statistics for the national accounts are reasonably adequate. The source data are obtained from: (i) business surveys; (ii) household surveys; (iii) government finance statistics; (iv) administrative records; (v) censuses, special studies and accounting statements; and (vi) price statistics.

Business surveys

The annual surveys used to calculate the national accounts are performed as part of a regular survey program by the Economic Surveys Section (ESS) of the DSC, and include the following:

- SNB, which contains a module for manufacturing, construction, and mining and quarrying;
- Survey of nonfinancial businesses: CFZ (SNB-CFZ);
- Survey on the financial progress of construction works (EAFOC);
- Farm surveys (EA): rice, corn and beans; and
- Livestock surveys (EP): poultry, cattle and swine.

The coverage of the annual surveys, in terms of the economic activities of nonfinancial businesses, is adequate, excluding only the following sectors: agriculture (except rice, corn

and beans); animal husbandry (except poultry, cattle and swine); hunting, forestry, and fishing; electricity and water supply; transportation (except air transport); private education; private healthcare; business and personal services.

The sample frame for the SNB is based on the business directory, which in turn relies on the 2002 Economic Census (EC 2002, with data from 2001). Regular updating of the business directory, using sweep operations, was suspended in 2003 for budgetary reasons. Since then, the administrative register of the Ministry of Economy and Finance (MEF) has been used. The registry captures formally added new units, but does not delete defunct ones (which are often not reported). The sample frame is not updated for budgetary reasons, although an update is planned for 2006.

Deficiencies in the business registry aside, the population of firms is representative nationally (with ISIC coverage at the four-digit level) and regionally (ISIC at the two-digit level), and is divided into two strata: firms with sales exceeding B/ 5 million, and firms with lower sales figures. In both cases the universe includes firms with more than five employees. Sample selections are not assessed regularly. The relative sample error is not calculated. There is no regular examination of population benchmarks or of weightings used in the estimation process, primarily because of the lack of computer resources (i.e., programs with official licenses). Survey questionnaires are prepared in accordance with sound design principles: they are always subjected to pilot testing and they are reviewed periodically. However, proposed amendments are not always subject to preliminary tests.

Annual (and quarterly for some activities) estimates are provided based on the results from 1500 firms sampled from a total of about 22,000. The data are sufficiently detailed to cover the main aggregates in the national accounts (output, intermediate consumption, fixed capital formation, and changes in inventories).

Household surveys

The National Household Income and Expenditure Survey (HIES) is outdated: the most recent one was conducted between May 1997 and April 1998, and covered only the urban population. Its periodicity is 10 years. The latest Living Standards Survey (LSS) was conducted during the months of May to August 1997.

The Households and Employment Survey (HES) is conducted annually (in August), although two surveys are planned for 2006, covering the urban and rural population, for use in population and employment estimates. The sample frame is the 2000 National Population and Housing Census (NPHC 2000), updated to reflect new housing construction (based on building permits and monitoring of informal construction, in parts of the country where this has reached significant proportions). Sampling techniques are scientific: the probability of selection of households is known.

The coverage of residential units is sufficient and the geographic coverage representative: the sample covers 13,400 dwellings (the universe of households according to the NPHC 2000 is

681,928) and it is conducted in all provinces (with the Province of Panama subdivided into three districts). The probability-based sample for urban dwellings is two-stage, while that for rural dwellings is single-stage. There is a planned rotation of 25 percent of dwellings in each survey. The sample statistics are not upgraded for response errors, because of the lack of software.

Government finance statistics

Complete monthly government finance statistics are available from a database provided by the MEF. Off-budget funds are surveyed for the decentralized agencies (Social Security Fund, universities, hospitals, institutes etc.) on the basis of their financial statements submitted to the NIS. Local government operations are recorded through their budget execution reports. All defense-related expenditures by the National Air Service and the Navy are recorded. There are no data on capital stocks.

Detailed data are available to measure output, intermediate consumption, fixed capital formation, and final consumption expenditure of government services.

Administrative records

The NIS receives adequate data from administrative records. These include: the income tax filings database from the Department of Revenues (DGI), building permits for 39 municipalities, monthly financial statements from the Superintendency of Banks (SB) and quarterly statements from the Superintendency of Insurance (SS), commercial vehicle registrations from the municipal treasuries, health statistics from the Medical and Statistics Records Section of the Ministry of Health, and school enrollment from the Statistics Department of the Ministry of Education. The foreign trade database from the General Directorate of Customs (DGA) is processed by the FTS of the DSC, and transmitted to the NIS.

Censuses, special studies, and accounting records

The following censuses are available: NPHC 2000, CE 2002 and the National Farm Census 2000 (CNA 2000). Special studies cover farming, livestock, forestry and artisanal fishing. There are also data on area planted, harvest and yield for the main crops, estimated by the Ministry of Agricultural Development (MAD). Accounting records cover various activities (in particular electricity and water supply, construction and transportation) and consist of financial reports and statements of earnings that the NIS compiles directly from businesses.

Price statistics

Price statistics are not adequate for making estimates at constant prices. There is no Producer Price Index (PPI). The weighting base of the Wholesale Price Index (WPI) is seriously out of date (1985). There is a CPI with a weighting base of 1996/1997 and a benchmark of

October 2002 = 100. There are also two series of nominal prices and indices for the agriculture sector, both with a monthly frequency: Prices Received by Farmers (PRPA)¹⁷ and Prices Paid by Farmers (PPPA).¹⁸ The PRPA cover 26 crops and 5 livestock products. The PPPA surveys prices of the main farming inputs¹⁹ and prices for live cattle and swine. The NIS also receives the monthly price index for apparent consumption of construction materials and labor prepared by the Panamanian Construction Bureau (CAPAC). There are no foreign trade price indices²⁰ or index of wages and salaries.

The annual information sources used for the production approach and the expenditure approach are assessed in the following tables. A rating of “good” implies that component coverage is broad. A rating of “reasonable” indicates that coverage could be improved, but is still appropriate. A rating of “regular” suggests that coverage could be improved with available sources. A rating of “poor” indicates low coverage. “Inappropriate” indicates that the indicator is not significantly related to the component observed. “Unsatisfactory” means the indicator is related to the component observed, but is a substitute for the correct one.

Principal Sources for the Annual Accounts

Production Approach		
ISIC Rev. 3	Principal sources	Evaluation
Agriculture, livestock, hunting and forestry	- National Farm Census 2000 - Ministry of Agricultural Development - Livestock surveys - Agricultural surveys - Foreign trade statistics - National Environment Administration	Good
Fishing	- Foreign Trade	Good
Mining and quarrying	- Ministry of Trade and Industry (physical output indicators) - SNB	Good
Manufacturing	- SNB	Good

¹⁷ Defined as “prices currently received by farmers at the farm gate or at market or at the first point-of-sale beyond the farm gate.” Source: Prices Received by Farmers, Compendium 2003.

¹⁸ Defined as “prices currently paid by farmers in establishments selling the various means of production (inputs) in the month the survey is conducted.” Source: Prices Paid by Farmers, Compendium 2003.

¹⁹ Animal feed, fertilizers, pesticides, veterinary medicines, implements, fuel and building materials and spare parts.

²⁰ SIN is making estimates based on unit values of foreign trade. As well, the DSC has launched studies that will shortly result in publication of export and import indices.

Production Approach		
ISIC Rev. 3	Principal sources	Evaluation
Electricity and water supply	<ul style="list-style-type: none"> - Financial reports - Physical indicators (KW, m3) 	Good
Construction	<ul style="list-style-type: none"> - Survey of the Financial Progress of Construction Works - Municipal housing permits issued - Households & Employment Survey (HES) (number of employed persons) - Panama Canal Authority (PCA) accounts - Government capital budget execution - Price index of apparent consumption of construction materials and labor (IPCAMMOC) 	Good
Wholesale and retail trade, repair of automotive vehicles, motorcycles, personal effects and household equipment	<ul style="list-style-type: none"> - SNB - Nonfinancial businesses survey–Zona Libre Colón (SNB-CFZ) - National Household Income and Expenditure Survey (HIES) - HES (number of employed persons) - Living Standards Survey 1997 (LSS) - CPI - WPI 	Good Good Good Good Good Unsatisfactory Unsatisfactory
Hotels and restaurants	<ul style="list-style-type: none"> - SNB - Panamanian Institute of Tourism - HES (number of employed persons) - LSS 	Good
Transport, storage and communication	<ul style="list-style-type: none"> - Financial and income statements - SNB - Movement of passengers and freight - PCA (tolls, tariffs and fees) - Public Services Regulatory Body (communications, physical indicators) - Foreign trade - LSS 	Good
Financial intermediation	<ul style="list-style-type: none"> - Superintendency of Banks (financial statements) - Superintendency of Insurance (financial statements) - Interest rates - Deposits and loans - CPI – inputs - WPI excl. oil at general level 	Good Regular Good Unsatisfactory Unsatisfactory
Real estate, rental and business activities	<ul style="list-style-type: none"> - Population and Housing Census - Stock of housing - Financial statements (Autoridad de la Región Interoceánica and Administración de Zona Libre de Colón) - Foreign trade - SNB - SNB-CFZ - Tax and income declarations - Social and commercial statistics (legal and business acts) - LSS 	Good Reasonable Reasonable

Production Approach		
ISIC Rev. 3	Principal sources	Evaluation
Public administration and defense and social security plans	- Central, provincial and municipal government budget execution reports - Financial reports from decentralized agencies and the Social Security Fund - Number of public employees	Good
Education and Health	- Government budget execution - Number of public education employees - Social statistics - private (private school enrollment) - Social statistics - private (admissions to private hospitals, number of physicians and medical specialties) - LSS	Good
Other community, social and personal services	- Financial statements - SNB - Tax declarations - HES (number of employed persons) - Social statistics (deaths) - LSS	Good
Domestic service	- HES (number of employed persons)	Good
Taxes/subsidies on products	- Collections, cash base - WPI excl oil - CPI	Good Inappropriate Inappropriate

Expenditure approach		
Category of expenditure	Principal sources	Evaluation
Household final consumption	- Residual - HIES (base year) - LSS (base year)	Poor Good Good
Nonprofit institutions serving households	- Residual	Poor
Government final consumption	- Budget execution - Financial reports - Number of employees	Good
Gross fixed capital formation – total construction	- Volume of output index	Regular
Gross fixed capital formation – private construction	- Value of output - IPCAMMOC	Good Regular
Gross fixed capital formation – government construction	- Residual	Poor
Gross fixed capital formation – machinery and equipment	- Imports - United States Manufacturers Price Index - Index of unit value of foreign trade - Panama	Good Poor Good
Change in inventories	- SNB - WPI	Good Inappropriate

Expenditure approach		
Category of expenditure	Principal sources	Evaluation
Exports and imports of merchandise	- Balance of payments - Unit value indices - CPI - WPI	Good Good Inappropriate Inappropriate
Exports and imports of services	- Balance of payments - Exports of FISIM (financial intermediation services indirectly measured) - CPI at general level - WPI imports	Good Good Inappropriate Poor

The detailed sources in the previous tables are supplemented by the CPI and the WPI, which are used in various components in disaggregated form.

The sources used for the production approach provide good coverage, while those used for the expenditure approach have coverage problems, which are in some cases significant.

In 2005 the NIS began to publish quarterly estimates of GDP at 1996 constant prices. The sources and indicators used for the quarterly estimates correspond in general to those used for the annual estimates, and coverage is adequate (93 percent of annual value added for the base year). In addition, there is a specially designed survey, the Quarterly Employment, Sales and Output Survey (QESOS), conducted by the ESS. It covers manufacturing, wholesale and retail trade (excluding the CFZ) and some services.²¹

There are no quarterly estimates at current prices, and expenditure components are not compiled on a quarterly basis.

The following table evaluates coverage of the sources used for quarterly compilation of GDP at constant prices based on the production approach.

²¹ Radio and television, laundry and dry-cleaning, and hairdressing.

Principal Sources for the Quarterly Accounts

Production Approach		
ISIC Rev. 3	Principal sources	Evaluation
Agriculture, livestock, hunting and forestry	<ul style="list-style-type: none"> - Crop cycle with fixed coefficients - Ministry of Agricultural Development (area planted, harvest and yield and stocks/slaughter/exports of cattle) - foreign trade statistics - National Environment Administration (lumber extraction and acreage reforested) 	<p>Reasonable Good</p> <p>Good Good</p>
Fishing	<ul style="list-style-type: none"> - Foreign trade (monthly exports) 	Good
Mining and quarrying	<ul style="list-style-type: none"> - Ministry of Trade and Industry (monthly output) 	Good
Manufacturing	<ul style="list-style-type: none"> - QESOS 	Good
Electricity and water supply	<ul style="list-style-type: none"> - Gross electricity generation, by type - electricity consumption (KW) - water billings 	Good
Construction	<ul style="list-style-type: none"> - Survey of the Financial Progress of Construction Works - Municipal housing permits issued - Households & Employment Survey (HES) (number of employed persons) - PCA accounts - Government capital budget execution 	Good
Wholesale and retail trade, repair of automotive vehicles, motorcycles, personal effects and household equipment	<ul style="list-style-type: none"> - ETVP - HES (number of employed persons) - WPI - CPI 	<p>Good Good Unsatisfactory Unsatisfactory</p>
Hotels and restaurants	<ul style="list-style-type: none"> - Instituto Panameño de Turismo (room/nights and occupancy rates) - HES (number of employed persons) - Income declarations - CPI meals and drinks consumed away from home 	Good
Transport, storage and communication	<ul style="list-style-type: none"> - Financial and income statements - Movement of passengers and freight - PCA (tolls, tariffs and fees) - Public Services Regulatory Body (communications, physical indicators) - Foreign trade 	Good
Financial intermediation	<ul style="list-style-type: none"> - Superintendency of Banks (financial statements) - Superintendency of Insurance (financial statements) - Interest rates - Deposits and loans - CPI – inputs - WPI excl oil at general level 	<p>Good Good Regular Good Unsatisfactory Unsatisfactory</p>
Real estate, rental and business activities	<ul style="list-style-type: none"> - Stock of housing - Financial statements (Autoridad de la Región Interoceánica and Administración de Zona Libre de Colón) - Foreign trade - Indirect indicators of other activities 	<p>Good Good</p> <p>Good Reasonable</p>

Production Approach		
ISIC Rev. 3	Principal sources	Evaluation
	<ul style="list-style-type: none"> - Tax and income declarations - Social and commercial statistics (legal and business acts) 	Good Reasonable
Public administration and defense and social security plans	<ul style="list-style-type: none"> - Central, provincial and municipal government budget execution reports - Financial reports from decentralized agencies and the Social Security Fund - Number of public employees 	Good
Education and Health	<ul style="list-style-type: none"> - Government budget execution - Number of public education employees - Social statistics – private (private school enrollment) - Social statistics – private (admissions to private hospitals, number of physicians and medical specialties) 	Good
Other community, social and personal services	<ul style="list-style-type: none"> - Financial statements - SNB - Tax declarations - HES (number of employed persons) - Social statistics (deaths) 	Good
Domestic service	<ul style="list-style-type: none"> - HES (number of employed persons) 	Good
Taxes/subsidies on products	<ul style="list-style-type: none"> - Collections, cash base - WPI excl oil - CPI 	Good Inappropriate Inappropriate

As can be observed, coverage of the quarterly GDP sources is adequate.

The Economic Indicators Section (NIS) of the DSC performs a monthly estimate of economic trends at current prices, and publishes an indicator that has been available since January 2000, the Monthly Index of Economic Activity (MIEA). This indicator covers 75 percent of GDP for the base year.

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

Source data are reasonably consistent with the definitions, scope and classifications, as well as with the time of recording, reference periods, and valuation of national account statistics.

Business accounting records have been governed by international standards since 2001, using standard charts of accounts that allow for homogeneous treatment and are kept on an accrual basis. The fiscal year usually coincides with the benchmark period for the national accounts (the calendar year). In the few cases where this is not so, the source data are not adjusted to the calendar year.

The government has its own chart of accounts, established by the CG. Government spending is recorded on an accrual basis, and revenues on a cash basis. The available information can be reclassified to meet the *1993 SNA* needs.

Permanent and seasonal crops are estimated from information from the MAD and sector surveys by the DSC (EA for farming and EP for livestock), which provide information on output, stocks, and the harvest/seeding calendar for crops.

The coverage of economic activities in all the data sources is good, embracing more than 80 percent of value added (see table of sources).

3.1.3 Source data are timely

Data collection and processing timetables are adequate to meet timeliness and periodicity for disseminating the national account statistics. Statistics from the business surveys, price surveys, and data on government, banking activity, and the balance of payments are received on time. In some cases, import statistics, which are received punctually in provisional form, undergo significant changes when the definitive data are received.

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

There is no information about sampling errors or about nonsampling errors in the surveys. There is no regular monitoring of information on sampling errors for each survey, for budgetary reasons (see section 0.2.1). There is a plan for checking the consistency of data from the surveys, to analyze possible inconsistencies and the accuracy of reporters' responses. This includes checking consistency against other sources, particularly tax sources. Material changes from data updates are incorporated into the national account statistics according to an established revision cycle. Extreme values are confirmed with respondents, and responses are corrected in case of error.

3.3 Statistical techniques

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

Data compilation procedures are reasonably sound. They identify values that are abnormal, and these are investigated with the direct source to confirm or adjust the results.

Procedures for imputation and adjustment for nonresponse are not soundly based: the procedure is to repeat the response from the immediately preceding year, instead of using

more appropriate techniques such as trend projections or changes in the benchmark population. The nonresponse ratio is low.

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

Unobserved activities

These were included in the base-year GDP through the preparation of output accounts by economic activity for unincorporated businesses (households). In particular, adjustments were made to output from the following activities: wholesale and retail trade, restaurants, hotels, education, health, and other community, social and personal services. These adjustments amount to 20 percent of GDP for base year. They do not explicitly include measurements of hidden or illegal activities.

Assets transferred to Panama

Between 1997 and 1999 the United States Government transferred to the Government of Panama an area of approximately 1400 km², covering a band 8 km wide along each side of the Panama Canal. Non-produced nonfinancial assets (lands and properties) and produced nonfinancial assets (dwellings, other buildings, machinery and equipment) were transferred to the Panamanian government. This transfer was recorded by the NIS in the “other changes in the volume of assets (OCVA)” account. However, this decision is regarded as inappropriate. The OCVA account “records the changes in assets, liabilities and net worth between opening and closing balance sheets that are due neither to transactions between institutional units, as recorded in the capital and financial accounts, nor to holding gains and losses” (1993 SNA 12.4). A transaction is defined as “an economic flow that is an interaction between institutional units by mutual agreement” (1993 SNA 3.12). Because the transfer of Canal assets was the result of a mutual agreement between two governments, it should be considered as a transaction and not as an OCVA.

According to the 1993 SNA, the recording of the transaction must include:

- A capital transfer in kind²² received by Panama for the total value of the nonfinancial assets transferred, to be recorded in the capital account with the rest of the world.

²² “A capital transfer in kind consists of the transfer of ownership of an asset (other than inventories and cash)...capital transfers may also be distinguished by the fact that they tend to be large and infrequent, but they cannot be defined in terms of size or frequency. Their essential characteristic is that they should involve the disposal or acquisition of assets by one or both parties to the transaction.” (1993 SNA 10.132).

- An acquisition of non-produced nonfinancial assets²³ for the total value of the non-produced nonfinancial assets received (lands and properties), to be recorded in the capital account with the rest of the world.
- An import of services for the value of the produced nonfinancial assets (buildings),²⁴ to be recorded in the goods and services account with the rest of the world.
- An import of goods for the total value of the produced nonfinancial assets (machinery and equipment) to be recorded in the goods and services account with the rest of the world.

The recording of these transactions changes the current balance with the rest of the world (by the value of the imports), while the balance on the capital account (net lending/borrowing) remains unchanged, because it covers all the transactions (imports, acquisitions of non-produced assets, and transfers of capital received).

Recording of FISIM as exports

The NIS makes estimates of FISIM in the production account for banking services. A portion of this output is sold to nonresidents and is deemed an export of services in the external account of goods and services. The complete recording in the national accounts should also include an entry in the external account of primary incomes and current transfers, within property income.²⁵ The NIS does not currently incorporate this entry, which means that the current balance with the rest of the world is understated,²⁶ because it includes FISIM as exports only, and not additionally as property income/interest payable.

²³ “There may be uncommon cases in which land shifts from one economic territory to another, e.g., the purchase of land by a foreign embassy. That land then is located in the economic territory of the country of that embassy, and is no longer part of the economic territory of the country of location. The same holds true in the case of a foreign embassy selling land. In these instances, a transaction in land between residents and non-residents is to be recorded.” (1993 SNA 14.127).

²⁴ This is the reverse operation of that conducted when a company constructs a building in another economy, which must be recorded as an export: “The construction of embassies, structures, and other works in extraterritorial enclaves by resident producers of the economy in which the enclaves are located is part of the production and exports of that economy.” (1993 SNA 14.31).

²⁵ “The coverage of compensation of employees and property income in account V.II is virtually identical with item 1.B (income) of the Manual, except that the latter includes ‘financial intermediation charge indirectly measured’ indistinguishably under investment income (interest).” (1993 SNA Annex II – 8 [sic]).

²⁶ The current balance with the rest of the world must not change with the inclusion of FISIM. “There are also implications for the flows of interest recorded in the primary

(continued)

Production approach procedures

The annual production accounts (value of output and intermediate consumption) are compiled at a sufficient level of detail, covering 135 economic activities, representing disaggregation at the group (three-digit) or class (four-digit) level, depending on the activity. The supply and use table (SUT) was prepared only for base year 1996. It covers the balance of 75 product groups at the most detailed level. The SUT has 52 activities.

Fixed ratios that are more than five years old are used for 42 percent of estimated 2004 GDP at constant prices, and 29 percent of estimated GDP at current prices.

The techniques used to address specific issues of GDP compilation are considered adequate in part. Output of owner-occupied dwellings is valued at market prices for dwellings of similar characteristics and geographic location (source HES and LSS). Growing crops (annual and seasonal), standing timber (coffee plantations and forestry), livestock and construction projects are considered works in progress, which are measured in the production accounts. Inventories data are not adjusted for holding gains or losses in the estimates of output and intermediate consumption. Consumption of fixed capital is measured by the depreciation rule used by reporting businesses in their private accounts (source SNB), which does not necessarily coincide with the perpetual inventory method. There is no calculation of fixed capital consumption in housing services, although there is available information on stock deletions that could be incorporated. Government expenditure is recorded on an accrual basis, but this is not true of revenues and taxes/subsidies on products, which are recorded on a cash basis and are not converted to an accrual basis in compiling the national accounts. Measures of GDP volume are obtained by various methods, including the use of double or single indicators, and price deflators, volume extrapolators, or a combination of both. The methods used for the most important activities are generally adequate. For example, in the case of supplementary activity of the Panama Canal Commission relating to marine transport, double deflation is applied with adequate price indicators; for commercial activity in the CFZ, a sales volume indicator is used. However, inappropriate price and volume indices are used in other activities. Examples are retail trade and insurance planning services, where the general-level CPI is used to deflate merchandise sales and insurance production, respectively, and public administration, which is estimated with a volume index of employment in the sector.

The compilation of owner-occupied housing services at constant prices is based on an estimate of the stock of housing, updated with additions (source: investment estimates) and deletions (demolition permits). Estimates of farming and livestock activity are made with output volume indices based on quantities of the principal products produced. Estimates of

distribution of income accounts. However, the saving of all the units concerned, including the financial intermediaries themselves, are not affected. Nor is the financial account affected.” (1993 SNA 6.130).

manufacturing are derived by extrapolating value added for the base year using physical industrial output indices prepared from the ETVP. The deflator used for estimating FISIM at constant prices is not considered adequate: it is the product of two indices, interest rate spreads²⁷ and the WPI (general level excluding oil).

Taxes/subsidies on products at constant prices are not properly estimated: the value at current prices is deflated by price indices (general level) instead of extrapolating values from the base year using a volume index of transactions subject to a specific tax or subsidy.

Value added in public administration, public education, and public health at constant prices is estimated by extrapolating from the base year value with a volume index of public employment. This index could be improved by incorporating changes in employment, using detailed data on salary categories in the public administration. For public education, student enrollment by level of education could also be incorporated.

The change in the volume of GDP is not measured using annual chain indices, and the base year (1996) is obsolete. A fixed-base Laspeyres-type formula is used.

Expenditure approach procedures

Government final consumption expenditure, gross fixed capital formation, foreign trade, and changes in inventories are estimated independently, while household final consumption is derived as a residual of supply and the remaining components of demand. This residual is called “private consumption,” since it includes consumption by nonprofit institutions serving households (NPISH).

Household consumption for the base year was compiled using the COICOP classification and it was also estimated, within the SUT framework, for 75 product groups. For other years, however, these classifiers were not used, because household consumption is a residual value. Government final consumption is compiled using COFOG. Fixed capital formation is compiled by type of asset: construction (housing and other buildings) and machinery and equipment (very detailed information from foreign trade). Changes in inventories are compiled by activity and type of inventory, based on the SNB.

²⁷ An annual interest spread is calculated, and represents the difference between two values that are estimated for interest charged and interest paid by financial institutions, divided by total deposits. Interest charged is derived by multiplying the prevailing lending rate (one-year term for consumer and business loans) by the total of consumer and business lending. Interest paid results from multiplying the prevailing rate (six months six term) by total deposits in the system.

Many specific issues of GDP compilation are resolved with proper techniques. For example, government final expenditure excludes incidental sales. Expenses of residents abroad and expenses of nonresidents in the economy are measured from the balance of payments.

The procedures for compiling GDP expenditure components are not adequate. Dedicated price indices are not used to deflate GDP components at the one-digit level of the corresponding classifications. The implicit deflator for household consumption is not consistent with the CPI because, as noted above, this is a residual.

Government final consumption expenditure is derived from the sum of its components. Intermediate consumption at current prices is deflated by a suitable price index.²⁸ Value added for the base year is extrapolated by the index of public-sector employment.

The volume measure of gross fixed capital formation in construction is obtained by extrapolating from the base-year value with a volume index of total construction output. Capital formation in private construction is obtained by deflating the value of output at current prices with the IPCAMMOC. The portion produced by the public sector emerges as a residual between total investment in construction and the value of private construction. The measure of capital formation in construction could be improved if there were an independent calculation of public-sector construction, deflating the value at current prices with an appropriate price index, rather than taking a residual.

The volume of gross fixed capital formation in machinery and equipment, given its primarily external origin, is measured by deflating the current values of imports of capital goods by a combined price index consisting of the United States manufacturers' export price index and a unit value index of imports into Panama, calculated by the NIS. This deflator could be improved if price indices for foreign trade were available. The measure of gross fixed capital formation could be improved by incorporating measures of output (net of other uses) of computer programs and financial leasing.

The volume measure of changes in inventories is not correct, because current values are deflated by the WPI at the general level.

The volume measure of exports and imports is obtained by deflation. The deflators used are not considered adequate, for they are based on baskets that weight internal and external indices that include the CPI, the import WPI excluding oil, and unit value indices prepared by the NIS.

²⁸ This is the price index for a basket that weights the main inputs from the base year.

Specific quarterly compilation techniques

Quarterly GDP is compiled only at constant prices, using the production approach. In general, it coincides with the annual methods of estimation at constant prices. A fixed-base Laspeyres formula is used.

Annual estimates are properly combined with the quarterly indicators using the Denton proportioning method.

The quarterly compilation system is derived at original values. Seasonally adjusted quarterly estimates are obtained using the X11-ARIMA program, although this fact is not publicized (see section 5.2.2).

The estimate of monthly economic activity using the MIEA reasonably approximates quarterly GDP estimation methods, although the weightings are for 1997 rather than 1996. The MIEA “is a combination of basic monthly indicators for the output of goods and services, prepared with a quantum index, which maintains a system of weights from the base year, which in Panama’s case is the year 1997.”²⁹

3.4.1 Intermediate results are validated against other information where applicable

Intermediate results are systematically validated against other data sources: production data from the surveys are compared with data from tax declarations supplied by the DGI. Foreign trade figures are also validated with data from the SNB-CFZ.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Significant statistical discrepancies are analyzed when they are detected. There is no systematic procedure for assessing them, and in practice they become part of expenditure in GDP, because private consumption is calculated as a residual.

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

GDP is estimated by three approaches: production, expenditure, and income. However, statistical discrepancies are not investigated because they are never explicit. The discrepancy between GDP by production activities and GDP by expenditure components is included in private consumption, which is derived as a residual: consequently, it is not separately identified and its value is unknown.

²⁹ “*Indice Mensual de Actividad Económica*,” NIS, DSC.

The discrepancy between GDP by production activities and GDP by expenditure components is included in the net operating surplus, which is derived as a residual.

Statistical discrepancies between GDP by production activities and GDP by expenditure components are not routinely investigated, because the SUT is not prepared on an annual basis.

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)

No studies are conducted to assess the initial estimates against revised or final estimates, such as studies of scale or of direction and magnitude of revisions. Nor are there any regular studies of long-term trends in the revision pattern to identify any systematic bias in the revisions.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

GDP statistics are disseminated annually, consistent with the IMF's GDDS.

4.1.2 Timeliness follows dissemination standards

Annual GDP statistics are disseminated within six to nine months after the end of the reference year, consistent with the GDDS.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

Generally speaking, the national account statistics are internally consistent. However, the supply and use framework is not used for consistent estimation of the supply and use components. Discrepancies are included as part of private consumption, since production approach sources are considered more reliable than those for the expenditure approach. The total supply of goods and services coincides with the figures on total use, since the latter are not derived independently. The production of computer software (net of exports) is measured on the supply side, but it is incorporated into the residual value of private consumption rather than into fixed capital formation.

Volume indicators and (implicit) deflators are consistent with the “value = volume x price” framework.

Quarterly GDP estimates are consistent with annual estimates. The concepts, definitions and classification for compiling quarterly GDP estimates are the same as those used to compile annual estimates. Quarterly GDP estimates are consistent with the annual estimates.

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

Transactions with the rest of the world can be reconciled with data from the balance of payments, although there are technical and coverage problems. There are differences in figures and measurements between these two frameworks, explained by the following:

- FISIM, which are included as exports of services in the national accounts, but not in the balance of payments.
- An adjustment for under-recording of exports by CFZ firms, consisting of trade transactions conducted abroad that are not recorded either as imports or as re-exports in the balance of payments, because they do not take place within Panama's economic territory. These transactions are included as exports of goods in the national accounts, but not in the balance of payments.
- The differing treatment of fees collected by Panamanian consulates abroad for inspection of Panamanian flag vessels belonging to nonresidents. The national accounts treat these transactions as exports of services, while in the balance of payments they are recorded as current transfers.
- The treatment of imports and exports of insurance and reinsurance services.

Of these four problem areas, the only methodological discrepancy between the two frameworks that would persist is that relating to FISIM.³⁰ The remaining discrepancies should be reconciled between the two frameworks. In the case of business conducted abroad by CFZ firms, the figures should be revised and if their existence and value can be verified they should be recorded as exports of services and not as exports of goods.

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

Government finance statistics can be reconciled with the national accounts. The national accounts have broader coverage than the GFS, for they cover not only central government and decentralized agencies but also the PCA and the provincial governments.

³⁰ "10. As indicated in table A.II.1, *SNA* coverage of exports and imports of goods and exports and imports of services is identical to coverage of corresponding items in the balance of payments with the exception of the item "financial intermediation charge indirectly measured." In the Manual this service charge is included, under investment income, as an indistinguishable part of interest income." Source: *1993 SNA* Annex II.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

The revision cycle for the annual national accounts is predetermined and reasonably stable from year to year. Estimates for year t are released as follows:

Estimates	Timing
Real GDP, first estimate	March of year $t+1$
Real and nominal GDP, preliminary	September of year $t+1$
Real and nominal GDP, revised (final)	September of year $t+2$

The revision cycle is made known in advance to the public in the calendar of publications posted at the web page. The reasons underlying the cycle are explained to the public via the ITCNA. The first estimate is based on quarterly GDP calculations (for the first three quarters) and an initial estimate for the fourth quarter of the preceding year. The preliminary estimate includes information based on surveys, records and financial statements from businesses. The final estimate incorporates a revision of data based on amendments that may originate from the sources. Changes in the base year for the national accounts do not follow a regular schedule.

4.3.2 Preliminary and/or revised data are clearly identified

At the time of their dissemination, the data are identified with footnotes indicating whether they are estimates (E), preliminary (P) or revised (R).

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

Results and studies of the revisions to the statistics are not reported to users, except when they are especially significant.

5. Accessibility

5.1 Data accessibility

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

The annual national account statistics are published in a clear manner, accompanied by charts and tables with various levels of detail and time series that supplement the data to facilitate analysis. However, prompt user access to the information is impeded by the manner in which the headings are presented, mingling indistinguishably the variable observed, its nature (preliminary or final), the measurement unit, the period covered, the frequency, and the name of the country. Final household consumption is presented only as an aggregate, and is

included under the concept “private consumption,” together with consumption expenditure of NPISH.

There is no analysis of current-period developments in each publication. The quarterly GDP series provide only seasonally-adjusted values, and not original values.

5.1.2 Dissemination media and format are adequate

The data are disseminated in printed and electronic formats, which facilitates their redissemination in the media. However, because they are presented in PDF rather than EXCEL format, they do not meet the needs of other users. More comprehensive and/or detailed statistics are also disseminated in paper format (available at the DSC Library) and/or in electronic format.

5.1.3 Statistics are released on a preannounced schedule

The statistics are released punctually, in accordance with a preannounced schedule.

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

The statistics are made available to all users at the same time.

5.1.5 Statistics not routinely disseminated are made available upon request

The DSC makes available other general statistics that are not regularly published, when these are requested by users. However, the availability of additional statistics is not made known. The seasonally-adjusted GDP series are not published, because they are still at the experimental stage. Once this stage is completed, they should be released to users.

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 sources and methods used for the annual national accounts are described in a document entitled “National Accounts Methodology,” available at the DSC web page. The quarterly GDP accounts are described in the document “Estimation Methodology for Quarterly Gross Domestic Product.” The GDDS metadata are reviewed and updated regularly.

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

General information on the national accounts is available and is made public, via publications and the Internet.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

General assistance to users is provided through the Statistics Information Center, which receives requests and concerns, and has an electronic mailbox: cie_dec@contraloria.gob.pa

In addition, the DSC website invites users to submit consultations by e-mail, and provides telephone numbers and the address for the Library. Some publications make no mention of contact points that can be reached by mail, telephone, fax or e-mail. The CG is working with the Ministry of Education on a project for “Developing a Statistical Culture,” to create public awareness of statistics and their use. There is an administrative provision that sets a limit of seven days for responding to user requests.

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

There is a catalog of publications and documents that includes their prices. This is available over the Internet, under the heading “Dissemination Calendar.”

Table 1. Panama: Data Quality Assessment Framework (July 2003)—Summary of Results for National Accounts
(Compiling Agency: *Controller General of the Republic of Panama*)

Element	NA	Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO		
0. Prerequisites of quality						
0.1 Legal and institutional environment			X		Even though the legal framework assigns the responsibility for compiling and disseminating statistics to the CG, it does not specify the scope of the statistics, including the responsibility for compiling the national accounts. Sanctions for non-response are outdated.	Increase fiscal provisions in the new draft Statistics Law.
0.2 Resources			X		Human and financial resources are slightly smaller, by about 10 percent, than required to carry out all the tasks and for updating of the base year. Contractual staff is 36 percent of total staff, and wages are low. The work space of the National Income Section's (NIS) facilities is limited, with restricted access to Internet and no access to a direct phone line for carrying out investigations. Budget execution and resource needs are not monitored regularly.	By May 2006, 80 percent of the staff will have access to the Internet.
0.3 Relevance		X				
0.4 Other quality management			X		Response rates to surveys and editing rates are not calculated for all surveys.	
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency			X		Some statistical publications do not identify where more information about the data producing agency and its products can be found. The terms and conditions under which statistics are collected, processed, and disseminated are not available to the public on the website. Changes in methodology and source data not announced in advance. However, in some cases they are discussed in seminars.	By August 2006, the DSC will be working with a consultant to improve the way data is presented on the website. Beginning in May, publications will include a list of contacts.
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		X				
2.3 Classification/sectorization		X				
2.4 Basis for recording			X		The surveys do not clarify that the valuation of the production should exclude the taxes/subsidies on products and that intermediate consumption should exclude the deductible part of the value added tax. Intra-company transfers are currently valued at cost. Although recording broadly accords with the accrual and valuation principles of the 1993 SNA, some government transactions and external transactions are recorded on a cash basis. The Section of Economic Statistics (SES) only conducts surveys of enterprises, not establishments. Transactions between establishments are not recorded on a gross basis.	

Table 1. Panama: Data Quality Assessment Framework (July 2003)—Summary of Results for National Accounts
(Compiling Agency: *Comptroller General of the Republic of Panama*)

Element		Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		NA	O	LO	LNO		
3. Accuracy and reliability							
3.1	Source data		X				In September 2006, a full review will be performed to update the business directory, which will serve as a research framework. In 2007, consultant services will be used to prepare producer and wholesale price indices.
3.2	Assessment of source data		X				Information on sample and sampling errors for surveys are unavailable. Sampling errors in the survey are not monitored. Outliers are confirmed with respondents and corrected, if necessary.
3.3	Statistical techniques			X			Proper imputation techniques are not used for non-response in the source data. Base year for constant prices is outdated (1996). In the total estimate of value added, the use of fixed ratios is more than 20 percent (35 percent of GDP). Proper procedures are not followed for compiling: output volume measures (WPI for deflating instead of PPI) and taxes/subsidies on products deflated by CPI. Detailed balancing of the accounts is not done. Household final consumption expenditure is not derived independently.
3.4	Assessment and validation of inter-mediate data and statistical outputs		X				<i>Ad hoc</i> assessments of potential discrepancies of major intermediate data are done, but checks usually occur only after discrepancies are identified. The statistical discrepancy is not routinely investigated and assumed to be part of expenditure on GDP. The supply-use framework is not used to investigate discrepancies and make the statistical outputs consistent. Discrepancies usually exist between the production and the expenditure approaches, but cannot be addressed since some expenditure components are not derived independently. No study of statistical discrepancy to detect bias in GDP estimates.
3.5	Revision studies			X			Analysis of revisions is not carried out to inform the statistical process. Analysis of revisions for preliminary GDP estimates are not available. Studies and analyses of revisions are carried out only when there is a change in the reference period.
4. Serviceability							
4.1	Periodicity and timeliness		X				
4.2	Consistency			X			Lack of proper reconciliation framework (supply and use tables). Discrepancies between the supply and expenditure approaches are included in final household consumption expenditure estimates, since supply sources are considered more reliable than those of the expenditure side.
4.3	Revision policy and practice				X		The change of base year does not follow a regular schedule. Only analysis and causes of major revisions are made public.
5. Accessibility							
5.1	Data accessibility			X			Household final consumption is published only at aggregate level. Dissemination media is not adequate for the users (PDF instead of Excel). Unpublished, but non-confidential sub-aggregates of the statistics are available to users upon request, but the availability of this information is not publicized.
5.2	Metadata accessibility		X				
5.3	Assistance to users			X			Some statistical publications do not identify specific individuals who may be contacted by mail, telephone, facsimile, or by e-mail. Beginning in May, publications will include a list of contacts.

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 laid out in a series of laws and legislative decrees. However, the scope of these statistics is not specified, including the compilation of a CPI.

Under the legal framework described for national accounts, the DSC has been compiling and disseminating the CPI since 1952. Operational responsibility for collecting, compiling, and analyzing the CPI lies with the Price and Living Standards Section (PLSS) in the Statistics Department (SD) of the DSC. No another institution compiles the CPI.

While the legal framework of the CG and the DSC is generally adequate, some functions specified for the DSC are rather ambitious and go beyond its current financial capacity.

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

The DSC is self-sufficient in the production of the CPI. All price and source data for weights are collected and tabulated within the DSC. Procedures are in place to provide timely and effective flow of price data between each regional office of the DSC and the PSLs. Each regional office collects and processes price data and includes them in databases in a server that are electronically accessed by the PSLs located in Panama City.

The National Statistical System (NSS) in Panama includes the CG, all ministries, decentralized public entities, local governments, public enterprises, and other data producing agencies. In 2003, under the framework of the PARIS21 initiative, a Statistical Committee was created for the preparation of the National Strategy of Statistical Development (NSSD-ENDE). Among its objectives were: to strengthen the NSS, attain homogeneity in the statistics of the Central American Region, and strengthen the capacity of the statistical function among national and international organizations.

Several interinstitutional committees are functioning, such as the committees of national accounts and the committee on minimum salary statistics. These committees meet periodically to coordinate data sharing, projects, and statistical activities. A statistical producers and users committee is created every time a new Household Income and Expenditure Survey (HIES) is conducted. In 2003, the CG and other data producing agencies prepared a diagnostic on the status of the national statistical activity in order to prepare a NSSD for Panama. This diagnostic included the need for consultation between

representatives of the NSS, the public sector, nongovernmental organizations, producer's associations, independent researchers, as well as some international organizations.

The flow of information between the DSC and the MEF for compiling the price quotations of the basic basket of foodstuffs (51 items) is frequent and efficient.

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

Confidentiality is one of the CG's ten commandments: Staff "shall safeguard facts and the information on which they have knowledge of by virtue of their exercise of their functions." Confidentiality of data for the CPI is protected by the same legal provisions described for the national accounts.

In the PSLS, access to confidential data is restricted to those employees who require the information in the performance of their duties. Some institutions have requested the PSLS unit records on prices and retail enterprises, and the PSLS has refused in accordance with the law. However, when unit records are made available for research purposes, the confidentiality of individual data is protected by making all records anonymous. Special aggregation rules are used to prevent residual disclosure when aggregations of survey or other confidential data are disseminated. The PSLS work procedures for compiling the CPI ensure that data are disseminated only at an aggregated level.

Questionnaires, once processed, are archived in the PSLS. Information is stored using shelving and filing cabinets located inside the office. Documents containing information are shredded by PSLS personnel. After the CPI series are updated by introducing new weights and a new price reference base, questionnaires from the old series are eventually destroyed. There are procedures which are the sole responsibility of the supervisor and chief.

A letter is sent to respondents in order to explain the purpose of the information request and the confidentiality of the data to be provided. Price data are collected by visits to retailers. Respondents are informed of the confidentiality of the information and that the data will be used for compiling price indices only. Price collectors fill out price surveys with the information obtained from the respondents. Price surveys include the CG and the DSC's names, the title "Retail Prices," the name of the establishment, the name of the manager, and the identification and code of the retailer. When conducting a HIES, the DSC informs respondents through notes or circulars, signed by the Director of DSC or the Comptroller General, of their rights and obligations with regard to the provision of information; these documents also state that the information respondents provide is confidential and will be used for the statistical purposes only. In the event of non-response, another letter is sent to informants citing the legal framework on obligatory data reporting and confidentiality of the data to be provided.

The Information and Statistical Services Department (ISSD) of the DSC has implemented a number of security measures to guard against unauthorized access to its statistical databases.

The DSC intranet can only be accessed with an authorized user's name and password, and different levels of access (user profiles) have been established for the various databases through the Operative Systems Windows NT, XP, and Advance Server. There are also an external firewall to prohibit access to the DSC intranet and databases, an anti-spam module, and antivirus software. CPI databases are administered by the PSLs of the DSC.

PSLS 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 statistical legal framework and the CG internal regulations.

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

Under the legal framework described for national accounts, information collected for the CPI must be used solely and exclusively for statistical purposes and macroeconomic analysis. Anyone who fails to comply with the legal provisions, or who provides false or incomplete information, will be penalized by a fine. Article 9 of the Law on National Statistics states: "A fine of B/ 5-100 shall be assessed against the chiefs of government offices and other persons who fail to supply the data or information referred to in Article 8, or who submit false information when such falsity is attributable to malice or extreme negligence. Repeated offenses shall trigger a penalty of not less than twice the amount of the fine imposed for the first violation. Payment of the fine shall not exempt the person thus fined from the obligation to provide truthful information and data as requested. The fines referred to in this article shall be deposited in favor of the National Treasury."

However, these penalties are 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 rarely been invoked and penalties for noncompliance have not 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 conditions of the country.

HIES and censuses are announced through newspapers, radio, television, and a letter to respondents with explanations of purpose. In general, the DSC assists respondents in completing and submitting the questionnaires through regular visits to enterprises in the sample and by providing a point of contact. Price surveys are filled out through direct interviews with informants.

The non-response rate to the HIES 1997–1998 was around 12 percent. It was mainly concentrated in Panama, San Miguelito, and Colón districts. With respect to price surveys, the non-response is around 1 percent. Retailers that do not provide information are visited by the supervisor or by the coordinator of the PSLs to try to encourage them to provide the requested information. Letters signed by the Director of the DSC or the Controller General, which include the legal provisions that obligate respondent to provide statistical information to the CG, are sent to respondents that fail to respond to surveys. If they refuse to provide the

data, they are substituted by other retailers that sell the same items and are located in the same market place. Statistical information is provided to respondents when requested.

Instruments to collect information on price and 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

Although the legal framework stipulates that the DSC shall have the necessary personnel to carry out its functions, the number of field agents assigned to data collection for the CPI at the central and regional offices is insufficient. For instance, there is a regional office (Changuinola) with only 1 field agent for collecting CPI price data and conducting other DSC surveys. The continuity of price collection could be affected when this agent is sick, on vacation or working on other surveys. In addition, only two professionals are assigned within the PSLS for analyzing and improving CPI methodology. There are six assistants, although most assistants may be reclassified to higher functions given their academic records and their wide-ranging experience in the collection, compilation, and analysis of the CPI.

Nearly half of the staff working on the CPI are contractual personnel, which may put the quality and timeliness of the CPI at risk, especially for data analysis and index calculation. The PSLS has been able to retain trained contractual personnel, as budgetary constraints permit, by renewing their contract annually. Data collectors are trained to ensure that collected data are validated, crossed-checked, and analyzed before compiling the index. The staff at the PSLS participate in both price collection and compilation of the CPI. The tasks of data collection, validation, cross-checking, CPI compilation, and results analysis are well performed.

The mix of staff involved in the compilation of the CPI is as follows:

Statistics Department	Permanent	Contractual	Total
Price and Standards of Living Section (CPI ³¹)	6	6	12
Chief	1	0	1
Deputy Chief	1	0	1
Supervisor of Statistic II	1	0	1
Professional (Statistics I and II)	2	0	2
Assistant of Statistics I	1	5	6
Assistant I	0	1	0
Regional Offices (CPI ³²)	12	9	21
Field agents	12	9	21
Total	18	15	33

Currently, field agents and staff are not sufficient for CPI data collection. At least two additional staff are needed. Moreover, there will be a shortage of resources (both human and financial) for the conduct of the 2007–08 HIES and the compilation and dissemination of a CPI with a new reference base.

Average seniority of staff in the CPI is approximately 11 years. About half the staff have less than eight years in service compiling the CPI. The years in service of the staff involved in the CPI compilation are as follows:

Years in service	Staff at the PSLS and Regional Offices (CPI)		
	Permanent	Contractual	Total
0–4	1	1	2
4–8	2	12	14
8–16	7	2	9
16–24	1	0	1
24–33	7	0	7
Total	18	15	33
Percentage composition			
0–4	5.5	6.7	6.1
4–8	11.1	80.0	42.4
8–16	38.9	13.3	27.3
16–24	5.6	0.0	3.0
24–33	38.9	0.0	21.2
Total	54.5	45.5	100.0

³¹ Personnel in charge of collecting CPI data in Panama City and San Miguelito and compiling the CPI.

³² Personnel in charge of collecting CPI data in the rest of urban areas of the country.

CPI staff members receive on-the-job training, as well as formal training through courses and seminars on mathematics, statistics, and introduction to index numbers, including a few abroad, such as those conducted by the Center for the Training of Statisticians from Developing Countries of the National Institute of Statistics of Spain (Cesd-Madrid). However, training opportunities are not offered regularly. Currently, the DSC maintains a regular training program in statistics, informatics, and human relations.

Salaries at the PSLS are not competitive with other ministries and public dependencies due to issues relating to the classification and grading of the different positions. In addition, salaries of contractual personnel are low, which might be a source of risk for retaining trained personnel.

The PSLS currently has sufficient processing equipment for the preparation of the CPI in line with the number of staff to handle large databases. The PSLS has eight computers, mainly Pentium 4, one server, and two printers. One of the printer is not working adequately, only the four supervisors' computers have Internet access, and only permanent personnel have their own CG e-mail account. Regional offices usually have only one computer and printer for data processing for all economic surveys and the capacity and speed of some computers are insufficient. Some printers at regional offices are out of order or are not functioning appropriately. The distribution of computers within the PSLS and the regional offices takes into account staff assigned to the different tasks (data collection, processing, and compilation) as well as their work programs.

The CPI is presently computed using applications developed in Oracle client 6i for Windows, configured to perform all calculations in an automated fashion. An Oracle database (Oracle Server 8.i) is used to store CPI data. A daily back-up of CPI data is made. Besides the intranet of the CG, each employee has access to computer programs, such as the ones included in Office 2000 (Excel, Word, and PowerPoint), and to Access to analyze results and prepare presentations and publications. However, software is not regularly updated due to budget constraints.

The CG building has adequate working facilities (cooling, restrooms, and power system to support CG's computing system). Nonetheless, the storage units and office space are not adequate to perform the required tasks. The PSLS does not have access to direct phone lines to call respondents for verifying prices and perform investigations. Transportation equipment for CPI data collection (1 vehicle per area) is insufficient and some vehicles are in poor condition. Sometimes price data collection has been delayed due to the lack of transportation equipment, as these vehicles must be shared with the work programs of other surveys. In addition, the allowance for food assigned to price collectors is insufficient for certain areas that are not close to the office (Las Cumbres, Tocumen, and Juan Díaz); therefore, price collectors have to return to the office taking more time to collect the data.

The financial resources for compiling the CPI are insufficient. Currently, funding for the compilation of the CPI is provided under the budgetary process of the DSC, which usually faces budget cuts. The budget for the PSLS in 2006 is \$78,885, 12 percent less than that for

2005 (\$89,684). The actual amount was even lower as budget cuts were later included in the budget approved by the MEF. The approved budget for the CPI program in 2005 (\$68,126) represented only 1.5 percent of the total approved budget assigned to the DSC (\$5,812,506) and represents even less (1.1 percent) in 2006 (\$70,471/\$6,412,505). A budgetary cut in the DSC of 24 percent in 2005 and 10.6 percent in 2006, as well as delays in resource allocation to the DSC, have affected the rate of execution of the CPI program. Additionally, issues regarding the permanent functioning of the cashier office affect the data collection process of the CPI.

Short and medium-term work programs are taken into account in the budgetary process. Requests for funding for special projects such as conducting the pilot HIES and the 2007–08 HIES, changing the reference base of the index, expanding its coverage, and conducting studies for improving CPI methodology are included as part of the budgetary process for special surveys.

0.2.2 Measures to ensure efficient use of resources are implemented

The DSC has a five-year (2005–2009) strategic plan that serves to increase the quality and timeliness of statistical series, as well as to improve efficiency in the allocation of resources. The five-year strategic plan is further broken down into individual annual work plans. These plans are administered by each organizational unit of the DSC in coordination with the Directorate of Economic Assistance (DEA) and the Department of Administrative Services (DAS). The DEA meets with each organizational unit every six months to review progress with the five-year plan and the yearly plan. The allocation of both financial and human resources is also discussed during these meetings with the DAS, the Directorate of Administration and Finance (DAF), the Directorate of Development of Human Resources (DHR), and the Directorate of Internal Auditing. In addition, each unit formally reviews progress on a monthly basis according to work plans through monthly reports that are sent to the Director of the DSC. Summaries are prepared for review by the controller general.

The performance of DSC personnel is annually evaluated and a quarterly review of staff performance is conducted. These evaluations and reviews, along with tests, are used when promoting personnel.

Assignment of responsibilities among the PSLP and regional offices is clear. Every position at the CG has a profile with specific functions and tasks as well as minimum requirements. Supervisors within the Socio Economic Sub-Directorate (SESD) meet regularly in order to measure progress, define the work to be undertaken, and analyze the CPI results. Working meetings are held in accordance with work requirements.

Budget procedures are carried out on a line item-by-item basis to help allocate financial resources. Periodic assessments are made of the resources employed for compiling statistics, but no comparisons are made to other statistical programs. In addition, resource needs are not reviewed regularly to ensure that scarce resources are employed efficiently in addressing major data problems or meeting new data priorities.

Daily productivity rates are calculated for data collection, processing, and analysis. There are also data verification systems. In the event of errors and inconsistencies, clarification is sought with respondents and corrections made. An efficient application was developed in Oracle client 6i to compile the CPI. This application was introduced to improve data validation processes and keep digital records of data corrections and revisions.

The CG and the DSC have an active program to take advantage of new computing technology, including the Internet, for data processing and dissemination. The CG Internet website is well designed, according with the standards of the Bank of International Server, and has become an important part of the data dissemination process for both the DSC and index users.

The PSLs have received technical assistance from independent consultants for conducting the 1997–1998 HIES, applying sampling techniques, compiling the CPI (October 2002=100), and systematizing the CPI compilation process.

0.3 *Relevance*

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

The CG Library and website provide timely information to users on DSC's statistical products. The Department of Information and Dissemination (DID), through the Statistical Dissemination Section (SDS), the Publication Services Section (PSS), and the Library monitors and keeps records on users' requests and unmet needs. The DSC has a Statistical Information Center that receives requests and queries directly or through an e-mail address provided on the CG website: cie_dec@contraloria.gob.pa. In addition, the CG website has a place to provide comments and suggestions if users did not find the needed information.

A seminar for statistical agencies and key public and private users and a users' survey was conducted in 2003 within the framework of the NSSD to obtain feedback from users. The PSLs does not have regular meetings with those entities that participate in the NSS or a formal process for consultation with policy departments and index users, in order to discuss statistical development and establish new data requirements for the CPI. The PSLs monitors users' needs through data requests. The PSLs has a list of 179 permanent users who receive CPI data by e-mail.

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

The PSLs staff participates in meetings and seminars on price statistics within budgetary constraints.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

In 1997, the DSC made its first attempt to implement a Total Quality System and, subsequently, a Reengineering Program. At present, the DSC strategic plan, as it is administered by the organizational units under the direction of the DAS, possesses the essential characteristics of a total quality management program. It provides the framework for continuous structured review of the allocation of resources, as well as the different elements of data quality, including accuracy, methodological soundness, reliability, serviceability, and accessibility. A goal of the strategic plan is to enhance the quality, credibility, and timeliness of statistics. Additionally, the DSC is working on the preparation of a NSSD aimed at strengthening the NSS.

The PSLS has among its goals for 2006 an improvement in the timeliness of the CPI for Panama and San Miguelito and the CPI for the rest of urban areas to 11 business days after the reference month.

In addition, the CG tries to inculcate the quality concept in the staff through its ten commandments: Staff “shall provide the best service and offer a high quality level in the performance of their duties.”

The CG, the Director of the DSC, and staff meet regularly with the media to discuss economic developments as well as to report on the DSC’s projects for improving the quality of statistics, including providing information on new indicators and surveys.

Price collectors and analysts are periodically trained on errors to be avoided: respondent errors, errors when completing questionnaires, transcription errors, and analysis errors. The PSLS and regional offices’ staff meet periodically to assess data collection and changes in item specifications. Staff training emphasizes that data must be consistent in order to achieve the desired quality.

The PSLS is currently working on the rollout of an integrated database with all information from the DSC to support timely and consistent use of price statistics.

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

Effectiveness rates by field agent are calculated: number of questionnaires collected by month and number of errors by item. Field supervisors in the central office call field agents to ask for explanations on comments in the questionnaires.

Even though responses to surveys were assessed for the NSHIE, response rates to price surveys are not calculated and 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). Nonetheless, the nonresponse rate for the price surveys is

negligible and informants are replaced if necessary. In addition, owing to budgetary constraints, regular visits to regional offices to oversee price collection were suspended in 2003. These visits served as a means for verifying abnormalities detected during the monthly review of data in the central office. The PSLS delivered a seminar to price collectors in 2004 to discuss changes in CPI compilation processes.

Compilers have access to expert guidance on the quality of their statistics and on strategies for improving data production when international organizations provide assistance or when the CG contracts experts. International consultants provide guidance on adopting recommendations on current methodologies to facilitate regional comparisons.

The PSLS has established practices and procedures to ensure the quality of the CPI at all levels of production including data collection, data processing, and index tabulation and dissemination. The monthly price collection phase of the CPI is reviewed at both the regional level and the national level. Some questionnaires are randomly selected for verification. Any detected problems are referred to the supervisors at the section and the unit levels. Data entry and screening are handled at the PSLS and the regional offices. Computer listings allow for review and validation of the index at each level of compilation. This process permits a consistent review of data from all parts of the country. Any errors are corrected after consultation with respondents and the regional staff, when necessary. The index aggregates are also reviewed and analyzed by PSLS staff at various administrative levels before the index is published.

There is a manual on data collection and processes to supervise data collection and apply consistency checks. Information from a sub-sample of questionnaires is verified by the regional supervisors in their visits. Staff keep records of errors and improvements to be incorporated in the new surveys to improve the compilation process. Follow-ups are also performed by means of monthly reporting to managers. However, periodic reviews at all levels of the DSC have been contemplated with the restructuring of the DSC.

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

The five-year strategic planning system of the CG and the form in which it has been implemented is strong evidence of the CG's commitment to quality assurance and an analysis of the tradeoffs among its different dimensions: resource availability, timeliness, and accuracy/reliability.

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

Although there are no official mechanisms, such as a users' survey or official advisory groups, for obtaining feedback from users and/or guidance on methodological issues regarding the CPI, the CG convenes, on an ad hoc basis, such groups when a new HIES is to

be conducted or changes to the index are being considered. However, these groups tend to concentrate on issues relating to the methodological soundness of the CPI, rather than users' needs. Nevertheless, the NSSD plays an important role in this regard. Users' needs are monitored through data requests and users' comments obtained through the CG website. The PSLs has a list of 179 permanent users that receive CPI data by e-mail.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Consistent with the legal framework, the CG recognizes the importance of the professional independence of its staff. Professionalism is evident in the prerequisites applied by the CG for hiring personnel. Hiring and promotion of CG employees are governed by the CG regulations, and are based on professional merit. These regulations ensure that political affiliation is not taken into account when hiring and promoting personnel.

Professionalism is promoted by encouraging staff participation in training opportunities, workshops and seminars, to ensure awareness and understanding of statistical standards and good statistical practices. Staff attending training courses and seminars have to make a presentation on their content to colleagues at the completion of the training. The ASD is in charge of personnel training.

CG 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 the result of the employees' own initiative. The methodological studies prepared by CG 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 CG. However, lately, the increasing demand for CPI data and the implementation of new methods and classifications, given the insufficient human resources assigned to CPI compilation, have limited the number of staff dedicated to research and analysis.

The CPI is produced and disseminated without any outside influence. The procedures of collection and compilation of the CPI are governed only by technical considerations. Professionalism is promoted by the publication of methodological papers on special studies and by the organization of meetings of professional groups. Conversation groups involving staff of the different units forming the DSC meet regularly to discuss international recommendations and practical treatments. Staff are internally evaluated every three months.

Standards set within the CG have regard for professional behavior, courtesy toward respondents, integrity, impartiality in hiring, execution of official duties, and the avoidance of influence by third parties. Staff members with outstanding performance are promoted for an interim period, with the promotion made permanent after an appraisal confirms

satisfactory performance. However, the Director of the DSC is selected by the Controller General and lately he/she has not remained in his/her position for periods that exceed the term of the President.

In order to protect the reputation of the CG and DSC, CPI, publications are revised and validated by all levels of the hierarchical chain within the institution.

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

The selection of source data and statistical techniques for the compilation of statistical series is based solely on statistical considerations, within the limits of available resources. The sources and methods for compiling the CPI are fully under the control of the DSC and concepts and practices generally follow international standards. Appropriate sources and statistical techniques 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. 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 DSC and the Controller General respond to erroneous interpretations of the CPI through press releases and conferences. The Directorate of Social Communications follows the press and television very carefully with regard to references to the statistics compiled by the DSC. CPI data and an executive summary on CPI trends are sent to reporters by e-mail and sometimes published in CG's press releases. Comments on CPI trends are included with the tables sent to reporters and all permanent users. They are also posted on the CG website. These comments identify the main underlying factors behind unusual figures and movements, in order to improve user understanding and reduce the likelihood of misinterpretation. The Controller General and the Director of the DSC are 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

Electronic publications make reference to the NSSD. A "Road Map" that describes the work plan for developing the NSSD is also available on the CG website. The CG website includes a summary methodology and the technical conditions under which the CPI is calculated. Transparency is one of the CG's ten commandments that are inculcated in staff.

The GC website also includes the following information on the mission of the DSC: “The Directory of Statistics and Census is the unit responsible for directing and forming the processes inherent to the national statistics, in accordance to what it is established in the Constitution, the Decree 7 of February 25, 1960, and the Decree No. 69 of March 31 of 1998, placed at operative level in the structure of the Controller General.”

However, the CG website does not reproduce material about the terms and conditions under which official statistics are compiled and disseminated, such as the Law of the CG and its By-Law or a summary of the articles that deal with obligatory reporting by respondents, confidentiality, and professionalism of the staff.

The CG website (www.contraloria.gob.pa) contains an e-mail address to direct additional requests, suggestions, and contact CG personnel. CG publications contain information on the CG website, its address, and phone and fax numbers. Nevertheless, some statistical publications, such as *Panama en Cifras*, do not identify where more information about the CG and its products can be found.

The CG Library and the Section of Publication Service are in charge of providing information to the public.

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

The PSLS indicates that the approval of published index series is exempt from outside interference and that CPI series are not provided to any government agency prior to their official release.

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

All CG publications include the CG and DSC logos. In the case of joint publications, each entity, whether public or private, is clearly identified with its logo or in the footnotes of all published tables. The CG 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, some permanent users are informally notified when they request CPI data. Also, a report with a summary table of the main differences between the new CPI and the previous index (1987=100) is published.

The questionnaires of the HIES, used to collect information on the new market basket weights for the CPI, were presented ahead of implementation to a users’ committee, which included representative of the different ministries, researchers, and specialized users.

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 issued to field agents and supervisors provides guidelines about staff behavior. CG staff are not authorized to alter or change statistical data received from respondents. The CG's ethical guidelines are based on the Executive Decree No. 246 Code of Uniform Ethics of Public Servants of December 15, 2004 and the CG's By-Law. Each new employee is informed of the Code of Ethics and the CG's By-Law and is given a personal copy of them. Furthermore, ethics is one of the ten commandments of the CG.

The Code of Ethics includes rules on staff conduct and definitions on probity, prudence, justice, discretion, dignity, decorum, honor, respect, independence of criteria, and others concepts on ethical standards to be observed by public servants. Similarly, the Code of Ethics and the CG's By-Law include prohibitions. Article 34 in Chapter IV on Prohibitions of the Code of Ethics states: "The public servant shall not give, solicit or accept directly or indirectly, gifts, benefits, promises or other advantages of individuals or staff." Article 35 establishes that "The public servant shall not solicit accept or admit money, grants, benefits, gifts, favors, promises or other advantages, directly or indirectly, in the following situations: a) To accelerate, delay, do or not do the tasks related to their functions; b) To influence other public servant,"...in order to do what it is mention in a).

Chapter VI on Sanctions of the Code of Ethics and VIII On Disciplinary Regime of the CG's By-Law present the sanctions to apply to the personnel that do not comply with the prohibitions. These sanctions include verbal and written reprehension, work suspension without salary, and dismissal of the employee.

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 others³³ 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.

³³ The Organisation for Economic Cooperation and Development (OECD), the Statistical Office of the European Communities (Eurostat), the United Nations, and the World Bank.

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 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 market basket item weights for the CPI are based on expenditure data from *urban* households included in the household sample for the 1997–98 HIES. However, the household sample is not representative of all levels of income, and household composition, since the expenditures of households in the lowest and highest deciles of the income distribution and one-person households were excluded from the weights. The HIES was designed to separate consumption and business expenditures for households with unincorporated business activity. Expenditure data from households involved in farming and fishing activities that resided in urban geographic areas were included in weights calculations for the CPI. Consumption of illegal market goods and services were not recorded in the HIES, and excluded from the CPI weights.

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

The CPI weights only cover the expenditures of urban resident households in the country. Rural households were not covered in the HIES, and therefore, their expenditures are excluded from the CPI weights due to budget constraints for data collection in rural areas.

Until 2002 the index covered only Panama City. Since then, prices have been collected in each major city and urban area of the seven provinces of Panama. These cities were selected from the three main regions of Panama: Metropolitan, Central, and Western regions, and this sample, together with the range of outlets covered in each province, 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 1997–98 HIES and the current CPI are based on a Panamanian version of the COICOP. However, this version departs from the standard COICOP in the following divisions: food and non-alcoholic beverages; alcoholic beverages and tobacco; communications; and restaurants and hotels. Alcoholic and non alcoholic

beverages are combined; tobacco and communications are included in miscellaneous goods and services; hotels are included in recreation and culture; and restaurants (food consumed out of the household) are included together with food and beverages. However, index data are available at the 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 five-digit version of the COICOP, which includes items' varieties. The 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 1997–98 HIES. The prices used to determine expenditures were the market prices (purchaser's prices), including trade and transportation margins and taxes and subsidies on products. The taxes included are the following: Tax on the Transfer of Goods and Services (ITBMS), Selective Tax on the Consumption (ISC) of Alcoholic Beverages and Tobacco, Tax on Consumption of Fuels, Tax on Vehicles, and Tax on Hotel Services. The only subsidy on products for final consumption is the subsidy on liquefied gas buckets of 25 pounds, which is reflected in the CPI.

Prices include discounts if they are applied for more than a month and do not include price bargaining, which deviates from international standards. According to international practices, discounted prices should be taken into account if generally available to anyone; that is, if they are applied to all purchasers. However, the products subject to discounts are not particularly important. Price bargaining is not usual in Panama.

Product specifications for pricing items in the market basket include detailed item characteristics and the terms of transactions. Field agents 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. Prices are recorded in the period during which the items are offered for sale.

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

For the CPI weights, purchases of durable goods, such as automobiles, were not registered as acquisitions less disposal of such goods to other households, only new goods were recorded. Information collected in the 1997–98 HIES may permit the separation of purchases of new

goods from purchases of used consumer durables and identify the sales of used consumer durables to allow estimates of weights for automobiles to be made on a net basis.

3. Accuracy and reliability

3.1 Source data

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

The first HIES was conducted in Panama City in 1942, the second in 1955–56, the third in 1962, the fourth in 1972, the fifth in 1983–84, and the last in 1997–98. Owing to budget constraints, the frequency of the HIES has been 10 to 13 years instead of 5 years, as international standards recommend. According to the authorities of the CG, the next HIES will be conducted in 2007–08 and a pilot survey in 2006. This activity has been included in the CG's budget. In addition, the MEF has carried out several surveys of living conditions (1997 and 2003) under the MECOVI project. The typical survey of living conditions is conducted over a four-month period, rather than over an entire year. Therefore, the results have the potential for seasonal bias. However, the survey of living conditions may be modified to accommodate the needs of the CPI and may be useful for assessing CPI bias owing to changes in consumption patterns.

The current CPI basket and weights were derived from 1997–98 HIES. The sampling frame for the 1997–98 HIES was the 1990 Census of Population and Housing (CPH). The construction of the sampling frame of this survey was based on census maps (for the selection of conglomerates) and lists of households (for the selection of households within the selected conglomerates). The HIES sampling frame covered the main cities of the seven provinces of Panama and its three regions. Therefore, only urban households were investigated.

The HIES sampling frame contained 1,071,052 inhabitants (761,130 for Panama City and San Miguelito and 309,922 in the rest of the country) and 253,900 housing units (180,742 in Panama City and San Miguelito and 72,158 in the rest of the country). The sampling frame was divided into two sub-populations, one for Panama and San Miguelito and another for the rest of the country, since they represented different characteristics. A two-stage stratified random procedure with replacement was applied for the selection of households: 9,002 households (6,493 in Panama district and San Miguelito and 2,509 in the rest of the country) were selected. The territory of Panama covered by the frame included the districts of Panama and San Miguelito and the main urban areas with 1,500 inhabitants or more with power, water pipes, sewer system, asphalt streets and commercial activity in each province—in all 18 urban areas: 1) Panama City (capital district), 2) San Miguelito district, 3) La Chorrera, 4) Barrio Colón, 5) Aguadulce, 6) Pocrí, 7) Barrio Norte, 8) Barrio Sur, 9) Almirante, 10) Chitré, 11) La Arena, 12) Monagrillo, 13) Barrio Balboa, 14) Cativá, 15) Puerto Pílon, 16) Sabanitas, 17) Changuinola, and 18) David. In the first stage of sampling, specific geographic areas (conglomerates) were selected within each urban area, and, in the second

stage, the households to be surveyed in each conglomerate were selected. For each conglomerate of 30 dwellings on average, the household sampling was randomly distributed over the 52 weeks to be covered by the survey (May 1997 to April 1998).

The sample size was increased by 20 percent to replace households that refused to respond to the survey. Thirty-six additional conglomerates of new urban areas in development after the 1990 Population Census took place were included in a special stratum and added to the number of conglomerates in order to improve the representativeness of the sample. The final number of conglomerates was 1,013 and the final number of households surveyed was 9,624 (2,448 in Panama and San Miguelito districts and 7,176 in the rest of urban areas). The sample size was calculated to yield an estimated sampling error of plus or minus 10 percent with a confidence level of 90 percent for each city. The sample size for the second stage was 16 households in Changuinola, Aguadulce, and Santiago and eight households in each conglomerate for the remaining urban areas. Households were not stratified according to socioeconomic criteria. In the special stratum, the sample was selected through a systematic sampling method with probability proportional to size. Complete information for 8,455 households including all levels of income was collected (1956 households for Panama and San Miguelito districts and 6499 for the remaining urban areas).

The HIES questionnaires were constructed according to sound design principles. They were subjected to pilot tests and proposed changes were pre-tested to ensure effectiveness.

Tabulations of the 1997–98 HIES data were prepared 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 results of the HIES were expanded to reflect the universe of the survey-sampling frame.

The CPI market baskets included a sample of 257 products and services for Panama and San Miguelito districts and 270 for the rest of urban areas aggregated into nine divisions (COICOP divisions), 43 aggregations (COICOP groups), 66 groups (COICOP classes), and 83 sub-groups. Prices are collected in the nine major urban areas (Panama City and San Miguelito, Colón, La Chorrera, Aguadulce, Chitré, Santiago, David, and Changuinola). Expenditure by one-person households and households in the lowest and highest deciles of the income distribution were excluded from the market basket weights. Price indices are compiled for Panama and San Miguelito districts, and the rest of urban areas and at national urban level. All expenditure items from the 1997–98 HIES with shares of greater than 0.06 percent and reported by 10 percent or more of households (frequency of consumption) were included in the CPI market basket.

An average sample of 24 outlets for monthly price collection for items in the food and beverages division and 18 outlets for the rest of items in the CPI were selected by taking into account the shopping patterns reflected in the 1997–98 HIES and the availability of the items

selected for price collection. The sampling frame to select the outlet sample was the cartographic maps of the 1990 Population Census. The sample size was calculated with an estimated sampling error of plus or minus five percent at a confidence level of 95 percent for each item. This sample is divided into three-week panels. Detailed specifications are used to identify the specific varieties of products and services that are priced for the CPI.

Outlets are selected using purposive sampling based on the following criteria: dispersion within each suburb, type of clients, cooperation of informants, class and type of establishment, significant consumer sales, abundant variety of articles for retailing, located in commercial zones with large flow of purchasers, and the availability of a range of goods and services included in the CPI basket. The selected outlets cover the major cities of the urban areas and districts; therefore, consumer prices in rural areas are not covered by the CPI. Item selection is 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 clothing and technological products. The price behavior for CPI market basket items is monitored and compared with information from the press and other sources (Ministry of Agricultural Development, Ministry of Commerce and Industry, Commission of Free Competition and Consumer Affairs, and Association of Retailers of Groceries).

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

Expenditure data from the 1997–98 HIES and the frequency of the price collection surveys (daily) are broadly adequate for the need of the CPI. The HIES 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. However, due to the priority given to other surveys or the unavailability of transportation equipment, price data by retailer and item are not always collected on the same date every month. In addition, prices are not collected during the last week of the month.

3.1.3 Source data are timely

Only price data from the monthly price survey conducted by the PSLs are used in the calculation of the published CPI. Prices are collected during the first three weeks of each month. These data are consistently obtained in a timely manner. Respondents usually provide 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

Nonresponse rates are 11.5 percent at national level for the HIES (18.6 percent in Panama and San Miguelito) and 9.1 percent in the rest of the country, and around 1 percent for the price survey.

Sampling errors for the HIES have been calculated using IMPS 3.0. Price survey is monitored on a regular basis but visits of the central office staff to regional offices were discontinued due to budget constraints. Data on 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. The PSLS applies a computer program for reviewing the price collection process. Variations of more than 1.6 percent and less than minus 0.6 percent are verified. Reports on source data and coverage control are prepared and used.

The proportion of household final consumption expenditure for the economy not covered in regular CPI compilation is not assessed and comprises more than 40 percent. It corresponds to household expenditures in rural areas, one-person households, and households in the lowest and highest deciles of the income distribution.

3.3 Statistical techniques

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

Compilation procedures employ some statistical techniques to 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 their cause has been clearly identified. Databases do not include footnotes when data are revised or codes to identify causes of revision.

Elementary indices at the item level are calculated using the geometric mean of short-term price relatives at variety level for heterogenous items and the ratio of average prices for homogeneous items. The elementary indices for each region are aggregated using as weights the regional expenditure shares at variety level. For higher levels of aggregation, a *Laspeyres-type* formula is used.

Temporarily unavailable prices are treated as follows: prices are held constant for food and beverage items missing during the first month. An average price from the rest of the

informants is used to impute the price of the missing food item during the second consecutive month. When all items of a sub-group of items are missing, which is unlikely, their prices are imputed applying the weighted average price change for the rest of sub-groups of the same group of items. For miscellaneous items, prices are held constant up to two months and then are replaced by the price of the brand that is collected simultaneously as a replacement. Although the methodology of holding the temporarily unavailable and seasonally unavailable prices constant is self-correcting, 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 in the following order based on availability and sample size: the price change of the same item declared by other respondents; the price change of the same item in another area; the price change of the rest of the item's varieties; the price change of a similar item; or the price change of the item's sub-group. A more serious problem arises when items/varieties become permanently unavailable. Sometime it may take several (three) 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, no imputation of price change is made, the potential exists 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 old varieties disappear from the market. Outlets are replaced when they do not want to provide information. 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 of payment.

An unbiased formula (weighted geometric mean of price ratios or relatives for heterogeneous items and ratio of average prices for homogeneous items) 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 *Laspeyres-type* formula.

The current weight reference period (monthly average expenditures for the period May 1997 to April 1998) and price reference period (October 2002=100) for the index are not the same. The expenditure shares are held constant from the weight reference period. The weight reference period has not been updated within the past five years.

When the new weights were introduced, the new index for Panama and San Miguelito was linked to the old index for Panama City using international accepted practices (the splicing method).

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 compared with comparable estimates from other major price indices such as the wholesale price index (WPI) for imports, agriculture and manufacturing. Detailed price data are compared to information from other sources such as the Ministry of Agricultural Development, the Ministry of Commerce and Industry, and the Commission of Free Competition and Consumer Affairs.

The detailed CPI is compared to the implicit deflators of private final consumption expenditures 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 CG 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. Reports on inconsistencies are prepared and analyzed.

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. Reports on inconsistencies and detailed price indices are prepared.

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 1997–98 HIES with regard to the level of error and consistency in the expenditure data. Documentation on income and expenditures results is available for use in a special publication 1997–98 HIES, Final Results for Panama and San Miguelito districts (*Encuesta de Ingresos y Gastos de los Hogares, 1997–98, Resultados Finales, Distritos de Panama y San Miguelito*).

Preliminary figures of the new CPI series (October 2002=100) were published when the new series was first released. Nonetheless, monthly CPI series are only revised in the event of errors. Monthly CPI data are final when released, but new weights are subject to analysis and validation prior to being incorporated in the index. Weights obtained from the 1997–98 HIES were compared to the weights used in the previous reference base (1983–84 HIES), and analyzed. Given the time between the conduct of the HIES and the release of the CPI, some weights had to be adjusted owing to the appearance of new products and services, such as cellular phones and the DVDs. However, periodic weight revision studies are not undertaken to determine the bias of the CPI. Documentation on price data adjustments, including a description of causes of adjustments and the way data are adjusted, are not incorporated into the database. Nevertheless, a column with comments on the causes of adjustments is included in the price questionnaires, which are archived.

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 15 days following the reference month, which exceeds GDDS recommendations 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 at national level for urban areas began publication in the second half of 2004 with a price reference period of October 2002=100. Continuous historical series for the CPI, with October 2002 as reference base, are available for the period January 2003–January 2006. These series for Panama and San Miguelito districts were linked to the previous series with 1987 as reference base and are available since 1990.

Detailed methodological notes that identify and explain the main breaks and discontinuities in time series (1952=100, 1962=100, 1975=100, 1987=100, and October 2002=100), and their causes are available on the CG website. No adjustments have been made to maintain consistency over time.

Both the press release and the monthly publication of the CPI on the CG website include 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 is verified by comparing the rate of growth of the CPI with those of selected Wholesale Price Indices (WPI) for imports, agriculture, and manufacturing, although, these indices have different coverage and conceptual frameworks. The CPI is also consistent with the implicit price deflator of private final consumption expenditures in the national accounts.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

Monthly CPI data are final. Preliminary figures were only published when the new series were first released. In principle, data may be revised only in cases of error. Although there was a major revision of the CPI in 2003–2004 (October 2002=100), there has not been a historically consistent pattern established for revising the index. The household income and expenditure surveys needed for updating the CPI market basket have been conducted every 10 to 13 years, which is not adequate. HIES should be conducted at least every five years. A pilot HIES will be conducted in 2006 and the next HIES will be conducted in 2007–08.

A detailed documentation of the latest CPI revision is available. A detailed publication with the results of the 1997–98 HIES for Panama and San Miguelito districts is also available to users. When CPI data are revised in the event of errors an (R) is included in the table to indicate the revision.

4.3.2 Preliminary and/or revised data are clearly identified

CPI preliminary figures were clearly identified in the publication when the series was first released. In the unusual event that errors are discovered after publication, corrections are

incorporated into the following month's index with an indication – (R) – that the figure was revised.

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

A study on the last CPI revision was publicized, and a special publication, *Encuesta de Ingresos y Gastos de los Hogares, 1997–1998*, presents the results of the 1997–98 HIES 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 CG *Quarterly Bulletin, Economic Situation, Wholesale Price Index and Consumer Price Index (Situación Económica, Índice de Precios al Mayor y Consumidor)* presents the monthly inflation for the current year compared with the same month of the previous year for the national-level CPI and the cumulated inflation for March, June, September, and December. More detail, a historical series, and the index of purchasing power of the balboa is published in January with the results of December. Charts and tables are included for Panama and San Miguelito districts, the rest of urban areas of the country, and at national level with detailed indices, and percentage changes at different levels of COICOP aggregations for December of the previous year and for the previous and current months. The CPI hard-copy publication for the new series is being reviewed for publication.

In addition, there is a monthly summary journal, *Consumer Price Indices (Índice de Precios al Consumidor)*, which is posted on the CG website and includes monthly prices indices and price changes at division, aggregation, groups, and sub-group level for the current and the previous years for the National Urban CPI, the CPI of Panama and San Miguelito districts, and the CPI of the rest of urban areas, as well as an analysis of current price trends.

Average Retailers' Prices, Simple Price Indices and Indices of Average Price Relatives (Precios al Por Menor, Índice de Precios Simple y de Promedio Relativos) at item level of the basic basket of goods and services for Panama and San Miguelito districts are disseminated in a quarterly bulletin.

Annual CPI data are published in *Panama in Figures (Panamá en Cifras)*. Charts and tables at all levels of disaggregations for the CPI at the national level, for Panama and San Miguelito districts, and for the rest of the urban areas are included in this publication.

Although the publication formats for the CPI meet standards, relevant series (e.g., food items) are not disseminated in a seasonally adjusted form.

5.1.2 Dissemination media and format are adequate

A press release is prepared by the Directorate of Public Relations of the CG for distribution to the press each month. Simultaneously, CPI data are posted on the CG website in *Panamanian Statistics, Real Sector, Price Indices*. At the same time, the same information is sent to a list of 179 permanent users of the CPI. The statistics presented are detailed and comprehensive, and contain tables, charts, and an analysis of current trends that facilitate redissemination. Current statistics can be accessed through the CG website. Longer time series can be obtained by request from the Publications Service Section (PSS) or the CG's Library. A copying fee may be charged for documents that are out of print or for information in the databases. Diskettes and CDs are to be provided by the users for copying information.

The PSLs provides monthly detailed price data by product of the basic basket to the MEF in order to be released in the press. PDF formats are disseminated instead of worksheets. Therefore, users have to retype the data.

5.1.3 Statistics are released on a preannounced schedule

A published schedule for the dissemination of the index is posted on the CG website every year in the first week of January. It is also available in hardcopy. CPI statistics are disseminated punctually according to the calendar of dissemination.

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 on the CG website and in the publications. CPI statistics are made available to all users at the same time. Publications contain information on the CG website (www.contraloria.gob.pa), CG's address, and phone and fax numbers. The CG website also includes an e-mail address (cie_dec@contraloria.gob.pa) and a page to direct requests and contact CG personnel.

5.1.5 Statistics not routinely disseminated are made available upon request

Historical, unpublished, non-confidential CPI data are available for the national urban index, Panama and San Miguelito districts' indices, the indices of the rest of urban areas, and indices at the item level and at higher-level of COICOP aggregations upon request as well as HIES data. 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 detailed methodology of the CPI *New Consumer Price Index: October 2002 (Preliminary Figures)* (*Nuevo Índice de Precios al Consumidor: Octubre 2002 (Cifras Preliminares)*) is available to the public at the CG website in *Publications on the Internet, Prices and Standard of Living* and in hard copy and the quarterly bulletin. However, hard-copy publications are scarce as only 100 copies were printed. A hard-copy publication with the revised new CPI series is being reviewed for publication.

Information on 1997–98 HIES's monthly average household income, and expenditure by item, class, group, and division and urban area were published in the *Household Income and Expenditure Survey 1997–1998, Final Results, Panama and San Miguelito Districts* (*Encuesta de Ingresos y Gastos de los Hogares 1997–1998, Resultados Finales, Distritos de Panama and San Miguelito*), available in hard copy, but information such as survey characteristics, response rates, survey monitoring, method, sample frame, sample design and selection, critic, coding, and editing, data processing was not published.

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

A brochure *Statistical Synthesis (Síntesis Estadística)* with summary data on the main socio-economic indicators is provided to users. A summary of CPI methodology is available, in hard copy in each quarterly bulletin, and a detailed methodology is available at the CG's Library, at the CG's Center of Statistical Information, and on the CG website. The detailed methodology documents the concepts, scope, classification system, data sources and statistical techniques. 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 CG's Center of Statistical Information, the PSS, and the CG Library. Key personnel is listed in CPI publications, but contact points are not listed in *Panama en Cifras*. Assistance to users is monitored through data requests, but is not reviewed periodically. The CG's By-Law establishes that information enquiries have to be addressed within seven business days.

The DSC, in collaboration with the Ministry of Education, is developing a program to promote statistical culture.

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

A catalogue of DSC's publications and CDs, with prices, is available from the CG's PSS and on the CG website. Orders can be placed through the PSS of the CG. Assistance is provided in placing orders at the information center. A copying fee may be charged for documents that are out of print or for information in the databases.

Table 2. Panama: Data Quality Assessment Framework (July 2003)—Summary of Results for the Consumer Price Index
(Compiling Agency: CG)

Element	NA			Assessment			Comments on Assessment	Plans for Improvement and Target Dates
	O	LO	LNO	LNO	NO	NO		
0. Prerequisites of quality								
0.1 Legal and institutional environment		X					Although the legal framework assigns responsibility for compiling and disseminating statistics to the CG, it does not specify the scope of these statistics, including the responsibility for compiling the CPI. Sanctions for non-response are outdated and rarely applied.	
0.2 Resources			X				The PSLs does not have sufficient permanent staff for compiling and analyzing the CPI and carry out developmental work, as 46 percent of staff is contractual. Transport equipment and per diem are insufficient for data collection. Some regional offices do not have enough staff and their data processing equipment and printers are inadequate. One of the printers at the PSLs is not working well. Resources for the conduct of the 2007–08 HIES and the compilation and dissemination of a CPI with a new reference base are likely to be insufficient. Access to Internet and to direct phone lines for carrying out price investigations are lacking. More regular attendance in price statistics courses is needed. The work space of the PSLs's facilities is limited. Resource needs are not monitored regularly.	
0.3 Relevance		X					A users' survey was conducted in the framework of the NSSD, but no formal process has been established for consultation with policy departments and CPI users. However, users' needs are monitored through data requests. Users' committees are only created when a new HIES is conducted.	As part of the work being conducted on the National Development Strategy, working groups will be set up with users beginning in 2007.
0.4 Other quality management		X					Editing rates are not calculated. Data adjustment history is not kept. Users committees are only created when a new survey is conducted.	Initiatives are underway to coordinate with the Computerized Statistical Services Department to remedy this situation as of April 2006.
1. Assurances of integrity								
1.1 Professionalism	X							
1.2 Transparency		X					DSC website does not reproduce material on the terms and conditions under which official statistics are compiled and disseminated (Law of the CG not disseminated). Some statistical publications do not identify where more information about the CG and its products can be found. Transparency is one of the CG's ten commandments. Changes in methodology and source data are not announced in advance (October 2002=100). However, in some cases, changes are noted to users when they request information.	The list of contacts with information on the person responsible for maintaining the section and the webpage was added to the publications in May 2006. Beginning in August 2006, the Department will be working with a consultant to improve the accessibility and presentation of the webpage.
1.3 Ethical standards	X							
2. Methodological soundness								
2.1 Concepts and definitions	X							
2.2 Scope			X				Only urban households are in the scope of the index. No account is taken of one-person households, nor of homes in the lowest and highest deciles of the income distribution, which represent around 40 percent of total urban consumption expenditures. Imputed rent of owner-occupied housing and own-account production of market goods for own final consumption are not included in the index, even though there is information in the HIES.	These aspects will be considered in the new Household Income and Expenditure Survey, to be conducted in 2007/08.
2.3 Classification/sectorization		X					Some departures from standard COICOP (e.g., alcoholic beverages, tobacco, communications, hotels and restaurants).	The Central Product Classification will be adopted using the new base year.

Table 2. Panama: Data Quality Assessment Framework (July 2003)—Summary of Results for the Consumer Price Index
(Compiling Agency: CG)

Element		Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO		
2.4	Basis for recording		X		Discounts are only recorded if they are applied for more than a month. Durable items such as automobiles were not recorded as acquisitions less disposals of such goods, even though information is available in the HIES.	Discounts will be considered beginning in May. Automobiles will be recorded in the new HIES, to be conducted in 2007/08.
3. Accuracy and reliability						
3.1	Source data		X		Final consumption expenditures and prices in rural areas are not covered. Owing to budget constraints, the frequency of the HIES is 10 years instead of five years. Due to the priority given to other surveys or the unavailability of transportation equipment, price data by respondent and item are not always collected on the same date every month and are not collected during the last week of the month.	To be included in the new HIES, to be conducted in 2007/08.
3.2	Assessment of source data		X		The share of consumption expenditure not covered by the index is more than 40 percent. Validation includes routine checks for extreme values, consistency, and completeness. Nonsampling errors are not calculated. In some cases, previous price data are imputed for missing prices, introducing a possible bias in the index. Changes in product specifications are introduced, but changes in quality are not excluded from price relatives. New products are introduced only when a mayor revision is carried out.	Practical exercises will be conducted to evaluate which of the two methods is preferable.
3.3	Statistical techniques		X		In some cases, previous price data are imputed for missing prices, introducing a possible bias in the index. Changes in product specifications are introduced, but changes in quality are not excluded from price relatives. New products are introduced only when a mayor revision is carried out. Geometric mean is only used for heterogeneous products. The current weight reference period and price reference period for the index are not the same.	
3.4	Assessment and validation of inter-mediate data and statistical outputs	X				
3.5	Revision studies		X		Monthly CPI data are final. CPI is revised in event of errors. Notes on price data adjustments are not stored in the database. Weights are not periodically assessed for bias. A study on the last major revision (October 2002=100) was carried out.	In coordination with the Computer Services Department, these aspects will be considered beginning in May 2006.
4. Serviceability						
4.1	Periodicity and timeliness		X			
4.2	Consistency		X			
4.3	Revision policy and practice		X		Preliminary data are identified. CPI data are final and only corrected in the event of errors. The change in the price reference base does not follow a well established schedule (bases of the CPI: 1952, 1962, 1975, 1987, and October 2002).	
5. Accessibility						
5.1	Data accessibility		X		Seasonally-adjusted data are not published. PDF format is provided instead of spreadsheets. Unpublished, but non-confidential, sub-aggregates of the statistics are available to users upon request, but the availability of this information is not publicized.	Beginning in April 2006, a note will be added to the publications indicating that the office has more up-to-date information available.
5.2	Metadata accessibility		X		Complete methodology on the 1997-98 HIES has not been published. Detailed CPI methodology is available on the CG website. A hard-copy publication is being reviewed for publication.	The methodology and information for Other Urban Areas is being prepared and will be published in August 2006.
5.3	Assistance to users		X		Contact points are not publicized in all publications (<i>Panamá en Cifras</i>). Assistance to users is monitored through data requests, but it is not reviewed periodically.	The 2006 edition of <i>Panamá en Cifras</i> will indicate that each office has updated numbers available.

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*

Government finance statistics (GFS) for Panama are compiled and published in accordance with the provisions of Law 97 of 1998, the current Budget Law (Law 38 of 2005), the Transparency Act, and the Uniform Code of Ethics for Public Servants.

Law 97 of 1998 created the MEF through a merger of the Ministry of Finance and Treasury and the Ministry of Planning and Economic Policy. That law gives the MEF the following functions: to analyze and assess economic performance and to report quarterly to the executive and to the public (Article 2 (A.2)); and to keep the government accounts and prepare consolidated financial statements for the public sector which, once they are audited by the Comptroller General of the Republic (CG), constitute the official source of data on the financial situation of the public sector (Article 2 (C.6)). Article 11 provides that the MEF and the CG must share all fiscal, budgetary, financial and statistical information on the public sector, including that processed through the Financial Administration System of Panama (SIAFPA). Finally, Article 18 amends Article 11 (1) of Law 32 of 1984 (Organic Law of the CG) giving the CG a purely supervisory role with respect to fiscal statistics, eliminating explicit references to Central Government financial transactions, and maintaining those relating to the internal and external debt. However, it must be remembered that the Constitution has not been amended and so the CG continues to be the oversight body for the Panamanian statistics system and retains the powers to order, reassign, or cancel statistical tasks.

The current Budget Law contains detailed instructions governing budget execution (Articles 160 ff). Article 221 requires all public institutions to submit a report to the MEF, the CG, and the Budget Committee of the National Assembly (CPAN), within the first 20 days of each month. That report covers budgetary execution for the preceding month, including details on revenues, expenditures, investments, public debt, cash flow, administrative management, program results, and work volumes. In addition, institutions must present a copy of their financial statements to those same entities, within 20 days after the end of the respective quarter.

Article 1 (10) of the Transparency Act (Law 6 of 2002) establishes the principle of public access, whereby any person has the right to request and receive truthful and timely information from government authorities and institutions. Article 1 (11) establishes the principle of publicity, whereby all information emanating from the public administration is deemed to be public, and procedures must be established so that citizens can access that information and disseminate it through the media and the Internet. Chapter II (Articles 2 to 7)

deals more extensively with the right of access to information: Article 6 provides a format for requesting information. Chapter III (Articles 8 to 12) deals with government reporting obligations, and Article 12 stipulates that the General Budget of the State must contain information on the nonfinancial public sector (NFPS), with respect to current revenues, current operating expenditures, current savings, interest, capital expenditures (investment), donations and capital recoveries, and amortization. That law also includes provisions relating to public servants (reviewed below), together with the rules established in the Uniform Code of Ethics for Public Servants.

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

As indicated, coordination between the MEF and the CG is legally mandated. In practice, this involves regular data reconciliation meetings for detecting discrepancies, analyzing and correcting them, as necessary, or preparing a common methodological explanation if no corrections are required for either entity. The source data are shared, but the CG does not have full access to SIAFPA reports.

Coordination between the MEF and the CG also covers other macroeconomic statistics systems where the MEF provides fiscal data. Reconciliation of the GFS also ensures that the data in the national accounts and the balance of payments are validated by both agencies.

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

The confidentiality of individual reporters' data is fully guaranteed by Chapter IV (Articles 12 to 14) of Decree 7 of 1960, known as the Statistics Act, the provisions of which are supplemented by the rules included in the Uniform Code of Ethics for Public Servants requiring observance both of general rules of conduct and of rules relating specifically to statistics.

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

All units of the public sector must provide the MEF, as well as the CG and the CPAN with the information needed for compilation, within legally established time limits (20 days after the end of the reference month or quarter). To date, there has been no need to apply sanctions.

It is normal procedure to review changes in the compilation forms with reporters, a task generally undertaken by the CG, with a view to improving the quality of the source data. Reporters are also offered assistance if they encounter difficulties in completing and delivering the forms.

0.2 Resources

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

Within the MEF, the Technical Unit for Public Policies (UTPP) is responsible for preparing statistics on public sector operations, and the Public Credit Directorate (DCP) is the unit that compiles the public debt statistics. Both units have adequately trained and remunerated staff for statistical work, the physical environment (in terms of workspace and furnishings) is excellent, and computer equipment is modern and regularly renewed, although there are some limitations on access to the Internet. UTPP staff have been trained in the *GFSM 1986*, but not in the *GFSM 2001*.

Available funding is sufficient to generate the required statistical products and meet additional demands.

0.2.2 Measures to ensure efficient use of resources are implemented

There is no staff appraisal system to serve as the basis for promotion or pay increases. New staff are selected on the basis of contract profiles that place special emphasis on experience and language skills (English).

There is no system to assure efficient use of resources. Budget preparation uses the incremental cost method, adding new resources as new needs are identified and new personnel are taken on, or in the course of broader institutional undertakings such as replacement of computer equipment.

0.3 Relevance

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

Fiscal statistics disseminated by the CG and MEF were assessed, as both sets of statistics are consistent and relevant for policy makers and fiscal analysts. Staff regularly attend seminars and workshops on topics that relate to improving production of the GFS.

User needs are not researched through any formal system, but rather through analysis of consultations and individual requests, for which the Transparency Act establishes a formal channel of contact. User requests are answered promptly (in less than one week, in most cases), but this reflects an internal policy of the compilation units, and not an institutional policy. Information requested by users is incorporated into the dissemination formats if it is deemed of interest to a significant number of users.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

There is a strong quality-oriented organizational culture, although there is no specific program in place for improving it. Quality initiatives have been taken by the compiling units, but they are of small scope (short courses, workshops, specific short-term advisory services). Attention is given to ensuring that training courses stress quality aspects in statistics production.

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

There are no measurements of quality indicators, although there is a quality-oriented organizational culture. Statistical processes are normally evaluated on a regular basis, but the analysis is not comprehensive, focusing only on one issue for each evaluation (for example, validation techniques).

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

The various dimensions of quality are recognized, and priority is given to timely delivery of the information. However, strong and intensive efforts are made at reconciliation between institutions, in order to guarantee accuracy, and working hours are often extended as deadlines approach.

1. Assurances of integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

Professional independence in compiling and disseminating the GFS is based on the provisions of the Transparency Act and the Uniform Code of Ethics for Public Servants.

The Transparency Act (Article 22) establishes penalties of up to twice the monthly salary for employees who obstruct access to information or who destroy or alter a document or record. Article 27 requires all government agencies and offices to establish and publish their respective codes of ethics, which must include aspects relating to conflicts of interest, and staff are required to report any act of corruption to a superior.

The Uniform Code of Ethics for Public Servants requires central government agencies to observe the provisions of Article 27 of the Transparency Act, establishing the principles of independence of judgment (Article 21), proper fulfillment of duties (Article 24) and the obligation to report (Article 29), all of which can be interpreted as supporting independence and professionalism in statistical work.

In addition, the organizational culture respects these principles and guarantees compliance with the law. As a result, persons responsible for compiling the statistics have remained in their positions despite changes of government, and the process for hiring new staff is governed by selection procedures based on clear and pre-defined professional profiles.

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

As noted in the previous section, both the organizational culture and legislation leave those responsible for statistical work free of any political interference when it comes to selecting the most appropriate sources and methods for compiling the GFS, or introducing any change in statistical processes.

The same holds for dissemination of the GFS, which is done in accordance with a calendar established by the budget law, and provides the information at the same time to all interested parties.

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

The compilation units provide assistance on technical aspects of the published GFS. The Minister of Economy and Finance holds a press conference when releasing the Quarterly Economic Report.

Although there is no official policy on this point, the compiling units are constantly on watch for interpretation errors by users of the figures, and they correct such errors either directly or through press releases.

1.2 Transparency

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

The MEF website provides access to the various laws governing data gathering, compilation and release of the statistics it produces. However, specific provisions relating to this issue are not clearly identified, nor is the Uniform Code of Ethics for Public Servants accessible.

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

No information is provided in advance either to the executive or legislative branches: the statistics are delivered simultaneously to all interested parties.

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

All statistical products clearly identify the compiling entity and unit. In the case of joint publications, the entity responsible for preparing the data is identified separately from the entity producing the analysis.

Use of the figures is monitored constantly to ensure that they are correctly used and that their authorship is attributed.

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

There have been no major changes in recent years to the methodology used for compiling the GFS. The minor methodological changes that have been made were announced in the publication in which they were first incorporated, in the form of methodological notes to the tables identifying changes in the manner of preparing the figures.

1.3 Ethical standards

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

As noted above, legal provisions, in particular the Transparency Act and the Uniform Code of Ethics for Public Servants, provide protection for statistical production and for the staff responsible for it, against any type of interference. The organizational culture also serves as a barrier to any kind of interference by any authority or entity.

Ethical rules are understood and respected by staff, and they are explained in the induction procedure for new employees.

2. Methodological soundness

2.1 Concepts and definitions

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

The compilation and dissemination of the GFS is based on the *GFSM 1986*. There are some discrepancies between Panamanian statistical practice and those standards, in some aspects, and these are reviewed in the following sections.

To date, there is no plan for migration to *GFSM 2001*, despite the emphasis that the GFS mission of February 2004 placed on this topic. The CG has included a migration plan among its objectives for the Strategic Five-year Plan, but no steps have been taken with the MEF to affect that plan.

2.2 Scope

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

The fiscal statistics disseminated by the MEF include information on central government, general government, and the NFPS. However, with the exception of the “Trust Fund” (*Fondo Fiduciario*), only the budgetary central government (the Central Administration in the case of Panama) is covered in full detail for the various concepts of revenue, expenditure and financing. This information is incomplete for the remaining levels of government, because a sample of institutions (the so-called “consolidated” institutions) is used to compile details for the decentralized institutions and for nonfinancial public corporations. No adjustments or projections are made to extend these detailed results to other decentralized institutions and nonfinancial public corporations, the activities of which are measured by their financing, which is aggregated, with its sign reversed, as a revenue line for NFPS (the same practice is used with the Trust Fund in the budgetary central government). The PCA is not included in the NFPS.

Operations of local governments (municipios) are recorded in the same manner as that used for “unconsolidated” institutions, which means that general government, like central government and NFPS, is represented by a consolidation of entities and institutions with complete information (budgetary central government, Social Security Fund (CSS) and consolidated decentralized institutions) and others with incomplete information (municipalities and unconsolidated decentralized institutions). Local government operations are not significant in comparison with the rest of general government (their budget is about 0.6 percent of that of central government), and they do not have the capacity to borrow.

The fiscal statistics prepared and published by the CG do not provide the breakdown needed to identify inter-institutional transfers at the central government and general government levels, providing only a total of consolidated transfers for NFPS.

The public debt statistics published by the MEF provided complete information according to residence and are broken down by holder and type of instrument.

2.3 Classification/sectorization

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

Classification problems in the core source data are resolved with the use of supplementary data sources, as explained in detail in the section on source data (3.1.1, below). However, there is still a problem separating customs duties from the *Impuesto a las Transacciones de Bienes Muebles y Servicios* (ITBMS, the Goods and Services Tax) paid on imported goods.

With respect to sectorization, the MEF presents data from the *Banco Hipotecario Nacional* (National Mortgage Bank) and the *Banco de Desarrollo Agrícola* (Agricultural Development Bank) as unconsolidated institutions within general government, although in Panama's other macroeconomic statistics systems these entities are classified as public financial corporations. These institutions should not be part of general government.

The functional classification of expenditure, prepared by the CG, differs from the *GFSM 1986* recommendations. Those differences arise from use of a national classification, which in broad terms is similar to that recommended by the *GFSM 1986*. This is done because the Integrated System of Financial Administration of Panama (SIAFPA) is not sufficiently flexible to incorporate a functional classification catalogue different from that used domestically.

Public debt statistics follow the *GFSM 1986* and distinguish between external and internal debt based on the place of issuance.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Flows are valued at market prices for each transaction; gross debt is recorded at its nominal value and amounts in foreign currency are converted to balboas using the midpoint between the buying and selling rates of exchange on the day of recording. Transactions in United States dollars are valued at par, reflecting the legal parity of Panama's currency with the dollar.

2.4.2 Recording is done on an accrual basis

Transactions are recorded on a mixed cash and accrual basis. More specifically, recording follows the *GFSM 1986*, with the exception of expenditure data for the CG, which are registered on a commitment basis, and MEF interest expenditures, which include capitalized interest on Inter-American Development Bank loans.

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

The procedures for recording gross and values follow the recommendations of the *GFSM 1986*.

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

In preparing GFS flow data, the compiling unit in the MEF uses various sources, both internal and external. As noted above, this diversity in data sources is related to classification problems in the basic information sources, which must be supplemented with additional information generated by other programs that compile data on fiscal operations.

The sources used in preparing the operations tables are:

Revenues: the basic source for central government operations is the revenue table provided by the Accounting Directorate of the CG. This information is supplemented by cash flow data provided by the Treasury Department (DGT) of the MEF and the list of “revenues” (inflows) from the Revenue Department (DGI). For the consolidated institutions, their cash flows and the Collections Sheet of the Social Security Fund (CSS) are used.

Expenditures: the basic source for the central government is the Expenditure by Category report, which the CG prepares on the basis of SIAFPA data. Supplementary information is provided by the DGT in its cash flow report, by the Public Credit Directorate (DCP) for interest payments, and by the Accounting Methods and Systems Directorate (DMSC) of the CG for the list of “expenditures” (outflows). For consolidated institutions, their cash flows are used.

Transfers: the basic source is the DMSC list of expenditures, from which payroll transfers (*transferencias por planilla*) can be determined. This information is supplemented with data on budgetary subsidies, data on internal interest paid to the CSS, which the DMSC prepares, and data from the Public Policies Technical Unit (UTPP) on central government transfers to the CSS.

Financing: the basic sources are the debt reports prepared by the DCP and by the Debt Department (DD) of the CG. For both the central government and the institutions, supplementary information is taken from the detailed report of the National Bank of Panama, the report of the Savings Fund and the report of the Superintendency of Banks (SBP). The Report on Receipts, Payments and Balances from the project to enhance capital budget execution (*Proyecto de Dinamización de la Ejecución del Presupuesto de Inversión*) prepared by the UNDP is also used.

The CG presents GFS based on budget execution, where revenues are recorded on a cash basis and expenditure on a commitments basis. There is no information available on transfers for consolidating central government and general government in accordance with

GFSM 1986. Revenues are taken from the cash flow report prepared by DGT and expenditures from the report generated by SIAFPA.

In the case of the MEF, the diversity of sources used is sufficient to capture the information needed to generate the GFS in accordance with international standards. By capturing such sources, the compilation program is sufficiently open and flexible to incorporate new sources of information or changes in the ways current sources collect the information used.

When it comes to the public debt, the fact that the Ministry manages all transactions affecting financial commitments by the public sector means that the source data are recorded directly in the compiling unit, the DCP.

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

The source data used by the MEF provide sufficient information for compiling the GFS in accordance with the *GFSM 1986* recommendations as they relate to definitions, scope, classifications, valuation and time of recording.

In the case of the GFS prepared by the CG, there is the problem that the source data used to prepare NFPS transactions provide expenditure information on a commitments basis, as opposed to the cash basis recommended by the *GFSM 1986*.

3.1.3 Source data are timely

The Budget Law requires detailed budget execution reports to be sent to the MEF, the CG, and the CPAN within 20 days after the end of the month. Consequently, background information needed to compile the GFS is available in a timely manner.

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

There is no automated system for evaluating source data nor is there any regular evaluation of the data reporting forms. Revisions are made only when errors or inconsistencies are detected, although there is constant contact with the reporting entities in order to minimize recording errors.

3.3 *Statistical techniques*

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

The source data are adjusted using sound statistical techniques that eliminate interinstitutional transfers and transfers between budgetary and non-budgetary activities.

If preliminary data are published, they are replaced by final data in the following publication of the respective statistical tables.

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

The use of a sample for presenting information on decentralized institutions and nonfinancial public corporations creates problems with the adjustments that must be made to incorporate entities from outside the sample into the overall NFPS results. Specifically, while the use of financing data from these entities, reversing the sign and adding it to revenues, may resolve the problem in terms of calculating the surplus/deficit, it does not provide sufficient information on the structure of revenues and expenditures of institutions outside the sample, and therefore of NFPS. In addition, there is no adjustment to incorporate the PCA into the NFPS accounts, although the CG publishes information on its operations in a separate table.

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

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

Although the variety of data sources used should allow for prior checking of aggregates there is no systematic validation of intermediate results. These are revised only when errors or inconsistencies are detected in the final results.

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

When statistical discrepancies are detected they are investigated and corrected through the necessary adjustments, or they are explained if they are due to justified methodological differences in the manner of recording or aggregation.

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

All statistical products relating to the fiscal accounts are subjected to regular reconciliation processes, especially between the MEF and the CG, to detect discrepancies and correct or explain them, as the case may be, so that consistent series can then be published.

With the external public debt, moreover, the information is validated against data from international agencies and other external institutional creditors, starting with the actual recording of the debt transactions.

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)

Both the MEF and the CG keep archives of their GFS products, and these are consulted when revisions are undertaken. However, revisions are done only when an error is detected, and they do not follow any regular program. The results of the analysis and revisions are incorporated into the worksheets to prevent repetition of errors and to identify the rule used to correct them, but there is no report produced, even for internal use, that would systematize revisions.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The flow data compiled by the MEF and the CG meet the periodicity recommendations of the GDDS. The MEF compiles quarterly and annual data for central government, general government, and the NFPS. The CG compiles monthly and quarterly flow data for the budgetary central government, and annual data for the NFPS.

The debt data prepared by the MEF go well beyond the GDDS recommendations: they are produced monthly and quarterly (the report for the fourth quarter is equivalent to the annual report).

4.1.2 Timeliness follows dissemination standards

The flow data from the MEF and the CG meet the timeliness recommendations of the GDDS. The quarterly reports are disseminated within 45 days, and the annual reports within three months in the case of the MEF, and 2½ months in the case of the CG. The monthly reports of the CG appear within five weeks.

The debt data prepared by the MEF are published within three weeks for the monthly information (24 days for the information relating to December) and within 45 days for quarterly publications.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The statistics published by the MEF and by the CG are consistent over time: the annual data correspond to the sum of the quarterly data, which in turn are equivalent to the sum of the monthly data, if published. There is reasonable consistency between flow data (transactions) and stock data (debt). The aggregates shown in the summary tables correspond to the sum of the categories included in the detailed tables.

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

For both the flow and stock data prepared by the MEF, series are provided covering relatively short periods (generally the total for the preceding year and cumulative to date for the current year). On the other hand, the CG publishes statistical series covering at least five years.

Changes in source data, methodology or techniques are reported in notes to the statistical tables, but historical series are not corrected. The series have been available since 1994 for the flows prepared by the MEF, and since 1990 for those produced by the CG. The quarterly debt figures compiled by the MEF are available from 1997, while the monthly figures are available from August 2004.

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

The public debt data prepared by the MEF are used as the source for compiling the balance of payments statistics. Flow data reconciled between the MEF and the CG are in turn provided for the national accounts. Thus there is consistency between these three macroeconomic statistics systems. With respect to statistics from the banking sector, prepared by the SPP, an internal reconciliation is performed through a request for information that the MEF sends to the SBP: however, there is no formal procedure for reconciling these figures between the two entities.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

There is no regular or predefined schedule for data revisions either in the MEF or in the CG. Revisions are made only when an error or inconsistency is detected, or when newly compiled information allows the published figures to be updated. Revisions are reported by means of notes to the tables containing the new information.

4.3.2 Preliminary and/or revised data are clearly identified

Both the MEF and the CG clearly identify the preliminary or revised status of the data they publish in the statistical tables, and the preliminary data are regularly replaced by revised data, when the required information is available.

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

Statistics users have access only to the methodological notes attached to the statistical tables. No studies have been performed to systematize the revisions that have been made.

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 series are disseminated according to the components defined in the *GFSM 1986*. The published data are clear and tables and charts are provided to facilitate user understanding. However, the time series included in the MEF publications are relatively short, providing information for the two preceding years and cumulative to date for the current year, in the case of flows, and for the preceding year and cumulative to date for the current year, in the case of the public debt.

Additional series are published with greater detail on various items, in an effort to meet the needs expressed by users interested in specific subjects. No tables with seasonally adjusted revenue series are produced.

5.1.2 Dissemination media and format are adequate

The statistics are disseminated through regular publications that both the MEF and the CG make available to the public, in hard copy and at their respective web pages. In the case of the Quarterly Economic Report and Outlook prepared by the MEF, this is released at a press conference. However, only the monthly tables of public debt are available for downloading as a spreadsheet (Excel). This poses problems for users who want to work with information from other available statistical series, because of the great level of detail they contain.

There is no electronic database that users can consult directly to obtain historical series, or details or aggregations different from those published, but this information is provided promptly upon request.

5.1.3 Statistics are released on a preannounced schedule

The CG's fiscal statistics are released according to a schedule announced in advance (generally at the beginning of the year). The same is true for the public debt information published by the MEF. In both cases, the statistics are published punctually.

In the case of the flow statistics prepared by the MEF, although most of the time limits are set in the Budget Law, there is no published schedule informing users in advance as to when the series will be published.

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

Fiscal statistics from both the MEF and the CG are made available to all interested parties at the same time.

5.1.5 Statistics not routinely disseminated are made available upon request

Both the MEF and the CG will provide information to users who request it. The Transparency Act established a standard format for information requests, which are submitted in writing through the mail, by e-mail, or at general contact points indicated at the web pages of the MEF and the CG.

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

There is no documentation dealing with methodological aspects of data collection, compilation and dissemination for the different series included in the GFS. GDDS information is kept up to date, but there is no link, for example, for accessing that information from the web pages of the MEF or the CG.

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

The levels of detail in the publications have been adapted to meet the requirements expressed by users in relation to specific topics. This information, or additional information, can be requested from the compiling units, but there is no documentation available to explain in detail what can be prepared and how to get it.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

The MEF and the CG both offer general contact points (not specifically for the GFS) on their web pages, and they also offer the possibility of consultation by e-mail, regular mail, and even in person, with respect to the figures published. Although there is no specific contact point for GFS, responses to consultations and inquiries from users are delivered promptly, as a result of policies adopted by the compiling units, in the case of the MEF, and an institutional policy, in the case of the CG, which has instituted a correspondence tracking system and has set a time limit of seven working days for providing a response.

The foregoing is supplemented by the rules in the Transparency Act on access to information and the obligation to respond to citizens' requests.

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

The CG has complete and up-to-date catalogs of its publications, including statistical series and documents. The MEF does not have such catalogs, but in the case of the public debt the information is found in the section corresponding to the DCP, which allows access to all published information on this topic. With GFS flow data, on the other hand, the lack of catalogs is significant because the information is scattered among various sections of the MEF web page and there are no indications of the publications that exist, or how to navigate among them.

Table 3. Data Quality Assessment Framework (July 2003)—Summary of Results for Government Finance Statistics
(Compiling Agency: Ministry of Economy and Finance)

Element		NA			Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO	LO	LNO		
0. Prerequisites of quality									
0.1	Legal and institutional environment		X						
0.2	Resources			X			No regular staff assessment is performed. There is no monitoring system for enhancing efficient use of resources.	These considerations must be reviewed by the Directorates of Public Credit or Public Policy of the MEF.	
0.3	Relevance		X						
0.4	Other quality management			X			There is a quality-oriented culture at MEF, but it doesn't have a specific program aimed at improving quality and no measurement is made of quality. Annual assessments are performed to improve statistical processes but deal with only one issue at a time. No progress has been made on the implementation of the recommendations of the 2004 GFS mission, including a migration path to <i>GFSM 2001</i> , increasing the sample of institutions, and compiling revenue, expenditures, and financing in full detail.		
1. Assurances of integrity									
1.1	Professionalism		X						
1.2	Transparency		X						
1.3	Ethical standards		X						
2. Methodological soundness									
2.1	Concepts and definitions			X			There is no official commitment to implement a plan to migrate to <i>GFSM 2001</i> .	The CG is currently implementing the 2001 Manual and, by January 2007, expects to be able to send fiscal data to the IMF for inclusion in the 2002 GFS Yearbook.	
2.2	Scope				X		The MEF disseminates consolidated data for the NFPS, but only the breakdown of the budgetary central government is complete. For the remaining NFPS, a sample of institutions is used. For those not included in the sample, their financing data is used as an additional revenue line. The PCA is not included in the NFPS. The CG disseminates NFPS data, but figures needed to consolidate general government or central government are not available.		
2.3	Classification/sectorization			X			MEF figures show, as a revenue line, the financing outcome for the local governments, and an important segment of the decentralized institutions and non-financial public corporations. There are two public financial corporations that should be excluded from the central government.		
2.4	Basis for recording		X						

Table 3. Data Quality Assessment Framework (July 2003)—Summary of Results for Government Finance Statistics
(Compiling Agency: Ministry of Economy and Finance)

Element	NA	Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO		
3. Accuracy and reliability						
3.1 Source data		X				
3.2 Assessment of source data			X		There is no regular assessment process for data sources. They are only assessed when an error is detected.	
3.3 Statistical techniques			X		The adjustments made do not provide full information about revenue, expenditure and financing of the non-sample institutions. No adjustment is made for the PCA.	
3.4 Assessment and validation of intermediate data and statistical outputs			X		No systematic validation of intermediate outputs is made. Validation processes are carried out only when an error is detected.	
3.5 Revision studies			X		No studies of revisions are conducted. The revisions are reflected only in the processing spreadsheets.	
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency			X		No revisions of historical data are made when new methodologies are implemented or new information is available.	
4.3 Revision policy and practice			X		No regular revisions are made. They are carried out only when an error is detected. There is no systematized procedure for revisions.	
5. Accessibility						
5.1 Data accessibility			X		Most of the statistical charts are not available on electronic spreadsheets. No calendar is available for the MEF's data on GFS flows.	
5.2 Metadata accessibility				X	There are no methodology documents on collecting, compiling and disseminating practices. GDDS is updated but there is no link from the MEF or CG websites. Additional information is provided upon request, but there is no documentation detailing what is available.	Beginning in August 2006, webpage accessibility will be improved and the GDDS (CG) link will be set up using the services of a consultant.
5.3 Assistance to users			X		Reports on GFS flows disseminated by the MEF are in different sections of the institutional website with no indication about their existence or on how they can be accessed.	

¹ These considerations must be reviewed by the Directorates of Public Credit or Public Policy of the MEF.

IV. MONETARY STATISTICS

0. PREREQUISITES OF QUALITY

0.1 *Legal and institutional environment*

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

The SBP is the official agency responsible for collecting, compiling, and disseminating banking sector statistics. The legal basis for the compilation and dissemination of monetary statistics, which have a broader coverage and different analytical approach than banking sector statistics, is not clearly assigned to the *SBP* or to any other official agency in the country.

The SBP was created by Decree-Law No. 9 of 1998 on the Banking Regime and the Superintendency of Banks (DL-9) as an autonomous agency of the Government, with its own legal personality and budget. According to the DL-9, the SBP acts independently in carrying out its functions and is subject to fiscal control by the Controller General of the Republic (CG). This control does not imply influence in any form on the administrative functions of the SBP.

Article 5 of the DL-9 enumerates the functions of the SBP. Among these functions, the responsibility for compiling and disseminating any type of statistics is not specified.

Article 57 of the DL-9 regarding reporting to the SBP of audited financial statements states that “Banks in the system should present to the SBP their financial statements within 30 days following the end of each calendar quarter. The Superintendency could publish them periodically..., in bulletins of financial information. In addition, it will publish consolidated information of the banking system....” This Article guarantees the need for publication of banking sector statistics on an aggregated level. However, other financial intermediaries that are not banks and, therefore, not supervised by the SBP are not covered by the DL-9.

Even if the responsibility for compiling monetary statistics is not clearly assigned to the SBP by law, this agency collaborates with international organizations, such as the IMF, in providing data that are analytically useful for macroeconomic analysis. However, these data are not published in national sources following the framework and methodology of international statistical standards, such as the *Monetary and Financial Statistics Manual (MFSM)* or the *System of National Account of 1993 (SNA 1993)*.

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

Adequate data sharing arrangements are in place within the SBP to ensure the flow of information among its pertinent departments, which is facilitated by a data warehouse. The SBP compiles and disseminates individual and aggregated information gathered from the

reports of commercial banks. The data are available to internal users and shared with other governmental agencies through special reports. No other agency in the country compiles financial sector data, and only the CG disseminates regularly a summary of the data provided by the SBP.

Coordination among agencies interested in the analysis of financial sector data (MEF, CG, and NBP) is adequate. Reports with the specific requirements of each agency—in standard format and more detailed—are prepared shortly after the data are published on the Internet.

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

All individual reports from banks are kept confidential. Article 84 of the DL-9 establishes the confidentiality of data that financial corporations provide to the SBP. This article states that the information collected by the SBP of individual clients of a bank could only be revealed to the competent authorities following the law and within a criminal procedure. Further, the Superintendency, including all its staff and external auditors, consultants and nominated inspectors, are to demonstrate appropriate reserve with all information given to them or gathered by them according to this Decree-Law, and consequently they should not reveal this information to third parties, except competent authorities SBP according to this Article. Exceptions are those reports or documents that, according to this Decree-Law, have to be disseminated to the public. The public servants who, owing to their positions, have access to the information described in the Article are obliged to keep appropriate reserve even after leaving their functions.

Article 86 includes penalties on staff who disclose confidential data. It states that staff found in breach of Article 84 could be liable for penalties of up to 100,000 balboas, irrespective of any other civil or criminal sanctions that might apply.

A channel of encrypted data protects the information sent by the banks to the . Access to individual financial corporation data are restricted to authorized personnel using access passwords.

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

The legal provisions underpinning the obligation of banks to report data needed to compile the statistics required by the SBP are contained in the legislation cited above (item 0.1.1). In addition, Article 54 of the DL-9 on the right to require information from banks or economic groups states that the Superintendency has the right to require any bank, or any company belonging to the economic group to which the bank belongs, to provide documents and reports on its operations and activities.

Article 55, regarding the presentation of audited financial statements, states that “Within three months following the end of the fiscal period, banks with general or international

license should report to the Superintendency their financial statements related to their operations performed in or from the Republic of Panama, according to the case...”

According to Article 58, “All banks should send to the Superintendency within the period and form defined by the Superintendency: A statement showing the assets and liabilities and earnings from their establishments in Panama at the closing of their operations in the latest working day of the previous month, and a report containing (1) an analysis and classification of its loans and securities portfolio of their establishments in Panama at the closing of their operations, and (2) the reconciliation of the capital account. Any other information with the frequency required by the Superintendency, and irrespective of what it is described in Article 59.”

0.2 Resources

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

Human resources

The banking statistics used for official national publications and submissions to international organizations such as the IMF are compiled by Economic Studies Department (*Departamento de Estudios Económicos (DEE)*), consisting of seven staff and a supervisor. All have university education with specialization in economics, finance, or banking. Most of the staff have sufficient experience in compiling statistics and mobility of the staff is low. Each employee has a personal computer and access to the Internet. Most have attended relevant courses at the IMF and other international organizations.

The number of employees involved in the compilation of monthly and quarterly statistics is adequate. Salaries are competitive compared to other public and private institutions.

Financial and computing resources

On computing resources, compilers of statistics use modern personal computers and adequate software. The technical staff use Excel, Word, Acrobat, and PowerPoint in a Windows environment. The compilation of banking statistics is performed using a data transmission and compilation system developed internally by the SBP.

Financial resources are broadly adequate to support the current programs for compiling statistics. However, the workspace is less than adequate to facilitate the efficient compilation of statistics.

0.2.2 Measures to ensure efficient use of resources are implemented

All programs in the SBP are subject to budget considerations and regular performance assessments. Monthly activity reports (*Informes de Gestión Mensual*) are prepared by the

Economic Studies Directorate (*Dirección de Estudios Económicos (DIEE)*) and delivered to the General Secretariat (*Secretaría General*) for monitoring. Work programs with budgetary requests are prepared annually for approval by SBP management.

Statistical databases are periodically updated to guarantee the efficient use of resources. In addition, a very efficient data transmission procedure for reporting institution, which includes a rich set of validation tests, guarantees the absence of processing errors such as accounting, coding, editing, or tabulation errors.

Staff performance evaluations are not conducted periodically (for example, annually).

0.3 *Relevance*

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

In addition to feedback from internal users, obtained through an annual evaluation of the statistical products, the SBP conducts periodic meetings (once a year) and regular telephone contacts with the staff of the CG and MEF to improve the quality and timeliness of the specific reports required by them. However, the SBP does not have a proactive policy of regularly consulting private sector users (for example, through regular meetings or a user survey) to obtain feedback on the quality and relevance of banking sector statistics, and therefore, input from these users is limited. In general, feedback on the relevance of the statistics is obtained in the course of responding to specific data requests and consultations.

SBP participation in seminars and conferences on statistics organized by international and regional organizations provides a forum to identify new and emerging data requirements and to help in assessing the relevance of SBP's banking sector statistics. Furthermore, the SBP has plans to compile and disseminate, as a complement to the banking sector statistics currently published, monetary statistics based on internationally accepted standards.

0.4 *Other quality management*

0.4.1 Processes are in place to focus on quality

The SBP recognizes that the quality of the statistics is essential for sound supervision and accurate analysis of the banking system. Quality awareness is embodied in the law (Agreement of the Board of Directors, i.e., *Acuerdo de la Junta Directiva 4-99*), which establishes that banks should produce financial statements according to international accounting standards (IAS) or to US Generally Accepted Accounting Principles (US-GAAP) applicable to financial corporations (Article 1). In addition, the SBP is sensitive to the importance of data quality and its dimensions, as evidenced by its participation in the GDDS.

To improve staff productivity, achieve excellence, and guarantee user satisfaction through the highest quality of its services, the SBP holds an annual meeting with staff. During the

meeting, each department presents the results of the tasks carried out in the past year and the work plan for the next one. In addition, the DIEE participates in the ISO 9000 program.

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

The SBP is in charge of monitoring the quality of the data reported by financial institutions under its supervision. DEE verifies that data-reporting practices followed by banks are consistent with SBP prescribed guidelines.

The DIEE, the Information Systems Directorate (*Dirección de Informática, DI*), and the Banking Supervision Directorate, meet regularly to assess and improve the data transmission system and discuss changes in data requirements, such as modifications to the catalogue of accounts or complementary data (*átomos*) submitted by banks.

The DEE carries out detailed analyses of the quality of data processed every quarter. The scope of the analysis is wide both in terms of detail and inter-temporally (historical series), resulting in the identification of systematic errors and the provision of better instructions to avoid recurrences.

When a particular financial institution does not correct systematic errors, supervisors visiting these institutions include in their agendas issues related to data reporting.

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

The SBP has a Unit of Technical Support (UTS) that assists reporting institutions with their queries. The UTS records the frequency of errors by institution and period. These records are used to identify recurrent problems in the data reported and to propose solutions to address them.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The statutory provisions under which the SBP compiles banking sector statistics are adequate to support its independence in conducting these functions. In this regard, the choice, tenure, and reporting arrangements of the Superintendent are supportive of the professional independence of the SBP. The Superintendent's tenure (five years according to Article 11 of the DL-9) does not coincide with that of the current government. The Directors' tenure is eight years (Article 9). Qualifications and other requirements for hiring the Superintendent and Directors are also regulated in Articles 10 and 8, respectively; issues of conflict of interest are set forth in Article 12. Removal of Superintendent and Directors is addressed in Articles 14 and 15.

Recruitment and promotion of compilers are based on relevant aptitude and/or expertise in statistics; there is no formal annual performance review. On-the-job training in methodology and compilation methods is provided, including participation in seminars, courses, and workshops arranged by regional and international organizations. Staff participating in these external training opportunities are invited to deliver a seminar presentation summarizing the knowledge acquired during the course or seminar.

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

The sources, methods, and statistical techniques used for compiling banking sector statistics are based on statistical considerations (e.g., coverage, timeliness, and reliability of the source data). The source data used for compiling banking sector statistics (i.e., balance sheets of the banks and complementary information) largely meet the statistical requirements for decision-making purposes and for publication. The definitions and statistical techniques are based on methodological considerations.

In addition to statistical or analytical considerations, some decisions about dissemination are also determined by regulatory considerations. For example, the reference interest rates for the local mortgage market used by banks for subsidized mortgage loans have to be published on a quarterly basis, as established by the law.

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

Erroneous interpretation or misuse of banking sector statistics by data users is infrequent. If there are significant errors in the interpretation of disseminated data by the media, the SBP issues an official response with the relevant clarifications. In addition, the Public Relations Department has a unit responsible for preparing an internal bulleting with articles on the financial system appearing in the press, including articles using SBP data sources. Since the publication of the *Carta Bancaria* together with the data, the number of erroneous interpretations of the data has been reduced considerably.

1.2 Transparency

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

The DL-9, which is available on the SBP website, contains the terms and conditions under which statistics are collected, processed, and disseminated. Chapter VIII of the DL-9 on “documents and reports” deals with aspects of banking sector reporting requirements, describing the types of information that the SBP is entitled to request from the banks and disclose to the public. All the information produced by the SBP is disseminated free of charge.

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

No government agency outside the SBP has access to banking sector statistics prior to their release. Officials from other government agencies (CG and MEF) who request specific data sets receive them several days after the official release of data to the public through the SBP website. The *Banco Nacional de Panama* (National Bank of Panama), *Caja de Ahorros* (Savings Association), *Banco de Desarrollo Agropecuario* (Agriculture and Livestock Development Bank), and *Ministerio de Desarrollo Agropecuario* (Ministry of Agriculture and Livestock Development) receive the same set of statistics disseminated on the SBP website immediately after their release.

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

The SBP only disseminates data to the general public through its website. Therefore, its statistical products are clearly identified.

All published banking sector information bears the SBP logo. Moreover, in cases where statistics are reproduced in documents outside the SBP or newspapers, the SBP is generally identified as source of the data.

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

Major changes on banking sector statistics are not always pre-announced. Owing to the relatively recent creation of the SBP, in operation since 1998, not many major changes deserving advance notice have occurred in the methodology for compiling banking sector statistics. Other changes, not only in methodology but also in the banking system population, such as merges and acquisitions, are published on the SBP website at the time they occur.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are made known to staff

There are clear guidelines outlining the correct behavior when the staff is confronted with potential conflict of interest situations. In addition to Article 12 of the DL-9 regulating the conflict of interests of the Superintendent and directors, the Internal Rules of Procedure (*Reglamento Interno de Trabajo*) No. 14-98 of August 27, 1998 describes the rights and obligations of the SBP staff (Chapter 7). The regulation is made known to the staff when they join the Institution. This regulation also includes sanctions for misconduct in Chapter 9.

2. Methodological soundness

2.1 Concepts and definitions

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

The framework, concepts, and definitions for monetary statistics are not applicable to the statistics on the banking sector disseminated by the SBP. As noted in the data module (Box 1), monetary statistics follow the methodology and analytical framework of the *MFSM* and *SNA 1993*, while the banking sector statistics are based on international accounting and reporting standards. Furthermore, the analytical presentation of the banking sector statistics is geared towards the identification of the main stocks and flow items (balance sheets and profit and loss accounts) of the financial accounting system and the risks associated with them, whereas monetary analysis focuses on liquidity (broad money) and its counterparts (credit and debt aggregates.)

The closest analytical account to a depository corporations survey for Panama is the balance sheet of the banks with general license. It includes those operating in Panama that, according to legal provisions in force, may conduct financial operations with residents and nonresidents. Unlike these, banks operating under an international license may conduct operations only with nonresident (offshore) entities and, therefore, should be separated for macroeconomic analysis. They cannot be considered depository corporations as they do not issue liquid assets (money) held by residents. State-owned development banks, the Agriculture and Livestock Development Bank (BDA), and the Mortgage Bank are also excluded, as the Superintendency of Banks does not regulate them.

The data are presented in balboas, the Panamanian monetary unit, which is equivalent to US\$1. The monetary agreement with the United States (1904) establishes that the U.S. dollar is legal tender in Panama. The balboa is a unit of account, and the government issues only subsidiary coins.

2.2 Scope

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

Banks with general license (other depository corporations)

The aggregated balance sheet of the banks with general license disseminated by the SBP represents more than 90 percent of the depository corporations in the country. Therefore, even if the SBP has no mandate to collect and disseminate data on nonbank depository corporations, this lack of coverage in statistics officially disseminated by Panama is not significant. Furthermore, publication of data of consolidated groups by the SBP complements the analysis of the data based on the aggregation of individual banks.

The disseminated data on Panamanian financial groups, comprised by banks and other financial corporations such as finance and insurance companies, compensate for the lack of coverage of the subsectors of the financial corporations sectors not supervised by the SBP on an individual basis, but covered by the supervision of consolidated groups. The nonbank depository corporations and other financial corporations that do not usually belong to a financial group (such as financial cooperatives and saving and loan associations) are considered negligible (or of minor relative importance) for the analysis of the Panamanian financial system.

National Bank of Panama

In the absence of a central bank, the NBP, an autonomous agency of the Panamanian government, acts as financial agency for the government. Its broad purpose is to engage in banking activities with a view to obtaining the financing needed for the economic development of Panama. It is also responsible for managing and operating the banknote exchange and clearing house for the entire banking system, ensuring an adequate supply of U.S. dollars for banks, and withdrawing worn U.S. dollar notes from circulation and returning them to the United States for new notes. The balance sheet of the National Bank of Panama does not include accounts with the International Monetary Fund, which, being government accounts, are recorded off-balance sheet.

In accordance with the regulations established by the Superintendency of Banks, the National Bank of Panama each year publishes its audited balance sheet in two national daily newspapers and in its *Memoria Anual* (Annual Report). The balance sheet is presented in balboas and includes notes to the financial statements. The data disseminated in the balance sheet include the following asset components: cash and short-term paper on hand, checks in clearing, sight deposits with local and foreign banks, time deposits with local and foreign banks, loans to the domestic sector (public and private) and external sector, investments, and other assets. On the liabilities side, the data include sight and time deposits of local and foreign banks, savings and restricted deposits, certificates of deposit, liabilities to financial institutions and international organizations, other liabilities, and capital funds.

The National Bank of Panama, like other banks under general and international licenses, is required to submit its balance sheets to the Superintendency of Banks monthly and quarterly. The Superintendency disseminates the quarterly balance sheet of the National Bank of Panama in its quarterly bulletin, *Carta Bancaria*, and on its web page. These balance sheets provide detailed data on the main components of assets and liabilities, classified as domestic or external. In addition, a breakdown of the loan portfolio into the domestic (public and private) sector and external sector is provided. Securities are classified by sector and instrument, and deposits are classified by sector and type of deposit.

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 financial instruments and sectorization systems used for monetary statistics are not applicable to the statistics on the banking sector disseminated by the SBP.

The sectoral classification adopted in the *MFSM* is based on the *1993 SNA*, which distinguishes between residents and nonresidents and classifies the resident units according to their functions as: (1) financial corporations; (2) nonfinancial corporations; (3) general government; (4) households; and (5) nonprofit institutions serving households. The classification of financial instruments in the sectoral balance sheets and in the surveys should be based on the liquidity of the instrument and the legal characteristics defining the basic relationship between creditors and debtors. Assets and liabilities are classified according to their counterparts' institutional sector. Thus, assets are classified by debtor sectors and liabilities by creditor sector. The banking statistics disseminated by the SBP reflect the residency criterion and provide partial information on counterpart sectors for most instruments.

The balance sheet of the banks with general license is compiled and published monthly and quarterly. The monthly data are published on the Superintendency's web page and show the main components of assets and liabilities, classified as domestic or external on the basis of the residency criterion. Liabilities are broken down by type of deposit (sight, time and savings), and deposits are classified by sector (official, of individuals, and of banks). Each quarter, the Superintendency publishes more detailed information on the main components of the assets and liabilities of banks on its web page. Disaggregated data are also presented for each bank under a general license, including the National Bank of Panama.

As for the classification of financial instruments in the banks balance sheet, the main deviations refer to the treatment of repurchase agreements, financial derivatives, insurance technical reserves, and accrued interest receivable and payable. Statistical standards such as the *MFSM* recommend: (1) classifying securities repurchase agreements as loans collateralized with securities; (2) classifying financial derivatives as well as insurance technical reserves as a separate category of financial instruments in the chart of accounts; and (3) classifying accrued interest on deposits, loans, and securities other than shares together with the financial asset or liability to which it corresponds and not as part of other accounts receivable or other accounts payable.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The general recommendation of the *MFSM* is that the valuation of financial assets and liabilities should be based on market prices or market-price equivalents (fair values). The

valuation of loans is an exception to this principle as loan values should be based on creditors' outstanding claims without adjustment for expected loan losses. This amount comprises the outstanding principal plus any accrued interest, and is referred to as the book value of the loan. The *1993 SNA* and the *MFSM* also recommend that financial instruments denominated in foreign currency should be converted to national currency values at the mid-point market exchange rate prevailing at the time they are recorded (i.e., on the balance sheet date). Holding gains and losses arising from changes in market values (or fair values) of financial assets or liabilities should be recorded separately in a revaluation account.

Banks balance sheets compiled using the manual of accounts of the SBP (based on IAS) are broadly in accordance with the valuation principles recommended by the *MFSM*. Financial transactions are recorded at the time they occur (that is, the date on which ownership is registered), and at market prices. The stocks of financial assets and liabilities are valued at market prices, if possible, or otherwise at purchasing price—as in the case of securities bought as a permanent investment.

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 adjusted for exchange rate valuation changes based on end-of-period exchange rates.

Compilers of banking sector statistics do not adjust the source data to approximate market valuation or fair values. Although not a normal practice in banking sector statistics, this is a recommendation for the compilation of monetary statistics that is consistent with other macroeconomic statistics.

2.4.2 Recording is done on an accrual basis

The accrual accounting principle recommended by the *MFSM* specifies that interest accruing on financial instruments be incorporated into the outstanding amount of the financial asset/liability, instead of being treated as part of other accounts receivable/payable. In other words, the interest accruing in each period prior to maturity should be recorded as a financial transaction that represents a further acquisition of the financial asset by the creditor (i.e., bond holder) and an equal incurrence of a liability by the debtor (i.e., the SBP). In addition, revenue and expenditure should be recorded in the period in which they fall due (accrual basis), regardless of when the corresponding cash flow actually takes place (cash basis). Interest in arrears continues to be recorded until paid or written off.

The principle of accrual accounting as stipulated by the *MFSM* is not fully applied in the compilation of banking sector statistics. Contrary to *MFSM* recommendations, accrued interest of financial assets such as securities held by financial institutions are classified under other accounts receivable/payable and not with the underlying instrument.

Interest in arrears for more than three months is no longer included in the balance sheet but recorded off-balance sheet.

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

The general principle of the *MFSM* and *1993 SNA* that data be collected and compiled on a gross basis is broadly applied to the compilation of banking sector statistics in the SBP. Assets and liabilities are compiled on a gross basis and aggregated into a balance sheet without consolidating interbank positions.

The SBP does not disseminate analytical accounts of the banking sector on a consolidated basis³⁴ (depository corporations survey, DCS). According to the guidelines outlined in the *MFSM*, the DCS is obtained by canceling out outstanding claims and liabilities between all depository corporations, while preserving the presentation of data on all stocks that are claims on (and liabilities to) the financial corporations subsectors other than the depository corporations subsector, other domestic sectors, and nonresidents.

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 financial system of the Panamanian economy is dominated by banks, which account for more than 90 percent of the depository corporations according to the definition of the *MFSM*, i.e. those that issue deposits or close substitutes of deposits that should be included in a definition of broad money. It can be said, therefore, that source data for compiling banking sector statistics by the SBP are obtained from comprehensive data collection programs that take into account the specific conditions for Panama.

However, the data collection program does not include information on the rest of the financial system, such as depository corporations that are not banks (financial cooperatives, saving and loan associations, money market investment funds, etc.) or other financial corporations such as insurance companies, pension funds, development banks, finance companies, investment funds other than money market, etc. Offshore banks, that is those with an international license, are included in the statistics and should be considered separately because they cannot accept deposits from residents.

The accounting records currently used for compiling banking sector statistics (*átomos*, mainly comprising the chart of accounts and complementary information on loans, securities and liquidity operations) broadly contain sufficient detail to classify data by financial

³⁴ Statistics presented on a consolidated basis are different from statistics on consolidated groups.

instrument and economic sectors as defined in the *MSMF*. The SIB is responsible for maintaining the chart of accounts and other accounting practices—such as the classification of loans and provisions for bad debts—used by banks.

Developments in the financial sector outside the banking sector are not monitored by the SBP because they are not covered by its mandate.

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

The source data reasonably approximate the definitions, scope, time of recording, and valuation required. The residency criterion, the classification of instruments, and the identification of institutional sectors are in broad compliance with *MFSM* recommendations. The only exceptions are financial derivatives and insurance technical reserves, which cannot be fully identified, although its relative importance is small.

The chart of accounts of the SBP follows international accounting standards and contains the necessary details for macroeconomic analysis. However, the distinction between assets and liabilities denominated in national currency (balboas or US dollars) and in foreign currency (other than US dollars) is not available. Thus, an analysis of currency mismatches of the financial sector is not possible. However, the relative importance of assets and liabilities in non-US dollar currencies is considered to be very low.

Regarding sectorization of the accounts, the chart makes the distinction, within the financial sector, between banks and other financial corporations. However, the recommended methodology distinguishes between other depository corporations (including not only banks but every financial institution issuing deposits or close substitutes of deposits included in the definition of broad money) and other financial corporations. The fact that the SBP does not compile aggregate measures of liquidity such as monetary aggregates—including broad money—likely justifies the distinction in the chart of account between financial institutions supervised and not supervised by the SBP.

3.1.3 Source data are timely

Source data are timely and delays are unusual. Monthly data, including balance sheet and complementary information (*átomos*), are received from banks 10 working days after the end of the reference month. A system is in place to record errors and reporting delays. All data are received electronically, which contributes to their timeliness.

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

Source data are assessed and kept updated through qualitative information about authorization of new entities, creation of new instruments, new operations, and other actions that the SBP is responsible for maintaining.

To ensure accuracy, the compiler visually validates the banks' balance sheets and complementary information. This validation, mostly to ensure that out-of-line developments in time series are not due to errors by reporting banks, comes after a strict set of arithmetic and logic validation tests, prior to approving the reported data, have been carried out automatically by the data transmission software in place.

The accuracy of the data from banks is routinely reviewed for internal consistency. Inconsistencies and out-of-value trends are discussed with the reporting financial institutions through the Extra Situe Supervision Department (ESD) and written records of the inconsistencies and their findings are kept. There is also communication between the DEE and supervision departments (Extra and In Situe) regarding proper understanding on new or complex operations by the banks.

The SBP prohibits direct contact between banks and compilers, instead routing all consultations through the ESS in written form. This procedure for communicating with reporting institutions may lack flexibility, particularly with regard to simpler, high-frequency data such as interest rates statistics. If the SBP plans to compile and disseminate weekly interest rates, which is more in line with international practices and welcome by users, consideration should be given to allowing direct contact—including by phone—between compilers and banks. In addition, a record of the results of the queries by the compiler may be maintained in substitution of the written procedure stated earlier.

3.3 Statistical techniques

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

The statistical techniques used to compile banking sector statistics are automated, reducing processing errors related to codification, tabulation, and revision of source data.

The DI filters the information received by banks electronically using a computerized system that validates the information (using around 40 tests) for each reporting institution. In special cases, where a financial institution fails to report data on time, the DEE estimates its position by copying the latest data reported, so that the aggregates can be prepared on time. When the data are received, they replace the estimated data disseminated earlier.

In the case of banks in the process of liquidation, distinction is made between voluntary and compulsory liquidation. Only in the latter case, are data not reported through regular procedures and the DEE does not apply any statistical technique to preserve a sound time series analysis of the aggregates. Nonetheless, there have been very few cases of liquidations forced by the authorities (only three in the past 30 years) and, therefore, the impact in the time series has been negligible.

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

Given the accounting basis of the source data, it is unusual to make statistical adjustments or estimates for the banks balance sheets and the banking sector aggregates. Source data are presented in national currency and include transactions based on conversion of foreign exchange into local currency using the official end-of-month exchange rate.

The banking sector statistics disseminated by the SBP are not subject to seasonal adjustment.

3.4 Assessment and validation of intermediate data and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

The *MFSM* recommends that the production of monetary statistics comprise two levels of data compilation and presentation: (1) the first aggregates data reported by individual units in sectoral balance sheets; (2) the second consolidates data from the sectoral balance sheets into surveys (also called analytical accounts). However, the banking statistics compiled by the SBP are only compiled and presented in balance sheet form, and not in survey format. Therefore, there is no intermediate statistical output (i.e., sectoral balance sheets) strictly speaking, but a single and final one, which is disseminated in summarized form.

Monthly information is validated against more detailed quarterly data when they are received. No other sources of information are available for cross-checking.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

There are no automatic checks to help monitor trends in the time series. These are scrutinized visually, which is considered an adequate practice considering the high-quality data transmission system in place in the SBP.

At the end of the year, a special investigation is conducted to assess the adjustments made in the end-of-the-year balance sheet. These adjustments may have implications in the time series. In addition, the DEE monitors—on a monthly basis—the changes in the stock of securities to ensure that they reflect real operations and not errors in the reported data.

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

Regarding statistical outputs, large discrepancies and other potential problems are routinely investigated. The DEE checks all its statistical products and explains any unusually large fluctuations. Data from banks are checked to prevent any statistical discrepancy due to errors in classification or omissions. This process usually involves an analysis of loans by type of economic activity and quality of credit. Investments in securities are analyzed by type and investment category.

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)

Banking sector statistics are not subject to formal revision cycles in the statistical sense as data are deemed final when first released. However, this report recommends that the SBP substantially improve the timeliness of disseminated data (from 6–8 weeks to four), resulting in the dissemination of preliminary data subject to revisions.

Investigations to improve data quality are conducted on an ad hoc basis to evaluate the sources of problems (e.g., inconsistencies between monthly and quarterly data). Once the source is identified, procedures are put in place to avoid recurrences.

Banks may also revise their data, which is nevertheless more frequent in profit and loss account items—such as gains/losses in securities trade, gains/losses in exchange rate conversion, and losses due to bad loans—than in the balance sheet. These revisions are particularly concentrated in end-of-fiscal-year data, which may or may not coincide with the end of the calendar year.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The periodicity of banking sector statistics, including the NBP, meets GDDS recommendations, i.e. monthly data.

4.1.2 Timeliness follows dissemination standards

The timeliness of monthly banking sector statistics is consistent with GDDS recommendations (two to three months.) The SBP publishes data for individual banks, including the NBP, six weeks after the end of the reference month. Aggregated data are disseminated two months after the end of the reference month. More detailed quarterly data are also published two months after the end of the reference quarter.

Notwithstanding the fulfillment of GDDS recommendations, the authorities are not fully responsive to the intent underlining certain tradeoffs among the dimensions of data quality. In particular, timeliness is not regarded as one of the most important elements of data quality. Banks report data promptly (10 working days, or two weeks, after the end of the reference month). The receipt and compilation of statistics is fully automated, including a series of checks and validations imposed on banks before accepting data delivery. However, statistics are disseminated only six weeks after the end of the reference period, which is about two weeks later than other countries with financial systems of similar development.

4.2 Consistency

4.2.1 Statistics are consistent within the dataset

The banks' records of claims on, and liabilities to, each other show discrepancies because of differences in the time of recording of financial transactions. However, these discrepancies are not significant. Sometimes there may be recording differences owing to operations in transit, but these operations are easily detected and corrected.

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

Available monthly banking sector data begin in 1970 and are reconcilable, although early data are very aggregated. Data disseminated to the public only begin in December 2001. Older series are internally available in paper, but not disseminated. The SBP has plans to construct longer time series with available data and publish these data in the near future.

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

The banking sector statistics disseminated to the public are not reconcilable with those obtained through other data sources because the analytical framework does not correspond to macroeconomic analysis, which is not the mandate of the SBP. It is not possible, for example, to reconcile fully net foreign assets with corresponding items in the balance of payments statistics, although the residency criterion is followed in both statistics. However, the SBP and the CG regularly verify that the data in the banking sector statistics are consistent with those in the balance of payments.

The criteria used to sectorize the economy for purposes of compiling banking sector and fiscal data are consistent. However, it is difficult to reconcile fully banking sector statistics with fiscal data (e.g., net credit to government) because accrual recording is largely used in banking sector statistics and cash recording in the fiscal data. In addition, and as in the case of the comparability with the balance of payments, the analytical framework for banking statistics does not facilitate the reconciliation with fiscal data, including on public nonfinancial corporations.

4.3 Revision policy and practice

4.3.1 Revisions follow a regular and transparent schedule

Monthly banking sector statistics compiled by the SBP are deemed final when published, as discussed in section 3.5.1. Therefore, there is no need for a regular and permanent revision schedule or implementation of a revision policy at this moment. However, if the SBP decides to disseminate more timely data, a revision policy may need to be defined.

Monthly statistics are nevertheless reviewed every quarter by comparison with the more detailed quarterly data that banks are obliged to report to the SBP. If significant changes in the monthly data occur, users are notified by means of footnotes.

The content of the statistics is reviewed on a continuous basis, particularly by contrasting monthly and quarterly data.

4.3.2 Preliminary and/or revised data are clearly identified

Disseminated data are always final. From the perspective of the SBP, which publishes not only aggregated data but individual bank data as well, preliminary data do not exist because compilers only publish the data that have been already validated and approved by the corresponding department in the SBP.

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

Revisions are extremely unusual owing to the SBP policy of publishing only final data. Therefore, studies and analyses of revisions that occasionally take place are not for publication. Nonetheless, the SBP intends to produce and publish analyses of revisions if the decision is made to disseminate preliminary data more timely than is currently the case (i.e., shortening the publication lag for aggregated data from two to one month after the end of the reference month.)

5. Accessibility

5.1 Data accessibility

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

The presentation of banking sector statistics facilitates the interpretation of data and allows monitoring of banking sector and financial developments. The data disseminated on the SBP website contain tables presenting data in a clear and user-friendly layout. It contains more detailed monthly and quarterly data for the last five years.

5.1.2 Dissemination media and format are adequate

The media used in the dissemination of data are adequate for users who have access to the Internet, as both recent and (limited) historical data can be consulted on the SBP website (<http://www.superbancos.gob.pa>). Regarding the format for dissemination, the use of PDF files without spreadsheets is not recommended by international best dissemination practices.

5.1.3 Statistics are released on a preannounced schedule

There is no preannounced advance release calendar to the public. However, DEE follows an internal production and publication schedule and dissemination is done at regular intervals (monthly and quarterly.)

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

Monthly and quarterly banking sector statistics are disseminated simultaneously to the public on the SBP website. However, owing to occasional longer-than-usual delays in dissemination, some users in the public sector have obtained data (as inputs to their own publications and analysis) before their dissemination.

5.1.5 Statistics not routinely disseminated are made available upon request

Unpublished (but nonconfidential) data are made available upon request from the DEE, with the approval of management. All information requested by users is free of charge. The SBP website has a facility for users to send questions or queries to the SBP. However, the SBP does not inform users of the availability of data online or of their content, such as the degree of detail available or the length of the historical series.

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 SBP does not provide users with methodological notes on banking sector statistics. Nonetheless, the banking law available in the SBP webpage contains descriptions on classification of loans, securities, capital adequacy and other topics that inform on the methodology for presenting the data. Furthermore, the SBP maintains updated metadata in the GDDS country page, but a link from the SBP webpage to the IMF's GDDS webpage does not exist.

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

Detailed methodological notes describing the main concepts and definitions of the disseminated data are not available for the specialized user.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

The internal users of banking sector statistics at the SBP get support from compilers at DEE. External users may send their queries through the SBP website (through the link: “*contactenos*”) or by phone. Written replies to user queries are made in less than three days.

The GDDS metadata identifies the director of the DIEE as the contact person for any query on the statistics disseminated by the SBP.

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

The vehicle for informing the public about statistics related to banking sector statistics is the SBP’s website, the only dissemination channel used by the SBP.

Table 4. Panama: Data Quality Assessment Framework (July 2003)—Summary of Results for Monetary Statistics
(Compiling Agency: *Superintendency of Banks of Panama*)

Element	NA	Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO		
0. Prerequisites of quality						
0.1 Legal and institutional environment			X		The Law does not clearly assign responsibility to the Superintendency of Banks of Panama (SBP) to disseminate monetary statistics.	
0.2 Resources			X		Periodic reviews of staff performance are not conducted.	
0.3 Relevance			X		Formal mechanisms for consulting private sector users' needs and identifying new data requirements have not been established.	
0.4 Other quality management		X				
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions	X				The framework, concepts, and definitions for monetary statistics are not applicable to the statistics on the banking sector disseminated by the SBP.	
2.2 Scope		X				
2.3 Classification/sectorization	X				The classification of financial instruments and sectorization systems used for monetary statistics are not applicable to the statistics on the banking sector disseminated by the SBP.	
2.4 Basis for recording			X		Depository corporations balance sheet are compiled using data partially based on historical prices with no estimation of fair values/market prices. Accrued interest is not allocated together with the financial instrument that generates it. Interest in arrears for more than three months is no longer included in the balance sheet, but recorded off-balance sheet. The SBP does not disseminate analytical accounts of the banking sector on a consolidated basis, although it publishes data on consolidated financial groups.	
3. Accuracy and reliability						
3.1 Source data			X		Financial derivatives and insurance technical reserves cannot be fully identified, although their relative importance is small. The distinction between assets and liabilities denominated in national currency and in foreign currency (other than US dollars) is not available; however, the relative importance of foreign denominated assets and liabilities is small.	The decision to modify the chart of accounts for ODC to identify financial derivatives and insurance technical reserves is being analyzed. These new accounts could be added by early next year. The currency breakdown of assets and liabilities is also being considered in our transference system action plan.
3.2 Assessment of source data		X				
3.3 Statistical techniques		X				

Table 4. Panama: Data Quality Assessment Framework (July 2003)—Summary of Results for Monetary Statistics
(Compiling Agency: Superintendency of Banks of Panama)

Element		Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		NA	O	LO		
3.4	Assessment and validation of inter-mediate data and statistical outputs		X			
3.5	Revision studies	X			Banking sector statistics are not subject to formal revision cycles in the statistical sense as data are deemed final when first released.	
4. Serviceability						
4.1	Periodicity and timeliness			X	Timeliness of disseminated statistics could improve owing to availability of prompt source data.	
4.2	Consistency			X	Even if data are consistent over time, with historical series beginning in 1970, no data on the banking sector are readily available in electronic form before 1998. Banking statistics are not reconcilable with other sectoral statistics because their analytical framework does not correspond to monetary analysis.	Comprehensive historical series beginning in 1970 will be available in electronic form in the short term.
4.3	Revision policy and practice		X			
5. Accessibility						
5.1	Data accessibility			X	Data is disseminated in PDF format only, and not in spreadsheets. Although there is no preannounced release schedule, data are disseminated on the SBP website at regular intervals (monthly and quarterly). Owing to occasional longer-than-usual delays in the dissemination of the data, some users in the public sector have obtained unpublished data on request (as inputs to their own publications and analysis.) Unpublished data are provided on request; however, this possibility is not made known to the public.	
5.2	Metadata accessibility			X	Methodological notes on banking sector statistics are not available, although the banking law available in the SBP webpage contains descriptions on classification of loans, securities, capital adequacy and other topics. Detailed methodological notes are not made available to the public.	Methodological notes on banking sector statistics are under development and will be ready by the end of 2006.
5.3	Assistance to users		X			

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 1972 Constitution of the Republic of Panama and the Presidential Decree 7, and the Law 32 of November 8, 1984 assign the task to the Office of the General Controller of the Republic (GC) the risk of compiling and disseminating national statistics in Panama. Article 280 of the Constitution states that the GC is responsible for carrying out the function of the “Directing and Producing National Statistics.” The Decree 7 of February 26, 1960 specifies that this function shall be carried out through the Directory of Statistics and Census (DSC) and “shall include activities related to the compilation, preparation, analysis, and publication of statistics produced by any national or municipal public office and by autonomous or semi-autonomous agencies.”

The DSC, conducts and coordinates economic and social statistical activities in general, and is authorized to request data from public and private entities. Working arrangements are consistent with the explicit assignment of responsibility to the DSC. The Balance of Payments Section (BOPS) of the DSC is directly responsible for data collection, compilation, and processing of balance of payments, international investment position, and international reserves.

The laws supporting the compilation and dissemination of macroeconomic statistics in Panama do not make specific reference to balance of payments statistics. However, the legal framework is supportive of these tasks in the area of external sector statistics. For example, the Decree 7 of 1960 describes the powers of the CG as regards national statistics, the obligations and penalties associated with the compilation of national statistics, and data confidentiality. According to the same decree, the CG guarantees the confidentiality of the data used for statistical purposes, and it establishes nominal penalties to reporters for noncompliance, although the law has become outdated with respect to nominal amounts.

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

The DSC is a decentralized agency with regional offices for compiling and processing primary information. Although there are no formal institutionalized agreements between the DSC and some other data providers, the DSC has established informal mechanisms with some public and private sector entities to obtain information for the compilation of the balance of payments statistics. There is coordination with Superintendency of Banks, Superintendency of Insurance, MEF, and the National Bank of Panama. Although there are meetings with other agencies on balance of payments issues and technical working groups, the relationship among governmental institutions is not institutionalized. Customs provides

import and export data on a monthly basis, and the MEF information on external debt. Embassy expenditures abroad are provided by the Comptroller's Office through the Accounts Directorate. The Local Business Directory Section and the Economic Survey Section, which are part of the DSC, are responsible for the annual updating of lists of firms used in the various surveys. In addition, there is a cooperation agreement with the Tourism Ministry (*Instituto Panameño de Turismo*) and *Ministerio de Relaciones Exteriores, Autoridad del Canal de Panamá* (Stops of Ships in Ports) to obtain data on migration flows to compile travel in the balance of payments. Although informal coordination with other governmental agencies is present, lack of formal institutionalized agreements with data providers can impact the coverage and timeliness of source data.

The DSC often organizes seminars on the methodology used in preparing balance of payments statistics to educate reporters and users on the needs of the DSC to produce balance of payments statistics.

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

For balance of payments purposes, the law is supportive of compilation and dissemination of data. In surveys and other statistical inquiries, respondents are informed of their rights and obligations with regard to the provision of information. The note or circular accompanying the survey form refers to confidentiality and mentions the Decree 7. The instructions for completing the form also contain such reference, and the articles referring to the respondent's rights and obligations are set out.

Regarding the compilation process in balance of payments statistics and the handling of primary and intermediate data, Article 14 of Decree 7, mentions that "Any employee of the Statistics Office who discloses data regarded as confidential shall be dismissed, without prejudice to any liability incurred pursuant to Article 166 of the Criminal Code."

The same Article 14 of Decree 7 provides further assurance to respondents on confidentiality: "For purposes of this Article, individual information will be deemed to have been disclosed when, through deliberate or careless action by the employee, such information comes to the knowledge of a person other than an employee of a statistics office who are authorized to have such information by reason of his duties."

Confidentiality is protected in the BOPS by assigning a number or key for identifying information. Moreover, reporting forms are kept in filing cabinets to which only those officials involved in the task have access. In the compilation and validation stages of the balance of payments statistics, only the staff of the unit in charge of specific accounts are aware of individual information.

The cover letter accompanying surveys and other requests for statistical information mentions explicitly that the information requested will be treated in a strictly confidential manner generally and used only for compiling balance of payments statistics.

Statistical tables and reports on balance of payments data are prepared in a way that prevents disclosure of individual data. The BOPS does not disseminate data for a particular item if the number of respondents is less than three. The computer systems prevent unauthorized access to individual data through password protection. In order to ensure adequate protection of resources, each employee has a username and a unique secret password that guarantees proper use of the equipment. Moreover, the DEC has two servers, which keep a backup of all data for security purposes.

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

The data-producing agency has the legal authority to collect data required to compile the statistics as established in Decree 7 of 1960, and the collection activity is consistent with the legal authority, pursuant to the Constitution, Law 32 and Decree 7.

Collection done through surveys includes a sheet with instructions and definitions. The circular that accompanies the survey form also refers to confidentiality issues and the instruction sheet includes articles from the law pertaining to obligations and penalties. In addition, assistance is provided to any respondent who so requests; this may include a visit to the company and guidance in completing the form. The survey forms are sent out using a list containing the name of the company, the person responsible for completing the form, the address of the company, the telephone number, fax, e-mail and regular mailing address.

0.2 Resources

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

There are nine staff involved in balance of payments data collection in the BOPS. A separate unit in charge of trade statistics provides data to the balance of payments and to the national accounts units within the DSC. Qualifications and training are adequate, and staff motivation appears high. Staff retention is good, evidenced by the fact that several staff members received training in balance of payments statistics at IMF courses and subsequently remained on the team.

Resources in the balance of payments unit are not adequate. Senior managerial staff positions in BOPS are not fully staffed. One staff member is assigned by contract, renewable every six months; at the end of each period, there is always some uncertainty as to whether the contract will be renewed or not. The position of head of the Balance of Payments Section has been vacant since 2002 and currently the deputy head is in charge of the BOPS. The unit also lacks a supervisor, a critical position within the unit, which means that the deputy head has to perform the functions of head, deputy head, and supervisor, limiting the time devoted to the analysis, review, and control of statistics.

The DSC also has a policy of offering a training program targeting all personnel and periodically revised for effectiveness. Because the BOPS does not have a supervisor, an effort is made to provide the more experienced personnel with training in all relevant issues, in order to specialize them so that they can play a supervisory role in case of personnel rotation (within the unit). The CG maintains a performance evaluation program and, therefore, all employees have the opportunity to fulfill the requirements, which entitles them to a salary increase every two years.

In the BOPS, each employee has a computer, with access to e-mail, and there are two printers (one of which does not work properly), a fax, two telephones lines, and computers with Internet access. One staff member does not have a computer. The programs used for statistical compilation are adequate and up to date, but there are no programs for analyzing statistical series. Facilities are adequate in terms of lighting and air-conditioning, but not in terms of physical space. Much of the furniture needs to be replaced. Transportation arrangements are not adequate to allow tasks, particularly surveys, to be performed properly.

Funding for compiling the statistics is inadequate. Funding is determined in a preliminary draft of the budget, which frequently suffers cutbacks before approval, resulting in funds transfer to other statistical activities that are considered higher priority. There are well-defined budgeting procedures for statistical activities, but they are subject to cutbacks. The budget is programmed on an annual basis in the face of severe financial constraints, making it difficult to plan for statistical improvements. The DSC therefore draws on funding from international agencies to make these improvements.

0.2.2 Measures to ensure efficient use of resources are implemented

The management of CG promotes a mission and direction for efficient use of resources that are shared with staff and described in CG's ten commandments. The CG has implemented a annual performance review, and quarterly performance planning is programmed. Working meetings are held, depending on the requirements and complexity of the work. The data-producing agency seeks outside expert assistance to evaluate statistical methodologies and compilation procedures through direct consultations, for example, on a change in methodology or the introduction of new statistics when necessary.

No specific provision exists to measure resources used to compile balance of payments statistics vis-à-vis those employed for other macroeconomic data produced by DSC. However, resources used to compile balance of payments statistics are monitored and budgeting practices are in place to help allocate resources to priority areas.

0.3 Relevance

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

The BOPS maintains a close dialogue with data users. Users are kept informed through bulletins, pamphlets, and information available over the CG Internet website. However, there are no formal monitoring procedures for data users. A calendar for data dissemination is made available to the press. The e-mail address is included in every note sent to users. The DSC holds seminars meetings with reporters and users of balance of payments statistics. Data users are kept informed on compilation methodologies through metadata disseminated in the *Balanza de Pagos, Estadística Panameña*, and the General Data Dissemination System (GDSS) webpage. Data publications identify a responsible staff member for each time series and encourage data users to send questions and comments. The balance of payments unit commits to answering such queries within seven working days.

Staff in charge of balance of payments statistical compilation regularly participate in statistical meetings and seminars organized by international/regional organizations or by professional organizations. A structured and periodic process of consultation takes place with policy departments/ministries and other principal data users. Through the Project for Preparation of the NSSD feedback mechanisms have been established in order to reinforce the National Statistics System (NSS), with a view to standardizing statistics and reinforcing statistical management capacities among national and international organizations.

0.4 Other quality management

0.4.1 Processes are in place to focus on quality

CG management is sensitive to all dimensions of data quality, and promotes a shared concern for quality throughout the organization. Strategic plans are prepared to set out the main objectives for each unit and are evaluated periodically to measure the results. Staff training programs emphasize the importance of quality and give staff an understanding as to how quality may be achieved. Staff are instructed on how to achieve data consistency for producing high-quality information.

The organization provides an infrastructure for quality by recognizing trade offs, economies of scale, and interrelations between datasets. Accordingly, within the context of the NSSD, and as a move to strengthen the National Statistics System, DSC is working on implementation of a database (INFODEC), that will allow timely and consistent statistics productions.

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

The BOPS prepares monthly reports to DCS management, summarizing in concrete form the status of all activities (surveys), i.e. forms sent out, received, pending receipt, analyzed, tabulated, etc. Compiling areas have access to expert guidance on the quality of their statistics and on strategies for improving data production, for example through regular communication with experts from the IMF.

Periodic reviews have been undertaken to identify steps necessary to maintain quality requirements. However, there are no such reviews at the present time.

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

Although explicit processes are not in place, the DSC evaluates work programs in order to identify shortcomings and to determine the need to apply standards for obtaining the necessary data for improving data quality. Plans to overcome large revisions in balance of payments statistics are currently under consideration.

1. Assurances of Integrity

1.1 Professionalism

1.1.1 Statistics are produced on an impartial basis

There are legal provisions that give the CG professional independence. The law establishes, recognizes, and respects professional independence. In practice, the official nature of the DSC in the CG and its publications are recognized. Although management positions within the DSC are subject to replacement, professional independence is maintained. Professionalism in statistical output is evident from adherence to international methodologies and recommendations.

Although the CG law does not specify the term or hierarchical level of the DSC head, his professional independence is maintained. For recruitment, job profiles are established for each area. There is a promotion policy of classification and reclassification of positions, and a performance appraisal system that provides for salary increases every two years. A culture of professionalism is encouraged through continuous training in specific areas. A training committee evaluates and plans training at both the national and international levels, in response to the needs of each administrative unit. This training plan includes material on balance of payments methodology for suppliers and users. With the growing demand for information and the implementation and classification of new methodologies in recent years, the time devoted to research and information analysis has been limited.

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

The DSC staff has independence in choosing data sources (e.g., administrative records or surveys). The choice of source data is based on these statistical considerations as specified in the Decree of 1960, which stipulates that data may not be used for other purposes (Article 13). There is no interference from other agencies in the choice of data sources and compilation methods. The selection is based on data quality, availability, timeliness, cost, and data needs considerations, guided by the pursuit of international standards. Users are informed in advance of the dissemination timetable of major aggregates through the Advance Release Calendar, which is also sent to the press. Within the limits of resources, decisions about the timing, methods, and other aspects of dissemination are based solely on statistical considerations without interference from other government agencies.

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

The DSC seeks to prevent misinterpretation or misuse of statistics by providing explanatory materials and briefings mainly through press releases and comments on the behavior of data. There is no formal policy or well-established custom to deal with data misinterpretations or misuse of statistics. However, when errors of interpretation are detected, the authorities respond by clarifying or confirming the statistical results. The Social Communications Directorate in the CG maintains a monitoring system for tracking news reports in the media (television and the printed press).

1.2 Transparency

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

The CG through its Social Communications Directorate makes an active and ongoing effort to inform the public about the terms and conditions under which it operates, including through press releases, meetings, lectures, and conferences. Names of contact persons for each subject field are published in balance of payments publications. The transparency of statistical data is guaranteed by CG's Law. Data are published in printed bulletins and are also disseminated by electronic means, e-mail, and on the Internet. Article 12 of the Decree of 1960 and Article 17 of Decree 7 govern the confidentiality of the information. It is common for the terms and conditions under which statistical series are compiled and disseminated to be presented during CG seminars.

Although it is widely known by the public that additional information about the DSC and its products are available on demand, this information is not widely publicized in publications.

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

In previous years, the senior authorities had prior access to information. Currently, information is delivered simultaneously to all users.

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

Statistical products are clearly identified with logos, a letterhead, and names. In the case of joint publications, all agencies are identified clearly with the logo of the institutions involved, including the DSC. The DSC requests that the source of the data be included when used by another entity.

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

Although only on exceptional occasions, advance notice is given to the public (e.g., articles in bulletins, briefings, or news releases) when major changes are introduced in methodology, sources, and statistical techniques. In the case of balance of payments statistics, the bulletin has included “explanatory notes,” which report changes in methodology and in certain technical statistics. Notice was also provided on changes to the methodology for recording transactions in the CFZ and bank transactions, among others.

1.3 Ethical standards

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

The Uniform Code of Ethics for Public Servants applies to the central government and thus to the CG. Every employee receives a copy of the Code of Ethics and of the Internal Bylaws, which are strictly enforced. Staff are reminded periodically of the standards, usually by means of memoranda and working meetings. Article 21, referring to independence of judgment (*Independencia de criterio*), states that public servants must not be involved in situations, activities or interests that are incompatible with their functions or that imply a conflict of interest. They must abstain from any conduct that could affect their independence of judgment in the performance of their functions.

There are clear guidelines that make the connection between ethics and staff work. For example, Article 28 of the Code of Ethics mentions that public servants must not use for their own benefit or that of third parties or for other than official purposes any information of which they may have knowledge by reason of or in the course of the exercise of their duties, and that is not intended for the general public. Nor may they use for their own benefit or that of third parties any information that would convey an undue advantage, lead to the violation of legal provisions, or generate discrimination of any kind. Ethics is one of the Ten Commandments in the CG that are widely publicized. New and current staff are periodically reminded about the importance of observance of ethics to achieve institutional excellence.

2. Methodological Soundness

2.1 Concepts and definitions

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

The structure, concepts, and definitions of the balance of payments statistics largely follow the *Balance of Payments Manual*, fifth edition (*BPM5*) guidelines. A double entry system is applied as the basic principle, with the statistical discrepancies recorded in errors and omissions. Being an important offshore trade and financial center, the residence of offshore entities and enterprises operating in free trade zones is attributed to the economy in which they are located.

In principle, data clearly distinguish between income components and goods and services components. The financial account separately records transactions in foreign financial assets and liabilities. With the exception of investment in construction, which is not currently recorded although there is a business registry of construction, direct investment is recorded on a directional basis, but no record is made of direct investment of residents abroad.

Resident institutional units are defined in conformity with the *BPM5* and relate to those that have a center of economic interest in Panama. However, resident holdings of external debt instruments issued by the government are not excluded from the balance of payments. With the exception of students and persons requiring medical treatment abroad, the one-year rule is applied in assessing the residence status of individuals, which is followed for the rest of the balance of payments transactions. The classification of types of transactions follows *BPM5* concepts. Balance of payments transactions are defined in principle as all transactions by resident economic entities with nonresidents. The compilation methods of the DSC do not deviate from the concepts and definitions of *BPM5* in principle.

With respect to foreign direct investment transactions, Panama applies the 10 percent ownership rule for recording purposes. As for reserve assets, since Panama has no central bank, deposits held abroad of the NBP, a government owned bank, are treated as international reserves. The Trust Fund that the government keeps on deposit with fund administrators is treated as a reserve asset.

2.2 Scope

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

In principle, all resident-nonresident transactions, as specified in the *BPM5*, are covered in the balance of payments statistics. Coverage improvements are needed in the recording of shuttle trade, mineral exploration, purchase of computer software packages (a survey of firms engaged in this activity is now under way), e-commerce transactions, temporary workers

abroad, and leases. In principle, all resident institutional units engaged in transactions with nonresidents are covered. However, there is lack of data on unrecorded trade and non-financial private debt is not recorded. The BOPS is now making efforts to obtain information on temporary workers from the household survey, and other business, construction, and computer and information services through the enterprise surveys.

2.3 Classification/sectorization

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

The balance of payments statistics classification and sectorization broadly comply with *BPM5* guidelines. Institutional units are classified according to the *BPM5*. Both analytic and standard presentations of the balance of payments and IIP are available on a quarterly and annual basis in DSC publications. Transactions are classified by relevant items, with sectoral breakdown in accordance with the sector of the transactor. However, license fees for fishing and hunting are not recorded in the balance of payments. No major classification problems arise from data sources.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The basis for recording is mixed. The principle of market valuation is generally used. In instances where no market prices are observed, prices of similar transactions or best estimates are used as a proxy. The value of transactions is reported separately from related charges, fees, and transaction services. In cases where transactions are calculated from changes in stocks, calculations are made to exclude valuation and other changes. External debt is recorded at face value when issued, but adjusted to market value when redeemed.

The BOPS compiles balance of payments data in balboas, which are equivalent to U.S. dollars. Most balance of payments transactions are in U.S. dollars and therefore present no conversion problem. When the currency of transaction is not the dollar, the data are converted to dollars at the exchange rate in effect on the date on the transaction. When the transaction date cannot be precisely determined, the average midpoint exchange rate for the reporting month is used.

Some flows in the financial account are derived from monetary statistics stocks. These are already in U.S. dollars. Due to available source data from the SBP, the balance of payments unit is capable of excluding, from the total, those changes due to prices, cross-exchange rates, and other variations.

2.4.2 Recording is done on an accrual basis

Recording is mostly done on an accrual basis; however, interest on external public debt and dividend payments are recorded when paid. The accrual basis is only approximately achieved in some of the sources used in balance of payments data. In the case of merchandise trade statistics, the data are recorded according to the time of clearance by customs, which may not be the same time that the goods change ownership. Services, income, and transfers are cash-based, as are equity and reinvested earnings of the private nonbank sector. Overall, efforts are made to use the accrual principle.

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

In line with the recommendations of the *BPM5*, current and capital account transactions are recorded on a gross basis while financial account transactions are recorded on a net basis, separately for the individual asset and liability components.

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 composition of data sources (surveys and administrative records) is adequate, but does not cover some private sector services and financial transactions. Shortcomings in source data from the CFZ hamper adequate trade estimates. The temporary discontinuation of some surveys, due to budgetary restrictions in the last two years, contributed to the shortcomings. The DSC is working to overcome these problems and to include new transactions relating to emerging activities of impact on Panama's economy. Established procedures provide for frequent integration of new transactor units into the register(s) and accounting of mergers, cessation of operations, and other changes.

The sources of data are: the National Bank of Panama; the SBP, formerly the National Banking Commission; Directorate of Public Credit of the MEF, formerly the Ministry of Planning and Economic Policy; Superintendency of Insurance; PCA, formerly the Panama Canal Commission; and the U.S. Embassy.

The BOPS also obtains information from other departments of the DSC (which compile statistics on foreign trade and migration) and other directorates of the CG (which compile data on external debt). In addition, the DSC conducts surveys and special research on services, income, current transfers, and private nonbank financial flows.

Goods

Regarding entries in the current account, the DSC bases its data on trade statistics from customs documents. Adjustments are made to eliminate double counting of trade between the CFZ and the rest of Panama. Beginning with 2001, the trade statistics include imports by the PCA. For goods procured in Panamanian ports by foreign carriers, DSC obtains data on direct sales by private enterprises (bunker oil), and oil companies (aviation fuel), and from surveys of agents of foreign airlines and shipping companies (other supplies). From 1997 onwards, adjustments are made for electricity trade between Panama and Central America, as well as goods for processing derived. These estimates are derived from trade declarations.

Services

Regarding transportation, BOPS uses information on freight on imports from customs declarations. It obtains data on passenger services from surveys of national airlines and agents of foreign airlines, and on port services from agents of foreign air and shipping lines, national airlines, container terminals ports, and the PCA (for tolls and other services to Canal users). For travel, the DSC employs sample surveys conducted in conjunction with the Panamanian Tourism Institute, on the expenditures of foreign visitors in Panama and of Panamanian residents on their trips abroad, and on information derived from migration statistics on the number of travelers.

Data for both credit and debit entries include estimates of new telecommunications agencies. On insurance, the credit entries cover net premiums on direct insurance and reinsurance assumed by Panamanian insurance companies, based on information from the Superintendency of Insurance of the Ministry of Commerce and Industry. The debit entries cover premiums on merchandise insurance on imports derived from the trade statistics, adjusted to exclude insurance collected by resident insurers and net reinsurance premiums ceded to foreign companies. For financial services, the data mostly cover commissions and other financial services provided or received by general license and international license banks, as reported to the SBP. BOPS obtains data for other business services through its surveys of nonfinancial enterprises, including those operating in the CFZ. Until 1999, the credit entries of government services mainly covered acquisition of goods and services in Panama by U.S. military establishments located in the Panama Canal Area obtained from the U.S. Embassy. BOPS takes the data on Panamanian government expenditures abroad from the Directorate of Accounting of the CG.

Income

Until 1999, the DSC obtained data on compensation of employees from the U.S. Embassy in Panama. The data included wages paid to Panamanian residents by the U.S. Defense Department and some other U.S. agencies that operated in the Panama Canal Area. Currently, a set of embassies are being surveyed.

Regarding direct investment in Panama, entries cover transactions of nonfinancial corporations, including those operating in the CFZ, the PCA (until 1999), general license banks (which do business with both residents and nonresidents), and international license banks (which do business with nonresidents only). Until 1999, the sources of the data were annual surveys conducted by the DSC, the annual report of the PCA, and the general license and international license banks' consolidated balance sheets and income statement data, which the SPB provided.

Portfolio investment data are collected by BOPS for general government from the Directorate of Public Credit of the MEF and for the banking sector bank-by-bank from the consolidated income and loss statements of the general license and international license banks from the SPB. The NBP provides information on the government trust fund which is kept off-balance-sheet by the NBP but included in official reserve assets in the balance of payments and IIP.

Regarding other investment, the main source of data on general government is the Directorate of Public Credit of the MEF. The DSC derives the data for the banking sector, bank-by-bank, from the consolidated profit and loss statements of the general license and international license banks provided by the SBP. It obtains data related to the other sectors, concerning the decentralized institutions, from the External Debt Report of the Directorate of Accounting of the CG and, from 1996 onwards, from the Directorate of Public Credit at the MEF and from the survey of foreign investment enterprises.

Current Transfers

On current transfers, keeping with *BPM5* recommendations, available information since 1997 has allowed a distinction to be drawn between current and capital transfers. The credit entries for current transfers of general government include grants received from the U.S. Agency for International Development and other organizations such as IADB, PNUD, WHO, and OAS. Since 2001, data on workers' remittances (for both credit and debit entries) have been derived from quarterly surveys of money changers. Other transfers (credits) cover mainly pensions paid by the U.S. government to residents of Panama who worked for U.S. government agencies in the former Panama Canal Zone.

Capital and Financial Accounts

From 1995 onwards, the BOPS has included grants by foreign governments and, since 1997, furniture and equipment grants from international organizations.

Direct Investment

No data are available on direct investment abroad by Panamanian residents. The data sources are business surveys. Direct investment enterprises are defined as those in which a foreign investor has an equity participation of 10 percent or more.

Portfolio Investment

Regarding portfolio investment, the DSC derives the entries under assets for bonds and notes of the banking sector from the consolidated balance sheets of the general license and international license banks provided by the SBP. The directorate obtains entries under assets for bonds and notes of other sectors from the quarterly enterprise survey. Beginning in 2002, the Coordinated Portfolio Investment Survey has been implemented. BOPS expects to include the results of this survey, which are position data, in the IIP statistics starting in 2006.

For portfolio investment liabilities, BOPS obtains data on general government bonds and notes from the Directorate of Public Credit of the MEF. These data comprise new bond issues designed to reschedule debt in arrears as well as those used for repurchases and exchanges of the new bonds. They also include repayments on previous issues as well as repurchases and swaps of new bonds. Recording of interest on external public debt is made on a cash basis and not excluding resident holdings of external public debt.

Other Investment

For the other investment account, the DSC derives data for the monetary authorities from the balance sheet of the NBP. It obtains data on the external debt transactions of general government and the decentralized institutions from the Directorate of Public Credit of the MEF. The entries for banks' short-term loans, other assets, and other liabilities may include long-term transactions, but separate information has not been recorded as such. The DSC draws data on the liabilities of other sectors from its surveys. Non-financial private debt is not recorded.

International Reserves

For international reserves, entries refer to the Government's Trust Fund and foreign exchange assets of the NBP, a government-owned deposit money bank that performs some of the functions of a central bank. The reserve asset entries are defined as the changes in stock at the end of each year as a result of transactions.

International Investment Position

In 1996, the BOPS started compiling and publishing annual international investment position (IIP) statistics in the bulletin *Estadística Panameña–Situación Económica, Balanza de Pagos and Estadística Panameña*. The data sources are the same as those used in compiling the balance of payments.

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

The composition of data sources (surveys and administrative records) is adequate, although it does not cover some private sector services and financial transactions. Difficulties in source

data from the CFZ do not ensure adequate trade estimates. Specific procedures have been developed to adjust data from various data sources to improve coverage, classification, and valuation to conform with guidelines in the *BPM5*. Administrative records used to compile balance of payments statistics reasonably approximate the methodological requirements of the balance of payments.

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. Respondents are made aware of the deadlines set for reporting through the circulars and documents that are sent out.

The DSC employs rigorous follow-up procedures to ensure the timely receipt of respondents' data through both personal and written contact with respondents.

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

Accuracy of data from surveys is routinely assessed to monitor sampling and non-sampling errors. A range of comprehensive checks for internal consistency are conducted and routine queries are made when large transactions take place. The effects of changes to questionnaires on survey estimates are assessed by testing the consistency of the data collected. Source data are analyzed in the context of revisions.

All material changes from available up-to-date data are incorporated in the balance of payments statement according to a revision cycle that prevents the accumulation of revisions over long periods of time. For the balance of payments statistics, two criteria are applied for reviewing the data: estimates are corrected after three quarters; and final estimates are provided six quarters later.

Comparative tables are produced (in absolute or percentage values) from the data generated. In addition, there is intensive contact with respondents.

3.3 Statistical techniques

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

Compilation procedures for surveys and administrative records are sound and, in general, consistent with international practices. Reconciliation of quarterly and annual data uses simple procedures. No comprehensive estimates of border transactions and smuggling are made. Compilation procedures minimize processing errors, such as in coding, editing, and

tabulation. These procedures cover logic, empirical discrepancies, and consistency of data reported between periods. Adjustments to unit records are made only when clearly warranted, and can be identified in datasets. In current quarters, adjustments are made only when there is a change in the position of the main aggregates. Other changes are made in accordance with the review criteria established by the BOPS.

Appropriate measures are taken when the nonsampling errors become large, through the repetition of logic checks and other procedures at the grouped level. In addition, sound estimation techniques are employed to adjust data for missing observations in statistical collections as recommended in the *BPM5* guidelines.

Any discrepancy between the sum of the quarterly data and from annual data surveys is removed through benchmark procedures or indicators, particularly after all measures for adjusting the real data have been exhausted. Adjustments are made to the fourth quarter to reconcile annual and quarterly data due to the estimated nature of this last quarter of the year. Annual data surveys are more reliable because they are based on audited balance sheets of enterprises.

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

The BOPS makes quarterly adjustments to trade data in order to adjust imports on a c.i.f. basis to f.o.b. basis with data provided by the Customs Office, which details values of insurance and freight provided by the reporter. Data on imports from the rest of Panama and the CFZ (from 1998 onwards) are available both on f.o.b. and c.i.f. basis. For compilation purposes, the reporting of these two items follows the *BPM5* guidelines and are classified in the services account of the balance of payments.

There are no adjustments to the trade database on the basis of direction of trade, and there are no estimates of non-recorded trade. The consistency of the source data with the balance of payments is checked, particularly regarding definitions, valuation, reference periods, and classifications.

3.4 Assessment and validation of intermediate results and statistical outputs

3.4.1 Intermediate results are validated against other information where applicable

Intermediate results are checked against other independent data sources, as in the case of media reports on foreign direct investments. Private sector interest data are not cross-checked with income taxation registers.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

Intermediate results are checked only when extreme values are observed. Cross-check verifications are insufficient with other administrative records available from government

agencies. Data on travel-related transactions are analyzed in relation to information compiled by the customs and immigration authorities on the numbers of international travelers entering/leaving the country.

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

The magnitude and sign of the net errors and omissions items is determined, and efforts are made to understand what statistical deficiencies may have caused them. No comparison are made between external debt data and the data compiled jointly by the World Bank and IMF.

There are no bilateral data reconciliations conducted for selected trade, but only with data from international agencies.

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)

Internal records are kept, but no formal analysis of revisions and their magnitude are conducted. Every revision process serves to improve the coverage and quality of the information. BOPS does not analyze time series, but does analyze the adjustments needed to enhance the accuracy of the data. Adequate documentation on revisions is maintained and includes descriptions of causes of revisions, methods used to incorporate new data sources, and the way in which data are adjusted.

4. Serviceability

4.1 Periodicity and timeliness

4.1.1 Periodicity follows dissemination standards

The periodicity of the balance of payments statistics exceeds the standards of the GDDS. Quarterly and annual data are compiled and disseminated for balance of payments and international investment position statistics.

4.1.2 Timeliness follows dissemination standards

Quarterly balance of payments statistics are disseminated within one quarter after the reference period exceeding GDDS recommendations. Annual balance of payments statistics are disseminated three months after the end of the reference period.

4.2 *Consistency*

4.2.1 *Statistics are consistent within the dataset*

Concepts, definitions, and classifications for producing quarterly, and annual statistics are the same. Annual statistics are the sum of quarterly statistics, and annual data are allocated to quarterly data using appropriate methods. Over the long run, the net errors and omissions item has been stable and not large. This item has remained stable over a long period of time, except for 1988 and 1991. Financial flows are reconciled with changes in the international investment position. Each year, the bulletin publishes a table with information on the initial position, the transaction, other changes, and the final position.

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

Data are consistent within the dataset and over a reasonable period of time. Financial transactions are reconciled with changes in the international investment position. Statistics are reconcilable with other statistical sectors, although there are no explanatory notes addressing discrepancies.

When changes in source data, methodology, or techniques are introduced, historical series are reconstructed as far back as reasonably possible. In particular, when BOPS began compiling balance of payments statistics according to *BPM5* and the series were reconstructed back to 1990, comprehensive information was prepared and published for users.

Currently, detailed methodological notes accompanying quarterly data identify and explain the main breaks and discontinuities in the balance of payments time series, their causes, as well as adjustments made to maintain consistency over time. Explanations on unusual trends are provided in the analytical portion of the publications, but are not included as a component in the database available to the public.

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 is not reconciled with international merchandise trade data, although balance of payments statistics are largely consistent with national accounts statistics. The banking sector transactions in the balance of payments statistics are largely consistent with monetary and financial statistics. The public external debt data prepared by MEF are used as a source for compiling the balance of payments statistics, making it consistent with GFS.

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. The revision of balance of payments statistics cycle follows a schedule established in advance of the following year, being predetermined and reasonably stable from year to year. This revision cycle is not made known to the public. However, as soon as revisions are made, the public is notified in printed and on the CG's web page. Every time the balance of payments is disseminated, whether as preliminary or revised data, commentary is included with the data through a press release.

4.3.2 Preliminary and/or revised data are clearly identified

At the time of data dissemination, users are informed whenever data are preliminary. The information is printed with a reference mark (P) indicating that the data are preliminary. Similarly, when revisions are made a reference mark (R) is placed in the tables, indicating that the data have been revised.

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

There are no formal studies or analysis of the revisions, thus no documentation is published.

5. Accessibility

5.1 Data accessibility

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

The balance of payments statistics are disseminated according to the standard components of the *BPM5*, and with time series. The BOPS disseminates the balance of payments according to both the standard and analytic presentations following *BPM5* recommendations. Additional series are disseminated to meet a range of user needs with various levels of detail, particularly trade data. Charts and tables in the quarterly and annual bulletins facilitate analysis. Commentaries on current-period developments are always included.

5.1.2 Dissemination media and formats are adequate

The Social Communications Directorate of the DSC is in charge of disseminating the balance of payments statistics, which it provides to the press and media through a press release. Data are disseminated on the CG website with the required timeliness as specified in the advance release calendar of statistics provided early in the year. The same data are published in the quarterly and annual bulletins. Recent data can be consulted free of charge via electronic

formats. As to printed publications, some are distributed free and others for a price, but the time series printed in the bulletins are sold to the public.

5.1.3 Statistics are released on the preannounced schedule

A schedule prepared by the DSC and provided to the press announces in advance the dates the statistics are to be released. In addition, it is published on the CG's web page in the first week of January. The statistics are released punctually according to the pre-announced schedule.

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

The data are released simultaneously to all interested users on the date and/or time specified in the pre-announced schedule, and the press is not briefed in advance. The public is informed of the statistics being released and the channel through which they are released. There is no prior access to balance of payments data by the government, or any other party not involved in the compilation, verification, and dissemination of the data.

5.1.5 Statistics not routinely disseminated are made available upon request

In addition to published balance of payments statistics, unpublished non-confidential specialized tabulations can be provided at no charge. However, the availability of non-published statistics is not publicized. Users are informed of the relevant contact 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

In annual DSC publications such as *Situación Económica*, *Balanza de Pagos*, a comprehensive sources and methods section is published and updated regularly. Metadata include information on concepts, definitions, classifications, data sources, compilation methods, statistical techniques and other relevant methodological aspects and procedures. The CG does not disseminate balance of payments metadata on its website. The GDDS metadata and other related descriptions are reviewed and updated regularly.

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

Based on requests by users, data are processed to meet their needs. Only non-confidential data are provided on request. Brochures inform general users about the balance of payments and other external sector statistics. A comprehensive sources and methods document is produced to inform analysts and other users of statistics on the balance of payments compilation methods and techniques. These documents are updated regularly.

5.3 Assistance to users

5.3.1 Contact points for each subject field are publicized

Prompt and knowledgeable service and support are available to users of statistics. Requests are handled through the Statistical Information Center of the CG. Material to raise awareness on the use of statistics is available. The DSC is working with the Ministry of Education on a program to promote a statistical culture.

Assistance to users is monitored and reviewed periodically through the Integrated System of Correspondence (SICO) of the CG. In addition, the internal by-laws stipulate that requests must be handled within seven working days.

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

The CG provides a list of balance of payments publications, documents, and other services, and updates them each year. A list of publications is available on its website. The prices of the statistical products and services are clearly disclosed, and assistance is provided for placing orders. Catalogs of publications, documents, and other services are available, and updated regularly. The Publications Section determines the prices of hard-copy publications. Some are distributed free of charge.

Table 5. Panama: Data Quality Assessment Framework (July 2003)—Summary of Results for Balance of Payments Statistics
(Compiling Agency: *Controller General of the Republic of Panama*)

Element	NA	Assessment			Comments on Assessment	Plans for Improvement and Target Dates
	O	LO	LNO	NO		
0. Prerequisites of quality						
0.1 Legal and institutional environment		X			No clear legal mandate exists for compilation of balance of payments statistics. Nominal penalties on reporters for noncompliance are outdated.	
0.2 Resources		X			Budget resources are insufficient to conduct surveys.	
0.3 Relevance		X			No formal monitoring procedures exist for users.	
0.4 Other quality management		X			The processes to focus on quality are not formal. There is no monitoring of intersectoral consistency.	
1. Assurances of integrity						
1.1 Professionalism		X				
1.2 Transparency		X			Publications do not mention availability of additional information for users who request it. Only on exceptional occasions advance notice is given to users on changes in data and methodologies. There is a lack of data on unrecorded trade.	In May 2006, a list of contacts for each statistical sector was added on the CG website. Plans to improve presentation and access to CG's website are to be undertaken in August 2006. In July 2006, balance of payments metadata are to be added to the CG website.
1.3 Ethical standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X			Resident holdings of external debt instruments issued by the government are not excluded from the balance of payments.	With the revision scheduled for August 2006, data on holdings by residents of external debt instruments issued by the government will be excluded from the balance of payments.
2.2 Scope		X			There is difficulty in measuring transactions on the free trade zone, some services, and income derived from compensation of employees. Debits on FDI are not compiled.	
2.3 Classification/sectorization		X				
2.4 Basis for recording		X			Balance of payments is recorded on a mix of cash and accrual basis. Interest on external public debt is not recorded on an accrual basis.	Details of interest recorded on an accrual basis to be requested by MEF in May 2006.

Table 5. Panama: Data Quality Assessment Framework (July 2003)—Summary of Results for Balance of Payments Statistics
(Compiling Agency: *Controller General of the Republic of Panama*)

Element	NA	Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO		
3. Accuracy and reliability						
3.1 Source data			X		Data collected from surveys are incomplete. Surveys do not cover some private sector services and financial transactions, such as direct investment abroad. Free trade zone source data are timely, but with poor quality until data are reprocessed for balance of payments purposes.	In January 2007, surveys conducted in the free trade zone lacking detailed data on insurance and freight will be returned to compilers. The automation of surveys for inflows and outflows in the free trade zone will be ready to be implemented by January 2007. Visits are to be conducted to the free trade zone in May 2006 to obtain data on oil resale to transient ships.
3.2 Assessment of source data		X				
3.3 Statistical techniques			X		Estimates of border trade are not compiled. No adjustments are made based on trading partner data.	During the multiple purpose survey scheduled for April 2007, CG will compile data on border trade. The tourism survey to be conducted in June 2006 includes new questions on workers' remittances.
3.4 Assessment and validation of intermediate data and statistical outputs			X		Other data sources are not commonly used. In particular, FDI data is not validated with other ministries' data. No bilateral data reconciliations are conducted for selected trade partners. No reconciliations are made in the financial account, in particular with debt data.	
3.5 Revision studies				X	Internal records are available, but no formal analyses are conducted to keep record of revisions and its magnitude.	
4. Serviceability						
4.1 Periodicity and timeliness		X				
4.2 Consistency			X		Data are reconcilable with some data sets. Discrepancies are not explained.	
4.3 Revision policy and practice			X		Studies and revision analysis are not made public. No formal analyses of revisions are conducted.	
5. Accessibility						
5.1 Data accessibility		X				
5.2 Metadata accessibility			X		Metadata are published in biannual reports. The electronic website lacks this information. No working papers are disseminated.	Starting May 15, 2006, metadata on balance of payments has been posted on the CG's website.
5.3 Assistance to users		X				

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

Summary of the GDDS

Data coverage, periodicity, and timeliness

Dissemination of reliable, comprehensive, and timely economic, financial, and socio-demographic data is essential to the transparency of macroeconomic performance and policy. The GDDS contains specific recommendations concerning coverage, periodicity, and timeliness for comprehensive frameworks as well as for data categories and indicators.

Quality

Data quality must have a high priority. Data users must be provided with information to assess quality and quality improvements. The GDDS recommends:

- dissemination of documentation on methodology and sources used in preparing statistics; and
- dissemination of component detail, reconciliations with related data, and statistical frameworks that support statistical cross-checks and provide assurance of reasonableness.

Integrity

To fulfill the purpose of providing the public with information, official statistics must have the confidence of their users. In turn, confidence in the statistics ultimately becomes a matter of confidence in the objectivity and professionalism of the agency producing the statistics. Transparency of practices and procedures is a key factor in creating this confidence. The GDDS, therefore, recommends:

- dissemination of the terms and conditions under which official statistics are produced, including those relating to the confidentiality of individually identifiable information;
- identification of internal government access to data before release;
- identification of ministerial commentary on the occasion of statistical releases; and
- provision of information about revision and advance notice of major changes in methodology.

Access to the public

Dissemination of official statistics is an essential feature of statistics as a public good. Ready and equal access by the public are principal requirements. The GDDS recommends:

- dissemination of advance release calendars; and
- simultaneous release to all interested parties.

Plans for improvement

The GDDS recommends that plans for improvement be developed for all areas in which shortcomings exist and that these plans be disseminated.

The GDDS also recommends that any needs for assistance be identified in the metadata. This may also be helpful for donors and technical assistance providers to prioritize their activities.

For each participating member country, the GDDS metadata provide descriptions of the dimensions listed above, together with plans for improvement and needs for assistance. This information is posted on the DSBB; participating countries are encouraged to also post the metadata on their national websites.

Source: Guide to the GDDS, March 2002: <http://dsbb.imf.org>

**Data Quality Assessment Framework—Generic Framework
(July 2003 Framework)**

Quality Dimensions	Elements	Indicators
<p>0. Prerequisites of quality</p>	<p>0.1 Legal and institutional environment—<i>The environment is supportive of statistics</i></p> <p>0.2 Resources—<i>Resources are commensurate with needs of statistical programs.</i></p> <p>0.3 Relevance—<i>Statistics cover relevant information on the subject field.</i></p> <p>0.4 Other quality management—<i>Quality is a cornerstone of statistical work.</i></p>	<p>0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.</p> <p>0.1.2 Data sharing and coordination among data-producing agencies are adequate.</p> <p>0.1.3 Individual reporters' data are to be kept confidential and used for statistical purposes only.</p> <p>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</p> <p>0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.</p> <p>0.2.2 Measures to ensure efficient use of resources are implemented.</p> <p>0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.</p> <p>0.4.1 Processes are in place to focus on quality.</p> <p>0.4.2 Processes are in place to monitor the quality of the statistical program.</p> <p>0.4.3 Processes are in place to deal with quality considerations in planning the statistical program.</p>
<p>1. Assurances of integrity</p> <p><i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.</i></p>	<p>1.1 Professionalism—<i>Statistical policies and practices are guided by professional principles.</i></p> <p>1.2 Transparency—<i>Statistical policies and practices are transparent.</i></p> <p>1.3 Ethical standards—<i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are produced on an impartial basis.</p> <p>1.1.2 Choices of sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations.</p> <p>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</p> <p>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</p> <p>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</p> <p>1.2.3 Products of statistical agencies/units are clearly identified as such.</p> <p>1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>

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
<p>4. Serviceability <i>Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.</i></p>	<p>4.1 Periodicity and timeliness— <i>Periodicity and timeliness follow internationally accepted dissemination standards.</i></p> <p>4.2 Consistency— <i>Statistics are consistent within the dataset, over time, and with major datasets.</i></p> <p>4.3 Revision policy and practice—<i>Data revisions follow a regular and publicized procedure.</i></p>	<p>4.1.1 Periodicity follows dissemination standards. 4.1.2 Timeliness follows dissemination standards.</p> <p>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.</p> <p>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).</p>
<p>5. Accessibility <i>Data and metadata are easily available and assistance to users is adequate.</i></p>	<p>5.1 Data accessibility— <i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p>5.2 Metadata accessibility— <i>Up-to-date and pertinent metadata are made available.</i></p> <p>5.3 Assistance to users— <i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts). 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.</p> <p>5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated. 5.2.2 Levels of detail are adapted to the needs of the intended audience.</p> <p>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 charges, are widely available.</p>

Users' Survey

1. The mission conducted a survey of users of Panama's macroeconomic statistics to obtain their views on the quality of these statistics. The survey used a questionnaire developed by IMF staff and conducted by the CG. Questionnaires were sent to 60 users with 24 responses received from representatives of private industry and commercial banks, consulting companies, academic institutions, government agencies, and international organizations. As a complement to the survey, the mission had a general meeting with about a dozen users and three meetings with an individual user, all organized by the CG.
2. According to the survey results, about 90 percent of survey respondents indicated that they made regular use of national accounts and CPI statistics. Regular use of government finance, monetary, and balance of payments statistics was indicated by around two-thirds of respondents. Analysis of trends for longer-term policy formulation was given by half of respondents as the purpose of use of official statistics. Higher proportions were given to econometric model building and forecasting (63 percent) and economic research (83 percent). Analysis of current developments for short-term decision making was the least cited purpose (38 percent).
3. Methodological soundness, accuracy, and reliability of Panama's macroeconomic statistics were viewed as satisfactory. Most respondents were broadly satisfied with coverage and detail. Panama's statistics were regarded as comparable or higher quality than those disseminated by neighboring countries by 96 percent of respondents. On a five point scale (1 = poor and 5 = excellent), the average rating for the overall quality of official statistics across all sectors was 4.0. About 60 percent of respondents, more so in private industry and the financial sector, believed that official statistics could be disseminated with a periodicity and timeliness better suited to their needs. Some respondents mentioned that consistency among statistical sectors could be improved.
4. Users were satisfied with access to statistics, making about equal use of official websites, printed copies, and e-mail correspondence. They expressed some concern about having to contact several departments or units in the CG, based on their respective areas of specializations, to inquire about statistics. They indicated a need for better adherence to calendars for the release and revision of data, with a particular need for improvement in revision policy for fiscal statistics. Despite these shortcomings, they credited statistical agencies, especially the CG, with providing additional breakdowns and explaining revisions on request. Overall, users viewed statistics agencies as professional and helpful in providing data.

Meetings with users

5. The views of users with whom the mission met were consistent with the findings of the survey. In addition to the interest in greater periodicity and timeliness found in the survey, users in private industry and banking would like to see more detailed sectoral breakdown, as this would provide more useful information for business and investment

decisions. In meetings, users expressed specific concerns about coverage of statistics, for example, regarding the market basket used for the CPI and trade data used for the balance of payments. They were concerned about the frequency and magnitude of revisions, and pointed to the need for a more transparent revisions policy. The representative of the news media noted the importance of adherence to calendars for release and revisions of key macroeconomic statistics, for example, GDP, CPI, and debt.

Table 6. Questionnaire Results by Type of User—February 2006

Type of Respondent	Total Received (60 Questionnaires Sent)
Government	6
State-owned agencies (enterprises)	2
Banks	3
Other enterprises	5
Embassies/International organizations	5
Universities (researcher)	2
Supervisory, regulatory institutions (stock exchange)	1
Total	24

Source: Users' Surveys conducted by the Controller General.

Table 7. Results of Users' Survey—February 2006
(in percentage of total responses)

General Information about
Uses of Official Macroeconomic Statistics of Panama

1. Which official statistics do you use regularly?

a. National accounts (NA)	88%
b. Prices	92%
c. Government finance statistics (GFS) or fiscal data	71%
d. Monetary and financial statistics (monetary)	67%
e. Balance of payments (BOP)	67%
f. Other:	
• Production indices	50%
• Labor market	50%
• Merchandise trade	71%
• International capital flows and foreign liquidity	25%
• External debt (public and publicly guaranteed)	58%
• International Investment Position	54%

2. What are your sources of official statistics?

a. Controller General of the Republic of Panama	100%
b. Superintendency of Banks of Panama	54%
c. MEF	63%
d. Other government agencies or departments	25%
e. International and regional organizations (IMF, World Bank, IDB, ECLAC, UN, etc.)	38%
f. News media	25%

3. Do you refer to descriptions of the sources and methods provided by agencies compiling the macroeconomic statistics?

• Yes	90%
• No	10%

4. For what purposes do you use the official statistics?

a. Analysis of current developments for short-term decision making	38%
b. Analysis of trends for longer-term policy formulation	50%
c. Econometric model building and forecasting	63%
d. Economic research	83%
e. Comparison with economic developments in other countries	63%
f. General economic analysis	79%
g. Market research	50%

Table 7. Results of Users' Survey—February 2006 (continued)

	NA	CPI	WPI	GFS	MS	BOP	Average
5. Coverage and detail							
5.1 In general, are you satisfied with the coverage of official statistics?							
Yes	95%	95%	100%	78%	85%	89%	91%
No	5%	5%	0%	22%	15%	11%	9%
5.2 In general, are you satisfied with the official statistics in terms of their level of detail?							
Yes	90%	86%	94%	78%	83%	100%	89%
No	10%	14%	6%	22%	17%	0%	11%
5.3 Do you find the data collection surveys (e.g., business survey) to be adequate?							
Yes	92%	93%	91%	100%	100%	100%	95%
No	8%	7%	9%	0%	0%	0%	5%
5.4 Do you find the statistical series to be consistent over time?							
Yes	60%	84%	88%	81%	85%	100%	71%
No	40%	16%	13%	19%	15%	0%	29%
6. Periodicity and timeliness							
6.1 Are you satisfied with the frequency of compilation of the official statistics (e.g., weekly, monthly, quarterly, annually)?							
Yes	71%	95%	94%	69%	73%	68%	79%
No	29%	5%	6%	31%	27%	32%	21%
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)?							
Yes	52%	77%	68%	56%	62%	44%	61%
No	48%	23%	32%	44%	38%	56%	39%
7. Other dissemination practices							
7.1 Do you know if there is a publicly disseminated calendar that announces in advance the dates on which the various official statistics will be disseminated?							
Yes	55%	57%	53%	58%	53%	53%	55%
No	45%	43%	47%	42%	47%	47%	45%
7.2 If there is a calendar of release dates, in your experience, are the official statistics released on the dates announced?							
Yes	60%	75%	70%	55%	50%	45%	60%
No	40%	25%	30%	45%	50%	55%	40%
7.3 Is there enough information about revisions to official statistics?							
Yes	85%	90%	93%	87%	91%	89%	89%
No	15%	10%	7%	13%	9%	11%	11%
7.4 Do you find the policy and procedure for revisions to the statistics to be adequate (scope of the revisions, periodicity, announcement, etc.)?							
Yes	75%	94%	93%	73%	88%	86%	86%
No	25%	6%	7%	27%	13%	14%	14%

Table 7. Results of Users' Survey—February 2006 (continued)

	NA	CPI	WPI	GFS	MS	BOP	Average
8. Accessibility							
8.1 Can you easily access the official statistics?							
Yes	90%	95%	95%	88%	92%	85%	91%
No	10%	5%	5%	12%	8%	15%	9%
8.2 Can you easily access information pertaining to the official statistics you use (explanatory notes, methodological descriptions, reference concerning concepts, classification, statistical practice)?							
Yes	84%	90%	89%	81%	75%	82%	84%
No	16%	10%	11%	19%	25%	18%	16%
8.3 Is the information on methodology sufficiently clear and detailed enough to be useful to you?							
Yes							78%
No							17%
No Opinion							4%
8.4 In what form do you have access to the official statistics?							
Hard copy:							
· Official releases							75%
· Press releases							8%
· Special requests							63%
· Official policy papers							33%
· Private sector summaries and analyses							13%
· Newspapers							21%
Electronic form:							
· Official releases							79%
· Official database and other (such as CD-ROM)							29%
· Private websites							4%
· News media websites with official policy papers							17%
· E-mail							83%
· Other							4%
8.5 Does the presentation of the data (format, clarity of the text, tables, graphics) meet your needs?							
Yes	90%	100%	100%	94%	100%	90%	96%
No	10%	0%	0%	6%	0%	10%	4%
8.6 Do you find user support to be easily accessible, timely, and competent?							
Yes	95%	95%	95%	87%	83%	89%	92%
No	5%	5%	5%	13%	17%	11%	8%
9. Overall assessment							
9.1 In your opinion, is the underlying methodology of official statistics sound and appropriate?							
Yes	86%	90%	89%	88%	100%	94%	90%
No	14%	10%	11%	13%	0%	6%	10%

Table 7. Results of Users' Survey—February 2006 (concluded)

	NA	CPI	WPI	GFS	MS	BOP	Average
9.2 In general, do you consider the official statistics to be reliable?							
Yes	89%	95%	94%	82%	100%	89%	81%
No	11%	5%	6%	18%	0%	11%	19%
9.3 How would you compare the quality of official statistics with those of other countries in the region?							
Better	47%	67%	67%	44%	25%	42%	50%
Same	53%	28%	33%	44%	67%	58%	46%
Worse	0%	6%	0%	13%	8%	0%	4%
9.4 How do you assess the overall quality of the official statistics?							
(1 = poor; 5 = excellent)	4.0	4.1	4.2	3.8	4.0	3.8	4.0

NA = National Accounts; CPI = Consumer Price Index; WPI = Wholesale Price Index;
 GFS = Government Finance Statistics; MS = Monetary Statistics; and BOP = Balance of Payments Statistics

Box 1. Comments by Users of Macroeconomic Statistics

Respondent 1

- I think in general that statistics should be more consistent. Regarding national accounts, each ten years both the base year and the methodology change, making it impossible to make long-term comparisons. Equally important is the lack of information to calculate income distribution because there are no data at provincial level. On price statistics, although they follow international standards they do not reflect the reality that one observes. For example, if for some surveyed individuals the leasing on houses increases, for others it increases because of the necessity to move explained by the deterioration in quality of the leased house. Moving implies an expenditure for consumer that is not reflected in the CPI, because, as I understand it, when the house is destroyed or the tenant moves, the surveyed individual is replaced by other consumer in the same building that has been paying the same rent in a given year.
- The reference goods [basket] is also another story. Because they take only prices into account. However, changes in consumer taste are not taken into account as for the quality and distribution of the basket through time.

Respondent 2

- Balance of payments, fiscal data and lack of estimates of global supply and demand are the areas that need improvement.

Respondent 3

- To create sub-accounts in particular areas of services is very important for the Panamanian economy, such as the canal, ports, communications.

Respondent 4

- The statistics related to my work are frequently shared with my colleagues, owing to the academic nature of our work. As facilitator in the learning process, we are direct and potential users also. We participate in the official bodies and institutions dealing with social issues, such as CEPRADENAC, SINAPROC, and the Ministry of Social Development.

Respondent 5

- I think that the compilation of statistics should be easier to understand by the general public, who does not have a technical knowledge on statistics. Statistics should be accompanied by an explanation.

Respondent 6

- Broadly speaking, the BOP statistics are accurate and of good quality. However, to improve them it would be a good idea to make them available on the website of the Contraloría, in Excel spreadsheets, and with better timeliness for the quarterly data.

Respondent 7

- In general, there is already an advance in being able to access the information on the web. Nevertheless, I consider that we are slow with respect to other countries, even of Central America, as far as the mode of access to the information. That is, I suggest to be able to make dynamic consultations.

Respondent 8

- Regarding national accounts, it is possible to develop statistics for the marine Conglomerate related to the Panama Canal. Also, an account for the marine sector of Panama could be developed.

Respondent 9

- To improve the periodicity and timeliness of the information (real, monetary, fiscal and external sectors) based on a dissemination calendar and follow it.

Respondent 10

- The information collected from data reporters is received with delay, given that some entrepreneurs and private offices do not like their information to be disseminated, even though the Directory of Statistics and Census of the Controller General has never provided individual information of any type and has only provided aggregated data on three or more informants according to the law.

Respondent 11

- The only improvements that I request are with respect to the periodicity of the data. While sooner the data are available, far better to prepare the respective reports for the people or companies with those we worked.