Chile: Report on Observance of Standards and Codes—Data Module; and Response by the Authorities

This Report on the Observance of Standards and Codes on Data Module for Chile 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 **July 13, 2001**. The views expressed in this document are those of the staff team and do not necessary reflect the views of the government of Chile or the Executive Board of the IMF.

The Response by the Authorities on this report is also included.

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CHILE

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

Prepared by the Statistics Department

Approved by Carol S. Carson and Claudio Loser

July 13, 2001

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FOREWORD

The data module of the Report on Observance of Standards and Codes (ROSC) has evolved significantly since its inception in early 1999. The first data modules assessed the monitorable elements of a country's data dissemination practices—the coverage, periodicity, and timeliness of data and the use of advance release calendars—against the Fund's Special Data Dissemination Standard (SDDS). Since the SDDS focuses on the disclosure of information upon which a user of statistics could make an assessment of the suitability of the data for a particular use, it does not directly assess the quality of data. Therefore, the early data module ROSCs did not deal with issues of data quality.

Concerns about data quality have, however, prompted the Statistics Department to develop a set of tools, or assessment frameworks, that could be used to assess data quality. This work has been the focus of a major effort by STA and has paralleled, to some extent, the development of the ROSC. An early version of the quality assessment framework was used in ROSCs last year. More recent work on data quality has led to data quality assessment frameworks (DQAFs) for specific datasets, e.g., the national accounts, used in this report. The DQAFs, which are at a preliminary stage, will be employed on an experimental basis in ROSCs. The experience gained with these assessments will be reviewed at a later date.

ACRONYMS

1993 SNA 1993 System of National Accounts

ARCs Advance Release Calendars

BCCH Banco Central de Chile (Central Bank of Chile)

BOP Balance of Payments

BPM5 Balance of Payments Manual
CGD Central Government Debt
CGO Central Government Operations

CODELCO Corporación del Cobre (Copper State Enterprise)
COFOG Classifications of the Functions of Government
COICOP Classification of Individual Consumption by Purpose

CPI Consumer Price Index

CGR Contraloría General de la República (Comptroller's General Office)
INE Instituto Nacional de Estadísticas (National Statistical Institute)
DCN Departmento de Cuentas Nacionales (National Accounts Department)

DE Departamento de Estudios (Research Department)
DIPRES Dirección de Presupuestos (Budget Directorate)

DQAF Data Quality Assessment Framework
DSBB Dissemination Standards Bulletin Board

FDI Foreign direct investment
GDP Gross Domestic Product
GFS Government Finance Statistics
GGO General government operations
IIP International investment position
IMF International Monetary Fund

ILVInternational reservesINDProduction indexMETMerchandise Trade

MFSM Monetary and Financial Statistics Manual MOF Ministry of Finance (Ministerio de Hacienda)

NPEs Nonfinancial Public Enterprises
NSDP National Summary Data Page
ODCs Other Depository Corporations
OFC Other Financial Corporations

PNRE Plan Nacional de Recopilación Estadísticas (National Plan for the Collection

of Statistics)

POP Population

PPI Producer Price Index

ROSCs Reports on the Observance of Standards and Codes SDDS Special Data Dissemination Standard

SBIF Superintendencia de Bancos e Instituciones Financieras

SERNATUR Servicio Nacional de Turismo (Tourist Office)

STA Statistics Department

TGR Tesorería General de la República (Treasury)

EXECUTIVE SUMMARY

This report is a summary assessment of Chile's data dissemination practices against the IMF's Special Data Dissemination Standard (SDDS) complemented by an in-depth assessment of the dimensions of data quality for the national accounts, prices, government finance, monetary, and balance of payments statistics. The Chilean agencies that produce these sets of statistics are the National Statistics Institute (INE), the Central Bank of Chile (BCCH), and the Ministry of Finance (MOF). This assessment was carried out by an IMF staff mission that visited Santiago during March 28–April 11, 2001. ¹

The mission concluded that:

- SDDS observance: Chile meets the SDDS specifications for the coverage, periodicity, and timeliness of all data categories and for the dissemination of advance release calendars.
- Prerequisites of quality: In all cases the Chilean agencies compiling and disseminating
 the SDDS data categories have a legal and institutional framework that supports
 statistical quality, and they demonstrate an awareness of quality as the cornerstone of
 statistical work.
- Integrity: All three agencies demonstrate professionalism, are transparent in their practices and policies, and provide ethical guidelines to their staffs.
- Methodological soundness: With a few exceptions, Chilean statistics generally follow internationally accepted standards for compiling and disseminating the five data categories. Exceptions include the producer price index, which differs from standards in the scope of agriculture and import prices, and general government data, because the coverage and the detail provided for the various fiscal aggregates are less than recommended in the 1986 Government Finance Statistics Manual (GFS), notwithstanding being in observance of SDDS. Other exceptions are largely due to the transition to the most current methodologies, e.g., disseminated monetary data do not yet follow the Monetary and Financial Statistics Manual (MFSM) and disseminated balance of payments data do not yet follow the fifth edition of the Balance of Payments Manual (BPM5).
- Accuracy and reliability are high in most data categories, but could be improved in others by strengthening the source data and statistical techniques.

¹ Prepared by Robert Di Calogero, Susana Almuiña, Segismundo Fassler, Alberto Jiménez de Lucio, Jose Carlos Moreno, and Nolvia Saca, from the IMF's Statistics Department.

- Serviceability: Chilean statistics are generally relevant, timely and frequent, and otherwise meet users' needs. It would be useful to undertake some additional efforts to improve the timeliness and periodicity of the fiscal accounts and the consistency among fiscal, monetary, and balance of payments statistics.
- Accessibility of data and metadata is high, and assistance to data users is of high quality.

I. Introduction

- 1. This data dissemination module of the Report on Observance of Standards and Codes (ROSC) includes a summary of Chile's practices on the coverage, periodicity, and timeliness of the SDDS data categories, the provision of advance release calendars for these categories, and an assessment of the quality of national accounts, prices, government finance statistics, monetary statistics, and balance of payments. This assessment is based on information (data and metadata) provided to STA prior to and during a staff mission, and also relies on official information publicly available.
- 2. Section II includes an overview of the SDDS and an assessment of Chile's data dissemination practices against the SDDS. A summary assessment of the quality of the principal macroeconomic statistical datasets, following the assessment framework that was developed by the Statistics Department (STA), is presented in Section III. Section IV summarizes the views of a cross section of users of Chile's statistical data based on a survey conducted by the BCCH. Section V lists the recommendations made by Fund staff for improving the quality of these data. Appendix I contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Section III; Appendix II contains the Data Quality Assessment Framework—Generic Framework; and Appendix III contains the results of surveys both for domestic and external users of Chile's statistics.

II. DATA DISSEMINATION PRACTICES AND THE SDDS

A. Overview of the SDDS

3. The standard against which Chile's data dissemination practices are assessed is the IMF's SDDS². The SDDS is a "best practice" standard. It covers four sectors of the economy (real, fiscal, financial, and external) as well as population, and identifies four dimensions (data, access, integrity, and quality) of data dissemination for each sector. For each of these dimensions, the SDDS prescribes two to four monitorable elements or good practices that can be observed, or monitored, by the users of statistics. See Box 1. IMF staff monitoring of the SDDS, as authorized by the Fund's Board of Executive Directors, is limited to the data (coverage, periodicity, and timeliness) and access (advance release calendars) dimensions. Moreover, it should be emphasized that the SDDS is a disclosure standard, i.e., it encourages the authorities to provide information to users, so they can assess the suitability of the data for purposes that they identify. The SDDS itself does not aim to assess the quality of data.

² A detailed description of the SDDS can be found on the IMF's Dissemination Standards Bulletin Board (DSBB) on the Internet at http://dsbb.imf.org/.

BOX 1. DIMENSIONS AND ELEMENTS OF THE SPECIAL DATA DISSEMINATION STANDARD (SDDS)

Data dimension (coverage, periodicity, and timeliness)

the dissemination of 18 data categories, including component detail, covering the four main sectors
of the economy, with prescribed periodicity and timeliness.

Access dimension

- the dissemination of advance release calendars (ARCs) providing at least a one-quarter ahead notice
 of approximate release dates, and at least a one-week ahead notice of the precise release dates; and
- the simultaneous release of data to all users.

Integrity dimension

- the dissemination of the terms and conditions under which official statistics are produced and disseminated;
- the identification of internal government access to data before release;
- the identification of ministerial commentary on the occasion of statistical release; and
- the provision of information about revision and advance notice of major changes in methodology.

Quality dimension

- the dissemination of documentation on statistical methodology and sources used in preparing statistics; and
- the dissemination of component detail and/or additional data series that make possible crosschecks and checks of reasonableness.

Subscribers are required:

- to post descriptions of their data dissemination practices (metadata) on the IMF's Dissemination Standards Bulletin Board (DSBB). Summary methodologies, which describe data compilation practices in some detail, are also disseminated on the DSBB.
- to maintain an internet website, referred to as the National Summary Data Page (NSDP), which
 contains the actual data described in the metadata, and to which the DSBB is electronically linked.

At the March 29, 2000 meeting of the IMF's Executive Board, Directors approved the incorporation of a new SDDS data category on external debt. The transition period for implementing this data category expires in March 2003.

As a result of the Third Review of the SDDS in March 2000, IMF staff began monitoring observance of the Standard through NSDPs maintained on the Internet. Monitoring commenced at the end of June 2000, and is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

B. Current Dissemination Practices

- 4. Chile has subscribed to the IMF's SDDS since May 17, 1996 and started posting its metadata on the DSBB on February 19, 1997. Chile is in observance of the SDDS and meets the specifications for the coverage, periodicity, and timeliness of the data dimension for most data categories, with only a few exceptions, for which a transition period and two SDDS flexibility options are being used, and for the dissemination of advance release calendars since March 30, 2000. The Data Template on International Reserves and Foreign Currency Liquidity has been disseminated since May 2000, and the national summary data page (NSDP) has been hyperlinked since August 2000.
- 5. The three institutions responsible for the compilation and dissemination of the SDDS data categories are the Central Bank of Chile (Banco Central de Chile, BCCH), the National Institute of Statistics (Instituto Nacional de Estadísticas, INE), and the Ministry of Finance (Ministerio de Hacienda, MOF). The BCCH has responsibility for the dissemination of the national accounts, the global production index³, the analytical accounts of the banking sector⁴, the analytical accounts of the central bank⁵, interest rates, share price indices, balance of payments, international reserves and the template on international reserves and foreign currency liquidity, merchandise trade, the international investment position, and the exchange rate. INE is responsible for compiling and disseminating data on the production index, price indices, labor market, and population. The MOF is responsible for compiling and disseminating data on the fiscal sector.
- 6. The responsibilities and tasks of the various organizations for compiling and disseminating statistics in Chile are defined annually through the publication of a National Plan for the Collection of Statistics (Plan Nacional de Recopilación Estadística, PNRE). The BCCH and the MOF—among other institutions belonging to the National Statistical System (SEN)—collaborate with INE in the formulation of the annual plan. The plan determines the priority tasks that each institution must carry out, thereby avoiding duplication of efforts, simplifying and streamlining the procedures used for the collection of data, and improving data quality.
- 7. Chile provides access to these data through a variety of publications and the following websites:
 - The BCCH's website is at http://www.bcentral.cl/

³ The BCCH global production index (Indicador mensual de actividad económica (IMACEC)) provides additional information to the production indices disseminated by the INE under the SDDS.

⁴ The banking sector is the "depository corporations survey" in the new MFSM.

⁵ The analytical accounts of the central bank is the "central bank survey" in the new MFSM.

- The Ministry of Finance's website is at http://www.dipres.cl/ (Ministerio de Hacienda/Dirección de Presupuestos)
- The INE's website is at http://www.ine.cl/

Data Dimension: Coverage, Periodicity, and Timeliness

- 8. The coverage, periodicity, and timeliness for macroeconomic data in Chile are summarized and compared with SDDS specifications in Table 1. Chile is in observance of the SDDS and meets the specification for the data dimension for most data categories. The few exceptions are:
 - Data on the international investment position (IIP) are released for a limited set of components. Released data exclude direct investment, direct short-term commercial credits, and residents' deposits and portfolio investment assets abroad. The data disseminated include (a) external debt, excluding direct short term commercial credits; (b) foreign assets and liabilities of the banking sector, including those of the BCCH; and (c) liabilities of portfolio investment (reported annually to the IMF). In addition, only partial data are included for some of the disseminated components. At present, the data that are not released are being compiled, but statistical procedures are still under evaluation and revision. The transition period for disseminating comprehensive IIP data expires at the end of 2001.
 - Chile has taken a flexibility option for the periodicity and timeliness of the data on central government operations and on central government debt.
 - Periodicity and/or timeliness exceed the specifications of the Standard for the labor market indicators (employment, unemployment, and wages/earnings), international reserves, merchandise trade, and international investment position.
 See Table 1 for a comparison of SDDS requirements and the corresponding Chilean practices.

Access Dimension

9. Advance release calendars giving at least one-quarter ahead notice of approximate release dates, and at least a one-week ahead notice of the precise release dates, are disseminated on the internet website of the agency responsible for the data. Data are released simultaneously

⁶ The SDDS allows subscribers the use of two flexibility options in recognition of differences in economic structures and institutional arrangements across countries, i.e., for up to two data categories, a subscriber may avail itself of flexibility provisions with respect to coverage, periodicity, and timeliness.

to all interested parties, generally on the websites of the relevant agencies, and on Chile's NSDP (http://www.bcentral.cl/fmi/nsdp.htm) hosted by the BCCH.

Integrity Dimension

- 10. The SDDS requires the disclosure of information on laws, regulations, and decrees that govern the collection, compilation, and/or dissemination of data, including those related to the confidentiality of individually identifiable data. The terms and conditions under which official statistics are compiled and disseminated in Chile are available to the public—in electronic and non-electronic formats—in Spanish, and they provide a legal framework that supports the integrity of the statistical system. The Law No 17-374 established the Instituto Nacional de Estadísticas (INE) as the administratively decentralized technical agency responsible for official statistics and censuses in Chile. However, in practice this does not mean that INE has oversight over the other agencies; the INE requests the support of these agencies in drawing up the Annual Statistical Plan.
- 11. The compilation and dissemination of macroeconomic statistics under the auspices of the Central Bank of Chile is governed by the Central Bank Law (Law No 18840). The Law assigns the central bank the responsibility for compiling and disseminating the country's main economic information (i.e., monetary and financial, balance of payments, and national accounts statistics). Decree with Legal Power-106 assigns to the Dirección de Presupuestos (DIPRES) the responsibility for compiling and disseminating government finance statistics.
- 12. Procedures on internal access prior to public release are disseminated on the DSBB for the data categories to which they apply.

Quality Dimension

- 13. Summary methodology statements for eight data categories have been provided to the IMF (national accounts, producer price index, consumer price index, analytical accounts of the central bank and the banking system, balance of payments, merchandise trade and international reserves, and foreign currency liquidity), and, eight have been posted so far on the DSBB and are accessible at http://dsbb.imf.org/summeth.htm.
- 14. Chilean agencies of the National Statistical System (Sistema Estadístico Nacional, SEN), such as INE and MOF, also disseminate component details and additional data series that make possible crosschecks and checks of reasonableness for all data categories as prescribed by the SDDS. In addition to the information provided under the SDDS, the statistical producing agencies also disseminate information on methodology for some data categories. For example, the "Balanza de pagos de Chile" (*Chilean Balance of Payments*) carries methodological notes.

Monitoring of Data and Access Dimensions

15. In accordance with the outcome of the Third Review, the staff began monitoring subscribers' performance under the SDDS beginning July of last year. Monitoring is carried out against the release dates stated in the advance release calendars and the metadata, i.e., to verify not only that the data are released according to the calendar, but also that the data disseminated correspond to the metadata posted on the DSBB. During the third and fourth quarters of 2000, and the first quarter of 2001, Chile's dissemination practices were largely in observance of the SDDS; in a very few cases data were reported on the responsible institution's website on time, but there were short delays in updating the NSDP.

⁷ The data dimension—coverage, periodicity, and timeliness of the data—and the advance release calendars of the access dimension have been monitored since July 2000. Other elements of the SDDS are on a self-disclosure basis by subscribers; that is, the subscribers are asked to confirm on a quarterly basis that their descriptions of their practices are accurate.

Table 1. Chile: Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the SDDS

SDDS Data Category	Coverage (meets SDDS	Period	licity	Time	liness	Comments
	requirements)	SDDS	Chile	SDDS	Chile	
Real Societ	V			г — <u>А</u>	037/12 37	O-certain data and
National accounts: GDP at current prices	Yes	Q	Q	Q	8W/12 W for Q4	Quarterly data are currently produced at current and constant (1986) prices. The GDP
GDP at constant price	Yes	Q	Q	Q	forQ4	data at constant prices are broken down by productive sectors and by major expenditure categories, while data at current prices are broken down by major expenditure category.
Production index/indices	Yes	М	М	M	4 W	The index is produced by INE and the timeliness is according to the SDDS
Global production index	Yes	М	М	М	7 W	The index is produced by the Central Bank and is a proxy of a monthly GDP; timeliness does not meet the SDDS requirement.
Employment	Yes	Q	Q	Q	4 W	Timeliness exceeds SDDS requirements. Quarterly moving average published every month.
Unemployment	Yes	Q	Q	Q	4 W	Quarterly moving average published every month. Timeliness exceeds SDDS
Wages/earnings	Yes	Q	М	Q	5 W	requirements. Data based on monthly survey. Timeliness exceeds SDDS Req.
Consumer prices	Yes	М	М	М	Within the first five days of the month	Data cover the Greater Santiago Area
Producer or wholesale prices	Yes	M	М	М	Within the first five days of the month	Wholesale price index.

Table 1. Chile: Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the SDDS

SDDS Data Category	Coverage (meets SDDS	Period	licity	Timel	iness	Comments	
V.RC2013	requirements)	SDDS	Chile	SDDS	Chile		
Fiscal Sector							
General government operations	Yes	A	A	2Q	2Q	Data are recorded on a cash basis and presented on a consolidated basis.	
Central government operations	Yes	М	Q and A Annual for data on financing	М	2M and 3 M for data on financing	Flexibility option for periodicity and timeliness.	
Central government debt	Yes	Q	A	Q	Within 1 year	Flexibility option for periodicity and timeliness.	
Financial Sector							
Analytical accounts of the banking sector	Yes	М	М	М	3W	Timeliness exceeds SDDS req.	
Analytical accounts of the central bank	Yes	M (W encouraged	Twice a month: on the 7 th and 23 rd	2W (W encouraged)	1 W	Periodicity and timeliness exceed SDDS req.	
Interest rates	Yes	D	D	1/	Less 1 hour and 2 days	Two days for the interest rate for deposits and lending operations of banks and financial institutions.	
Stock market	Yes	D	D	1/ ·		The Central Bank of Chile redisseminates data on the index	
External Sector						data on the macx	
Balance of payments	Yes	Q	Q	Q	Within I Q		
International reserves	Yes	M (W encouraged)	Twice a M	W	w	Periodicity exceeds SDDS requirements.	
Reserves template	Yes	М	М	М	M		
Merchandise trade	Yes	M	Twice a M	8W (4-6 encouraged)	3 W	Periodicity and timeliness exceed SDDS requirements.	
International investment position	No	A (Q encouraged)	M and twice a month	2Q (Q encouraged)	5 W and 1 W	Data are not disseminated for all required SDDS components. Periodicity and timeliness exceed SDDS specifications.	
Exchange rates	Ycs	D	D	1/	D	Daily spot exchange rates and monthly data on forward rates.	
Addendum population	Yes	A	A	161	18 months		

III. SUMMARY ASSESSMENT OF DATA QUALITY

A. The Framework for Assessing Data Quality

16. Work toward developing a framework for assessing the quality of data has been under way in the IMF's Statistics Department for some time. This initiative responded to a number of needs, in particular, the need to focus more closely on the quality of data provided by countries to the IMF for surveillance and to assess the quality of data in the context of Reports on the Observance of Standards and Codes (ROSCs). Against this background, the Statistics Department has developed a tool that provides a structure and a common language to assess data quality and establishes a link with the SDDS. The data quality assessment framework that has emerged comprises a generic framework that brings together internationally accepted core principles for official statistics and serves as the overarching structure for dataset specific frameworks (for national accounts, balance of payments, monetary, government finance, and price statistics) that are organized around indicators of quality.

17. The Data Quality Assessment Framework (DQAF) covers a set of prerequisites or pointers and five key dimensions of quality to provide a common language for the assessment of data quality (see below). The coverage of these dimensions recognizes that data quality encompasses the quality of the institution or system producing the data as well as the quality of the data product.

- Prerequisites of quality—the legal framework is supportive of statistics; resources are commensurate with the needs of statistical programs; and quality is recognized as a cornerstone of statistical work.
- Integrity—professionalism in statistical policies and practices is a guiding principle; statistical policies and practices are transparent; and statistical processes are guided by ethical standards.
- Methodological soundness—concepts and definitions used are in accord with standard statistical frameworks; the scope of the data, classification, and sectorization systems are in accord with internationally accepted standards; and flows and stocks are valued and recorded according to internationally accepted standards.
- Accuracy and reliability—source data available provide an adequate basis to compile statistics; statistical techniques employed conform to sound statistical procedures; and source data are regularly assessed and results validated.
- Serviceability—statistics cover relevant information on the subject field; timeliness
 and periodicity follow internationally accepted dissemination standards; statistics are
 consistent over time, internally, and with major data systems; and data revisions
 follow a regular and publicized procedure.
- Accessibility—statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis;

up-to-date and pertinent metadata are made available; and prompt and knowledgeable support service is available.

- 18. A central feature of this framework is its structure, in which principles of quality are organized in an orderly progression from the abstract to the more specific. Thus, for each of the five dimensions there is a set of prerequisites, a set of elements, indicative of desirable practices, and a group of indicators or pointers to these practices.
- 19. The findings from the application of the data quality assessment framework to the Chilean statistical system are presented below. An assessment of five macroeconomic datasets (national accounts, prices, government finance statistics, monetary statistics, and the balance of payments) was conducted, using information prepared on the basis of dataset specific frameworks. On the basis of this information, summary assessments were prepared. The mission's conclusions are also presented in the form of standardized summary tables in which the assessment of data practices is made on a qualitative basis, using a four-part scale (Tables 2.1–2.5).

B. Summary of Findings

20. The prevailing view within the Fund is that Chile's macroeconomic statistical databases meet all requirements for the conduct of effective surveillance. However, Fund staff is aware of a small number of data shortcomings that have the potential for complicating the accurate analysis of economic developments and the formulation of appropriate policies. These statistical issues were important points of reference against which the data quality assessments were undertaken and were addressed in discussions with the Chilean authorities.

Prerequisites of Quality

- 21. The INE, which prepares the price statistics, must collect, process, and publish the official statistics as well as submit to the President of the Republic the Annual Statistical Plan. The INE operates under a legal framework that appears adequate. However, due to the law of immobilization that hampers personnel management flexibility, INE finds it often difficult to appoint qualified new staff. The legislation supporting its activities is in Law No. 17.374 of 1970. In practice, the INE requests the support of the other institutions, e.g., the BCCH and the MOF, in drawing up and implementing the Annual Statistical Plan.
- 22. The MOF operates under a legal framework that appears adequate. The government finance statistics (GFS) are compiled and published under the terms and conditions of the Annual Budget Law, Decree-Law No. 1263 of 1975, and Decree with Legal Power-106 of 1960.
- 23. The Annual Budget Law requires that the Budget Directorate (Dirección de Presupuestos, DIPRES) of the MOF send data to Congress on the quarterly budget execution of the central

⁸ See Appendix II for a copy of the Data Quality Assessment Framework (DQAF)—Generic Framework.

government revenue and expenditure, within 60 days after the end of the quarter (45 days beginning in 2001). All central government units must provide the DIPRES the necessary information to this effect.

- 24. The **BCCH** has the legal authority and responsibility for the collection of monetary, balance of payments, and national accounts statistics and has developed a well-organized system to that effect. The Constitutional Organic Law of the BCCH (Law No. 18840 published in the official paper on October 10, 1989) stipulates in its Article 53 that the Bank shall compile and publish, in a timely manner, the principal macroeconomic statistics of the country, including monetary and foreign exchange statistics, balance of payments statistics, and the national accounts. Furthermore, Article 53 also gives the BCCH power to define and request from other public sector entities information necessary for this assignment.
- 25. In addition, the coverage, periodicity, and timeliness of the statistics compiled by the BCCH are established by Decision No. 393-07-941207 of the Central Bank Board of Directors, published in the official paper on December 13, 1994. Overall, these laws provide an adequate legal framework for the compilation of national accounts, balance of payments, and monetary statistics.
- 26. For the national accounts, balance of payments, and monetary statistics, there are also mechanisms for the sharing of data and/or coordination between the BCCH and the bodies generating primary data and statistics (e.g., INE, SERNATUR, SBIF) based on contractual relationships, agreements, good will, and on the legal prerogative of the BCCH to request information from public entities for statistical purposes. In general, the human, financial, and computing resources assigned to the compilation of the data are adequate.
- 27. For the balance of payments, statistical reporting is mandatory and law guarantees the confidentiality of data. The processing of reported data is efficiently handled by a well-trained professional staff in the BOP Department. The consistently high quality of these data is ensured by routine procedures that are used to review internal and external data sources.
- 28. For monetary statistics, formal procedures have been established within the BCCH that govern the reporting of information to the Research Department (DE) by other departments, the Superintendence of Banks and Financial Institutions (SBIF), and individual commercial banks and finance companies. The Accounting Department prepares the BCCH accounting data, which is accessed electronically by the DE. The SBIF reports to the DE monthly balance sheets data on commercial banks and finance companies. Furthermore, an on-line system called "SINACOFI" connects the BCCH, the SBIF, and all commercial banks and finance companies. Through this system, the BCCH receives daily information on interest rates, the information needed to compile the monetary aggregates and the provisional figures for the monthly survey of the other depository corporations.

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⁹ Surveys are not covered by this guarantee.

Integrity

- 29. Practices are in place at the **INE** to ensure professionalism in statistical policies and practices, transparency, and ethical standards. The professional independence of the INE is recognized in the Law on the INE. INE's Regulatory decree as well as the Civil Servant Statute is important ethical standards for the INE.
- 30. The staffs of the MOF and related institutions that prepare and disseminate fiscal and debt data employ a high level of professionalism in these activities. Compilation and dissemination of government finance statistics are not governed by a published 'code of conduct' that ensures that data are compiled and the results presented according to strictly professional standards. Nevertheless, there is a culture of proceeding in such manner such that strong informal safeguards support the professional independence of both the agency and the fiscal data compilation process.
- 31. Practices are in place at the **BCCH** to ensure professionalism and transparency in statistical policies and practices in the compilation of national accounts, monetary, and BOP statistics. The terms and conditions under which these statistics are disseminated and the practice of internal government access are known to the public. The choice of sources and methods is determined primarily by statistical considerations and meets high standards of objectivity. Ethical standards are broadly defined in the legal framework of the BCCH, and an Employee Statute guiding staff conduct, in its professional capacity, is available.

Methodological Soundness

- 32. The overall structure of the **national accounts**¹⁰ follows internationally endorsed standards and recommendations of 1993 SNA. The delimitation of the economy, the production and assets boundaries, and the classifications used are in accordance with internationally recommended systems. However, there are some deviations in coverage from international practices, which do not exceed 1% of GDP and are attributable more to a lack of adequate information than to a conceptual deviation.
- 33. The **consumer price index** (CPI) and the **producer price index** (PPI) are based on internationally endorsed standards and recommendations and use classifications compatible with internationally recommended systems. Concepts and definitions used for the compilation of the CPI in Chile are in line with the recommendations of the ILO. The CPI measures the changes in price of a representative basket of goods and services purchased by households; prices are actual market prices paid by consumers. The CPI is not based on an

¹⁰ The DQAF for national accounts refers to the yet unpublished data with base year 1996=100 based on 1993 SNA. When the DQAF mission was scheduled, the release of the new series of national accounts with the new base year was scheduled for March 23, 2001 but has been tentatively postponed to March 2002 until further review of the 1996 benchmark year is performed, and the construction of the new series is properly implemented. A notice to this effect was published on the March 15, 2001 issue of the BCCH's Economic and Financial Report.

international classification; however, there is a one-to-one correspondence between the CPI's classification and that of COICOP.

- 34. Concerning the PPI, the official name of the index in Chile is "indices de precios al por mayor", that is wholesale price index (WPI). As the name suggests, the index is not a pure PPI designed to measure changes in prices charged by local producers of goods. Instead, the index measures the changes in price of a fixed basket representative of locally produced and imported goods. Weights for the compilation of the WPI are based on the recommendations contained in the 1968 SNA and partially on the 1993 SNA. The WPI covers all market output of goods produced by the manufacturing, mining, agriculture, and fishing industries, and sold in the domestic market (exports are excluded). Similarly, the WPI covers all imported goods that have the same industrial origin as the domestic produced goods included in the index. The classification of establishments and economic activities is in accordance with a local adaptation of the International Standard Industrial Classification of all Economic Activities (ISIC Rev.2). Prices collected for locally produced goods are market prices, which correspond in general to the concept of producer's prices. Prices of imported goods are collected on a c.i.f. basis.
- 35. With few exceptions, the Chilean **fiscal accounts** follow internationally accepted classification standards as defined by the IMF's manual on government finance statistics. The data cover the budgetary units of central government (which include the social security funds managed by the public sector), and the local government units. The extra-budgetary units of central government (of which only the state universities are significant) and special funds, dealing with oil and copper prices and non-publicly accounted military expenditures, are not included in the data on GFS. ¹¹ According to the guidelines of the *1986 GFS Manual*, the extra-budgetary units of central government, the special funds, and all military transactions should be included under central government. All transactions are recorded on a cash basis in the period when they actually occur. A move to an accrual accounting/budgeting basis is being considered. All stocks and flows are valued on a current market basis. Transactions in foreign currency are converted to local currency using the average exchange rate for the month they take place in the case of quarterly fiscal data and using the average exchange rate for the year in the case of annual fiscal data.
- 36. The analytical framework underlying the monetary statistics follows internationally endorsed standards. Currently a program to improve the monetary and financial statistics is being developed, which aims at revising the local definitions of the monetary aggregates and incorporating other depository corporations and other financial intermediaries into the coverage. In particular, it aims, in the very short term, at incorporating the mutual funds into the definition of monetary aggregates and the survey of the other depository corporations. There is also interest in the revision of the plan of accounts for commercial banks, which is

However, explanatory notes are published in "Estadisticas de las Finanzas Públicas" issued by DIPRES. The notes carry detail on the deposits and withdrawals of copper and petroleum funds. Additionally, beginning October 2001, the amount of resources transferred from CODELCO assigned to non-publicly accounted military expenditures will be disseminated in the website of the Budget Directorate (www.dipres.el). At present these transfers are included as part of CODELCO's current transfers, but they are not detailed.

currently being assessed against international accounting standards. These revisions should result in greater consistency with the *MFSM*.

37. Chile's **balance of payments** statistics are compiled in broad conformity with the conceptual framework of the fourth edition of the IMF's *Balance of Payments Manual (BPM4)*. There are several projects underway to compile and disseminate BOP data according to *BPM5*. Data based on *BPM5* will be disseminated by 2002. However, *BPM5* components such as accrued interest for international reserves have been incorporated into current BOP compilation and dissemination.

Accuracy and Reliability

- 38. Chile has ample source data for the compilation of the annual **national accounts**, especially as regards the estimates of GDP by branch of industrial activity and for the compilation of the supply tables of domestic and imported products. However, there could be some improvement in the estimation procedures used in the economic surveys, whether conducted by the INE or by the BCCH. To this end, the BCCH has developed a project for the standardization of information that will facilitate data validation and comparison. Similarly, the BCCH is studying the adoption of new techniques for the statistical validation of surveys. These two projects are being developed complementary to the 2001 INE-BCCH Agreement on "Quality Improvement". The Agreement includes the requirement that INE provide assurances of the relevance of survey results.
- 39. The **CPI** and **PPI** are compiled using sound procedures and methods. The weights and prices are obtained from a comprehensive data collection program. The Family Budget Surveys (FBS) provide sufficiently detailed data on household consumption to derive the weights of the CPI. Price data for the PPI are collected on a monthly basis by mail, in questionnaires. The PPI basket and weights are updated at infrequent intervals. The commodity composition and weights of the present PPI are based on the supply and use table of 1986, compiled within the framework of the national accounts. There are various validation procedures for the source data. However, these procedures do not cover all areas (sampling and non-sampling errors).
- 40. **Fiscal data** covering the full range of economic stocks and flows are provided from administrative systems for central and local governments. Fiscal data are based on the accounting records of the actual annual budget execution, as reported monthly by all units of general government. Data are consolidated for the central government sector, and data are available to allow consolidation of data for the different levels of government (general government, non-financial public sector). There are no procedures in place to allow estimation of missing data, as the compilation of fiscal data is based on complete information. The budget and extra-budgetary charts of accounts align with GFS categories. The budget execution reports of central government units follow the budget classification system issued by the MOF. The DIPRES uses a bridge table to derive an economic

¹² It should be noted that BOP data transmitted to STA are based on BPM5.

classification from the budget classification and to derive fiscal data categories in accordance with the 1986 GFS Manual. Furthermore, the timing of recording and valuation of source data are generally consistent with GFS concepts. There are no problems with material gaps in coverage and/or completeness of data collection, as fiscal data are compiled on the basis of complete information for all units included in the current coverage (i.e. excluding extrabudgetary units, special funds, and certain military transactions).

- 41. The monetary statistics are compiled on the basis of the individual monthly report forms of the other depository corporations (commercial banks and finance companies only) and the accounting records of the BCCH. The reported data are disaggregated in terms of instruments and sectors to permit a sufficient analysis of the accounting data to derive the monetary accounts. However, for the other depository corporations, there are less important cases of insufficient information for instrument and sectoral breakdowns (see sections 2.3.2 and 2.3.3 of Appendix I. Section D for further details). Preliminary data are compiled and disseminated by using a more simplified, alternative source, which consists of daily information received directly from the depository corporations. The source data reasonably approximate the definitions, scope, classifications, time of recording, and valuation required. The source data are subject to internal consistency checks.
- 42. The **balance of payments** compilation is based on comprehensive primary sources; i.e., foreign exchange transactions system, customs documents, and administrative records of the BCCH. There are also some secondary sources that complement information from the primary sources; these include direct information obtained from enterprises and data from the financial system. Data derived from primary sources are adjusted to improve the coverage. For example, imports are adjusted to include those that are not captured in customs declarations, in particular, certain military procurements, and the valuation and the timing of the records. The definitions, scope, and classification used in source data are broadly in line with *BPM4* and, in some limited cases, with *BPM5*. Effective and well-documented data management procedures, combined with computerized and manual editing checks, contribute to overall accuracy and reliability.

Serviceability

- 43. As a subscriber to the IMF's SDDS, Chile complies with the prescriptions for frequency and timeliness of **national accounts** statistics. The national accounts are consistent internally and over time, although it is necessary to ensure a greater degree of consistency with other statistical systems, such as the balance of payments. In fact, the national accounts statistics are not fully consistent with the balance of payments; the discrepancies between external saving in the national accounts and the deficit in the balance of payments are identified and calculated. However, there is a project underway to fully reconcile both figures. The revision policy is well established and known to the public, although it remains necessary to introduce systematic procedures for the analysis of revisions in the national accounts and disseminate these to the public.
- 44. One of the major users of the national accounts statistics is the BCCH, as a consequence of which the programs for compiling the national accounts are geared toward supplying the

information required for operational purposes and for economic research at the Bank. This is shown by the priority given to the work on updating and changing the base year of the national accounts and the programs to develop the quarterly accounts. However, there are no regular forums seeking the views of users of these statistics outside the Bank. Therefore, to ascertain the views of users both within Chile and abroad on the full range of data disseminated by the Bank, BCCH designed and implemented a survey of data users that took place concurrently with the ROSC mission. The **PPI** and **CPI** adequately respond to users' needs. Timeliness and periodicity follow generally accepted good practices, and the indices are consistent over time.

- 45. The **fiscal data** for general government operations meet SDDS specifications for timeliness and periodicity. The two available flexibility options under the SDDS are being used for the timeliness and periodicity of these two fiscal data categories. Although the basic data for all central government units are collected monthly and are used for budgetary control purposes at that level, the sectoral aggregates were until recently compiled and disseminated quarterly with a timeliness of 60 days after the end of the reference quarter, except for the financing data which continue to be compiled and disseminated on an annual basis with a timeliness of 90 days after the end of the reference year. Beginning in 2001, for statistical purposes and to meet the legal requirement to inform Congress on budget execution, the data on the sectoral aggregates for income and expenditure are compiled and disseminated quarterly with a timeliness of 45 days after the end of the reference quarter, a 15-day improvement in timeliness. Quarterly central government debt data are compiled with a onemonth lag by DIPRES, but these are not disseminated. Annual central government debt data are compiled and disseminated with a ten-month lag, although the data are available much earlier. To improve its statistical services, DIPRES is implementing an improvement program as follows:
- Quarterly data on central government financing with improved coverage is being compiled. The first release will be in August 2001 for data for the first and second quarter of 2001, with the same detail as for annual data.
- Quarterly data on central government debt with improved coverage will be compiled with quarterly timeliness. The first release will be in September 2001 (for data on June 2001). Project to compile and disseminate public debt data and the debt service schedule is underway.
- 46. There is an informal process of periodic reviews of the **monetary statistics** with the policy departments of the BCCH to ensure that the statistics meet users needs. The DE reviews developments that have an impact on statistical data requirements with the BCCH's departments that analyze the data. Moreover, the BCCH regularly participates in international meetings and seminars organized by international statistical organizations, such as the IMF and the United Nations.
- 47. The surveys of the BCCH and of the other depository corporations subsectors are disseminated on a fortnightly and monthly basis, which is consistent with the specifications of the SDDS. The central bank survey is disseminated one week after the end of the reference

date, and the other depository corporations survey is disseminated three weeks after the end of the reference month, which is in keeping with the specification of the SDDS.

48. Chile compiles and disseminates quarterly balance of payments within one quarter after the end of the reference quarter. The data are preliminary when first released and become final 15 months after the reference quarter. The final data are disseminated in the annual BCCH publication "Balanza de pagos de Chile" (Chilean Balance of Payments) as well as the fortnightly "Informe Económico y Financiero Trimestral" (Quarterly Economic and Financial Report). While the BOP statistics exhibit inter-temporal and internal consistencies, they are not fully reconcilable with the national accounts; a project to promote consistency is in train for 2002. The compilation of both national accounts and balance of payments statistics has been brought under the same management partly with this purpose in mind. Reconciling BOP data on international reserves with the corresponding monetary data on analytical accounts of the BCCH is made daily. Efforts also have been made to reconcile international assets and liabilities of banks with the corresponding banking data, but this exercise is not carried out on a regular basis.

Accessibility

- 49. The dissemination of **national accounts**, the corresponding metadata, and the related service and support are commensurate with users' needs. The BCCH website has been developed as a tool to provide enhanced accessibility. The BCCH has a release calendar for all publications on its website and on the DSBB for the relevant SDDS data categories. In addition, the BCCH disseminates the "*National Accounts Yearbook*" in hardcopy and on the BCCH's website (http://www.bcentral.cl/).
- 50. The dissemination of **price statistics**, the corresponding metadata, and the related service and support are commensurate with users' needs. In addition, the INE disseminates the "*Boletines*" in hardcopy and on its website (http://www.ine.cl/).
- 51. The **fiscal data** are presented in a way that facilitates proper interpretation and meaningful comparisons. The figures for the period in question are compared with figures for previous periods, both in real terms and in terms of GDP. The figures are also compared with the budget for the period. However, the degree of detail provided for the major fiscal aggregates is less than that set out in the *1986 GFS Manual* tables. At present, there are no summary methodologies posted on the DSBB, but the authorities indicated that they will provide them shortly. Moreover, updated methodology notes will be added in the Chilean annual publication on GFS to be released in 2002. A program underway to provide more detailed data on income taxes, asset sales, and financing is expected to be completed in early 2002. GFS are disseminated in both hard copy publications and by posting in the DIPRES's website (http://www.dipres.cl/).
- 52. The dissemination of **monetary statistics** is carried out in the form of tables, charts, and text. The means of disseminating monetary statistics are adequate and suitable for the users' needs. In addition, there is on-going work to provide users with several file format options, such as Acrobat-Reader and Excel. Metadata are available to the public. Compilation

procedures were revised during 1998, and new series and a methodological note were published in the Central Bank's monthly bulletin of February 1999. Furthermore, summary methodologies for the analytical accounts of the Central Bank and the banking sector have been posted in the IMF's DSBB recently. Monetary statistics are released on a preannounced schedule in accordance with the requirements of the SDDS and are posted on the BCCH's website (http://www.bcentral.cl/)

53. Dissemination formats for **balance of payments** data and metadata include press releases, hardcopy publications; such as the *Economic and Financial Report*, and the *Chilean Balance of Payments*, which are posted on the BCCH's website (http://www.bcentral.cl/) and are also available in magnetic media.

Table 2.1 Data Quality Assessment Framework—Summary for National Accounts Statistics¹³

			Asse	ssment		
Elements	NA	0	LO	LNO	NO	Comments
Prerequisites of quality 0.1 Leg. & inst. environment 0.2 Resources. 0.3 Quality awareness		X X X				
1. Integrity 1.1 Professionalism 1.2 Transparency 1.3 Ethical Standards 2. Methodological soundness 2.1 Concepts and definitions 2.2 Scope 2.3 Classification/sectoriz. 2.4 Basis for recording 3. Accuracy and Reliability 3.1 Source Data		X X X X X X	X			The data available for the quarterly estimates are limited in scope.
3.2 Statistical techniques 3.3 Assessment & validation		X	X			No information is available about sampling errors and nonsampling errors for the business survey and the household budget survey.
3.4 Revision studies 4. Serviceability	NA					The DQAF was applied to a new dataset and not to the currently disseminated time series.
4.1 Relevance 4.2 Timeliness & periodicity 4.3 Consistency 4.4 Rev. policy & practice ¹⁴ 5. Accessibility 5.1 Data Accessibility 5.2 Metadata accessibility		X X X X				
5.3 Assistance to users		X				

Note: NA=Not Applicable; O=Practice Observed; LO=Practice Largely Observed; LNO=Practice Largely Not Observed; NO=Practice Not Observed

¹³ The DQAF for national accounts refers to the yet unpublished data with base year 1996=100 based on *1993 SNA*.

¹⁴ Although the DQAF was applied to an unpublished dataset, the revision policy and practice corresponds to the currently disseminated dataset.

Table 2.2 Data Quality Assessment Framework—Summary for Price Statistics

	T	Τ	Asse	essment		
Elements	NA	0	LO	LNO	NO	Comments
Prerequisites of quality		+	 			Commences
0.1 Leg. & inst. environment		X				
		İ				
0.2.7					i	
0.2 Resources.			X			Due to the law of immobilization that hampers
0.3 Quality awareness		v				personnel management flexibility, it is often difficult to appoint qualified new staff.
0.5 Quanty awareness		X				to appoint quantitet new statt.
1. Integrity		ĺ				
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical Standards		X				
2. Methodological soundness						
2.1 Concepts and definitions		X				
2.2 Scope		^	$ _{\mathbf{X}}$			The framework for the compilation of price
1						indices follows international standards, in gene-
						ral. For the CPI, it follows ILO recommen-
, .						dations. For the PPI, there are some discrepan-
]]		į	cies on agriculture and import prices concepts.
2.3 Classification/sectoriz.		X				
2.4 Basis for recording 3. Accuracy and Reliability		X				
3.1 Source Data		ļ -	$ _{\mathbf{X}}$			Thomas in the control of the control
J. T. Source Batta			Δ			There is no complete synchronization between the source data and the indices. For the PPI, in
						the case of agricultural and fishing products,
		ļ				there is no sample framework for the directory
3.2 Statistical techniques		X				of reporting establishments.
					i	
3.3 Assessment & validation			,,			
5.5 Assessment & validation			X			37.111.1
						Validation procedures do not cover all areas (nonsampling errors).
						(nonsampung errors).
3.4 Revision studies	NA					Data are final when first released.
4. Serviceability	:					
4.1 Relevance		X				
4.2 Timeliness & periodicity 4.3 Consistency		X			ļ	
4.4 Rev. policy & practice	NA	X				D-4 6-1-1-6
5. Accessibility	IVA	:			İ	Data are final when first released.
5.1 Data Accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X			- 1	

Table 2.3 Data Quality Assessment Framework—Summary for Government Finance Statistics

Government Finance Statistics									
				ssment					
Elements	NA	0	LO	LNO	NO	Comments			
0.1 Leg. & inst. environment			X			No formal arrangements for cooperation among			
0.2 Resources.			X			agencies. Human resources just sufficient for current			
						activities.			
0.3 Quality awareness		X							
1. Integrity 1.1 Professionalism		X							
1.2 Transparency		X							
1.3 Ethical Standards		X							
Z. Methodistopical countinese									
2.1 Concepts and definitions		X							
2.2 Scope				X		Coverage of general government is not complete. The detail provided for the various			
						GFS aggregates is less than recommended in the			
2.3 Classification/sectoriz.		X				1986 GFS Manual.			
2.4 Basis for recording		X							
3. Acquires and Reliability									
3.1 Source Data			X			Data for some extra-budgetary units and for some military transactions not available. Data for central government available after 30 days.			
3.2 Statistical techniques	NA	v							
3.3 Assessment & validation		X				No estimations made; data based on complete information.			
3.4 Revision studies	NA					Minor revisions made to data, as data are usually final when first published.			
4. Services billing						•			
4.1 Relevance 4.2 Timeliness & periodicity		X		X		No monthly control accomment or antique data			
4.2 Timemess & periodicity				Λ		No monthly central government operations data compiled. No quarterly central government debt			
						data compiled by DIPRES.			
4.3 Consistency			X			No reconciliation of GFS financing data and			
						corresponding monetary and balance of payments data.			
4.4 Rev. policy & practice		X							
5.1 Data Accessibility		X							
5.1 Data Accessibility 5.2 Metadata accessibility		Λ	X			Methodological notes published provide limited			
		,	1		-	detail. At present, no summary methodological statements submitted for DSBB.			
5.3 Assistance to users		X							

Table 2.4 Data Quality Assessment Framework—Summary for the Central Bank and the Other Monetary Corporations Surveys

			Asse	ssment		
Elements	NA	0	LO	LNO	NO	Comments
0.1 Leg. & inst. environment 0.2 Resources 0.3 Quality awareness		X X	х			(On-going work to set up an integrated database to monitor the quality of all statistics disseminated by BCCH.)
1.1 Professionalism 1.2 Transparency 1.3 Ethical Standards 2 Methodological		X X X				
2.1 Concepts and definitions			X			Simplified analytical framework. (Program underway to revise definitions and expand coverage to achieve greater consistency with MFSM.)
2.2 Scope			X			Mutual funds not covered under other depository corporations.
2.3 Classification/sectoriz.			X			Private sector includes some depository corporations; instrument breakdown does not separately identify financial derivatives.
2.4 Basis for recording			X			Accrual accounting not strictly followed for the other depository corporations. Market valuation not generally applied.
3.1 Source Data			X			Information not sufficient to support instrument and sectoral breakdown.
3.2 Statistical techniques			X			No estimation of accrued interest by instrument.
3.3 Assessment & validation			X			No standardized set of plausibility checks in place.
3.4 Revision studies	NA					Data mostly final when first released
4.1 Relevance 4.2 Timeliness & periodicity		X X				
4.3 Consistency			X			No reconciliation with fiscal data. Consistency with balance of payments data needs to be improved.
4.4 Rev. policy & practice			X			Final data not regularly checked against preliminary data.
5.1 Data Accessibility 5.2 Metadata accessibility 5.3 Assistance to users		X X X				

Table 2.5 Data Quality Assessment Framework—Summary for Balance of Payments

			Asse	ssment		
Elements	NA	0	LO	LNO	NO	Comments
Presequence of gening						
0.1 Leg. & inst. environment		X				
0.2 Resources		X				
0.3 Quality awareness			X			Data are disseminated according to <i>BPM4</i> . (Several projects are underway to disseminate data according to <i>BPM5</i> by 2002.)
L-integrity		:				
1.1 Professionalism		X				
1.2 Transparency		X				
1.3 Ethical Standards 2. Methodiological		X				
2.1 Concepts and definitions			X			Does not fully comply with the definitions of <i>BPM5</i> (see below).
2.2 Scope			X			Limited coverage of military imports and the IIP.
2.3 Classification/sectoriel.			X			According to BPM4.
2.4 Basis for recording		٠	X			Accrual principle not strictly followed. Market valuation not used in all cases.
3. Accuracy and Reliability						
3.1 Source Data		X				
3.2 Statistical techniques	:	X				
3.3 Assessment & validation			X			No standardized set of plausibility checks in place (limited set of checks being developed).
3.4 Revision studies		X				
4. Services bility					•	
4.1 Relevance		X				
4.2 Timeliness & periodicity		X				
4.3 Consistency			X			No reconciliation with fiscal data. Consistency with national accounts and monetary data needs to be improved.
4.4 Rev. policy & practice		X				•
5.1 Data Accessibility		X				
5.2 Metadata accessibility		X				
5.3 Assistance to users		X				

IV. USERS' VIEWS

54. A survey of the usability¹⁵ of the data produced by the Chilean' statistical agencies was conducted by the BCCH among key users, both domestic and external, of Chilean economic statistics (see Appendix III).¹⁶ In general, users were satisfied with the coverage, periodicity, and timeliness of most Chilean economic data. Moreover, their views were consistent with the findings of the mission in that the main areas identified for improvement are broadly in line with the proposals suggested by the Fund staff.

Survey of domestic users

- 55. Two areas in which coverage could be improved were mentioned frequently: government finance and balance of payments statistics. On fiscal data, users would like to have more detailed quarterly data on tax revenues, revenues from privatizations, government expenditure, and data on financing. On balance of payments data, users would like to have additional breakdowns for the financial services account and the capital account as well as dissemination of data on a gross rather than net basis, a breakdown of gross external debt between bank and nonbank private sector; a breakdown of net external borrowing by creditor; amortization schedules for private and public sector debt; and monthly real effective exchange rate calculations on a unit labor cost (ULF) basis. In addition, on real sector data, users indicated that economic analysis could be improved if the production index (IMACEC) were available by sectors. It must be noted that National Accounts were excluded from the specific question on coverage and that a specific question on institutional coverage was made only for fiscal data. This may have led to a bias against the statistics that were singled out.
- 56. Users also recommended higher periodicity than that prescribed for some SDDS data categories. Specifically, they saw the need for monthly fiscal and balance of payments data, instead of quarterly as currently disseminated by Chile and shifting unemployment data from a three-month moving average to monthly frequency. Users also suggested monthly periodicity for non-SDDS data categories, such as private consumption and the forward operations position.
- 57. Regarding timeliness, users suggested shorter lags for several data categories, exceeding in some cases the SDDS requirements.
- 58. Namely, disseminating data on balance of payments, national accounts, government finance, and the IMACEC with no more than a one-month lag.

¹⁵ The questions covered aspects related to coverage, periodicity, and timeliness of the disseminated data, calendar of statistics dissemination, methodological soundness, and quality of the data.

¹⁶ The sample of domestic users includes 27 persons surveyed: 14 analysts that are part of the BCCH's economic expectations survey (includes mainly analysts linked to the financial market)and 13 journalists; the sample of external users includes four staff of international banks.

- 59. Advance release calendars were perceived as very useful and generally adhered to, except for the new quarterly national accounts series that the BCCH announced for March 2001 but later postponed to August 2001.
- 60. Chile's National Summary Data Page (NSDP) (http://www.bcentral.cl/fmi/nsdp.htm) was found useful by all analysts surveyed and by most journalists.
- 61. Most criticism was addressed to the methodologies disseminated. In particular, the respondents found that the methodologies disseminated lacked transparency, because methodological concepts and definitions were either not clearly defined or lacked enough detail.
- 62. Data quality, defined in terms of methodological soundness and reliability, was perceived to be good, however, the criticism of the lack of transparency in the dissemination of methodologies is repeated in the quality assessment section of the survey. The quality of Chilean statistics compares favorably with that of other emerging economies in the region. Nevertheless, areas in which respondents viewed scope for improvement were:
 - Real sector statistics: national accounts, employment, wages, and wholesale prices.
 - Government finance statistics: need to improve transparency and reliability by disseminating the methodologies.
 - Balance of payments and international reserves: need to improve dissemination of methodologies.

Survey of external users

- 63. External users of Chilean statistics made similar observations. They further emphasized the need for more details for below the line fiscal data and for external debt, particularly on public sector debt service (both external and domestic debt) both for historical data and projections.
- 64. On data coverage, users commented on the inconsistencies between balance of payments and external debt data and the need for the authorities to provide the corresponding explanations. Users also requested clarification on the financial relationship between the government and extra-budgetary funds such as the Copper Stabilization Fund, because the data are presented on a net basis. Users suggested that government debt be clearly separated from BCCH debt used for open market operations, and that the external debt assumed by the BCCH on behalf of the government in the 1980s be clearly identified in the data.
- 65. On the quality of methodology, the only area where users indicated need for improvement was General government and Central government operations. On the dissemination of methodologies, there was need for improvement in the three areas of fiscal statistics, i.e., General and Central government operations and Central government debt.

- 66. One respondent indicated frustration with the lack of agreement on the definitions of the Chilean quasi-fiscal deficit as viewed by the BCCH, the IMF, and the analysts of statistics. Although the respondent conceded that this could be due to valuation adjustments. 17
- 67. Survey results for the domestic and external users are summarized in Appendix III.

V. FUND STAFF RECOMMENDATIONS

68. Based on the results of the data quality assessments and discussions with the Chilean authorities in the respective statistical agencies, and mindful of data users' views, the staff proposes the following measures to bring Chile's statistics into greater conformity with international standards and improve the usefulness of the data. The recommendations are made in terms of the specific elements corresponding to the dimensions of quality:

National Accounts

Classification and sectorization

69. Implement the classification of household consumption by purpose of expenditure. This classification has not been implemented except at the level of the product groups used in compiling the supply and use tables.

Source data

- 70. Promote the establishment and maintenance of a directory of establishments and enterprises for use as the basis for selecting samples and determining the coefficients of expansion for all the economic surveys conducted by the various institutions.
- 71. Monitor closely developments in the Central Bank projects on data and survey validation and the 2001 INE-BCCH Agreement on "Quality Improvement".
- 72. Ensure that the personnel compiling the national accounts take a more critical attitude, and involve them more in evaluating the quality of the basic statistics.
- 73. Give priority to the project to improve the periodicity and comprehensiveness of information sources particularly for quarterly data, including for data on changes in stocks and household consumption.

¹⁷ It should be noted that quasi-fiscal data is not a SDDS data category and therefore, was not covered by the ROSC mission.

Relevance

74. Establish procedures for consulting with the users of the statistics, involving representatives of various sectors of society, with a view to adapting national accounts programs, to the extent possible, to users' information needs.

Revision policies and practices

75. Adopt the practice of documenting and disseminating revision studies on the national accounts data, explaining the magnitude and direction of the changes and in the corresponding data sources.

Price Statistics

Methodological soundness

PPI

- 76. Update the basket and weights of the PPI based on the supply table being constructed for the new benchmark year estimates of the national accounts.
- 77. Change the procedures for imputation of missing prices. Missing prices may be assumed to change at the same rate as observed for similar items in the same group instead of the current practice of carrying forward the last observation.

Fiscal Accounts

Resources

78. Increase human resources assigned to the compilation of fiscal statistics.

Scope

- 79. Expand the coverage of central government to include the extra-budgetary units of central government, the special funds dealing with oil and copper prices, and all military transactions.
- 80. Compile and disseminate fiscal data at the level of detail shown in the 1986 GFS Manual for the major fiscal data aggregates (revenue, expenditure, surplus/deficit, financing, and debt).

Timeliness and periodicity

81. Establish a system to derive fiscal data automatically from budget execution data and thereby compile and disseminate monthly central government operations data and quarterly central government debt data.

Consistency

82. Conduct regular exercises to reconcile fiscal data with monetary and balance of payments data.

Accessibility

83. Compile and disseminate more detailed methodological notes for fiscal statistics and begin reconciliating fiscal data with monetary, balance of payments, and national accounts data on a regular basis.

Money and Banking Statistics

Coordination between data producing agencies and methodological soundness

84. Improve BCCH's collaboration with the SBIF in the review of the plan of accounts for commercial banks and finance companies to facilitate the implementation of the *MFSM* recommendations. Concrete steps for this collaboration and a program for the implementation of the new *MFSM* are needed, which might involve the temporary use of additional resources.

Serviceability

85. Improve controls to monitor data quality: (1) define a set of plausibility checks in the part of the compilation process that correspond to the BCCH; (2) check consistency with BOP and fiscal data regularly, in addition to the checks with BOP/IIP data already in place; and (3) monitor the accuracy of preliminary data closely through established and regular procedures.

Balance of Payments Statistics

Methodological soundness

- 86. Complete the work underway to compile data on the stock of foreign direct investment in Chile.
- 87. Continue with the work underway to reconcile the differences between the Chilean and BIS short-term external debt figures. Further analytical work remains, as the Chilean external debt data does not yet include short-term trade credits. Although estimates of this item are included in the balance of payments flows.
- 88. Use the residence concept of *BPM5* in the compilation of external debt statistics. In some specific cases, the concept of nationality is used instead in the compilation of these statistics. It should be noted that Chile is working towards unification of the residency criteria in both external debt and balance of payments statistics.

- 89. Improve the coverage of the military sector in external statistics. At present, military imports that do not pass through customs are estimated in the aggregate by indirect methods by the central bank; therefore, the composition of these imports is unknown.
- 90. Compile and disseminate all components of balance of payments data according to *BPM5* in the first half of 2002 as scheduled.

Serviceability

91. Provide additional detail on the international investment position, including information on foreign assets held by the private sector, to improve the assessment of external vulnerability.

Detailed Assessments using the Data Quality Assessment Framework

Based on the structure of the generic DQAF, five dataset DQAFs were developed, which were closely mapped to existing statistical standards and manuals, and focused on identifying indicators or pointers of practices that form the underlying structure for elements that are associated with data quality. The following detailed information on these indicators 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 Chilean officials. This information, which is organized along the lines of the generic DQAF, was used by the mission to prepare the summary assessment of data quality elements (Section III), based on a four-part scale of observance (Tables 2.1–2.5).

A. National Accounts Estimates (Annual and Quarterly)

0. Prerequisites of Quality

0.1 Legal and institutional environment

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

Chile's national accounts are compiled and disseminated by the BCCH. The Constitutional Organic Law of the BCCH (Law No. 18840 published in the official paper on October 10, 1989) stipulates in its Article 53 that the BCCH shall compile and publish, in a timely manner, the principal macroeconomic statistics of the country, including monetary and foreign exchange statistics, balance of payments statistics, and the national accounts.

In addition, the coverage, periodicity, and timeliness of these statistics are established by Decision No. 393-07-941207 of the Central BCCH Board of Directors, published in the official paper of December 13, 1994.

The unit compiling the national accounts within the BCCH is the National Accounts Department (DCN), a part of the Office of the Information and Statistical Research Manager. The DCN is divided into three major areas covering the responsibilities for the processing and analysis of basic data, the preparation of sectoral and institutional accounts, and the work of producing the national accounts synthesis.

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

The major provider of information for the compilation of the national accounts is the National Statistics Institute (INE), with which the BCCH works closely for purposes of obtaining the basic statistics necessary for compilation of the national accounts. There is a formal framework agreement between the two institutions dating from 1995, which is updated annually by means of annexes setting forth new information requirements. The

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BCCH finances the INE by purchasing statistical research services from it. The information flow is continuous and generally timely; though there are a few exceptions.

Access to administrative records is expedited; although the level of detail of the data to which national accounts compilers have access depends upon the degree of confidentiality of that data. On the other hand, the use of the single tax roll number as the sole identifier for economic agents for all types of transactions makes the administrative records quite manageable and allows for the application of a consistent classification scheme throughout. The most important administrative records for use in compiling the national accounts are those on foreign trade (customs records) and on taxation (income tax and value-added tax). There are no confidentiality limitations in respect of foreign trade data, but limits are imposed on the use of tax records. The Bank has partial access to primary data from the tax records, which are either processed in accordance with the information requirements of the Bank, (that receives them at levels of aggregation that protect confidentiality) or in the form of individual registers without identification of the taxpayer but including the industrial and sectoral classifications agreed upon with the Bank. The flow of tax information is good but not timely enough for the compilation of quarterly accounts, a situation that is expected to improve with the drafting of an agreement between the Bank and the tax authorities.

Coordination for statistical work between the BCCH and reporting institutions is good, in particular in connection with the survey services the BCCH entrusts to the INE. A significant step is being made in this direction by the tendency shown by other institutions to use, for statistical and/or administrative purposes, the directories of institutions and businesses drawn up by the BCCH, thereby ensuring both improved coverage and consistency in the various statistics.

Another mechanism contributing to interinstitutional cooperation is represented by the existence of a National Statistics Commission, in which users and suppliers of statistics meet monthly.

0.1.3 Confidentiality of respondents' data is guaranteed, and their use is restricted to statistical purposes.

The confidentiality of data reported by individual persons and entities are guaranteed under Article 66 of the Act on the BCCH as well as by the Code of Conduct the Staff of the Bank (Reglamento de Personal, section conflict of interest). The latter prohibits to the staff to disseminate confidential information, i.e., any information that has not been published. Additionally, the employment contract states that, "It will be justified reason for the termination of the employment contract the non-fulfillment of the following obligation: Maintain absolute secrecy of the situations or businesses that, directly or indirectly, were connected to the Bank and that were known owing to the staff position or functions as well as keep full loyalty to the Bank." In addition, the BCCH's networked information system does provide for protected access to, and storage of, the data managed by national accounts compilers.

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

For statistical compilation purposes, the central bank law only gives the BCCH the authority to obtain information from public institutions. No legal provision empowers the BCCH to demand information from the private sector. At present there are no procedures in place to encourage cooperation by reporting parties.

Articles 39, 40, 53, and 58 of the BCCH Organic Law ensure statistical reporting to Central Bank of any transactions in foreign exchange and constitute the legal base to request information on the balance of payments to both public and private institutions.

0.2 Resources

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

Financial and staff resources

Adequate financial resources support compilation of the national accounts at the BCCH, and de facto there are no budgetary restrictions to the development of the national accounts. Beginning in 2000, the BCCH is implementing policies aimed at optimizing resource allocation within the framework of a program to assess results, and evaluate objectives, products, and activities.

The buman resource complement of the DCN is sufficient in number and in terms of quality. The DCN has a staff of 40, most of them are economists or statisticians with ample experience in the compilation of the national accounts. The number of staff may be regarded as adequate for the intensive workload of the department, which also constantly prepares detailed annual estimations of the national accounts and monthly and quarterly estimates in more reduced formats, and is also engaged in the work of implementing a new base year and improving the quarterly national accounts. However, the distribution of the workload is not balanced well, and some redefinition of duties is merited.

An annual professional training program is also in place, and makes it possible for the staff to participate in relevant seminars and courses abroad. Internally, two weekly seminars are currently offered on national accounts and on short-term economic indicators.

The compensation structure for staff is good, whether in absolute terms or in relation to market comparators. Judging from the relatively high seniority of the employees, there is no staff retention problem.

Computing resources

The computer resources available for national accounts compilation are sufficient and at the same level as those of the other BCCH units. Advanced information technology applications are available, and good use is being made of technological potential through an intensification of the computer processing used in the compilation of national accounts.

0.2.2 Measures to ensure efficient use of resources are implemented.

The Bank is in the midst of evaluating the tasks of the DCN with a view to determining priorities, in large measure on the basis of cost-effectiveness criteria.

0.3. Quality awareness

0.3.1 Processes are in place to focus on quality, to monitor the quality of the collection, processing, and dissemination of statistics, to acknowledge and deal with tradeoffs within quality, and to guide planning for existing and emerging needs.

The BCCH recognizes the importance of quality national accounts figures, as it is the principal user of these statistics for financial programming purposes and in monitoring developments in economic activity. The importance of quality is also reflected in the work being carried out to implement the new benchmark and base year for the national accounts and the allocation of resources to this area of activity for purposes of contracting for special research projects and surveys intended to improve and broaden the base of the source data used in compiling the national accounts.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The professional independence of the Central Bank is established by law. While there are no statutory provisions preventing outside interference in the contents and dissemination of statistics, in practice no influence is exerted, whether external or internal, which might have any impact on the national accounts results.

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

The statistics are compiled in accordance with thoroughly professional criteria and with complete independence of compilers to use and select the data sources and methodologies they deem best suited for purposes of the estimates.

1.1.3 Statistical agencies are entitled to comment on erroneous interpretation and misuse of national accounts data

The National Accounts Division may provide clarification in both cases but may not comment. Comments are reserved for BCCH management, if needed, in consultation with the National Accounts Division.

1.2 Transparency

1.2.1 The terms and conditions under which the data are produced and disseminated are available to the public

As previously mentioned, the terms and conditions under which the national accounts statistics are prepared are covered by Article 53 of Law No. 18840. This law is available to the public on the Bank's website and may also be obtained in printed form at the Publications Department of the BCCH (copies in English may be purchased at a token price).

1.2.2 Identification of internal government access to data before release.

The national accounts are disseminated simultaneously to all users, and no one outside the BCCH has access to the data prior to their publication. This principle is strictly observed by the BCCH.

1.2.3 Products of statistical agencies are clearly identified as such.

There is no ministerial commentary attached to the release of the data.

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

Important methodological changes are announced in advance in the biweekly financial report of the BCCH. The data release timetable is disseminated in advance on the website and in issues of the economic and financial report of the BCCH.

Publication of the compilation methodologies and sources for the national accounts is traditionally done in special publications released on an infrequent basis with timing coinciding with the implementation of important methodological changes and new base years. Although it is acknowledged that having special publications that are quite comprehensive is important, it is also regarded as necessary to introduce summary methodological notes in the periodic national accounts publications, whether annual or quarterly.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are clear and publicized.

The BCCH does not have an explicit code of ethical conduct that guides the compilers of statistics in the staff, but ethics are important in practice. Professional ethics are an intrinsic characteristic of the high degree of professionalism of the institution. Professionalism is promoted by BCCH management and has taken on new importance with the introduction of a continuous program of weekly seminars on national accounts topics organized within the DCN. The BCCH Constitutional Organic Law, and the code of conduct (Reglamento del Personal) provide broad ethical guidelines for BCCH employees.

2. Methodological Soundness 18

2.1 Concepts and definitions

2.1.1 The overall structure of the national accounts follows internationally endorsed standards and recommendations.

Chile's national accounts are based on the conceptual guidelines of the *System of National Accounts* of 1993 (1993 SNA). Chile updates the national accounts every ten years. The series currently being published use 1986 as the benchmark and base year for calculations at constant prices. These series already contain some of the recommendations of 1993 SNA, in particular as regards the valuation of transactions but also, in part, with regard to classifications. New series with base year 1996 are at an advanced stage of implementation and will shortly be published; these adopt the recommendations of 1993 SNA more fully.

2.2 Scope

2.2.1 The delimitation of the economy, and the production and assets boundaries are in accordance with the 1993 SNA.

Chile's national accounts cover the economic activities of all agents resident in the country in accordance with the residency concept of the national accounts manual of 1993. As such they include the activities of embassies, free trade zones (duty-free areas), and the activities of workers employed abroad for a period of less than one year.

¹⁸ The DQAF for national accounts refers to the yet unpublished data with base year 1996=100 based on *1993 SNA*. When the DQAF mission was scheduled, the release of the new series of national accounts with the new base year was scheduled for March 23, 2001 but has been tentatively postponed to March 2002 until further review of the 1996 benchmark year is performed, and the construction of the new series is properly implemented. A notice to this effect was published on the March 15, 2001 issue of the BCCH's *Economic and Financial Report*.

The production boundary is generally consistent with those established in 1993 SNA, although there are some exceptions, which are apparently attributable more to a practical criterion (the lack of adequate information) than to a conceptual deviation. Among these departures from international recommendations are: (i) the exclusion of own-account manufactured goods for final consumption. Production for self-consumption includes only primary agricultural commodities; (ii) research and development costs incurred by enterprises have not been singled out as products; for which reasons the costs have been reflected as intermediate consumption of the major activity; (iii) although the production of capital goods for own use is estimated by the industrial surveys, in-house developed computer software are likely not to be included; (iv) no estimation for original literary and artistic works is included; and (v) no estimations are made for the production of illegal products. However, mineral prospecting costs have been included within the limits of production. It should be noted that these deviations from international recommendations are not for the most part of major importance. This appreciation of the issues has been confirmed by studies under the new base year and by partial information obtained from the BCCH's economic surveys. However, one exception is that of the illegal drug trade in v). This is circumscribed to the trade and not the production of drugs. Instead, the importance of the remaining departures is not estimated to be above the value added by illegal activities with the following caveat: goods under i), ii), and iii) are included in the production boundary, although they are not specified. In the case of iv), there are no data, but in Chile it does not have a major macroeconomic significance. According to the DCN staff, the estimated amounts involved in activities that deviate from the norms represent approximately 1% of GDP or less.

The assets boundary coincides in general with those established in 1993 SNA, including, for example, defense expenditure on assets that may have civilian uses. In addition, historical monuments and values have not been included. Nor are works in process in agriculture included, in as much as production is measured as the value of the harvest. Computer applications are included among assets only when purchased from third parties, not when they are developed internally by businesses, which the 1993 SNA also requires. Artistic originals are not included either in production or in balances.

Chile's system of national accounts includes annual, quarterly, and monthly estimates. The annual system is built around the construction of annual supply and use tables, and extended to the consolidated and sectoral accounts, from the production account to the financial account. The system of accounts using base 1986 follows the structure of accounts in the national accounts manual of 1968 (SNA 1968), but the new series to be published with base 1996 will be presented using the structure of 1993 SNA.

At present, the quarterly national accounts are limited to estimations of GDP by industry at constant prices and GDP by components of final expenditure at current and constant prices. The monthly estimations are only a volume indicator of GDP measured on the production side by economic activity.

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems used are broadly consistent with international standards, guidelines, or agreed practices.

Internationally recommended systems are used for classification purposes. The classification of institutional units, transactions, and other flows corresponds with that of 1993 SNA. The classification of economic activities is consistent with the International Standard Industrial Classification of all Economic Activities (ISIC Rev. 3) produced by the United Nations. For the classification of products, Chile's national accounts use a classification scheme unique to them, the Clasificador Unico de Productos [Single Product Classifier] (CUP), which is an adaptation of the UN's Central Product Classification (CPC). The classification of household consumption by purpose of expenditure has not been implemented except at the level of the product groups used in compiling supply and use tables. It is necessary to clarify that the issue of classification has been addressed systematically in the DCN giving it a relational database focus, so that the classification of household consumption expenditure in accordance with the "Classification of Individual Consumption by Purpose" (COICOP) as well as other cross section classification systems, can be easily matched up with other systems of CUP and ISIC (matrices). In this regard, the solution is already implemented in the cross section with the main classifiers of ISIC and CCP as well as other classifiers of INE and the internal tax service.

2.4 Basis for recording

2.4.1 Timing rules used for recording flows are broadly consistent with international standards, guidelines, or agreed practices.

All transactions are in principle recorded at the market prices prevailing at the moment they occur, in accordance with the valuation principles of 1993 SNA. Production is valued at basic prices. Intermediate consumption is valued at purchase prices, excluding deductible value-added tax. Other components of final expenditure are valued at purchase prices, including the applicable value-added tax. Total exports and imports are valued at f.o.b. prices. In accordance with 1993 SNA, transfer prices when identified are corrected to reflect market prices. The latter procedure is applied in particular to products in vertically integrated industries.

2.4.2 Valuation rules used for recording flows and stocks are broadly consistent with international standards, guidelines, or agreed practices.

In general, all transactions are recorded on an accrual basis. This includes both the government's expenditure and its revenue. An exception is made, as noted previously, for the production of agricultural goods, which are assigned to the period of the harvest and not the period of actual production.

3. Accuracy and Reliability

3.1 Source data

There are various data sources for the national accounts estimates, including censuses and surveys, as well as special studies and administrative records. The range of data available for the base year estimates is broader and more detailed than the data for the periodic annual estimates. The data available for the quarterly estimates are limited in scope.

Statistics on establishments are compiled on the basis of a regular system of annual surveys conducted by the INE, covering the manufacturing sector, commerce, and some of the service industries (personal services and services to enterprises). These surveys have national geographical coverage and are representative at the four-digit level of ISIC Rev. 3. The manufacturing sector surveys gather ample information on the basis of the enterprises' accounting statements as well as other information of a statistical nature. The information includes data on operational revenue and expenditure of the enterprises at a detailed level compatible with national accounts requirements. Additional data are gathered on compensation of employees and employment, quantitative and value data on sales and production of major products, quantitative and value data on the major inputs used in production, their purchases and inventories, investment data by type of activity, taxes, and depreciation.

The trade and services surveys have a structure and content similar to those of the manufacturing industry, although because of the nature of these activities quantitative information is not gathered on products and inputs. A special questionnaire is used for establishments that provide food services and tourist lodging. The INE's periodic surveys do not cover all industries in the services sector; consequently, for the current years the DCN conducts its own surveys to cover a substantial proportion of activities in the business and personal services industries. It bears noting as well that INE experiences problems obtaining information on inventories, especially from commercial establishments.

Regarding sample frameworks, the mission found that national accounts compilers lack an exhaustive knowledge of the nature and characteristics of the sample frameworks used by the INE in selecting samples and determining the expansion factors for the surveys, whether for the base year or for the periodic annual surveys. This can mainly be attributed to the lack of methodological documentation prepared by the INE on these surveys. It was determined, however, that the INE surveys follow a stratification procedure with census-level coverage for major establishments and random samples for medium and small establishments. Moreover, the BCCH has established a directory of enterprises, which is being updated annually, listing 3,500,000 entities of which 500,000 are legal entities. The Bank bases this directory on administrative tax records, trade guides, and surveys. Businesses are classified by major economic activity, following the ISIC Rev. 3. This directory has served as the central framework for the collection and classification of statistics within the BCCH, thereby ensuring the consistency of the statistics produced and avoiding duplications. The

classifications from this directory are applied to the processing of data from administrative tax records. However, there are still inconsistencies between the classifications used in this directory and the INE classifications, though these are in the process of being eliminated.

(a) Base year sources

The information sources for the base year are enriched by comparison with the sources for the annual periodic estimates because of the availability of special studies, surveys with broader coverage and greater level of detail, agricultural, population, and housing censuses for a period near the base year, and the household income and expenditure survey for 1996–97. These additional sources are described below:

- 1. The INE's annual periodic survey of manufacturing covers only those establishments employing 10 or more persons. For purposes of base year 1996, the representativity of the manufacturing survey was enhanced by conducting a survey of small businesses, obtaining data on their production and cost structures.
- 2. Special studies were carried out by third parties, including: (i) special studies on agriculture (crops, fruits, livestock products, and agricultural services), for obtaining production information by product, use by economic destination, detailed production costs, and marketing margins; (ii) special studies on construction, for detailed costs estimates for different types of building construction and other structures; (iii) special studies on commerce, used to determine marketing margins by groups of domestic and imported products, and to determine the share of the goods supply that is marketed; (iv) special studies on the land transport of cargo and passengers, used to determine production levels and cost structures; and (v) special studies on the communications industry, to identify new products and obtain detailed information from the enterprises in this industrial sector.
- 3. The 1992 population and housing census, which, among other things, made it possible to obtain data on the stock of housing units by type, which together with population projections and household surveys are used as a basis for calculations of housing rents. Data were also obtained on employment by branch of economic activity, which together with the INE's periodic employment surveys, made it possible to estimate an employment matrix for 1996.
- 4. The 1997 agricultural census, which, among other things, made it possible to gain information on areas under cultivation and yields by type of crop, quantities produced, cost structures by type of crop and technology used, stock of live animals, fruit plantations, etc.
- 5. Household income and expenditure survey conducted by the INE between August 1996 and July 1997 for the Greater Santiago area, which made it possible to make an independent estimate of household consumption expenditure for 1996.

(b) Sources for annual periodic estimates

The estimates for the current year use the INE's annual surveys, which, as noted above, cover manufacturing, commerce, and some services industries. These are complemented by surveys conducted by the BCCH on services industries not covered in the INE surveys. The INE also compiles statistics on manufacturing production within the framework of its work to prepare an industrial production index. It bears noting that there are classification problems with the data from the surveys conducted by the INE. The DCN reclassifies some establishments in order to correct their branch of activity and processes the individual questionnaires to obtain the aggregates of the relevant variables. The sample values are expanded by obtaining estimates based on value indexes derived from the sample data from a comparative sample of establishments or, depending on the branch of activity, in some cases the expansion is performed in light of ratios between a population indicator obtained from the tax records and the corresponding indicator obtained from the sample. Similar expansion procedures are used for the surveys conducted by the Bank.

Construction data are obtained from the building permits compiled monthly by the INE, as well as a special survey conducted by the BCCH on other construction projects for particular requesting sectors.

Agricultural sector data include an annual INE survey that provides information on areas under cultivation and yields. For mining, good current information is obtained from a survey conducted by the BCCH. Complete, detailed, and timely data are obtained from central government budget execution based on the accounting records of the Office of the Comptroller General of the Republic and the Treasury. Budget data provided by the Budget Directorate are also used.

Detailed foreign trade data are based on customs records. Education and health statistics are provided by the ministries concerned. Financial statements are obtained from financial institutions and some subsectors in transportation, communications, and public utilities (power and water). Tax data processed by branch of economic activity are used either to validate the estimates or as expansion factors for the economic surveys. The main statistics on prices are the wholesale price indexes and the consumer price index.

(c) Data sources for quarterly estimates

The major sources of information for the quarterly estimates are the INE's monthly surveys on manufacturing and mining, tax records (value-added tax), and foreign trade records. Information is lacking on agriculture, and the information on the livestock sector is partial. Information on fisheries activities is partial and received with a time lag. The basis for source data on construction is the same as for annual statistics. As for the annual estimates, there is good quarterly information for some subsectors of the transport industry, the financial sector, and power and water utilities. Information on general government is of good quality and timely. Health activity indicators are limited to the public sector only. There are no economic surveys for all the other services activities. VAT data constitute the major source for the

estimates, which are delayed. VAT data have a four-month delay, which should be reduced to 45 days as soon as the contract with the Internal Taxes Service (Servicio de Impuestos Internos, SII) is formalized. In addition, another weakness of the database for the quarterly accounts is the lack of direct information on household consumption and changes in inventories.

3.2 Statistical techniques

GDP by activities

The system used for compiling annual accounts in Chile is based principally on the preparation of supply and use tables balanced at a highly detailed level of activities and products. This procedure guarantees making the best use of the available information, ensuring by means of the balancing processes that the estimates of national accounts aggregates generated are logically and numerically consistent. The new system of quarterly national accounts using the 1996 base year will also be based on a system of balanced tables of supply and uses, which not only will provide better quality estimates, but will also provide the opening necessary for the compilation and dissemination of GDP estimates by expenditure, which were not part of the system using the 1996 base year.

The annual supply and use tables are prepared for publication at a level of detail of 73 products and 73 activities, but de facto are carried out at detailed levels of hundreds of activities and thousands of products. The gross output and the intermediate consumption of the agricultural industry are estimated at detailed product levels, while in other branches of activity the calculations are also quite detailed, in general at the four-digit ISIC level.

There are no explicit estimates of the activities of the informal sector, but the system of balancing supply and demand on the basis of independent sources would ensure ample coverage of economic activity. Imbalances between supply and demand, especially in services activities, would be resolved in the base year by means of adjustments to the production data. Still it remains possible that some informal activity is not captured, though it is of marginal impact, perhaps in commerce and in the production of industrial goods for self-consumption.

The estimation techniques used are generally appropriate. For agriculture, the value of production is obtained at current and constant prices by multiplying the estimated production quantities by the corresponding prices. Cost structures are assumed to be fixed, except in the case of inputs for which current data are available. The cost structures are revalued at current prices by means of price indexes. Similar procedures are used in the estimates for construction. Overall values for the production and intermediate consumption of manufacturing industry, at the four-digit ISIC level, are calculated at current prices by using the financial data on sales, purchases, and changes in inventories adjusted at replacement prices. The value of production at constant prices is obtained by extrapolation, using the volume indexes for the products. Double deflation methods are used mostly in the estimates of the production accounts of the service industries.

The estimates of rents of owner-occupied housing follow the recommendations of 1993 SNA, valuing them in accordance with the market values of similar housing.

The methods used for the constant price estimates of activity in commerce are in accordance with the recommended practices of extrapolation of trade margins for the base year with sales volume indexes. The estimates are performed at detailed levels for domestic and imported products, on the basis of supply volume indexes. A similar procedure is followed in calculating taxes on the products, including the taxes on imports by applying the base year rates to the tax base at constant prices.

The base year for the national accounts is changed every ten years. However, with the new base 1996 series, prices for the previous year would be applied. Volume values of aggregates on a fixed reference period will be estimated through a chain-linking process.

GDP by expenditure components

GDP by expenditure components is available for annual data only. Quarterly data are available for internal use only. These data will be eventually available for dissemination but not until the authorities feel comfortable with the degree of accuracy and reliability of the data.

The annual estimates of household consumption are determined by the flow of goods within the framework of balanced supply and use tables and uses. The annual estimates of changes in inventories are partial, and the final estimate is determined in the supply and use balances.

The estimates of private consumption are obtained at detailed product levels, though they still have not been classified by object of expenditure. Fixed capital formation has been calculated by type of asset, by product group and by branch of user activity for base year 1996 and there is a commitment to do the same for annual data in the new series with the 1996 base year.

3.3 Assessment and validation

No information is available about sampling errors and nonsampling errors for the business survey and the household budget survey. Information is available about nonresponse in these surveys.

In compiling GDP estimates by expenditure components, over 90 percent of the source data is obtained from surveys/censuses or appropriate administrative records.

Appropriate measures are taken to validate the source data and make them consistent with national accounts.

3.4. Revision studies

Since time series are not yet available under 1993 SNA, revision studies are not yet warranted.

4. Serviceability

4.1 Relevance

4.1.1 Processes to monitor the relevance and practical utility of existing statistics in meeting users' needs are in place.

One of the major users of the national accounts statistics is the BCCH, as a consequence of which the programs for compiling the national accounts are geared toward supplying the information required for operational purposes and for economic research at the Bank. This is shown by the priority given to the work on updating and changing the base year of the national accounts and the programs to develop the quarterly accounts. However, there are no regular user forums seeking the views of users of these statistics outside the Bank. Meetings with users are held occasionally for purposes of presenting the results of implementing the new base year.

4.2 Timeliness and periodicity

4.2.1 Periodicity follows dissemination standards.

National accounts are compiled/disseminated with both annual and quarterly periodicity.

4.2.2 Timeliness follows dissemination standards.

As an SDDS subscriber, Chile's national accounts comply with the required norms for timeliness and periodicity established by these standards. The quarterly national accounts are published 47 days after the end of the reference period, compared with the maximum lag of 90 days established by the standards. The annual national accounts are published in preliminary form in a format reduced to the major GDP aggregates by origin of economic activity and component of final expenditure 3 months after the end of the reference period. A revised version of the accounts, with the full scope of detail, is disseminated 14 months after the end of the reference year.

4.3 Consistency

4.3.1. Temporal consistency

The national accounts series are consistent at least for periods of up to 10 years, the frequency with which the base year is changed. No backward adjustments for long periods are made in order to introduce methodological improvements.

The internal consistency of the annual national accounts is guaranteed by the procedures for estimating GDP by means of balanced supply and use tables, from which consistent GDP estimates are derived from the standpoint of production, revenue, and expenditure.

Net lending/borrowing by industrial sector is derived independently from the capital accounts and financial accounts, and reconciliation efforts are made which may result in revisions to the estimates for the nonfinancial accounts of the system.

The national accounts using base year 1986 did not maintain consistency with the balance of payments figures, a situation that would be resolved with the new base year 1996. The national accounts should incorporate data from Chile's official balance of payments in the record of transactions between residents and nonresidents of the system. The country's net external lending or borrowing as derived from the national accounts must be identical to the sum of the balances of the current account and capital transfers of the balance of payments. The treatment of transactions between residents and nonresidents in both systems is not yet coordinated between the compilers of the two statistical systems.

4.3.2. Statistics are internally consistent (e.g., accounting identities observed).

Internal consistency of the annual accounts

The quarterly national accounts are consistent with the annual estimates, that is, the sum of the figures for the four quarters of a given year coincides with the annual estimate. However, the harmonization procedures are somewhat inadequate given that they are based on pro rata techniques, which introduce distortions in the rates of change between the first quarter and the last quarter of the preceding year. Better harmonization techniques, such as Denton techniques, should be used.

Consistency of the quarterly estimates of GDP with the annual estimates

Concepts and definitions for compiling quarterly GDP estimates are identical to those used to compile the annual estimates.

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

The national accounts using base year 1986 did not maintain consistency with the balance of payments figures, a situation that would be resolved with the new base year 1996. The national accounts should incorporate data from Chile's official balance of payments in the record of transactions between residents and nonresidents of the system. The country's net external lending or borrowing as derived from the national accounts must be identical to the sum of the balances of the current account and capital account of the balance of payments.

4.4 Revision policy and practice

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

Chile has an established policy, governed by BCCH Board of Directors decision, on the revision of national accounts estimates. The first data published for each given period are provisional, and are identified as such. The annual estimates include a preliminary estimate in March of the year following the reference period, a preliminary comprehensive estimate 14 months following the reference period, and a revised estimate 26 months after the end of the reference period. The series are generally subject to revisions over long periods whenever the base year is updated and changed. The historical quarterly national accounts are revised in accordance with the revisions in the annual accounts. The quarterly accounts for the current year are revised upon receipt of more complete information in the course of the year.

4.4.2 Preliminary data are clearly identified

The revision policy identifies the status of the data. In particular, the provisional and revised data are identified in tables.

Revisions are analyzed only internally, and not in a systematic way. The exception is the new base year, for which full documentation of revisions and their causes is provided.

5. Accessibility

Users have good access to national accounts data through printed publications and via the Bank's website.

5.1 Data accessibility

5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons.

Chile's national accounts figures are published in sufficient detail in special annual publications (*Anuario de Cuentas Nacionales*—National Accounts Yearbook) containing detailed series of resource and use tables, sectoral accounts, and quarterly accounts. The quarterly accounts are also published in the Bank's monthly *Boletín Mensual* and in the quarterly Informes *Económicos y Financieros* (economic and financial reports). The data are also disseminated on the Bank's website.

The data are published in accordance with a release calendar that is made available three months in advance in the *Informe Económico y Financiero* and on the Bank's website.

5.1.2 Dissemination of media and formats are adequate.

National accounts estimates are disseminated regularly, through dedicated annual and quarterly national accounts publications, and through electronic means.

5.1.3 Statistics are released on a pre-announced schedule.

An advance release calendar that gives one-quarter-ahead notice of the precise release dates is published on the Central Bank of Chile's Internet website (http://www.bcentral.cl/Indicadores/calendario/release.htm) and in the "Informe Económico y Financiero".

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

The data are released simultaneously to all interested parties by publishing "Informe Económico y Financiero" (Economic and Financial Report), a twice-monthly publication of the Central Bank of Chile. The publication is available for sale to the public, between 9:00 and 9:30 A.M. on the days on which it is released (the 7th and the 23rd of each month or the following working days if they are holidays). Subscribers may also pick up their copies, at that time, or have them mailed directly.

Subsequently "Informed Economic y Financier" is also published on the Central Bank's Internet website (http://www.bcentral.cl) under 'Publications'.

5.1.5 Nonpublished (but nonconfidential) data at the compilation level are made available to users upon request.

Nonconfidential data at the compilation level are available from the BCCH upon request.

5.2 Metadata accessibility

5.2.1 Documents on concepts, scope, classifications, basis of recording, data sources and statistical techniques are available, and differences from international standards are annotated.

The Bank releases metadata to the public by means of special methodological publications that appear infrequently. The metadata are now also available on the IMF's public electronic bulletin board (DSBB) in the context of Chile's subscription to the SDDS. However, current national accounts publications lack methodological notes describing the sources and methods used and any revisions in figures published previously.

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5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized.

A national accounts contact person is available to provide further assistance as required. The name, telephone number and e-mail address of contact persons are indicated in the publications, on the BCCH website and on the DSBB.

5.3.2 Catalogues of publications and other services, along with information on any fees, are widely available.

Catalogues of publications, other services, and fees are available.

B. Price Statistics (Consumer Price Index and Producer Price Index)

0. Prerequisites of Quality

0.1 Legal and institutional environment

Chile's price statistics are compiled and disseminated by the National Statistical Institute (Instituto Nacional de Estadísticas, INE). The legal authority and responsibility for the compilation and dissemination of price statistics is directly specified. Law Decree 313 of 1960 approved the creation of the former Directorate of Statistics and Census (Dirección de Estadísticas y Censos). This mandate was superseded by Law 17.734 de 1970, and its Regulations, which created INE, the National Statistical Commission (Comisión Nacional de Estadísticas, CNS), and the Consultative Technical Committee (Comité Consultivo Técnico de Estadísticas, CTC). Wherein it is established that the INE is the administratively decentralized technical agency responsible for official statistics and censuses in Chile. According to Article 2 of Law No 17.374, the INE must collect, process and publish the official statistics, as well as submit to the President of the Republic on a yearly basis the Annual Statistical Plan. Article 5 of Law No 17.374, creates the National Statistical Commission (Comision Nacional de Estadísticas, CNS), adjunct to the Director of INE. The CNS has, among its attributions, the approval of the Annual Statistical Plan prior to its submission to the President. This Plan guides the production of statistics and proposes statistical studies and improvements in compilation and dissemination of official statistics.

The Annual Statistical Plan is prepared by INE's Director with the cooperation of the CTC and the prior approval of the CNS. Both the CTC and the CNS are composed of representatives from the BCCH and MOF as well as other SEN branches, and are presided by INE's Director.

All individuals and legal entities are required to provide any information requested by the INE, which in turn is required to maintain strict confidentiality and is prohibited from explicitly referring directly or indirectly in its publications to individuals or legal entities.

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INE's questionnaires inform data providers about the provisions of this law.

The CNS is composed of representatives from the National Planning Commission, the Development Corporation, BCCH, MOF, and from the universities, one labor representative and one from the corporate sector.¹⁹

The CTC coordinates the collection, classification and dissemination of the statistics prepared by the public sector institutions (fiscal, mixed ownership and public enterprises) with the corresponding tasks of INE. In particular, CTC must reach agreements on principles, norms and directives that must be applied in the statistical field in order to perform the coordination in its mandate. The CTC is composed of representatives from the public sector, the universities, as well as specific international regional organizations such as the Economic Commission for Latin America (CEPAL).

The INE and the other branches of the Chilean Statistical System (SEN) cannot disseminate facts that refer to individuals or particular entities when they have been obtained in the course of carrying out its statistical functions. The strict observance of this obligation constitutes the "Statistical Secrecy" principle. Failing to observe this principle by anyone subject to this obligation is penalized under article 247° of the Penal Code. In addition, Article 30° of the Law states that no statistical data with specific direct or indirect reference to a person or entity can be published or disseminated if there is a prohibition from those affected.

0.2 Resources

Overall, the INE has adequate resources to carry out its mandate. The area where the authorities would want additional resources is in hiring outside experts.

The price statistics program has adequate staff resources. However, due to the low level of wages and the "law of immobilization", which precludes free hiring and firing of employees, the INE has difficulties in appointing and retaining qualified staff. The law applies to approximately 70 percent of the 700 staff. The remaining staff is under contract, which allows some limited flexibility in the pay scale.

The price statistics program has adequate financial resources. In general, INE has no difficulties in financing the Annual Statistical Plan, which is routinely approved. Special projects are also financed but require strong justification.

The price statistics program has adequate computing resources, being supported by a modern computerized system based on Windows NT. Other statistics programs, notably the

¹⁹ Commission members have a two-year tenure.

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remuneration statistics, have an antiquated computer system although it is in the process of being upgraded.

0.3 Quality awareness

The INE is proud and vocal about being very quality conscious. It is carrying out a project on a "Diagnostic Survey to Determine the Quality of INE's Statistical Products". The survey will be for internal use and aims to determine areas where there is need for improvement. The first phase is of fact-finding, the second for implementing the recommendations, and the third is for following up changes implemented to improve and ensure the quality of INE's statistics. The project began in 2000 and is scheduled to run for six years through 2006.

The CNS, which comprises data users and data providers, gives advice on policy and priorities in the Annual Statistical Program.

Concepts, methodologies, and accounting conventions used within the INE are in harmony with the International Labor Organization (ILO) for the CPI, and the SNA 1968/1993 standards and recommendations for the PPI. The latter is a hybrid of the two standards above: the 1993 SNA applies only to industry currently and will in the future be applied first to agriculture, followed by fishing, mining and remaining sectors as the project advances.

1. Integrity

Data gathering and dissemination are carried out using objective mechanisms and appropriate calculation algorithms are used for compilation of statistics.

1.1 Professionalism

According to the Law that established the INE, the Institute is independent in determining the methodology, release dates, design of surveys and definitions used. Data gathering is objective and impartial. The sources and methods used are determined by sound statistical methodologies (probabilistic sampling).

The INE is entitled to issue clarifications on the indicators disseminated and in fact is often called to explain movements in the CPI -- the most sensitive indicator-- to members of Congress or the press. However, the INE also feels that, given the transparency of their methods and soundness of their procedures, there is scant justification for errors of interpretation or inadequate use of the statistical products they disseminate.

1.2 Transparency

Terms and conditions

The terms and conditions under which the data are produced and disseminated are available to the public.

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No government officials outside the INE have access to the data before their release to the public. In general, ministerial commentary is not attached to the release of the data. At times, however, the Minister of Economy and/or the Minister of Finance may hold press conferences at the time the data are released. On occasion, the Director of the INE may also hold a press conference to hand out the "Indicadores del Mes - Precios y Remuneraciones" (Monthly Indicators – Prices and Remunerations) and to comment on the data.

The data on the CPI and PPI are final when first released and are not subject to revisions.

Major changes in methodology, including a new base period, take place approximately every ten years and are announced to the public in advance in great detail although in some cases they are not.

Advance release calendars are publicized and disseminated.

The data are released simultaneously to all interested parties.

Documentation on methodology

Documentation on the methodology of price statistics is disseminated. For the CPI, the INE's document "Indice de Precios al Consumidor, IPC, base: December 1998 = 100, Aspectos Metodológicos" (Consumer Price Index, base: December 1998 = 100, Methodological Issues) provides a detailed description of the methodology, including the theoretical bases, and description of all the components of the index, and their respective weights. This document may be requested from the INE's Marketing Unit and is also available on the Internet INE website (http://www.ine.cl/).

For the PPI, INE's document "Indice de Precios al por Mayor: Base June 1992 = 100, Metodología" (Wholesale Price Index: Base June 1992 = 100, Methodology) provides a detailed description of the methodology, including the theoretical bases, identification, and description of the components of the index and their respective weights. This document may be requested from the INE's Marketing Unit.

1.3 Ethical standards

Ethical guidelines for INE officials are contained in the Regulatory Decree 1.062 (Reglamento del INE) of October 30, 1970, Titles II through VI. Title V, on employees' obligations and prohibitions, details instances of specifically forbidden activities. Title VI, on employees' responsibilities, spells out the consequences of failing to meet duties and responsibilities. The Administrative Statute that applies to civil servants complements the

²⁰ http://www.ine.cl under "indice de precios/metodologia" and under "indice de precios/nuevo ipe".

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INE's guidelines. The Statute was issued as Law N° 18.834 of September 23, 1989. Title III on general rules specifically deals with ethical guidelines in the form of specific obligations and prohibitions for civil servants. Title V on administrative responsibility deals with the steps that would be taken if infringement to the responsibility took place.

2. Methodological Soundness

2.1 Concepts and definitions

CPI

Concepts and definitions used for the compilation of the CPI in Chile correspond to international practices and are in line with the recommendations of the ILO on this subject. The CPI measures the changes in price of a representative basket of goods and services purchased by households; prices are actual market prices paid by consumers.

PPI

The official name of the index in Chile is "indices de precios al por mayor", that is wholesale price index (WPI). As the name suggests, the index is not a pure PPI designed to measure changes in prices charged by local producers of goods. Instead, the index actually measures the changes in price of a fixed basket representative of locally produced and imported goods. Weights for the compilation of the WPI are based on the concepts and definitions of the supply and use table of goods and services according to the recommendations contained in the 1968 SNA and the 1993 SNA. For locally produced goods, the price concept used is the producer's ex-factory prices in the case of manufacture and mining products, but wholesale prices are used for agriculture and fishing products. C.i.f. prices are used for imported goods.

2.2 Scope

CPI

The CPI measures the change in prices of a fixed basket of goods and services representative of the final consumption expenditures of households of the Greater Santiago. All goods and services purchased by households for consumption purposes, as defined in the national accounts, are included.

PPI

The WPI covers all market output (excludes only the production of goods to be used as intermediate consumption by the same establishment) of goods produced by the manufacturing, mining, agriculture and fishing industries and sold in the domestic market (exports are excluded). Similarly, the WPI covers all imported goods that have the same industrial origin as mentioned above.

2.3 Classification/sectorization

CPI

The CPI is not based on an international classification. However, there is a one to one correspondence between the CPI's classification and that of COICOP. Products are classified into 41 minor groups and 8 mayor groups (food, housing, housing equipment, clothing, transportation, health, education and recreation, and miscellaneous goods and services). The index basket includes 483 products for which there are 1195 varieties (specifications) in total.

PPI

The classification of establishments and economic activities is in accordance with a local adaptation of the International Standard Industrial Classification of all Economic Activities (ISIC Rev.2). Products were classified by industries of origin mainly based on the ISIC Rev 2. The index is compiled separately for imported and locally produced goods according to the economic use of the goods (inputs to production, final consumption and capital formation).

2.4 Basis for recording

CPI

The valuation rules for weights and for price collection are in accordance with the SNA concept for the valuation of final consumption expenditure. Prices collected are the actual market prices paid by households (after discounts and rebates), including all taxes levied on the products. Financial charges are excluded.

PPI

Prices collected for locally produced goods are market prices at which transactions take place. These prices correspond in general to the concept of producer's prices (except for agriculture products for which most prices collected are the wholesale level. Prices of imported goods are collected on a c.i.f. basis. The valuation rules for weighing purposes are the producer's prices for each economic destination of the goods. Detailed and narrow specifications of items are used for the collection of prices, which represent the net prices received by producers or paid by importers for their more characteristic type of transaction.

3. Accuracy and reliability

3.1 Source data

CPI

The selection of the basket and the weights of the CPI are based on the Family Budget Survey of 1996/1997. The reference period of this survey was August 1996-July 1997. All

socio-economic stratums of the population were covered within the geographical area of the Greater Santiago. The survey was based on a random sampling design by which 8,445 households were selected to constitute the survey sample. The survey was conducted through all the reference period. Weights are infrequently changed with a periodicity of about 10 years, which correspond to the frequency at which the Family Budget Surveys (FBS) have been conducted. The previous update was made in 1988.

Prices are collected monthly from 2489 outlets and service providers. Besides, about 200 housing units are surveyed every month to collect data on rents. Approximately 130,000 price quotations are obtained every month by means of enumerator's visits to the selected outlets and service providers.

PPI

The WPI basket and weights are updated at infrequent periods of time. The commodity composition and weights of the present WPI are based on the supply and use table of 1986, compiled within the framework of the national accounts. Detailed breakdown by commodity of the use matrices of domestically produced goods and of imports, both at producer prices, was used to determine the weights of the products within the industry of origin and for the index aggregates. Products were selected for each economic use according to their relative importance within each industry (those which represent 1.9% or more) at the four level of the ISIC classification.

The primary selection of informant enterprises was based, in the case of manufacture, on a cut- off sample including the enterprises for which sales of the products selected represented 90% of total sales in the annual industrial survey for the year 1987, and latter updates based on the annual industrial survey of 1989. A similar process for the selection of enterprises was applied to imports, based on detailed data on imports by commodity and importer for the year 1989. The criteria for selecting enterprises in the mining industry were, in general, the enterprise size. Different sources are used to collect prices of the agriculture products.

Prices are collected monthly by mail from 685 establishments using a specific questionnaire. An exception is 36 agriculture and food products for which average weekly prices are collected. There are 1265 price quotations for 378 products. Prices collected relate to the same day of the month (or as close as possible) in each period.

3.2 Statistical techniques

CPI

The FBS provides with sufficiently detailed data on household consumption to derive the weights of the CPI. Products were selected in accordance to their relative share in total consumption, and all products having a share equal or greater than 0.025% were selected with the only exception of car rentals, video cameras and dishwashers, which were found to be consumed almost exclusively by only 1% of the population with the highest income.

Very narrow specifications of products (the variety) are used for the collection of representative prices for each product selected. Outlets were selected based on the most important places of purchases by household in term of volume.

The base period of the index is December 1998. Weights from the 1997/1998 FBS were updated to December 1998 using the changes in prices of the specific products. The Laspeyres formula with the base period weights is used to calculate the index at the upper levels of aggregation. The variety index is calculated as the geometrical mean of the month-to-month price ratios of all observations. At the product level, a month to previous month index is calculated as a weighted geometrical mean of the indices of varieties included. Product indices with respect to the base period are aggregated to upper levels using the classic Laspeyres formula with weights of the base period. An exception is the food items, which are aggregated up to the article level using weighted geometrical means.

Imputation of missing prices is made using observed price changes of other varieties in the same group. Replacement items are introduced using the overlap method. New products are only introduced at the time of updating the weight of the CPI.

PPI

Detailed data on output and imports by products are available for the compilation of the supply and use table for national accounts benchmark years, like in 1986, which is the source for weights used in the WPI. Comprehensive surveys and censuses, using sound statistical techniques, were used for the 1986 national accounts benchmark year estimates. All goods covered in the scope of the index are included. The PPI is compiled using a Laspeyres formula with weights of 1986. The reference period of the index is June 1992. Base period weights were not adjusted to the reference period by price changes. The index is calculated at the lowest level of aggregation using average prices ratios of current period to reference period (June 1992) for each individual item. At all level of aggregation, the Laspeyres formula with the 1986 weights is used.

The index is not updated for the inclusion of new products. Replacements of items that become permanently unavailable are made using the overlap method. Missing prices are imputed by carrying forward the last observation available.

3.3 Assessment and validation

There are various validation procedures for the source data. However, these procedures do not cover all areas (sampling and non-sampling errors).

In those cases were information exists to allow validations of intermediate data, the validation is carried out comparing both results and determining the factors causing the differences found. Statistical discrepancies are investigated and notified to the users.

CPI

Sampling and non-sampling errors for the FBS are available. Prices collected are verified according to established procedures for checking price quotations. Manual and automatic checks are performed at different stages of the CPI compilation.

PPI

Comprehensive enterprise surveys were carried out for the base year, generally with a census approach for large firms and random samples for the small units. The comprehensiveness of the output and import data used for determining the weights of the WPI are enhanced by the supply and use table framework from which they were derived.

The source data on prices is constantly reviewed by the compilers for the sake of temporal consistency and doubts are resolved by means of direct inquires with the informants. The staff manually verifies the index calculation at various stages of compilation.

3.4. Revision studies

Not applicable since both indices are not revised and become final when first released.

4. Serviceability

4.1 Relevance

Although no surveys have been conducted to objectively assess whether the price statistics program meets user needs, the users of the price statistics have generally indicated that the data adequately respond to their needs.

4.2 Timeliness and periodicity

The periodicity of both the PPI and the CPI is monthly.

The timeliness of the monthly PPI and CPI is 5 working days.

4.3 Consistency

Temporal consistency

Consistent time series of the PPI and CPI at the aggregate level are compiled based on consistency criteria that are adjusted each time the base year is changed (approximately every 10 years).

"Indicadores Mensuales" (Monthly Indicators) publishes indices and annual changes in the overall CPI and in its main components for the last eight years, as well as indices and

monthly changes for the last two years. Moreover, additional breakdowns are published in the "Indicadores Mensuales" and on the Internet (under "Indice de Precios"). "Series de Precios al Consumidor" provides average monthly prices for 483 CPI items for the last two months.

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"Indicadores Mensuales" publishes indices and annual changes in the overall PPI and its components for the last seven years, and monthly changes for the last two years. Series of average bimonthly prices for the 414 items in the index for the last two months and percentage changes are published in "Series de Precios al por Mayor".

Internal consistency

The PPI and CPI are internally consistent by construction/methodology of calculation.

Intersectoral consistency

There are no procedures in place to reconcile price data with that of other sources or frameworks. However, INE staff indicated that they are conscious of the need for consistency with other sectors and frameworks.

4.4 Revision policy and practice

The PPI and CPI data are released according to a regular, well established, and transparent schedule. The release schedule is, in particular, predetermined and stable from year to year, and announced in advance of expected release dates.

The release dates are coordinated with the arrival of the price data sources.

There is no revision policy for the CPI and PPI data, since they are final when first released and are not revised. Nevertheless, great care is taken in the compilation of the CPI because these data are used in financial transactions, rent contracts, labor contracts and the like.

5. Accessibility

5.1 Data accessibility

The PPI and CPI data are disseminated regularly in detail and with time-series, according to a well-established production and release schedule, through a dedicated monthly publication, and through electronic means. Data presentation are appropriate, easy to interpret and known to the users. Nonconfidential, more detailed data than that disseminated are available from the INE upon request.

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5.2 Metadata accessibility

Comprehensive descriptions of PPI and CPI metadata are published in the INE publications, and are available on the DSBB and the INE website (http://www.ine.cl/). However, the metadata does not include a comparison or detailed assessment of Chilean practices vis-à-vis internationally accepted norms.

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5.3 Assistance to users

A contact person for PPI and CPI is available to provide further assistance as required. The name, telephone number and e-mail address of contact persons are indicated in the publications, the INE website (http://www.ine.cl) and the DSBB.

C. Government Finance Statistics

0. Prerequisites of Quality

0.1 Legal and institutional environment

0.1.1 The responsibility for compiling and disseminating GFS is clearly assigned to one agency

In Chile the government finance statistics (GFS) are compiled and published under the terms and conditions of the Annual Budget Law, Decree-Law No. 1263 of 1975, and Decree with Legal Power –106 of 1960.

The Annual Budget Law requires that the Budget Directorate (Dirección de Presupuestos, DIPRES) of the Ministry of Finance (MOF) send data to Congress on the quarterly budget execution of the central government revenue and expenditure, within 60 days after the end of the quarter (45 days beginning in 2001).

Decree Law No. 1263 states that the DIPRES must issue during December of every year the specific budgetary instructions applicable for the following year. These include the data to be reported to the DIPRES concerning monthly budget execution. The law also states that all central government units must prepare by December 31 of every year a statement of revenues and expenditures, and a statement of financial position, and send these to the DIPRES and the Comptroller's General Office (Contraloría General de la República, CGR). Finally, the law states that the CGR must prepare annually consolidated statements on the public sector's budgetary position, financial position, and equity position.

Decree with Legal Power-106 states in article 22 (modified by Law on November 1999) that the functions of the DIPRES include, among other, the compilation of GFS and their dissemination to Congress and the general public, as well as to international organizations.

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

The information published under financial accountability arrangements (e.g., publicly available data on budget outcomes) has similar scope as GFS, and can be reconciled to GFS. The data prepared by the DIPRES are compiled in accordance with the methodology recommended by the IMF's "A Manual on Government Finance Statistics, 1986" (1986 GFS Manual). In addition, a reasonable degree of consistency can be established between the data published by the DIPRES and the data published by the CGR.

There are no formal arrangements for cooperation between the agency responsible for compiling GFS financing data and the agency responsible for compiling financial data for other sectors, or between the agency responsible for compiling GFS and the agency responsible for compiling national accounts data, or between the agency responsible for compiling GFS debt data and the agency responsible for compiling external debt data. However, there are informal arrangements between the DIPRES, the BCCH and the INE. Furthermore, the government data used for compiling national accounts is currently provided by the CGR, not the DIPRES. There are on-going conversations for the DIPRES to begin providing such data to the BCCH.

There are no formal mechanisms in place to maintain close liaison between GFS compilers and important users of the statistics. However, there is a close relationship with Congress.

0.1.3 Access to records

There is adequate access to the data required to compile GFS

All central government units must provide the DIPRES all data required for compilation of GFS, within a given time frame. Local government units —municipalities- provide information to the CGR, which in turn provides it to the DIPRES. Finally, there are only informal arrangements for receiving debt data.

The CGR is the entity responsible for establishing the accounting standards for the public sector; it is also responsible for auditing all public sector entities.

0.1.4 Voluntary Response

Not generally relevant to GFS

0.2 Resources

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

Within the DIPRES the task of compiling GFS is assigned to three units: the Statistical Unit (Sector Estadísticas, SE), the Coordination Unit (Sector Coordinación, SC), and the

Investments and Public Credit Unit (Sector Inversiones y Crédito Público, SICP). The first unit is responsible for compiling annual GFS, and it is composed of a chief and three analysts (only two at present); the second unit is responsible for compiling quarterly GFS, and it is composed of a chief and 5 analysts; the third unit is responsible for compiling government debt statistics, and it is composed of a chief and two analysts (one at present). All technical personnel have a computer assigned for their exclusive use. There are no specific provisions for on-the-job, internal, and external training of government finance staff. However, there is an internal policy of strong support for staff training.

The previous budgetary information system did not allow for full automation of government finance compilation procedures. Linked spreadsheets are currently used to generate GFS from budget execution data. The new budgetary information system (SIAP) recently introduced by the DIPRES, is expected to allow for automation of government finance compilation procedures. New software is being developed for debt data, which is expected to be operational this year.

An information system for financial management of the government is currently under development. It is intended to be a comprehensive tool for financial management, where information will be directly entered into the system by each budgetary unit, and processed automatically thereafter. Once operational, this system will significantly improve the timeliness and overall quality of central government operations data. The system is expected to be ready by 2005.

Available resources are barely sufficient to perform the tasks currently assigned to the three units. Until the new budgetary information system is fully operational, these units would be unable to undertake additional tasks (e.g. compile monthly GFS).

0.2.2 Measures to ensure efficient use of resources are implemented.

The costs associated with compiling GFS are not measured, and it is not known for certain whether resources are used in the most cost-effective way. However, there is a strong concern about the human and financial resources used in compiling and disseminating GFS, and with the efficient use of available resources.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality, to monitor the quality of the collection, processing, and dissemination of statistics, to acknowledge and deal with tradeoffs within quality, and to guide planning for existing and emerging needs.

There are processes in place to monitor the quality of production and dissemination of GFS. The internal consistency of data, and its consistency over time are closely examined. The trade-offs between quality and other considerations (e.g., timeliness) are acknowledged, and at present favor quality. There is a culture of producing the highest quality product with the

resources available and within the established time frame; it is considered a matter of personal and professional pride.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The compilation and dissemination of GFS are not supported by specific laws that establish the professional independence of the agency responsible for GFS, and there are no formal safeguards that ensure the independence of GFS compilation. However, there are strong informal safeguards that support the professional independence of both the agency and the GFS compilation process. These safeguards are of a cultural nature; it is considered inadmissible to have political considerations interfere with the compilation of statistics.

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

Statisticians are free from political influence in choosing the most appropriate sources and methods for compiling GFS, and changes to statistical processes are not influenced by political considerations.

The main source for compilation of GFS is the budgetary execution reports that all central government units must submit to the DIPRES, according to the established accounting norms, and which are subject to auditing by the CGR. Furthermore, Congress monitors closely budgetary execution reports.

The methodology of the 1986 GFS Manual has not been legally adopted, however, in practice it underpins the compilation of GFS. In addition, as stated above, quarterly GFS must be published within a specified time frame. Furthermore, Chile is an SDDS subscriber and follows the corresponding guidelines.

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

GFS compilers provide expert advice on technical (not policy) aspects of GFS. The Budget Director makes a technical presentation to the press when the data is released. In addition, public response to misinterpretation of GFS is permitted and exercised.

1.2 Transparency

1.2.1 Terms and conditions under which the data are compiled and disseminated are available to the public

Laws and regulations governing the compilation and dissemination of GFS are freely disseminated to the public. The Annual Budget Law and its complementary regulations are available in Spanish, for a fee, to any interested party.

There are no restrictions on public access to GFS. The only information not publicly available (or included in the GFS) is non-budgetary data related to the military.

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

There are no special arrangements, whereby the government has access to GFS before publication. No government officials outside the DIPRES have access to the data before they are released to the public, and the data are released simultaneously to all interested parties, via press conference and posting on the DIPRES web site. The data is approved for dissemination directly by the Director of the DIPRES.

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

Not generally relevant to agencies compiling GFS

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

No advance notice is given in preceding GFS publications, and/or in special publications directed to the same audience as the GFS publications, of methodological or other changes, which could materially affect the published data. Major changes in methodology are announced to the public at the time the changes are introduced. Any changes, which cause a break in the time series, are clearly noted in the corresponding publication.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are clear and publicized.

Compilation and dissemination of government finance statistics are not governed by a published 'code of conduct' that ensures that data are compiled and the results presented according to strictly professional considerations. However, there is a culture of proceeding in such manner.

There are reasonable and systematic efforts made to promote professionalism and to benefit from methodological and organizational developments elsewhere. Attendance to courses and

seminars is strongly supported, and a comprehensive and up-to-date library is available to staff.

2. Methodological Soundness

2.1 Concepts and definitions

2.1.1 The overall structure in terms of concepts and definitions follow international standards, guidelines, or agreed practices.

GFS compilation and dissemination are generally based on the recommendations of the International Monetary Fund, currently promulgated in the *1986 GFS Manual*. The more significant departures are discussed below under Sections 2.2. Scope and 2.3 Classification.

It should be noted that beginning with the Budget Law for 2001 the MOF introduced a new fiscal policy indicator, the central government's structural balance. The structural balance reflects the level of revenues and expenditures in a context where output reaches its potential and the price of copper is equal to its medium term price, i.e. it excludes the cyclical effects of economic activity and the price of copper. The structural balance is estimated by adjusting the accounting balance (the one reported by the DIPRES to Congress quarterly) in two steps:

- (a) The first step aims to estimate the fiscal deficit based on the concept of net worth (analogous to the approach followed in the revised GFS accrual system), i.e. only transactions that affect net worth determine the deficit. Transactions that do not affect net worth but are included above the line in the accounting balance (and vice versa) are reclassified accordingly (acquisition of securities, proceeds from privatization, sale of financial assets, lending and repayments, gross recording of copper revenues, oil price stabilization fund, and "recognition bonds"),
- (b) The second step aims to exclude the cyclical impact of economic activity on tax revenues, and of copper price fluctuations on copper fiscal revenues.

The MOF intends to supplement the information currently reported to Congress with additional data that allows for the monitoring of the structural balance.

Finally, the DIPRES intends to migrate from the GFS framework based on the 1986 GFS Manual to the revised GFS accrual system once it becomes effective.

2.2 Scope

2.2.1 The scope is broadly consistent with international standards, guidelines, or agreed practices.

The data covers the budgetary units of central government (which include the social security funds managed by the public sector), and the local government units. The extra-budgetary units of central government (of which only the state universities are significant) and special funds dealing with oil and copper prices are not included in the data. According to the guidelines of the 1986 GFS Manual these entities should be included under central government. The authorities pointed-out that universities operate under a regime of full autonomy, and that the inclusion of the funds would distort the analysis of GFS, given their erratic behavior. In addition, certain data related to the military (transfers from Codelco, borrowing, and associated expenditures) are by law considered to be outside the budget, and are therefore not included in GFS; though according to the 1986 GFS Manual they should be.

Data are available on economic flows and stock holdings between general government units, to enable consolidated statistics to be produced. No preliminary data based on partial coverage of the general government sector are published; all data disseminated for the general government are final. At the central government level, data for the first three quarters of the year are preliminary and are replaced by final data at the time the annual figures are published.

All material general government activity is carried out by general government units. However, the data does not include certain entities as indicated above. In addition, the data on local governments does not include municipal corporations that carryout health and education activities. Therefore, no supplementary data on quasi-fiscal activity is provided. The DIPRES also prepares GFS for the non-financial public sector.

Central government debt covers the total gross outstanding direct debt of the central government's budgetary units, including the social security funds. Data for the extrabudgetary units are not included. It also covers government guaranteed debt.

Quarterly data are disseminated by the DIPRES for central government in a summary table that includes: revenue, broken down by economic type; expenditure, broken down by economic type; and the global (overall) deficit /surplus. The level of detail provided in the quarterly table for revenues and expenditures is significantly less than in tables A and C of the 1986 GFS Manual. Furthermore, no functional classification of expenditure or financing data is provided.

Annual data are disseminated by the DIPRES for both central and general government in summary tables for revenue, broken down by economic type; expenditure broken down by functional classification; expenditure, broken down by economic type; the global (overall) deficit/surplus; and financing, broken down into domestic financing and external financing; and the use of cash funds, which are all domestic. Except for the additional information on

financing the summary table for quarterly and annual data are similar. Thus, the level of detail provided in the annual table for revenues and expenditures are again significantly less than in tables A and C of the 1986 GFS Manual. It should be noted, however, that these two revenue and expenditure tables are reported by the DIPRES to STA for inclusion in the Government Finance Statistics Yearbook (GFS Yearbook) with the recommended level of detail.

In addition to the summary table, annual data also include a table on tax revenues by type of tax and a functional classification of expenditure. Finally, the only data provided for financing is net foreign and domestic borrowing, and change in cash and other balances; i.e. no financing tables by type of debt holder or by type of debt instrument are provided (tables D and E of the 1986 GFS Manual).

Annual data on central government debt are disseminated by the DIPRES with a breakdown of total gross outstanding debt based on the residency of the debt holder into domestic and foreign debt, a breakdown by creditor, a breakdown by currency, and debt guaranteed by the central government. No maturity breakdown is disseminated, as there is no short-term outstanding debt. The level of detail provided in the debt tables would allow for compilation of table F (outstanding debt by type of debt holder), however, it does not allow for compilation of a table of outstanding debt by type of debt instrument (table G).

Monthly and annual external debt data are disseminated by the BCCH with a breakdown by creditor, debtor, maturity, public and private sectors, though not by type of instrument. The BCCH is the official entity responsible for compiling and disseminating external debt data. As such it has a comprehensive external debt database, which is regularly updated. The CGR and the Treasury (Tesorería General de la República, TGR) also compile and disseminate debt data in their annual publications.

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems used are broadly consistent with international standards, guidelines, or agreed practices.

Institutional sectors are generally defined in accordance with the *System of National Accounts 1993*. The exceptions are the extra-budgetary units of central government (of which only the state universities are significant) and the special funds dealing with oil and copper prices, which are not included in central government, as discussed above.

Revenue, expenditure, and financing flows are generally classified using the methodology set out in the 1986 GFS Manual, except for a few cases: (a) Privatization proceeds are divided into two components, book value and excess over book value. The book value is registered as financing and the excess over book value is registered as revenues. The 1986 GFS Manual registers both as repayments under the economic classification of expenditures; (b) Military revenues, expenditures and borrowing considered by law to be outside the budget are not

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included in GFS; and (c) The functional classification of expenditure follows a Chilean classification, not the United Nations classification (COFOG) used in the 1986 GFS Manual.

2.3.2 The sectors/subsectors for which GFS are produced are in accordance with the draft GFS Manual

Where non-general government agencies are included in GFS, statistics are available for the general government sector separately, as well as for the non-general government sectors, and the consolidated public sector/subsectors. Government finance statistics are provided separately for the central government, local governments, and for the consolidated general government.

2.4 Basis of recording

2.4.1 Accounting is on a cash basis

All transactions are recorded on a cash basis in the period when they actually occur, in line with the 1986 GFS Manual. A move to an accrual basis is being considered in connection with the development of a new integrated information system for the public sector.

The CGR has established the accounting system for the public sector (Sistema de Contabilidad General de la Nación, SCGN), which is based on internationally accepted accounting principles. The SCGN is the single, basic, source of information for all financial information needs.

2.4.2 Market prices (or nearest equivalent) are used to value stocks and flows

All stocks and flows are valued on a current market basis. Chile's budget is actually composed of two budgets, one in local currency and one in foreign currency. The latter includes all foreign currency transactions. These transactions are converted to local currency using the average exchange rate for the month they take place in the case of quarterly GFS, and using the average exchange rate for the year in the case of annual GFS. Central government outstanding debt data are valued at end period exchange rates and disseminated in U.S. dollars.

3. Accuracy and reliability

3.1 Source data

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

Data covering a wide range of economic stocks and flows are provided from administrative systems for central and local governments. GFS are based on the accounting records of the actual annual budget execution, as reported monthly by all units of general government to the

DIPRES and the CGR. Data are consolidated for the central government sector, and data are available to allow consolidation of data for the different levels of government (general government, non-financial public sector). There are no procedures in place to allow estimation of missing data, as the compilation of GFS is based on complete information. Finally, as indicated above, data for extra-budgetary units and for some military transactions are not available.

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Local government administrative data are available with sufficient detail and timeliness. All municipalities report data to the CGR, which in turn provides it to the DIPRES.

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

The budget and extra-budgetary charts of accounts align with GFS categories. The budget execution reports of central government units follow the budget classification system issued by the MOF. The DIPRES uses a bridge table to derive an economic classification from the budget classification, and to derive GFS categories in accordance with the 1986 GFS Manual. Furthermore, the timing of recording, and valuation, of source data are generally consistent with GFS concepts.

The previous budget management system did not include provision for automatic derivation of GFS items from budget items, whereas the new system recently introduced will provide such capability, as indicated above.

3.1.3 Source data are timely

The budget management system provides comprehensive and up-to-date records of budget sector transactions. Central government revenue and expenditure data are available 60 days after the end of the reference quarter (45 days beginning in 2001), and financing data are available 90 days after the end of the reference year. Local government data are available 5/6 months after the end of the reference period.

3.2 Statistical techniques

3.2.1 Data collection employs sound statistical techniques

No estimation of missing data or surveys is done, as both central government and general government GFS are based on complete information.

3.3 Assessment and validation

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

There are no problems with material gaps in coverage and/or completeness of data collection. As indicated above, GFS are compiled on the basis of complete information.

The GFS for central government are issued within 60 days of the end of the reference quarter (45 days beginning in 2001). The GFS for general government are issued within 6 months of the end of the reference year.

The GFS for central government are preliminary for the first three quarters of the year when issued. These are all revised at the time the GFS for the fourth quarter of the year is issued. The annual central government and general government GFS are final when issued. Should material differences be detected later data are corrected, but such differences rarely occur.

A reasonable degree of consistency can be established between the data published by the DIPRES and those published by the CGR, as both use the same source data.

3.3.2 Main intermediate results are validated against other information where available.

Not generally relevant to GFS

3.3.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated and made available to guide users

The GFS financing data are not reconciled with BCCH monetary or balance of payments data.

3.4 Revision studies

3.4.1 Studies and analysis are used to inform the statistical process

No revision studies or analyses are conducted on a routine basis that could be used to guide and improve statistical processes.

3.4.2 Studies are publicized

Not applicable.

4. Serviceability

4.1 Relevance

4.1.1 Processes to monitor the relevance and practical utility of existing statistics in meeting users' needs are in place.

The GFS are compiled within the same time frame as budget preparation and monitoring, and are used in the process of determining/evaluating fiscal policy. Quarterly central government budget execution reports are submitted by the DIPRES to Congress within 60 days of the end of the reference quarter, as mandated by the Annual Budget Law (beginning in 2001 the reports will be submitted within 45 days).

4.2 Timeliness and periodicity

4.2.1 Periodicity follows dissemination standards.

No monthly central government operations data are compiled. However, the necessary information for such compilation is available. Only quarterly central government operations data with a two-month lag are currently compiled. Thus, SDDS timeliness and periodicity requirements are not met (monthly, one month). Chile takes a flexibility option for this data category.

4.2.2 Timeliness follows dissemination standards.

Quarterly central government debt data are compiled with a one-month lag by the DIPRES, but they are not disseminated. Annual central government debt data are compiled and disseminated with a ten-month lag, although the data are available much earlier. Thus, SDDS timeliness and periodicity requirements are not met formally (quarterly, one quarter). Chile takes a flexibility option for this data category.

The timeliness of general government operations annual data is 2 quarters after the reference period. Thus, SDDS timeliness and periodicity requirements are met (annual, two quarters).

Central government operations data are not published monthly, only quarterly and annually. General government operations data are published annually. Finally, central government debt data are not published quarterly, only annually.

4.3 Consistency

4.3.1 Statistics are consistent or reconcilable over a reasonable period of time.

Divergences from the expected trend in the revenue and/or expenditure time series are related to the underlying fiscal policy and/or economic developments. Previous series are adjusted to

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account for discontinuities arising from methodological developments and changes in the statistical system. Breaks in time series are clearly identified and fully explained.

4.3.2 Statistics are internally consistent (e.g., accounting identities observed).

The overall deficit/surplus is equal to total financing (with the opposite sign). Each is calculated separately and any discrepancy investigated and corrected. No component is derived residually. This unusual consistency between the above the line and below the line data has its origin in the use of a double entry accounting system, whereby each entry automatically generates a counterpart entry.

The overall deficit/surplus equals total revenue and grants minus total expenditure and lending minus repayments. The components of revenue, expenditure, and financing add to aggregates.

Quarterly central government operations data coincides with annual data, except for differences due to the exchange rate used, as detailed above. Finally, the sum of GFS aggregates for component levels of government, equal aggregates for the consolidated combination of those subsectors, less consolidation adjustments.

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

The GFS data used for national accounts purposes are provided by the CGR, not the DIPRES. The DIPRES is discussing with the BCCH the possibility of providing such data, which would then be consistent with related national accounts aggregates.

GFS financing data are not reconciled with banking data and changes in government financial assets and liabilities held by other sectors. Finally, GFS data for foreign debt, and foreign grants and financing transactions, are not reconciled with BOP data.

4.4 Revision policy and practice

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

The release of revised data follow a well established and understood schedule. The data for the first three quarters of the year are revised at the time the data for the fourth quarter is released (i.e. 60 days after the end of the quarter in the past, 45 days beginning in 2001). The data for the fourth quarter and for the year as a whole are final when first released.

4.4.2 Preliminary data are clearly identified.

Preliminary and revised data are not identified in the published statistics. However, users are aware of the revision policy followed by the DIPRES. The revised data are disseminated in the same way, and at the same level of detail, as the original data. Finally, the coherence

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between preliminary and final data is sufficient to allow preliminary data to be used with confidence for policy determination and analysis.

4.4.3 Studies and analyses of revisions are carried out routinely and made public

Revisions incorporate all material data changes resulting from available up-to-date data. No time series of revisions to data is made available. The revisions made are based on supporting documentation. Finally, no analyses of preliminary versus revised data published for major GFS aggregates for the preceding periods are conducted.

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).

Government finance data are presented in a way that facilitates proper interpretation and meaningful comparisons. The figures for the period in question are compared with figures for previous periods, both in real terms and in terms of GDP. The figures are also compared with the budget for the period. However, as noted above, the degree of detail provided for the major GFS aggregates is significantly less to that set out in the 1986 GFS Manual tables.

The information presented is suitable for use in the budget development and monitoring process, and other government economic and fiscal policy development. Beginning in 2001 the authorities have introduced adjustments to the accounting balance to obtain a structural balance, which is considered more appropriate for fiscal policy purposes, as discussed above.

5.1.2 Dissemination media and formats are adequate.

The Annual Budget Law requires that data on the quarterly budget execution of the central government revenue and expenditure be sent to Congress within 60 days after the end of the reference quarter (45 days beginning in 2001). Furthermore, at the same time, the data is distributed to the local press at a conference held by the Budget Director.

There is a dedicated annual government finance publication, titled "Estadísticas de las Finanzas Públicas". Quarterly government finance statistics (revenue, expenditure, surplus/deficit) are published in a quarterly report titled "Informe de Ejecución Trimestral de la Ley de Presupuestos". The tables in the annual and quarterly publications are also posted in the DIPRES's website. Monthly government finance statistics are not compiled. Finally, there is an annual debt publication titled "Proyección del Servicio de la Deuda del Gobierno Central y Empresas Públicas", which contains both historical and projected debt data. This document has limited distribution, and the data are not posted in the DIPRES's website.

5.1.3 Statistics are released on a pre-announced schedule.

The date of release of GFS publications is announced substantially in advance. An advance release calendar that provides one-quarter-ahead notice of the approximate release dates is disseminated on the Central Bank of Chile's Internet website. The calendar is also published in the Central Bank's fortnightly publication "Informe Económico y Financiero". The precise release dates are announced no later than the end of the week prior to the release of the data. The actual date of publication meets the pre-announced date.

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

Statistical publications are made available to all users simultaneously, and without preferential treatment of selected users. As indicated above, the same day the quarterly report is sent to Congress the data are released at a press conference and posted in the DIPRES website.

5.1.5 Nonpublished (but nonconfidential) sub-aggregates are made available upon request.

The availability of non-published data, and the terms and conditions on which it is made available, are not publicized in GFS publications. However, non-published data are made available to users upon request.

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 international standards are annotated.

Concepts, sources, and methods (C, S, & M) are documented, and revisions to C, S, & M published at the same time as the data they affect. The quarterly publication "Sector Público Ley de Presupuestos" includes a brief note on methodology, while the annual publication "Estadísticas de las Finanzas Públicas" includes a more detailed methodological description. Methodological notes are also disseminated through the DIPRES's website. The publication "Deuda del Gobierno Central" contains a brief note on methodology. Summary methodological statements have not yet been published in the DSBB.

- C, S, & M documentation does not identify differences from internationally accepted standards, or provide candid description of coverage and compilation problems. Finally, bridge tables showing the links between source data and GFS have never been requested, but in principle would be made available.
- 5.2.2 Different levels of detail are provided depending on intended audience and type of collection.

The methodological notes included in the various publications are considered adequate to allow both general and expert users to assess the strengths and weaknesses of the government

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finance statistics published. Further information on methodological aspects is made available upon request.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized.

The contact person for GFS is publicized. Prompt and knowledgeable service and support is available. Finally, there is a policy of responding promptly to the misuse of government finance data, but there are no specific provisions to educate the users of government finance statistics.

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

No.

D. Monetary Statistics

0. Prerequisite of Quality

0.1 Legal and institutional framework

0.1.1 The responsibility for compiling monetary statistics is clearly specified.

The compilation and dissemination of monetary statistics are governed by the terms and conditions of the 1989 Act of the Central Bank of Chile (Law 18840). Additionally, the BCCH participate in the National Plan for the Collection of Statistics (*Plan Nacional de Recopilación de Estadística, PNRE*), which assigns to this institution the task of compiling and disseminate the balance of payments statistics. The PNRE is designed and approved by the President of the Republic each year.

The collection and dissemination of monetary statistics is guaranteed under Article 53 of the Act on the BCCH. The Constitutional Organic Act of the Central Bank of Chile, Law Number 18840 of October 1989, stipulates in Article 53 that "the Bank shall compile and publish, in a timely manner, the principal macroeconomic statistics of the country, including monetary and foreign exchange statistics, balance of payments statistics, and the national accounts."

In addition, the coverage, periodicity, and timeliness of these statistics are established by Decision No. 393-07-941207 of the Central Bank Board of Directors, published in the Official Gazette on December 13, 1994.

The Research Department (DE) of the BCCH is in charge of the collection of the source data and the compilation and dissemination of monetary statistics.

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0.1.2 Data sharing and coordination between data producing agencies are adequate.

Formal procedures have been established within the BCCH that govern the reporting of information to the DE by other departments, the Superintendency of Banks and Financial Institutions (Superintendencia de Bancos e Instituciones Financieras, SBIF), and individual commercial banks and finance companies. The Accounting Department prepares the BCCH accounting data, which is accessed electronically by the DE. The SBIF reports to the DE monthly balance sheets data on commercial banks and finance companies. Furthermore, an on-line system called "SINACOFI" connects the BCCH, the SBIF, and all commercial banks and finance companies. Through this system, the BCCH receives daily information on interest rates, the information needed to compile the monetary aggregates, and the provisional figures for the monthly survey of the other depository corporations. Therefore, balance sheet data is received by the BCCH through two channels: (1) comprehensive monthly information transmitted by the SBIF; and (2) data transmitted daily through SINACOFI to compile the provisional monthly other depository corporations' survey.

The BCCH and the SBIF consult on new projects that have the potential to modify report forms for the banks' balance sheets and profit and loss accounts, which are jointly used by both institutions for statistical and supervisory purposes. In this regard, an extensive revision of the plan of accounts applied to commercial banks and finance companies is being carried out by the SBIF. Owing to the early stage of the project, there was no need for consultation with interested parties, such as the BCCH. However, senior representatives of the SBIF indicated their willingness to include experts from the BCCH in the process of revision for those issues of interest to the Bank. Issues such as appropriate sectorization of accounts to facilitate macroeconomic analysis, as well as the provision of complementary information to fill the gap between book and market values of financial assets and liabilities, may greatly benefit from the close collaboration of the two Institutions.

0.1.3 Confidentiality of reported data

There are internal rules aimed at avoiding disclosure of confidential data. Furthermore, penalties are imposed to the staff that discloses confidential data. In addition, computer applications exist to safeguard against the exposure of confidential data. However, it is worth noting that the BCCH publishes monetary statistics, including data on individual institutions, as part of its efforts towards complete transparency in its activities. The publication of detailed data by institution is a traditional practice in the BCCH (i.e. for the last 25 years).

The confidentiality of data is guaranteed under Article 66 of the BCCH's Organic Act as well as by the Bank's Staff Code of Conduct (Reglamento de Personal) under section "conflict of interest." The latter prohibits the staff from disseminating confidential information, i.e. any information that has not been published. Additionally, the employment contract states that "It will be justified reason for the termination of the employment contract the non-fulfillment of the following obligation: Maintain absolute secrecy of the situations or businesses that, directly or indirectly, were connected to the Bank and that were known owing to the staff position or functions as well as keep full loyalty to the Bank."

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The disciplinary measures range from a verbal warning to the termination of the contract of employment.

With regard to the confidentiality maintained through computer applications, the internal administrative rules note: "Confidentiality of the information: All pieces of information stored in the computer systems or services are define as private. Therefore, it is prohibited to disseminate or distribute any kind of information obtained from those systems to parties not defined in the administrative rules of each unit." Furthermore, as far as manipulation of data or programs is concerned, the administrative regulation states: "Every system or computer service should be used taking into consideration the functions that have been defined to them. This implies that it is prohibited to modify data through mechanisms not defined in the system or service, to modify programs or to modify computer procedures." Finally, a chapter on security measures states: "Those persons using the official software or that elaborate applications to support the functions of the Bank, should be authorized by the Chief of the Department within its Unit and observe the rules defined by the Computer Manager."

0.1.4 Statistical reporting is legally mandated.

Commercial banks, finance companies and savings and loan cooperatives are obliged to report data to the SBIF. The Article 53 of the Central Bank Organic Law requires the SBIF to report these data to the BCCH. Commercial banks and finance companies also provide data directly to the BCCH. Sanctions are not defined for those not complying with the BCCH's requests of information.

0.2 Resources

0.2.1 Staff and other resources

The DE has 5 staff, three of which are professionals and two administrative. In addition, there is a full time position of a senior economist specialized in monetary issues. The academic qualifications and technical skills required for employment are high. The average years of experience is above 15. In addition, there is a procedures manual for the compilation of monetary statistics, to be used in case of an absence or arrival of a new employee.

The systems of data collection and compilation are highly computerized. Depository corporations submit report forms by electronic means. There are no budgetary constrains to carry out improvements in the system.

0.2.2 Cost-effectiveness measures

There are measures in place that monitor the cost-effectiveness of the program for compiling monetary statistics. In particular, each year prior to the finalization of the annual budgetary process of the BCCH, evaluations are carried out on the current systems to review the need for improvements.

0.3 Quality awareness

0.3.1 Processes have been established to monitor the quality of the production and dissemination of statistics.

There are processes to monitor of the quality of the statistics produced by the BCCH. In particular, there is an on-going work on setting up an integrated data base covering all the data disseminated by the BCCH – currently, the specific data-sets, such as national accounts, balance of payments or monetary statistics, are maintained in separate data bases for which each compiling unit is responsible. The integrated database may be expanded in the future to include data of internal use also.

Owing to the importance attached to the data on international reserves, a cross checking is periodically carried out between the Balance of Payments and the Accounting Departments to monitor these data. The DE also monitors this indicator closely.

1. Integrity

1.1 Professionalism

1.1.1 Impartiality in the compilation of statistics

The statutory provisions under which the BCCH compiles monetary statistics are adequate to guarantee independence of the staff in conducting these functions. Furthermore, impartiality is guaranteed through the publication of statistics on depository corporations on an individual basis. In addition, in the opinion of the authorities, inaccuracies in published data would entail a loss of credibility for the BCCH.

1.1.2 Choices of sources and methods are informed solely by statistical considerations.

In compiling monetary statistics, the methodological framework is designed to comply with the IMF's recommendations as suggested in the SDDS guidelines. Furthermore, there are plans to devote resources in the near future to the implementation of the new *MFSM*.

1.1.3 Commentaries prepared by the BCCH on erroneous interpretation and misuse of statistics

In the prospective case of changes in the presentation of disseminated data or the need to explain complicated statistical formulations, the *Gerencia Division de Estudios (GDE)* would be in a position to provide explanations to the press or other interested users.

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1.2 Transparency

1.2.1 Availability of the terms and conditions under which statistics are produced and disseminated

An advanced release calendar that gives the precise dates for the next four months is disseminated on the BCCH's Internet website. The calendar is updated every month.

1.2.2 Prior government access to statistics is identified

Monetary statistics are disseminated simultaneously to all interested parties every fortnight. However, a reduced set of preliminary indicators is monitored on a daily basis. Following approval of the daily data produced by the DE, a limited number of senior BCCH staff has access to them.

1.2.3 Identification of statistical products by statistical agencies

The DE of the BCCH is identified as the source of the central bank and the other depository corporations' surveys.

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

Changes in methodology, source data, or statistical techniques are communicated simultaneously with the release of the data. Furthermore, the correct interpretation and treatment of the historical series in support of the changes are provided.

1.3 Ethical standards

1.3.1 Guidelines covering staff behavior are publicized

Guidelines covering staff behavior are not deemed as necessary within the BCCH, and therefore do not exit, owing to its very transparent policy of publishing data on individual financial institutions.

2. Methodological soundness

2.1 Concepts and definitions

2.1.1 The analytical framework underlying the monetary statistics follows internationally endorsed standards.

The analytical framework underlying the monetary statistics follows internationally endorsed standards. Currently, a program to improve the monetary and financial statistics is being developed, which aims at revising the local definitions of the monetary aggregates and

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incorporating other financial intermediaries into the coverage. These revisions should result in greater consistency with the *MFSM* directives.

Central Bank Survey

The analytical framework used by the BCCH (Assets and Liabilities of the Central Bank) reflects an approach aimed at quantifying, by means of institutional sectorization, the factors that have an impact on the issuance of Central Bank liabilities that contribute to the formation or constitute part of those liabilities included in the local definition of private monetary aggregates.

The main departures from the guidelines of the *MFSM* are: (a) the inclusion of nonbank financial intermediaries in the Private Sector; and (b) the use of accounting valuation criteria that are not always in line with the measurements at market prices prescribed by the *MFSM* (see accounting conventions). However, the accounting criterion for purposes of expressing in local currency terms assets and liabilities in foreign exchange and indexed units of account is consistent, in general terms, with the *MFSM*.

Depository Corporations Survey

The analytical framework used by the BCCH (Table of Assets and Liabilities of the Banking Sector) attempts to quantify, by means of an institutional sectorization, the factors affecting the issuance of private monetary aggregates. Given that the local definition of private monetary aggregates includes only liabilities issued by the Central Bank, Commercial Banks, and Finance Companies, this table is prepared by totaling and consolidating the balance sheet accounts of these institutions.

The balance sheet data used as primary source to compile the other depository corporations surveys reflect concepts and principles that are, in general, consistent with international accounting standards. Moreover, the plan of accounts for commercial banks and finance companies, which needs some adaptation to recent international guidelines, is currently under review by the SBIF.

The main deviations from the *MFSM* are: (a) the inclusion of nonbank financial intermediaries in the Private Sector; and (b) the use of accounting valuation criteria, which do not always coincide with the market price measurements prescribed by the *MFSM*. Nevertheless, for purposes of expressing in domestic currency, assets and liabilities denominated in foreign currency or in indexed units of account; the accounting criterion is compatible, in general terms, with the *MFSM*.

2.2 Scope

2.2.1 Comprehensiveness of institutional coverage

The depository corporations sector comprises the BCCH, 44 other depository corporations, including 28 commercial banks, one bank owned by the State, one finance company, 16 mutual funds, and two major saving and loan cooperatives²¹. The depository corporations survey (banking sector) compiled by the DE of the BCCH does not include mutual funds and saving and loan cooperatives. However, the work program of the current year includes the incorporation of mutual funds into the survey, while saving and loan cooperatives are not under consideration because of their reduced importance.

Mutual funds and saving and loan cooperatives represent a 7.7 percent and 0.5 percent of the current definition of money and cuasi-money, respectively (with the consolidation process, this percentage is lower).

2.3 Classification/sectorization

2.3.1 Consistency with international standards

The principles underlying the classification of financial instruments and the sectorization of institutional units are, with few exceptions, based on international standards.

The main exception is that the definition of private sector includes not only the 1993 SNA households, nonfinancial corporations and NPISH sectors, but also those financial corporations that are excluded in the definition of the depository corporations' survey (i.e. mutual funds, saving and loan cooperatives, and other financial corporations.) Furthermore, monetary statistics do not comprise flow statistics. However, for internal use, a flow statement for the BCCH is prepared, which distinguishes cash flows, revaluations, and interest accrued.

2.3.2 Principles of classification

The principles of classification of financial instruments are generally consistent with international standards. However, source data to compile the other depository corporations survey do not separately identify financial derivatives and insurance technical reserves, which are both included as unclassified assets and liabilities. During 1999, net unclassified assets and liabilities averaged 8 percent of the total assets in the other depository corporations' survey.

²¹ The total number of saving and loan cooperatives is not relevant owing to their very reduced size. The two largest cooperatives are the only ones obliged to report data to the SBIF. However, the combined size of these two cooperatives is very small compared to the rest of depository corporations.

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Accounts representing adjustments, which do not represent assets or liabilities in economic terms, are included in the survey. The most important of these accounts are the *Cuentas de Conversión y Cambio* (accounts of conversion and exchange), which are intermediate accounts aimed at separately recording operations in national and foreign currencies. For the latter, the effect of the fluctuations in the exchange rate is identified. The balance of the *Cuentas de Cambio* is equivalent, but with the opposite sign in the *Cuentas de Conversion*. This balance represents the deficit or surplus in national currency, which is compensated with a surplus or deficit in foreign currency.

Central Bank Survey

The assets side shows the net balances resulting from calculating debit balances minus credit balances not included as monetary liabilities, grouped in sectoral classifications which evaluate, in general terms, gross balances of credit to the Private Sector and net balances of credit to the remaining sectors. The sectoral specification, which is consistent with that described in the SDDS, includes the External Sector (broken down into International Reserves and Other); General Government; Private Sector; Rest of the Banking Sector; and Other. In the case of the Banking Sector, the net balance of credit corresponds to assets minus liabilities (other than base money and notes) with a secondary market.

The liabilities side shows the balance of base money (broken down into currency held by the public and monetary reserves) and Central Bank paper that is traded on secondary markets.

Depository Corporations Survey

On the assets side, it includes the net balances obtained by taking the debit balances less credit balances not included as monetary liabilities, grouped in sectoral classifications that evaluate, in general terms, the gross balances of credit to the Private Sector and net balances of credit to the remaining sectors. The sectoral breakdown, which is compatible with the SDDS requirements, includes the External Sector (broken down into International Reserves and Other); General Government; Private Sector, and Other.

On the liabilities side, it includes the balances of money and near money held by the private sector, broken down into banks (issued by commercial banks and finance companies) and instruments of the central bank. Private money includes cash held by the general public, current accounts and other sight deposits in domestic currency of the Private Sector, and sight savings accounts. Near money includes time deposits in domestic currency of the Private Sector, foreign currency deposits of the Private Sector, mortgage letters of credit in circulation (i.e., those not acquired by the Banking Sector), and time savings deposits. Instruments of the Central Bank include those with a secondary market and in circulation (i.e., those that do not form part of the investment of the Commercial Banks and Finance Companies.)

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2.3.3 Principles of sectorization

The principles of sectorization applied in the monetary statistics are generally consistent with international standards, grouping similar kinds of institutional units with respect to their objectives, functions, and economic behavior. However, a deviation from these standards has been identified: the definition of private sector includes not only the 1993 SNA households, nonfinancial corporations and NPISH sectors, but also those financial corporations not included in the definition of the depository corporations survey (i.e. mutual funds, saving and loan cooperatives, and other financial corporations.) Furthermore, public nonfinancial companies cannot be separately identified and are included in "other internal credit, net", together with own funds and unclassified assets and liabilities.

Central Bank Survey

The residency criterion that is used to distinguish between net foreign assets and domestic assets is based on the IMF's Balance of Payments Manual (5th edition).

The Banking Sector includes the Central Bank, commercial banks (including the *Banco del Estado*, the only publicly held commercial bank), and finance companies. The latter, as in the case of commercial banks, accept deposits included in the local definition of private money.

In accordance with the definition set forth in the IMF's *Monetary and Financial Statistics Manual* (MFSM), the General Government Sector includes entities from the central government and local government (municipalities). In Chile there are no state government entities. The public social security funds are national in scope and included within Central Government. The rest of the public sector, namely publicly held nonbank corporations, is included in "other internal credit, net."

The Private Sector includes all domestic entities not included under the definitions of Banking Sector or Public Sector. Thus, it includes private nonfinancial entities as well as private financial intermediaries, such as mutual associations, savings and loan cooperatives, insurance companies, and pension funds, which do not constitute part of the Banking Sector.

Depository Corporations Survey

The residency criterion that is used to distinguish net external assets from domestic assets is based on the IMF *Balance of Payments Manual* (5th Edition).

In accordance with the definition in the IMF *Monetary and Financial Statistics Manual (MFSM)*, the General Government Sector includes Central Government and Local Government (Municipalities) entities. Since Chile is a unitary state, there are no State Government entities. Public social security funds are national in scope and are included in Central Government. The rest of the public sector (i.e., privately owned nonbank corporations) is included in "Other."

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The Banking Sector includes the Central Bank, commercial banks (including the *Banco del Estado*, which is the only government-owned commercial bank), and the finance companies. The latter, like the commercial banks, take deposits included in the local definition of private money and receive credit from the Central Bank. The net balance of operations within the banking sector, theoretically zero, is included in "Other."

The Private Sector includes all domestic entities not included in the definitions of the Banking Sector or the Public Sector (i.e., it includes private nonfinancial entities and private financial intermediaries, such as mutual funds, savings and loan cooperatives, insurance companies, and pension funds which are not part of the Banking Sector).

2.4 Basis of recording

2.4.1 Use of accrual accounting

The accrual accounting guidelines recommended by the *MFSM* require that interest accruing on deposits, loans, and securities other than shares be incorporated into the outstanding amount of the financial asset or liability, rather than treated as part of other accounts receivable/payable. Accrual accounting is used in these terms in the BCCH balance sheet. However, the other depository corporations' balance sheet does not provide for the allocation of accrued interest into the outstanding amount of the financial asset or liability of origin. Therefore, interest accrued are included in net unclassified assets and no estimation techniques to allocate them into their proper categories are applied.

2.4.2 Valuation principles

The valuation principles applied in the monetary statistics are broadly consistent with international standards. However, assets negotiable on secondary markets are not always valued at market prices, but at the lower of historical cost or market price; liabilities are valued in accordance with the trend value of attracting them (central bank survey) or at historical cost (other depository corporations survey).

The general recommendation of the *MFSM* is that financial assets and liabilities should be valued on the basis of market prices or market-price equivalents. The valuation of loans is an exception to this principle; loan values should be based on creditors' outstanding claims without adjustment for expected loan losses. This amount comprises the outstanding principal plus any accrued interest and is referred to as the book value of a loan. This valuation principles are, however, not compatible with the plan of accounts for commercial banks, which is based on book values. Market valuation is applied only if it is lower than the book value.

Consistent with the recommendations of the *MFSM*, the loan portfolio and deposits on the balance sheets of the depository corporations are valued at book values. Loan valuation is not adjusted for expected loan losses; provisions for expected losses are recorded as separate entries on the liability side of the balance sheet.

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Financial instruments denominated in foreign currency are converted into national currency values at the market exchange rate prevailing at the balance sheet date. Monetary gold is valued at an average of its price during the last quarter with an additional reduction.

2.4.3 Aggregation and consolidation

The CBS, ODCS, and DCS are consolidated statements. In the consolidation, stocks and flows that occur between institutional units within depository corporations are eliminated.

2.4.4. Recording on a gross basis

Assets and liabilities are originally compiled on a gross basis. However, for purposes of presentation in the analytical accounts, they are netted out for all sectors except for the private sector.

3. Accuracy and Reliability

3.1 Source data adequacy

3.1.1 Comprehensiveness, timeliness, and accuracy

The source data for compiling the central bank survey are the accounting records of the BCCH prepared by the Accounting Department, which are available on a daily basis.

The basic data sources for the other depository corporations survey are the individual monthly report forms of the other depository corporations (commercial banks and finance companies only). The reported data are disaggregated in terms of instruments and sectors to permit a sufficient analysis of the accounting data to derive the monetary accounts. However, there are cases of insufficient information for instrument and sectoral breakdowns (see sections 2.3.2 and 2.3.3 for further details).

Preliminary data are compiled and disseminated by using a more simplified, alternative source to the monthly report forms. This source is a daily report form with 35 data received directly from banks through an electronic transmission system called "SINACOFI." These data is sufficient for the publication of the analytical accounts in the fortnightly and monthly bulletins.

The source data for compiling the central bank and the other depository corporations' surveys are subject to internal consistency checks. In particular, a crosscheck is carried out among the various report forms (aggregate data in the balance sheets and the disaggregated data in the annexes) prepared by each single financial institution. Furthermore, the DE occasionally verifies the accuracy of the data by checking the corresponding interbank positions reported by the BCCH and the Other Depository Corporations.

3.1.2 Suitability of the source data for compiling analytical accounts

The source data reasonably approximate the definitions, scope, classifications, time of recording, and valuation required.

3.1.3 Source data are timely

The Accounting Department of the BCCH prepares accounting data for the central bank on a daily basis, which are available at the end of the following day. Source data for the ODCs are available from report forms that are prepared on a preliminary, daily basis. The data for the banks are reported by electronic means using a network for the transmission of financial data called SINACOFI.

3.2 Statistical techniques

3.2.1 Soundness of statistical methods

The statistical techniques used to compile monetary statistics are automated. In processing source data, computerized files are used that incorporate standardized macros. For the other depository corporations' survey, estimates for non-responding banks are not needed since the information is received on a daily basis and the DE has at least seven days to request data that might be on delayed.

Accrued interests broken down by instrument are not estimated, but this amount is registered under the unclassified asset and liabilities account.

3.3 Assessment and validation

3.3.1 Evaluation of source data and results

Report forms used by the ODCs are occasionally revised to reflect changes in the presentation of accounting records and the needs of compilers. A regular revision procedure does not exist since only the SBIF is in charge of providing instructions to open new accounts in cases where new types of operations were authorized. The DE, for its part, is obliged to identify and appropriately classify the new accounts because of the requirements of the electronic transmission mechanism used to compile the data.

As regard the daily data directly reported to the BCCH by the ODCs, the DE revises the report forms in cases where new requirements for information arise.

3.3.2 Results are validated against other information

The DE checks large and unexplained fluctuations in the time series compiled. However, there is no standardized set of plausibility checks in place.

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The data on financial market operations are occasionally used to check the ODCs' balance sheets.

3.3.3 Investigation of errors

Errors in the reported data are investigated and letters are sent to the responsible depository corporations for their correction.

3.4 Revision studies

3.4.1 Studies and analysis are used to inform the statistical process

No studies or analyses are conducted on a routine basis that could be used to guide and improve statistical processes.

3.4.2 Studies are publicized

No.

4. Serviceability

4.1 Relevance of information

4.1.1 Systems exist to monitor users' needs.

There is an informal process of conducting periodic reviews with the policy departments of the BCCH. The DE reviews developments that have an impact on statistical data requirements with the BCCH's departments that analyze the data. Moreover, the BCCH regularly participate in international meetings and seminars organized by international statistical organizations, such as the IMF and the United Nations.

4.2 Periodicity and timeliness

4.2.1 Periodicity follows dissemination standards.

The surveys of the BCCH and of the other depository corporations sub-sectors are disseminated on a fortnightly and monthly basis, respectively, which is consistent with the specifications of the SDDS.

4.2.2 Timeliness follows dissemination standards.

The central bank survey is disseminated one week after the end of the reference date, and the other depository corporations survey is disseminated three weeks after the end of the reference month, which is in keeping with the specification of the SDDS.

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4.3 Consistency

4.3.1 Consistency of data over time

The data on the BCCH and the other depository corporations' surveys are consistent over time. Methodological notes are maintained, although not disseminated, for time series data describing major breaks in the series, their causes as well as adjustments made to maintain consistency over time.

4.3.2 Internal consistency of data

The data on the BCCH and the other depository corporations' surveys are internally consistent. Interbank positions between the BCCH and the ODCs are also occasionally checked for consistency. The mission confirmed that differences in interbank positions were minor.

4.3.3 Consistency with other statistical frameworks

The DE routinely cross checks data on the net foreign assets positions of the BCCH and the other depository corporations sub-sectors with the corresponding measures derived from the international investment position.

The DE does not check whether net credit to government from the depository corporations' subsector is consistent with or reconcilable with government borrowing from the banking system as recorded in the government finance statistics.

4.4 Revision policy and practice

4.4.1 Transparency of revision policies and practices

Revision policies follow a regular pattern. The data for the BCCH and the other depository corporations surveys are preliminary when first released and are finalized within one month and two months, respectively, except in case of the year-end data, which are finalized three or four months after the end of the reference year. However, final data are not frequently checked against preliminary data.

4.4.2 Preliminary data are clearly identified.

Revisions made to the BCCH and the other depository corporations' surveys are clearly identified in the fortnightly and monthly reports of the BCCH and in the statistical releases posted on the web site.

5. Accessibility

5.1 Data accessibility

5.1.1 Presentation of data facilitates interpretation and understanding.

Published monetary statistics are supplemented by the dissemination of tables, charts, and text. Moreover, the means of disseminating monetary statistics are adequate and suitable for the users' needs. In addition, there is an on-going work to provide the users several file format options, such as Acrobat-Reader and Excel.

5.1.2 Adequacy of dissemination formats

Monetary data are disseminated in many formats including the BCCH's fortnightly and monthly reports, and on the BCCH website, (http://www.bcentral.cl, under "Indicadores Económicos" or "economic data"). The menu can also be displayed in English.

5.1.3 Statistics are released on a pre-announced schedule.

An advance release calendar that provides a quarter-ahead notice of the precise release dates is published on the Central Bank of Chile's Internet website (http://www.bcentral.cl/Indicadores/calendario/release.htm) in English and Spanish.

The advanced release calendar is updated monthly and also published in each issue of the BCCH's publication "Informe Económico y Financiero" in Spanish and English.

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

The data are released simultaneously to all interested parties through the publication of the "Informe Económico y Financiero" (Economic and Financial Report), which appears fortnightly. The publication is available for sale to the public, between 9:00 - 9:30 a.m. on the days on which it is released (the 7th and the 23rd of each month, or the following working days if they are holidays). Subscribers may also pick up their copies at that time or have them mailed directly.

Simultaneously "Informe Económico y Financiero" is also published on the Central Bank's Internet website (http://www.bcentral.cl, under 'Publicaciones').

5.2 Metadata accessibility

5.2.1 Documentation of methodological principles underlying the statistical framework

The statistical concepts, scope, classifications, basis for recording, data source, and statistical techniques are available to the public.

The compilation procedures were revised during 1998. New series and a methodological note were published in the Central Bank's monthly bulletin of February 1999. A hard copy of the methodological note can be obtained from the BCCH's contact person for monetary statistics. Furthermore, summary methodologies for the analytical accounts of the Central Bank and the banking sector will be posted in the IMF's DSBB very soon.

5.3 Assistance to users

5.3.1 Public availability of the names of contact persons

There are provisions to offer adequate assistance to internal and external users. The BCCH's Internet website (http://www.bcentral.cl/) offers the possibility of addressing queries to the Bank.

5.3.2 Public Availability of information on other related services

Catalogues of publications, other services, and fees are available.

E. Balance of Payments Statistics

0. Prerequisites to Integrity

0.1 Legal and institutional environment

0.1.1 Assignment of responsibility for BOP data compilation and dissemination

The compilation and dissemination of the balance of payments (BOP) data are governed by the terms and conditions of the 1989 Constitutional Organic Act of the Central Bank of Chile (Law 18840). Article 53 of the Act on the BCCH states that the Central Bank must compile and publish on a timely basis the country's main economic information: monetary and financial, balance of payments, and national accounts statistics. Additionally, the BCCH participates in the Plan Nacional de Recopilación de Estadísticas (PNRE), which assigns it the task of compiling and disseminating the balance of payments statistics.

0.1.2 Arrangements or procedures to facilitate effective inter-agency coordination between the BCCH and BOP source-data producing agencies.

Article 53 of the BCCH Act designates it as an organ of the official statistical service, thereby providing the legal basis for inter-agency coordination as well as for requesting data. Article 53 states: "The Bank shall have the authority to request and obtain from various agencies and departments of the Civil Service Administration, decentralized entities, and generally the public sector, any information it may deem necessary." In addition, Article 40 allows the BCCH to request information on foreign exchange transactions from private institutions.

At an operational level, the BCCH has agreements with several source-data producing institutions: (1) Agreement with the Customs Service (Servicio Nacional de Aduanas) for information on exports and imports, which are obtained weekly through a direct line that assures the provision of information to the BCCH as soon as the data are available, (2) Agreement with the National Tourism Service (Servicio Nacional de Turismo, SERNATUR) for travel services, (3) Agreement with the International Police (Policia Internacional) for numbers of travelers.

The following institutions provide source data to the BCCH without formal agreements or through their regular publications: (1) Foreign Investment Committee (Comité de Inversiones Extranjeras) for supplementary information on foreign investment in Chile through surveys and administrative requirements; (2) Banking and Financial Institutions Superintendence (Superintendencia de Bancos e Instituciones Financieras, SBIF), the information provided by the banking system is through SINACOFI (Sistema Nacional de Comunicación Financiera), which is an on-line system that connects the BCCH, the SBIF and all commercial banks and financial companies; (3) Stock Exchange and Insurance Superintendence; and (4) Pension System Superintendence for data on direct investment funds.

0.1.3 Confidentiality of respondents' data is guaranteed and their use is restricted to statistical purposes.

The confidentiality of data reported by individual persons and entities is guaranteed under Article 66 of the BCCH Act as well as by the Code of Conduct of the Bank (Reglamento de Personal, section conflict of interest). The latter prohibits dissemination of confidential information by staff, i.e., any information that has not been published. Additionally, the employment contract states that "It will be justified reason for the termination of the employment contract the non-fulfillment of the following obligation: Maintain absolute secrecy of the situations or businesses that, directly or indirectly, are connected to the BCCH and that are known owing to the staff position or functions as well as to keep full loyalty to the BCCH."

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

Articles 39, 40, 53, and 58 of the Central Bank Act ensure statistical reporting to BCCH of all foreign exchange operations and provide the legal basis for requesting information on the balance of payments to both public and private institutions.²²

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²² In order to compensate for the effect of the removal of capital controls, in April 2001, on the compilation of statistics, the BCCH has made use of Article 40 of the Act as the legal basis to ensure continued compliance with data reporting requirements.

0.2 Resources

0.2.1 Staff, financial and computing resources

The Balance of Payments Department of the Information and Statistical Research Management of the BCCH are responsible for producing the balance of payments statistics. The department has a permanent staff of 12 (9 professional and 3 support staff), and temporal staff of 3 who are working on projects to implement BPM5. The average professional has high academic qualifications (economists and statisticians) and most of them have several years of experience and have participated in training in the area of the balance of payments (7 of the 12 professional staff have undergone BOP training courses offered by the IMF), some of them have participated in other training and meetings (e.g., Balance of Payments Statistics Committee of the IMF, European Union, Mercosur workshop on financial account and portfolio investment).

Staff also receives academic training. At present, a statistician is working towards a Diploma on Financial Economics and an economist is working towards a Master in Economics, both in Chilean universities. Another statistician is participating in a doctoral program on data analysis in a Spanish university.

The data collection and compilation procedures of the Balance of Payments Department are highly computerized. In addition, the Department uses computing applications to increase efficiency, most of which have been designed and implemented according to the specifications defined by the Department's staff. The most used computing applications are the following:

- (1) Introduced a direct line with the Customs Service to collect information on trade (export and imports of goods and services).
- (2) Designed a database for "on-line analytical processing (OLAP)" to manage data on trade and supplementary information on services which facilitates cross section analysis.
- (3) Designed a program to calculate commercial credits for import and export statistics, which are not included in the external debt statistics
- (4) Implemented a database management program for information on direct investment.
- (5) Uses the Internet to run surveys on direct investment.

²³ External debt statistics are produced by the Department of External Statistics of the International Management Division and provide input to the Balance of Payments Department on some items of the financial and current accounts (external debt flows and associated income) and the international reserves template.

0.2.2 Measures, if any, which exist for determining the cost-effectiveness of the BOP statistical work program.

Since 1999, budget formulations include cost-effectiveness analysis on each BCCH project/work program.

0.3 Quality awareness

0.3.1 Processes in place to focus on the quality of BOP statistics in accordance with changing users needs, emerging data requirements, etc.

The Information and Statistical Management Department (Gerencia de Información e Investigación Estadística) was created in December 2000, combining the Departments of the Balance of Payments and National Accounts. The reorganization highlights the increased importance of statistics for the BCCH.

There are several projects underway oriented towards improving the quality of BOP statistics, these include:

- (1) The project to develop a statistical system for compiling international transactions data (Sistema Estadístico de Transacciones Internacionales (SETI)). This project was jointly developed by the Balance of Payments and the External Statistics Departments (July 1999-December 2000) to improve the coverage of the data on the capital account, associated income flows and international investment position prescribed by SDDS. Several SETI proposals will be implemented in 2001, which will enable Chile to meet the SDDS requirements to disseminate data on IIP by June 30, 2002. In April, 2001, existing regulations to capital flows were removed, but the requirement to provide data for statistical purposes remained, and were adjusted to take account of BPM5 requirements.
- (2) Budgetary increases to finance the SERNATUR Agreement destined to meet *BPM5* requirements.
- (3) The project to develop statistics to compile the services account of the BOP to meet *BPM5* requirements.
- (4) The project to assure consistency between the balance of payments and national accounts data.
- (5) Surveys on direct investment in Chile and abroad.
- (6) Participated in the Coordinated Portfolio Investment Survey.

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1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The statutory provision under which the BCCH compiles balance of payments statistics is adequate to guarantee independence of the staff. The staff independently selects sources and methods. The BCCH enjoys high credibility due to the quality of the published data as well as for its tradition of independence.

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

Choices of sources and methods are based solely on statistical consideration. A summary of the methodologies used are published in the *Chilean Balance of Payments*, which is available in hard copy, CD and on the BCCH's website. The public is informed of important methodological changes through footnotes, special articles, press releases, press conferences and/or meetings with professional groups. For example, when a new series of balance of payments, which included reinvested earnings data was first released, the BCCH organized a press conference and a meeting with specialists to discuss the changes, particularly that the inclusion of reinvested earnings increased the deficit in the balance of payments.

1.1.3 Statistical agencies are entitled to comment on erroneous interpretation and misuse of BOP statistics

The BCCH provides technical explanations and clarification to the press, or other interested users, keeping a technical and neutral position.

1.2 Transparency

1.2.1 The terms and conditions under which BOP statistics are produced and disseminated are available to the public

The terms and conditions under which BOP statistics are produced and disseminated are available to the public. The Constitutional Organic law of the Central Bank is available in Spanish on the BCCH's website. An English version of the law can be purchased from the BCCH's Department of Publications. Dissemination of documentation on methodology and sources used in preparing the statistics of the balance of payments are available on request from the BCCH library.

1.2.2 Identification of internal government access to data before release.

As indicated in Chile's BOP metadata on the Dissemination Standards Bulletin Board (DSBB), the Minister of Finance has access to data on merchandise trade and reserves no sooner than five working days prior to their release to the public. This practice is noted in the

corresponding tables of the *Economic and Financial Report* (Informe Económico y Financiero).

1.2.3 Products of statistical agencies are clearly identified as such.

Products of statistical agencies are clearly identified.

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

The public is informed of major changes in methodology at the time of the release of the data in notes or special articles that accompany the data, and in press releases and/or conferences.

1.3 Ethical standards

1.3.1 Guidelines for staff behavior are clear and publicized

The Constitutional Organic Law of the Central Bank (1989), and the Code of Conduct (Reglamento del Personal) provide broad ethical guidelines for employees of the BCCH.

2. Methodological Soundness

2.1 Concepts and definitions

2.1.1 Balance of payments statistics are compiled in broad conformity with guidelines in international statistical manuals

At present Chile's BOP is compiled based mainly on *BPM4*. However, there are several projects at an advanced stage where compilation of the balance of payments is based on the conceptual framework of the *BPM5*, but these data have not yet been disseminated.

2.2 Scope

2.2.1 Transactions/institutional units are covered in the balance of payments statistics in conformity with international statistical guidelines.

In general terms most significant resident-nonresident transactions as specified in the *BPM5* are covered in Chile's balance of payments statistics, although the data are disseminated with the break down that follows the *BPM4*. As indicated, current projects are geared to *BPM5*.

2.3 Classification/sectorization

2.3.1 Classification/sectorization systems implemented in the BOP statistics

BOP data transmitted to STA for publication broadly conform to the requirements of *BPM5*. However, the data currently disseminated by Chile on its publications are classified

according to *BPM4*, with some elements of *BPM5*, such as accrued interest for international reserves and other foreign assets.

2.4 Basis for recording

2.4.1 BOP accounting is done on an accrual basis.

In general, BOP accounting is done on an accrual basis, and change of ownership as specified in the *BPM5* is the principle governing the recognition of most transactions and their time of recording. However, there are some areas where accounting is done on a different basis:

- a) Transactions of goods are at invoice value and are recorded according to customs documents, i.e., at the time they legally enter the country, rather than at the time of change in ownership.
- b) Portfolio and other investment income are generally recorded on a cash basis. In exceptional cases, such as interest rescheduling, the due for payment criteria has been used.
- c) Unrequited transfers such as grants are recorded when foreign exchange is converted to pesos.

The above deviations from accrual accounting are clearly identified.

2.4.2 Market prices are used to value flows and stocks

Some transactions on the capital account are not valued at market prices, for example, short-term loans and other investment assets are calculated as a difference between stocks, which are at book value. The flows can be significant; how different these flows are from what they would be at market values, is not known.

3. Accuracy and reliability

3.1 Source data

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

The primary data sources for Chile's balance of payments statistics are (1) the BCCH's foreign exchange transactions system; (2) customs documents from which data are obtained and adjusted to bring them closer to the recommendations of *BPM5* with respect to coverage, valuation and timing; (3) the BCCH's external debt reporting system (4) government sources; (5) administrative records of the BCCH; (6) the BCCH's balance sheet, and (7) estimates.

There are also some secondary sources, which complement or replace the information from the primary sources, especially the estimates. Among them are direct information from

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enterprises and surveys. Surveys are used to compile the following balance of payments accounts: *Passenger services' credit entries* are estimated from annual surveys of resident carriers (i.e., shipping companies and airlines). *Travel account surveys* are carried out three times a year (high, mid-and low season) by SERNATUR and cover tourism for incoming and outgoing travelers. *Communication services*, both credit and debit entries are obtained from annual surveys. Additional surveys are done to compile data on royalties, intellectual property, transport, and computing services. Direct investment surveys, covering both direct investment in Chile and abroad are carried out on a yearly basis. In some cases the surveys are censuses, in others they are based on samples. Among the first are communications, air and sea transportation, computer services, and, of the latter, direct investment in Chile, direct investment abroad, royalties, foreign trade commissions.

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

Data derived from primary sources are adjusted to improve the coverage. Imports are adjusted to include imports that do not generate customs declarations, such as military and free zone imports, financial account transactions conducted through the informal exchange market for which there is partial data or estimates, supplementary data obtained from financial statements to improve coverage of information on direct investment flows. The definitions, scope and classifications used in source data are broadly in line with *BPM4* and in some limited cases with the *BPM5*.

3.1.3 Source data are timely

There are lags in the timeliness of some balance of payments components and as a consequence some items are estimated and are revised when the source information becomes available.

3.2 Statistical techniques

3.2.1 Data collection and other statistical procedures employ sound statistical methods

In most cases where database management procedures exist; computerized edit checks are used to identify coding and other errors in source data, and to minimize processing errors of editing and coding. Also, Internet media are used occasionally to conduct surveys.

3.3 Assessment and validation

3.3.1 Source data are routinely assessed.

Surveys are assessed and revised periodically to meet new requirements. For example, the coverage and procedures of the tourism survey were reviewed, new requirements identified and the budget for the survey was increased. In addition, the SERNATUR-BCCH agreement is being modified to include the provision of all components required by *BPM5*.

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3.3.2 Main intermediate results are validated against other information where available.

Secondary data sources are used to supplement and verify data compiled from the primary sources. For example, information of the Superintendences of Securities and Insurance, and of the Pension System are used to verify and supplement information from the surveys and from BCCH's records. Financial statements of foreign capital investment funds are used to verify data on capital flows and investment income. Moreover, some significant financial transactions are verified against publicly available information (such as from newspapers).

3.3.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated and made available to inform users.

BCCH staff is alert to the level of the errors and omissions and seek to find the sources of the errors, understand them by crosschecks between the balance of payments statistics and monetary statistics and between current, and financial accounts of the balance of payments.

The behavior of the BOP statistical time series is routinely assessed against related series, e.g., financial flows and income data are validated with the corresponding stocks data, freight earnings are validated with the export and import levels, balance sheet of the transport enterprises are crosschecked with the customs information, and reported data on external debt of the banking system are crosschecked with the corresponding monetary statistics.

Data reconciliation of selected transactions with major trading partners are not routinely carried out. However, because of Chile's participation in the Apec Trade and Investment Data Review Working Group, and its present participation in the Mercosur Group, limited comparisons with partner country data have been done. Within the Mercosur Group, it is currently working to adopt uniform criteria on compilation of direct investment data and other selected data categories among the participating countries.

The External Statistics Department of the International Management Division has been working to reconcile and explain discrepancies between debt statistics of the BCCH and the BIS. This research will be published in the new *Manual on External Debt*, a joint publication of the IMF, BIRF, OECD, and BIS.

3.4 Revision studies

3.4.1 Studies/analyses of revisions are undertaken routinely by the BOP compilation agency, and/or any public/private institution, and the results are used to inform statistical processes.

Validations are routine as part of internal quality control exercises. The public is informed of the results when the revisions are significant. Preliminary data are identified, and are accompanied by commentaries that emphasize the provisional character of the data.

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4. Serviceability

4.1 Relevance

4.1.1 Processes to monitor the relevance of and practical utility of existing statistics in meeting users' needs are in place.

As an organ of the Official Statistical Service, the BCCH is a member of the National Statistical Council, which operates as a professional advisory and opinion-forming body representing the interests of society and data users under the Statistics Law of the INE. Data collection procedures are defined in the National Statistics Plan (PNRE), which is presented to the President of the Republic every year.

In addition, the BCCH's Balance of Payments and the External Statistics Departments are in contact with analysts and researchers and take into account their concerns and suggestions.

4.2.1 Periodicity follows SDDS requirements.

The periodicity of the balance of payments statistics meets SDDS requirements.

Balance of payments statistics are compiled quarterly, a summary version is published in the BCCH *Economic and Financial Report* and in the monthly *Bulletin*. The detailed data are published in the *Chilean Balance of Payments* (Balanza de Pagos de Chile). The latest Yearbook, published in August 1999, carried revised quarterly data for 1989-1998. The BCCH's *Economic and Financial Report* and the *Chilean Balance of Payments* have been posted on the BCCH's website. The 2000 yearbook will carry detailed quarterly data for 1991—2000.

4.2.2 Timeliness follows SDDS requirements.

Chile disseminates preliminary data on the balance of payments and its components with a maximum lag of three months. Data become final after 15 months. The final data are published in the annual publication the *Chilean Balance of Payments*.

4.3 Consistency

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

Quarterly BOP data in electronic files dating from 1989 are available in time series format in the *Chilean Balance of Payments*. Hard copy versions, with quarterly data since 1983 are also available. This publication also contains comments on methodological aspects (e.g., treatment of debt rescheduling. and conversion) rather than comments on changes in economic trends. The Memoria Annual and the Monetary Policy Report contain comments on economic trends during the reference year. The latter also includes prospects for the next two years.

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4.3.2 Statistics are internally consistent

The BCCH compiles and disseminates quarterly BOP for most components but some components are estimated based on an annual survey, (e.g., quarterly data on direct investment are estimated using assumptions or coefficients of specific model or survey).

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

BOP statistics are consistent with money and banking statistics as part of the integrated BCCH Information System, and in general with BCCH external debt statistics²⁴. Although there is no full reconciliation with the national accounts, the BCCH is implementing a project to effect reconciliation beginning with data for 2000.

International reserves are published as flows in the balance of payments, and as stocks as well as valuation changes (prices and exchange rates) affecting reserves; valuation changes in the case of external debt are disseminated only for external debt data with an original term of more than one year, and cover only exchange rate valuation.

4.4 Revision policy and practice

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

The data are provisional when first released and are revised during the fifteen months following the first release when more accurate source information becomes available. Final annual data are published in the Chilean *Balance of Payments*. The public is informed of major changes in methodology through a press release, conference and/or a note or article published in one of the BCCH's publications.

4.4.2 Preliminary data are clearly identified

Preliminary data are clearly identified in the text and in the tables.

²⁴ Balance of payments statistics use the *BPM5* concept of residence, but external debt statistics uses the concept of nationality in a limited number of cases.

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5. Accessibility

5.1 Data accessibility

5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons.

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Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons. Chile disseminates data based on *BPM4*. Dissemination under *BPM5* is scheduled for June 2002.

5.1.2 Dissemination of media and formats are adequate.

Data are released simultaneously to all interested parties by publishing the *Economic and Financial Report* (Informe Económico y Financiero), a twice-monthly publication of the BCCH. The report is available for sale to the public, between 9:00 and 9:30 A.M. on the days on which it is released (the first working day after the 7th and the 23rd of each month). Subscribers may pick up their copies at that time or have them mailed directly. The *Economic and Financial Report* is posted on the BCCH's Internet website (http://www.bcentral.cl/Publications) at the same time.

The *Chilean Balance of Payments* publication carries quarterly data for the last 10 years. It is available on the BCCH's website, and in hard copy and CD for a fee.

Export Indices 1986-1999 (Indices de Exportación 1986-1999) carries detailed information on price and volume export indices.

Chilean External Debt contains detailed information on external debt according to original maturity, residency, type of creditors, economic sectors, etc.; and on debt service (time series and projections).

The BCCH has also developed a database of economic statistics for about 400 data categories with time series data beginning in 1990. The database has been available to the public since May 2001 and is arranged by topics to facilitate search.

5.1.3 Statistics are released on a pre-announced schedule.

An advance release calendar that provides a quarter-ahead approximate release dates, and then a precise release date, at the end of the week prior to the date of release, is published on the BCCH's Internet website (http://www.bcentral.cl/Indicadores/calendario/release.htm) in English and Spanish. A notice indicating that the calendar is released only on the Internet is published in each issue of the BCCH's twice monthly publication *Economic and Financial Report*.

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

The data are released simultaneously to all interested parties by publishing the *Economic and Financial Report* (Informe Económico y Financiero) a twice-monthly publication of the BCCH. The report is available for sale to the public, between 9:00 and 9:30 A.M. on the days on which it is released (the 7th and the 23rd of each month, or the following working days if these are holidays). Subscribers may pick up their copies at that time or have them mailed directly.

The data are posted on the BCCH's Internet website (http://www.bcentral.cl) in three different ways: a) simultaneously, by posting the *Economic and Financial Report* itself (click on Publications); b) simultaneously, by updating the electronic data bases (click on economic data/economic data); and c) during the day, by updating the Chile's National Summary Data page (NSDP), where the data on components prescribed by the SDDS are released (the NSDP may be accessed through the IMF's Internet website http://dsbb.imf.org/).

5.1.5 Nonpublished (but not confidential) sub-aggregates are made available upon request Only BOP published data are available.

5.2 Metadata accessibility

5.2.1 Documents on concepts, scope, classifications, basis of recording, data sources and statistical techniques are available, and differences in international standards are annotated.

The Chilean Balance of Payments publication disseminated by the BCCH carries a brief description of the methodology and sources used in preparing the final annual data. A draft paper with more detailed explanations is available in the BCCH's library. The Balance of Payments General Note and Calculation Procedures, May 1991 (Balanza de Pagos: Nociones Generales y Procedimientos de Cálculo en Chile, Mayo 1991), is registered as document N° 382.17 C813 in the BCCH's library (Phone: 56 2 6702258). Photocopies are available upon request from the Publications Department (Phone: 56 2 6702479).

A Summary methodology on Balance of Payments has been sent to the IMF for review and dissemination on the DSBB. Chile reviews and updates regularly the SDDS summary methodology statements and base page metadata posted on the DSBB. Additionally, a Summary on Methodology, updated yearly, is published in the IMF's *Balance of Payments Statistics Yearbook*.

5.2.2 Different levels of detail are provided depending on intended audience and type of collection.

Detailed information on all components of the BOP (current, capital and financial accounts) are available on the various publications and on the BCCH's Internet website.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized.

A contact person is identified on the DSBB.

5.3.2 Catalogues of publications and other services, along with information on any fees, are widely available.

The Internet is the primary dissemination format for BOP data and metadata. All dissemination formats are identified on the DSBB. Hard copy catalogues of publications and other services are not produced by the BCCH.

Data Quality Assessment Framework—Generic Framework (Draft as of end March 2001)

Quality Dimensions	Elements	Indicators
Prerequisites of quality ¹¹	0.1 Legal and institutional environment – The environment is supportive of statistics.	0.1.1 The responsibility for collecting, processing, and disseminating statistics is clearly specified. 0.1.2 Data sharing and coordination among data producing agencies are adequate. 0.1.3 Respondents' data are to be kept confidential and used for statistical purposes only. 0.1.4 Statistical reporting is ensured through legal mandate and/or measures implemented to encourage voluntary response.
	0.2 Resources – Resources are commensurate with needs of statistical programs.	0.2.1 Staff, financial, and computing resources are commensurate with institutional programs. 0.2.2 Measures to ensure efficient use of resources are implemented.
	0.3 Quality awareness – Quality is recognized as a cornerstone of statistical work.	0.3.1 Processes are in place to focus on quality, to monitor the quality of the collection, processing, and dissemination of statistics, to acknowledge and deal with tradeoffs within quality, and to guide planning for existing and emerging needs.
1. Integrity The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.	1.1 Professionalism – Professionalism in statistical policies and practices is a guiding principle.	1.1.1 Statistics are compiled on an impartial basis. 1.1.2 Choices of sources and statistical techniques are informed solely by statistical considerations. 1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.
	1.2 Transparency - Statistical policies and practices are transparent.	1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public. 1.2.2 Internal governmental access to statistics prior to their release is publicly identified. 1.2.3 Products of statistical agencies/units are clearly identified as such. 1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.
	1.3 Ethical standards – Policies and practices are guided by ethical standards.	1.3.1 Guidelines for staff behavior are clear and publicized.

Quality Dimensions	Elements	Indicators
2. Methodological soundness The methodological basis for the statistics	2.1 Concepts and definitions – Concepts and definitions used are in accord with standard statistical frameworks.	2.1.1 The overall structure in terms of concepts and definitions follows international standards, guidelines, or agreed practices: see dataset-specific framework.
follows international standards, guidelines, or agreed practices.	2.2 Scope – The scope is in accord with internationally accepted standards.	2.2.1 The scope is broadly consistent with international standards, guidelines, or agreed practices: see dataset-specific framework.
	2.3 Classification/sectorization – Classification and sectorization systems are in accord with internationally accepted standards.	2.3.1 Classification/ sectorization systems used are broadly consistent with international standards, guidelines, or a agreed practices: see dataset-specific framework.
	2.4 Basis for recording — Flows and stocks are valued and recorded according to internationally accepted standards.	 2.4.1 Market prices are used to value flows and stocks. 2.4.2 Recording is done on an accrual basis. 2.4.3 Grossing/netting procedures are broadly consistent with international standards, guidelines, or agreed practices.
3. Accuracy and reliability Source data and statistical techniques are sound, and output data sufficiently portray reality.	3.1 Source data — Source data available provide an adequate basis to compile statistics.	3.1.1 Source data are collected from comprehensive data collection programs that take into account country-specific conditions. 3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required. 3.1.3 Source data are timely.
reality.	3.2 Statistical techniques — Statistical techniques employed conform with sound statistical procedures.	3.2.1 Data compilation employs sound statistical techniques. 3.2.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.
	3.3 Assessment and validation – Source data are regularly assessed and results validated.	3.3.1 Source data—including censuses, sample surveys and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and non-sampling error; the results of the assessments are monitored and made available to guide planning. 3.3.2 Main intermediate results are validated against other information where applicable. 3.3.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated and made available to guide users.
	3.4 Revision studies – Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.	3.4.1 Studies and analyses of revisions are carried out routinely and used to inform statistical processes. 3.4.2 Revision studies and analyses are made public and used to guide data users.

Quality Dimensions	Elements	Indicators
4. Serviceability	4.1 Relevance – Statistics cover	4.1.1 Processes to monitor the relevance and
Statistics are relevant,	relevant information on the subject field.	practical utility of existing statistics in meeting users' needs are in place.
timely, consistent, and follow a predictable revisions policy.	4.2 Timeliness and periodicity – Timeliness and periodicity follow internationally accepted dissemination standards.	4.2.1 Periodicity follows dissemination standards. 4.2.2 Timeliness follows dissemination standards.
	4.3 Consistency – Statistics are consistent over time, internally, and with major data systems.	 4.3.1 Statistics are consistent or reconcilable over a reasonable period of time. 4.3.2 Statistics are internally consistent (e.g., accounting identities observed). 4.3.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.
	4.4 Revision policy and practice – Data revisions follow a regular and publicized procedure.	 4.4.1 Revisions follow a regular, well-established and transparent schedule. 4.4.2 Preliminary data are clearly identified. 4.4.3 Studies and analyses of revisions are carried out routinely and made public.
5. Accessibility Data and metadata are easily available and assistance to users is adequate.	5.1 Data accessibility – Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.	5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts). 5.1.2 Dissemination media and formats are adequate. 5.1.3 Statistics are released on a pre-announced schedule. 5.1.4 Statistics are made available to all users at the same time. 5.1.5 Non-published (but non-confidential) subaggregates are made available upon request.
	5.2 Metadata accessibility – Up- to-date and pertinent metadata are made available.	5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from international standards are annotated. 5.2.2 Different levels of detail are provided depending on intended audience and type of collection.
	5.3 Assistance to users – Prompt and knowledgeable support service is available.	5.3.1 Contact person for each subject field is publicized.5.3.2 Catalogues of publications, documents, and other services, including information on any charges, are widely available.

¹¹ The elements and indicators included here bring together the "pointers to quality" that are applicable across the five identified dimensions of data quality.

Central Bank of Chile Economic Research Department

Survey of Domestic Users of Chilean Economic Statistics Sample: 27 (14 Analysts and 13 Journalists)

		, ,			r			
1. Coverage	1.1 In general, are you satisfied with		Yes	No	No Answer			
	the coverage of Chile's economic	Α	10	4	O ANSWEL			
	statistics?	J		_	ō			
	1.2 Do the statistics cover all the	Α	8	6	0			
	areas that are relevant for economic	J	11	2	0			
	analysis?							
	1.3 Is the level of detail sufficient,	A	8	5	1			
	for example for data on:	J	12	0	1			
	a) the Balance of payments?							
	Comments on Balance of Payments	3			,			
Comments from	The data should be released faster.							
Journalists								
Comments from	1. Some data should be released with a quart	ter.	ly and a	annual				
Analysts	periodicity. For example, the data on short				sets.			
]	, in the second of the second							
	In general, it would be useful to identify							
	spending of the current and capital account detailed breakdown for the financial service							
	useful, so that a clear distinction between							
	payments could be made. We would like to see							
	freight account, insurance and travel expenses.							
	It would be useful to have a more detailed be components of international reserves.	ore	akdown (or the				
	2. There should be more detailed breakdowns and capital account. In particular, more in disseminated on the investment of internation Central bank intervention on the exchange management.	nfo: ona	rmation l reserv	should /es, and	be d the			
	3. More information is needed for the serv	ice	and cap	oital a	ccounts.			
	4. The data are disseminated with a long la	ag.						
	5. More background on the capital flows.							
	6. Financial and non-financial services the net basis should be disseminated on a gross			seminate	ed on a			
	7. I do not use the information.							
	8. We could use a more detailed quarterly balance of payments with a shorter lag.							
			Yes	No	No			
	1.3 Is the level of detail sufficient,				answer			
	for example for data on:	Α	13	0	1			
	a) Monetary?	J	12	0	1			
				1				

	Comments on Monetary				
Comments from Journalists	No comments				
Comments from Analysts	1. The coverage is very comprehensive and the periodically.	he inform	nation is	released	
	2. I do not use the information.				
	1.3 Is the level of detail sufficient, for example for data on:	Yes A 5	No 8	No answer	
	c)Fiscal?	J 6	6	1	
	Comments on the Fiscal Sector	<u> </u>		<u>I</u>	
Comments from Journalists	1. Fiscal statistics disseminated are not swith other Latin American countries and it more up-to-date.	will be b		-	
	 More detailed would be better, for examp It is possible to obtain more detailed transactions. 		iscal		
Comments from Analysts	1. More detail of the quarterly tax revenue accrual basis instead of cash.	s. Fisca	al accoun	ts on an	
	2. The fiscal information is given on a budgetary basis and not economic. To be more precise, there is no balance between the accounts over and under the line. In other words, more information on the structural and adjusted budget would be preferable.				
	3. Missing information on public enterprise	s.			
	4. Information is delayed and not very deta	iled.			
	5. Missing time series and homogeneous data relevant breakdowns on the fiscal statistic general government and the rest of the publ	s, distin	nguishing	-	
	6. Missing details of the different levels administration.	of the p	oublic		
	7. Missing information by tax, details of privatizations, debt and other lines that we			tes.	
	8. I do not use the information.				
	9. Fiscal statistics are disseminated with little information on the accounting criter.		and there	is very	
	d) Is the institutional coverage satisfactory? For example that of the	Yes		No answer	
	fiscal data?	A 3 J 5	8 7	3	

Com	ments on the institutional coverage of the	Fiscal o	iata		
Comments from Journalists	1. There is good analysis of the fiscal data, background.	but it sl	hould h	ave more	
Comments from Analysts	2. More up-to-date information is always more convenient. 1. Missing consolidated data with the same timeliness as that of the central government data and of the public enterprises. Data on the municipalities are published with a long lag. In addition, a more detailed breakdown for the consolidated public sector, where the fiscal effects of the law on the copper, the municipalities, the enterprises, etc. 2. The data on the central government are released periodically, but not the data on the nonfinancial public sector.				
	 There is too much lag in disseminating the data on municipalities. Time series data are missing and there is no homogeneous breakdown of fiscal statistics, distinguishing between the central government and the rest of the public sector. Additional background on the treasurer's flows. Better periodicity and timeliness. The information on municipalities, public enterprises, and decentralized organizations is very scarce. 				
2.Periodicity and timeliness	8. I do not use the information. 2.1 In general, are you satisfied with the frequency of Chilean statistics? A		No 1 1	No Answer 0 0	
	2.2 Is there any type of statistics that you would prefer with higher frequency?	4	10 5	0	
	Comments on Periodicity				
Comments from Journalists	1. Balance of payments and real exchange rate 2. A detailed breakdown of the Indicador N Económico (IMACEC) on the production sect	Mensual			

Comments from Analysts	1. It would be very positive to obtain fiscal data with monthly periodicity as well as monthly data for IMACEC.						
	2. IMACEC by sector, 30 days.						
	3. Fiscal, monthly. Detailed balance of payments, monthly.						
	4. Sectoral data should be more detailed, more components or coverage, and monthly periodicity.						
	5. Private consumption, monthly series.						
	6. Fiscal data and balance of payments, mon-	thly	period	licity.			
	7. Forward exchange rate and interest rate a system, monthly. This would permit forecas				-		
	8. Fiscal collection (monthly), corrections weeks), and balance of payments (monthly).	s to					
	2.3 In general, do you consider that		Yes	No	No Answer		
	the data are disseminated with the	A	11	3	0		
	appropriate timeliness?	J	10	2	1		
	Comments on Timeliness						
Comments from Journalists	1. Date of publication is fine, but sometimet.	es t	the prec	ise hou	ır is not		
	2. Chile is one of the most punctual countrol of the data.	ies					
	2.4 Is there any type of statistics		Yes	ОИ	No Answer		
	that you would prefer with higher timeliness?	A	7	5	2		
	Comments on Timeliness			<u> </u>			
Comments from	1. The national accounts.						
Journalists	2. Balance of payments and real exchange ra	te.					
	3. Merchandise trade and international rese	rves	5 .				
	4. The new series on national accounts.						
	5. The IMACEC series.						
	6. Yes, IMACEC.						
	Comments on Timeliness						
Comments from Analyst	1. The fiscal statistics as well as the Gross National Product should be disseminated with a 1-2 months lag and not as it occurs now, 3-4 months. The same with Balance of payments.						
	2. The fiscal data and Gross National Product (national accounts).						
	3. The Production index IMACEC, 30 days.						
	4. National accounts, fiscal data and baland more than 30 days of timeliness.	ce o	of payme	nts wit	th no		
	5. Balance of payments, and quarterly GNP.						

3. Advance release calendars	The Central Bank publishes advance relemain economic statistics, where advance dissemination of statistics 3 months in Economic and Financial Report {Informe and its Internet website http://www.bcent Económicos) 3.1 Do you find this service/procedure	nc ad Ecc	otice is lvance. onómico	s giver (In th y Fina	n of the ne anciero}	
	useful?	A	13	0	Answer 1	
		J	13	ő	. 0	
	3.2 In your experience, are advance release calendars adhered	A	Yes	No 2	No Answer 2	
	to/respected?	J	13	0	0	
	Comments on Advance release calend	lar	3	·	•	
Comments from Journalists	Except national accounts.					
Comments from Analyst	1. In the case of national accounts, it was will be disseminated in March and then the the end of the year. 2. Very little periodicity in its use.	anr rele	nounced ease was	that the postpo	ne data oned to	
4. National Summary Data Page (NSDP)	. National National summary data page: The Central Bank publishes on the Internet a summary data page aimed to foreign users (or					
	4.1 In your opinion, do you find this service/procedure useful?	A	Yes 14 10	No 0 0	No Answer 0 3	
5.Methodology	5.1 Are methodological concepts on which the indicators are based clearly defined?	A	Yes 7	No 6	No Answer I	
		Ĵ	10	2	1	
	Comments on Methodology, Question					
Comments from Journalists	1. Some data, deposits for example, need to users.	be	calcula	ted by	the	
2. There is one point that is not exactly related to methodology, it would be good to improve the presentation of the corrections or finalization of time series data. I am thinking basically on the two most relevant in my case. IMACEC and Merchandise trade. It would be very good that when the table is disseminated, a note be included informing the corrections that have been done. Data changes for the last 3 months are easily recognized, but changes for previous periods are very difficult to find.					or the two would be uded for the	

Comments from Analyst	 The methodology of calculating IMACEC and quarterly GNP and their updates are not sufficiently transparent in some sectors (mining, telecommunications, agriculture, and services). More on balance of payments. There are cases where the concepts are not clear enough. 						
	4. I do not use the information.						
	5. Missing major details on how IMACEC is measured. It is necessary to disseminate at least some type of disaggregation of the monthly IMACEC data.						
	6. The methodology used for IMACEC is not very clear some sectors. The methodology used for employment could be discussed further. It is not clear that it is being measured adequately.						
	5.2 Is the analytic framework on which		Yes	No	No Answer		
	the statistical information is based, clear and easy to understand (general	A	11	2	1		
	focus, and/or specific international	J	8	3	2		
	quidelines)?						
	Comments on Methodology, Question	5.	2				
Comments from Journalists	1. There are cases when the analytic framewo	rk	is ver	ry tech	nical and		
	2. There are times I believe I need to	len.	ou doma		nt a		
Comments from	1. Basically, the analytic framework of IMAG						
Analysts	are not seasonally adjusted.						
6. Quality	6.1 How do you rate, in general, the quality of Chilean statistics?		Very good	Good	Not satisfacto ry		
		A		11	0		
		J		8 No	0		
	6.2 Do you consider that, in general, the methodology on which Chilean		Yes		No Answer		
	economic statistics are based is solid?	A J	1 1	0	0		
- T- 2 24 MW mm	6.3 Do you consider that, in general,		Yes	No	No Answer		
	the methodology on which Chilean economic statistics are based is	A		1	0		
	clearly explained and described?	J	8	5	0		
	6.4 In general, are Chilean statistics		Yes	No	No Answer		
	reliable?	A	1	0	0		
	6.5 In what areas do you think there	J	11 Yes	No	0 No Answer		
	is room for improvement of Chilean	A	13	0	0		
	statistics?	J	11	2	0		

Subject area	Quality of Methodology	Dissemination of Methodology	Reliability
National accounts	1J+2a	3J+ 7a	2J + 1a
Employment	5J+ 5a	4J + 5a	5J + 5a
Wages and salaries	0J + 5a	. 1J + 7a	1J +5a
Consumer prices	1J + 0a	2J + 2a	1J + 1a
Wholesale prices	1J + 3a	2J + 3a	1J + 2a
Public Finance: 1. General government operations 1/	2J + 3a	6 J + 7a	6J + 4a
2. Central government operations 2/	1J + 2a	7J + 6 a	4J + 3a
3. Central government debt	2J + 2a	7J + 6 a	3J + 3a
Monetary aggregates	1J+0a	0J + 0a	0J + 0a
Interest rates	2J+ 1 a	0J + 1a	1J + 0a
Central Bank of Chile Balance sheet	0J +2a	3J+4a	0J + 0a
Deposit money banks consolidated balance sheet	0J + 0a	2J + 1 a	1J + 0a
Balance of payments	0J + 1a	1J + 6 a	0J+ 1a
International reserves and foreign currency and liquidity	0J + 1 a	1J + 4 a	0J+ 2a
Trade balance, services and Transfers	1J + 1 a	2J + 2a	0J + 1a
Foreign Investment	0J +2a	1J + 4a	0J +2a
Foreign debt	1J + 0a	1J + 1 a	0J + 0a
Exchange rate	0J + 2a	2J+3a	0J + 1a

1/ General government: Nonfinancial public sector except public enterprises. 2/ Central government: General government, except the municipalities.

6.6 In your opinion, how do Chilean statistics		Very favorably	Favorably	Disfavorably
compare with those of other emerging	A	2	12	0
economies?	J	4	8	0
6.7 In your opinion, how do Chilean statistics		Very favorably	Favorably	Disfavorably
compare with those of other South American	A	8	5	1
countries?	J	5	7	0

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Central Bank of Chile Economic Research Department

Survey of External Users of Chilean Economic Statistics Sample: 4 Analysts

	1 1 Ta and and 1 and and application of the	Yes	No	No Answe
1. Coverage	1.1 In general, are you satisfied with			
	the coverage of Chile's economic statistics?	4	0	. 0
	1.2 Do the statistics cover all the	3	1	0
	1	٥		
	areas that are relevant for economic			
	analysis?	2	2	0
	1.3 Is the level of detail sufficient,	2		"
	for example for data on:			
	a) National accounts?			L
	Comments on National accounts			
. Quarterly	national accounts' datademand side includi	ng disa	ggrega	tion of
_	consumption in private/public.	_	,, ,	
	The standard for the st			
. I would li	ke more information on internal demand if po	ssible.		
	1.3 Is the level of detail sufficient,	3	1	0
	for example for data on:			
	b) Balance of payments?			
	Comments on Balance of payment	.s	l	1
	n inconsistency between external debt and ba			
	be useful to better explain why such differ	ences e	xist (most
ikely coverag	e or definitions).			
	1.3 Is the level of detail sufficient,	3	1	0
	· ·			
	for example for data on:		-	
	<pre>for example for data on: c) Monetary?</pre>			
		1	3	0
	c) Monetary?	1	3	0
	c) Monetary? 1.3 Is the level of detail sufficient,	1	3	0
	<pre>c) Monetary? 1.3 Is the level of detail sufficient, for example for data on:</pre>	1	3	0
I would like	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data		3	0
. I would like	<pre>c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal?</pre>		3	0
	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data e more detail on public debt (domestic and extern	al).	3	0
	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data	al).	3	0
. Quarterly	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data e more detail on public debt (domestic and extern	al).		
. Quarterly . Financial	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data e more detail on public debt (domestic and externation) below-the-line" (i.e. financing) detailed descriptions between government and the Copper	al). ata. stabili	zation	fund ar
. Quarterly . Financial ot clear beca	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data more detail on public debt (domestic and externation) detailed described between government and the Copper use information is presented on a net basis	al). ata. stabili	zation	fund ar
. Quarterly . Financial ot clear beca	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data e more detail on public debt (domestic and externation) below-the-line" (i.e. financing) detailed descriptions between government and the Copper	al). ata. stabili	zation	fund ar
. Quarterly . Financial ot clear becanformation on	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data e more detail on public debt (domestic and extern below-the-line" (i.e. financing) detailed description of the copper use information is presented on a net basis stocks flows on the Copper stab. Fund.	al). ata. stabili and the	zation re is	fund ar
. Quarterly . Financial ot clear beca nformation on . Need clarif	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data more detail on public debt (domestic and extern below-the-line" (i.e. financing) detailed d relations between government and the Copper use information is presented on a net basis stocks flows on the Copper stab. Fund. ication on Public domestic debt: (a) Clearly	al). ata. stabili and the	zation re is	fund ar
. Quarterly . Financial ot clear beca nformation on . Need clarif tock of domes	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data more detail on public debt (domestic and extern below-the-line" (i.e. financing) detailed d relations between government and the Copper use information is presented on a net basis stocks flows on the Copper stab. Fund. ication on Public domestic debt: (a) Clearly tic public debt that belongs to the central	al). ata. stabili and the state bank (o	zation re is what i pen ma	fund ar no
. Quarterly . Financial ot clear beca nformation on . Need clarif tock of domes perations) an	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data more detail on public debt (domestic and extern below-the-line" (i.e. financing) detailed d relations between government and the Copper use information is presented on a net basis stocks flows on the Copper stab. Fund. ication on Public domestic debt: (a) Clearly tic public debt that belongs to the central d the government, including historical stock	al). ata. stabili and the state bank (o	zation re is what i pen ma ; perh	fund ar no s the irket laps a
. Quarterly . Financial ot clear beca nformation on . Need clarif tock of domes perations) an	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data more detail on public debt (domestic and externation) detailed described and externations between government and the Copper use information is presented on a net basis stocks flows on the Copper stab. Fund. ication on Public domestic debt: (a) Clearly tic public debt that belongs to the central definition of which debt is BCCH debt due to the	al). ata. stabili and the state bank (o	zation re is what i pen ma ; perh cial c	fund ar no s the arket laps a crisis of
. Quarterly . Financial ot clear beca nformation on . Need clarif tock of domes perations) an urther clarif he mid-1980 w	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data more detail on public debt (domestic and externation) detailed described and externations between government and the Copper use information is presented on a net basis stocks flows on the Copper stab. Fund. ication on Public domestic debt: (a) Clearly tic public debt that belongs to the central definition of which debt is BCCH debt due to the ill also be useful (b) publish domestic debt.	al). ata. stabili and the state bank (o	zation re is what i pen ma ; perh cial c	fund ar no s the arket laps a crisis of
. Quarterly c. Financial of clear becanformation on . Need clarifitock of domes perations) an urther clarif he mid-1980 w	c) Monetary? 1.3 Is the level of detail sufficient, for example for data on: d) Fiscal? Comments on Fiscal data more detail on public debt (domestic and externation) detailed described and externations between government and the Copper use information is presented on a net basis stocks flows on the Copper stab. Fund. ication on Public domestic debt: (a) Clearly tic public debt that belongs to the central definition of which debt is BCCH debt due to the	al). ata. stabili and the state bank (o	zation re is what i pen ma ; perh cial c	fund ar no s the arket laps a crisis of

satisfactory? For example that of the

fiscal data?

Comments on the institutional coverage of the Fiscal data

1. Severe delays in some parts of the Public sector (municipalities) but institutional coverage is good. Data are not disseminated on the future debt service on external or domestic public debt. It would be very useful to have both historical (at least 10 years) and expected (based on stock as of the end of the most recent past quarter, for example) quarterly or at least annual data on stocks and flows (including amortization, interest, disbursements) for the next 10 years.

2. Periodicity		Yes	No	No Answer
and timeliness	2.1 n general, are you satisfied with the frequency of Chilean statistics?	4	0	0
	2.2 Is there any type of statistics that you would prefer with higher frequency?	2	2	0

Comments on Periodicity

1. It is sometimes frustrating to download info from your web-site because there is not too much detail. For example when downloading the trade balance what you have there is just the number but it will be very useful if you could actually put the whole thing there including exports/imports by major products, not just the number.

	2.3 In general, do you consider that the	Yes	No	No Answer		
	data are disseminated with the	3	1	0		
	appropriate timeliness?					
	2.4 Is there any type of statistics that	Yes	No	No Answer		
	you would prefer with higher timeliness?	1	3	0		
3. Advance	The Central Bank publishes advance release calendars for its					
release	main economic statistics, where advance no		_			
calendars	dissemination of statistics 3 months in advance. (In the					
	Economic and Financial Report (Informe Económico y Financie:					
	and its Internet website http://www.bcentral.cl/ , click Indica					
	Económicos))					
		Yes	No	No Answer		
	3.1 Do you find this service/procedure	4	0	0		
	useful?					
		<u> </u>				
		Yes	No	No Answer		
	3.2 In your experience, are advance	4	0	0		
	release calendars adhered to/respected?					
 Methodology 	4.1 Are methodological concepts on which	Yes	No	No Answer		
	the indicators are based clearly defined?	3	1	0		
		[

Comments on Methodology, Question 4.1

1. Why are there always differences between the definition the Central Bank and the IMF and private analysts have on the central bank's quasi-fiscal deficit? It will be useful if the Central Bank of Chile could publish both the accounting and the economic definition of the Q-fiscal definition (i.e. I guess most of the difference comes from valuation adjustments).

	4.2 Is the analytic framework on which the statistical information is based,	Yes	No	No Answer
	clear and easy to understand (general focus, and/or specific international guidelines)?	4	0	0
5. Quality	6.1 How do you rate, in general, the quality of Chilean statistics?	Very good	Good	Not satisfac tory
		4	0	0
	6.2 Do you consider that, in general, the methodology on which Chilean	Yes	No	No Answer
	economic statistics are based is solid?	4	0	0
	6.3 Do you consider that, in general,	Yes	No	No Answer
	the methodology on which Chilean economic statistics are based is clearly explained and described?	4	0	0
	6.4 In general, are Chilean statistics reliable?	Yes	No	No Answer
		4	0	0
	6.5 In what areas do you think there is re of Chilean statistics?	oom for	improv	rement

Subject area	Quality of Methodology	Dissemination of Methodology	Reliability		
National accounts					
Employment		:			
Wages and salaries		•			
Consumer prices					
Wholesale prices					
Public Finance: 1. General government operations 1/	1	2	·		
2. Central government operations 2/	1	2			
3. Central government debt	2	2			
Monetary aggregates					
Interest rates					
Central Bank of Chile Balance sheet					
Deposit money banks consolidated balance sheet					
Balance of payments					
International reserves and foreign currency and liquidity					
Trade balance, services and Transfers					
Foreign Investment					
Foreign debt					
Exchange rate					

- 1/ General government: Nonfinancial public sector except public enterprises. 2/ Central government: General government, except the municipalities.

5.6 In your opinion, how do Chilean statistics compare with those of other Western Hemisphere countries?	Very favorably 3	Favorably 1	Disfavorably 0
5.7 In your opinion, how do Chilean statistics compare with those of other South American countries?	Very favorably 3	Favorably 1	Disfavorably 0

Chile—Report on the Observance of Standards and Codes Response by the Authorities July 16, 2001

- 1. The Budget Directorate, the Central Bank of Chile, and the National Statistical Institute agree on the importance of wide and timely dissemination of good quality data. Proper statistics contribute decisively to the efficiency of public policies, as well as support timely adjustments in the face of changes in the economic environment. Good policies and efficient markets require an institutional framework that guarantees economic agents access to information in order to promote appropriate private decisions.
- 2. Chile adhered early to the efforts of the international community aimed at transparency. We believe that a properly informed public opinion guarantees public honesty but is also a powerful stimulus for the formulation of responsible and successful policies. The Central Bank of Chile, the Budget Directorate, and the National Statistical Institute, which are Chile's main economic data producers, share these principles. This common vision underlies Chile's early subscription of the IMF's Special Data Dissemination Standard (SDDS) in 1997, and the commitment of these agencies to the tasks involved.
- 3. We believe that the wide and non-discriminatory dissemination of data is an important pillar of transparency. Another important and mutually reinforced component is the disclosure of the decision making process that underpins economic policies. We also agree that data dissemination should be accompanied by commitment to its quality. This aspect goes beyond the accuracy of the figures but also encompasses the dissemination of methodologies, the coverage of topics that are of interest to data users, and the provision of timely and equal access to data.
- 4. In recent years, the Budget Directorate, the Central Bank, and the National Statistical Institute have performed important steps to reach these objectives. Subscription to the SDDS has contributed to these achievements, which are also a result of the transparency and public service policies that are pursued by these institutions. Examples of these steps are the release, beginning in 1993, of the Budget Directorate's annual *Public Finances Statistics*, which contains detailed data on Central Government and Public Sector Corporations, and also, in recent years, the data on the revenues and expenses of the municipalities. With these publications Chile returned to the annual releasing of internationally comparable fiscal statistics, which had been interrupted for more than a decade. The National Statistical Institute made a significant accomplishment when it implemented the new CPI with base December 1998, which was designed using modern statistical approaches, and whose methodological aspects were widely disseminated. Additionally, the Institute has achieved a great deal of transparency in its dissemination policies by applying strict rules that guarantee the release of the data in dates and hours communicated in advance. The Central Bank, on the other hand, has carried out important methodological innovations in Balance of Payments statistics. At the same time it has increased the coverage of the quarterly GDP data and, regarding financial statistics, has published improved series of the analytic accounts of the banking system and of the central bank. The three institutions have taken advantage of

technological developments to facilitate the prompt availability of their growing supply of data.

- 5. When we requested that the IMF carry out a Report on the Observance of Standards and Codes (ROSC) with reference to the SDDS and the quality of the data, we thought that it could drive new achievements regarding transparency. First, it would provide an impartial view of Chile's statistics stance, along with a series of recommendations that could validate or reorient our projects. Second, but no less important, it would strengthen the instances of interinstitutional coordination on these matters.
- 6. The work developed by the IMF meets our expectations, providing analysis that supports most of our projects and suggesting other objectives and procedures worth considering. Among them, obtaining data on private consumption disaggregated by purpose of expenditure would contribute to the analysis of economic prospects. The recommendation to carry out periodic consultations with data users in order to evaluate the performance and improvements of the statistical services and to define future objectives is also interesting. No less important is the recommendation that ratified our staff proposal to promote and maintain an updated directory of establishments. Besides its immediate utility, the project will encourage coordination and cooperation between the Central Bank and the National Statistical Institute. Similarly, the recommendation regarding reconciliation procedures among fiscal, monetary and balance of payments data, works on not only data accuracy but also on promoting synergy between the Central Bank and the Budget Directorate. These and the remaining recommendations will be especially considered in the formulation of the future Annual Statistical Plan, and in the specific programs of our institutions.
- 7. The recommendation of giving more accurate statistical treatment to the expenditures of the armed forces subject to reservation under a legal provision is difficult to fully implement because a national consensus to change our legislation will be required. Within the existing legal framework, these operations are being recorded, or reported, with the highest degree possible of methodological soundness.
- 8. Finally, we would like to point out that the survey addressed to e-users, which was carried out in the context of this report and which aimed at providing relevant information for IMF evaluation, may have some biases and limitations due to the urgency with which the consultation was done. However, despite this drawback, it is possible to extract some useful conclusions out of it; such as the need to reinforce the procedures on methodological dissemination, and to give the users greater detail of some statistics on a more timely basis.