

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

This Report on the Observance of Standards and Codes on the Data Module for **Malawi** was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on **October 29, 2004**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of **Malawi** or the Executive Board of the IMF.

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

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MALAWI

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

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Contents	Page
Acronyms	2
Executive Summary	3
I. Introduction	5
II. Data Dissemination Practices and the General Data Dissemination System	5
Data dimension: coverage, periodicity, and timeliness	6
Quality dimension	6
Integrity dimension	6
Access dimension	7
Plans for improvement	7
III. Summary Assessment of Data Quality	7
Prerequisites of quality	9
Integrity	10
Methodological soundness	11
Accuracy and reliability	13
Serviceability	15
Accessibility	16
IV. Staff's Recommendations	19
General Recommendations	19
National Accounts	20
Consumer Price Index	21
Government Finance Statistics	21
Monetary Statistics	22
Balance of Payments Statistics	22
Text Tables	
1. Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the General Data Dissemination System	8
2. Data Quality Assessment Framework—Summary Presentation of Results	18

ACRONYMS

<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
BOP	Balance of Payments Statistics
<i>BPM4</i>	<i>Balance of Payments Manual, fourth edition</i>
<i>BPM5</i>	<i>Balance of Payments Manual, fifth edition</i>
CPI	Consumer Price Index
DSBB	Dissemination Standards Bulletin Board
DQAF	Data Quality Assessment Framework
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual of Government Finance Statistics 1986</i>
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
IFMIS	Integrated Financial Management Information System
IHS	Integrated Household Survey
ILO	International Labor Organization
IMF	International Monetary Fund
<i>ISIC</i>	<i>International Standard Industrial Classification of all Economic Activities</i>
MEPD	Ministry of Economic Planning and Development
MS	Monetary Statistics
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MOF	Ministry of Finance
MS	Monetary Statistics
NA	National Accounts
NSO	National Statistical Office
RBM	Reserve Bank of Malawi
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard

EXECUTIVE SUMMARY

This Report on the Observance of Standards and Codes (ROSC) data module provides a review of Malawi's data dissemination practices against the International Monetary Fund's (IMF) General Data Dissemination System (GDDS), complemented by the in-depth assessment of the quality of five macroeconomic data sets: the national accounts, consumer price index (CPI), government finance, monetary, and balance of payments statistics. The National Statistical Office (NSO), produces the national accounts, price indices, and balance of payments; the Ministry of Finance (MOF), produces government finance statistics (GFS); and the Reserve Bank of Malawi (RBM), produces monetary statistics. The assessment was carried out by a mission¹ from the Statistics Department that visited Lilongwe and Zomba, Malawi during September 1–16, 2003.

Malawi is making great efforts to strengthen its statistical system. This is despite recently tightened resource constraints applied to the compilation and dissemination of statistics. A significant offset to these constraints in developing new data sources has been provided through the technical assistance programs of foreign donors. Against a background of a weak and deteriorating statistical infrastructure, Malawi has been participating in the GDDS since 2002, reflecting the authorities' strong commitment to adhere to internationally accepted good practices.

The mission reached the following main conclusions:

- **GDDS participation:** With the exception of the fiscal sector, Malawi publishes statistics for most of the *comprehensive frameworks*, *data categories*, and *indicators* recommended in the GDDS. For the fiscal sector, although data on central government operations are published, there is a lack of comprehensive framework data on central and general government. For the real sector, statistics are not compiled on employment, unemployment, earnings, and indices of agricultural production. For the external sector, data on public sector external debt with appropriate breakdowns and government guaranteed debt are not disseminated. Data are not published for most of the *encouraged extensions* to the GDDS. Most of the data disseminated follow the GDDS recommendations for *periodicity* but less so for *timeliness*.
- **Prerequisites of quality:** While the legal and institutional framework for the production of the five macroeconomic data sets of all institutions responsible for collecting, processing, and disseminating macroeconomic statistics is broadly adequate, there is scope for strengthening the provisions of the Statistics Act. There is a need to formally define the responsibility of the MOF for the compilation and dissemination of timely and comprehensive central and general government statistics and recognize this responsibility and that of the RBM for monetary statistics. Resources are not adequate to support the statistical work of the NSO in national

¹ The mission team was led by Mr. Simon Quin and comprised Ms. Lorraine Ocampos, Mr. Satoru Hagino, Ms. Lisbeth Rivas (all STA), Messrs. Louis Venter and David Collins (experts), and Ms. Maria Delia M. Araneta (STA—Administrative Assistant).

accounts, consumer price index, and balance of payments statistics. Better coordination is needed between the NSO and the RBM to ensure that resources committed by the RBM for balance of payments compilation are effectively utilized. In general, there are high standards of quality awareness in the NSO, MOF, and RBM. For this reason, the NSO is keenly aware that a lack of resources and weakening data sources have resulted in some slippage in the quality of data over time. In the MOF, there is a growing awareness of the usefulness of a more comprehensive framework for government finance statistics.

- **Integrity:** In general, all agencies demonstrate professionalism and have taken steps to make this known and pursue transparency in their statistical policies and practices. However, because of the manner in which data are released, for all these three agencies the government has prior access to releases of most new data (an unintended consequence of not using press releases or electronic release for new data, with the notable exception of the consumer price index). This is not widely known. All agencies provide adequate ethical guidelines to their staff, although these need to be promoted more actively in the NSO.
- **Methodological soundness:** The concepts and definitions of the consumer price index follow international standards, as broadly do the national accounts, balance of payments, and monetary statistics. For government finance statistics, the published data for central government operations are incomplete and hence not in accordance with the framework of the GFSM 1986 for cash reporting, and data for general government are not compiled. There are deficiencies in the scope of national accounts (for small scale establishments, informal and hidden activities), balance of payments statistics (for incomplete coverage of transactions between residents and nonresidents), government finance statistics (for consolidated central and general government accounts) and monetary statistics (for some deposit-taking financial institutions). The classification/sectorization of consumer price index and monetary statistics is generally sound, but international standards are not fully followed in government finance, national accounts and balance of payments statistics. The basis for recording of national accounts, consumer price index, government finance, monetary and balance of payments statistics broadly follows international standards.
- **Accuracy and reliability:** While source data are broadly accurate for consumer price index and monetary statistics, there are significant deficiencies in national accounts, government finance, and balance of payments statistics. The statistical techniques used for compiling government finance and monetary statistics are sound, but there remains scope for improvement in national accounts statistics. The use of statistical techniques in balance of payments statistics is limited by the absence of statistical surveys. Shortcomings in data sources and lack of resources hinder the assessment and validation of national accounts and balance of payments statistics. Revision studies for national accounts, consumer price index and balance of payments statistics are limited and not undertaken on a formal basis.
- **Serviceability:** Consultation with users on the relevance of macroeconomic statistics is undertaken by the NSO in support of its *Strategic Plan 2002–2006*. There is no consultation by the RBM and MOF with users outside the government. The

disseminated data appear to broadly meet users' needs for consumer price index and monetary statistics and less so for national accounts, government finance, and balance of payments statistics. Statistics are generally internally consistent with the exception of monthly/quarterly government finance statistics, and are largely consistent over time, although breaks in series are not always clearly identified. The periodicity of statistics generally meets the GDDS recommendations and timeliness less so in some key areas (national accounts and balance of payments statistics). Revision policies and practices for national accounts, consumer price index, government finance, and balance of payments statistics are not made public.

- **Accessibility:** Except for the consumer price index, data are not easily accessible to users due to significant deficiencies in the use of press releases and websites for the release of statistical information and in publicizing the availability (including terms and conditions) of detailed unpublished statistics. The publication of different national accounts, balance of payments, and government finance statistics by the NSO, RBM, and Ministry of Economic Planning and Development (MEPD) is confusing, notably as the statistics are not released on a pre-announced schedule and this is further exacerbated by the lack of simultaneous access. A consequence is that government users appear to have prior access. Apart from monetary statistics, there is little current information on sources, concepts, and methods other than the summary metadata posted on the Dissemination Standards Bulletin Board (DSBB) on the IMF website in fulfillment of the recommendations of the GDDS. To assist users, contact information is in most cases provided by the statistics compiling agencies and they respond to users' requests.

I. INTRODUCTION

1. The data module of this Report on Observance of Standards and Codes (ROSC) provides a summary of Malawi's practices with respect to the General Data Dissemination System (GDDS) and is complemented by a detailed assessment of the quality of national accounts, consumer price index, and government finance, monetary, and balance of payments statistics using the July 2001 vintage of the Data Quality Assessment Framework (DQAF) developed by the IMF's Statistics Department (part I). The underlying detailed assessments (part III) are based on information provided before and during an IMF staff mission of September 1–16, 2003. The assessments are also based on publicly available information, as well as consultation with data users through a survey, followed by a face-to-face meeting during the mission.
2. Section II of the data module includes an overview of the GDDS, in which Malawi is a participant, and an assessment of Malawi's data dissemination practices against the best practices contained in it. Section III presents a summary assessment of the quality of the five macroeconomic datasets, following the dataset-specific assessment frameworks. Finally, Section IV sets out recommendations to achieve further improvements in Malawi's statistics.

II. DATA DISSEMINATION PRACTICES AND THE GENERAL DATA DISSEMINATION SYSTEM

3. Macroeconomic and socio-demographic statistics in Malawi are mainly produced by three institutions: (i) the National Statistical Office (NSO), responsible for the national accounts, price indices, balance of payments, other economic, and socio-demographic

statistics; (ii) the Ministry of Finance (MOF), responsible for government finance and public debt statistics; and (iii) the Reserve Bank of Malawi (RBM), responsible for monetary and domestic government debt statistics. Access to macroeconomic data and socio-demographic indicators is provided through several publications and at the following internet websites:

- National Statistical Office: <http://www.nso.malawi.net>
- Reserve Bank of Malawi: <http://www.resbank.malawi.net>
- Ministry of Finance: <http://www.finance.malawi.gov.mw>²

Data dimension: coverage, periodicity, and timeliness

4. With the exception of the fiscal sector, Malawi publishes statistics for most of the comprehensive frameworks, data categories and indicators recommended in the GDDS. For the fiscal sector, the coverage of central and general government is deficient. For the real sector, statistics are not published on employment, unemployment, earnings, and indices of agricultural production. For the external sector, data are not disseminated for public sector external debt with appropriate breakdowns and for government guaranteed debt. Data are not published for most of the *encouraged extensions* in the GDDS. Deficiencies in the *coverage* of five of the statistics in the GDDS framework are discussed further in Section III.

5. Most GDDS recommendations are met for periodicity and less so for timeliness. In the case of constant price gross domestic product (GDP) and balance of payments statistics, the timeliness recommendations are close to being met through the publication of preliminary data by the NSO.

Quality dimension

6. The quality dimension of the GDDS is particularly important given that the primary focus is on improvements in data quality over time. The assessment of quality by users requires the dissemination of (i) documentation on methodology and data sources, and (ii) component detail and reconciliation with related data.

7. Some documentation on the methodology and data sources for most macroeconomic statistics exists in Malawi but is not made available to users. Non-published (but non-confidential) data are made available to users on request, though this facility is not widely known.

Integrity dimension

8. The GDDS recommends the disclosure of the legal framework for the collection, processing, and dissemination of data, including provisions for the confidentiality of respondents' data.

9. The terms and conditions under which most official statistics are compiled and disseminated in Malawi are according to a legal framework that supports the integrity of the

² This website was not operational at the time of the mission.

statistical system, although these are not widely publicized. The posting of metadata containing such information on Malawi's GDDS website has gone some way toward bringing together relevant information in a location that is readily accessible to users.

Access dimension

10. The access dimension entails two practices that facilitate ready and equal access to data: (i) simultaneous release to all parties, and (ii) dissemination of advance release calendars.

11. With the exception of the consumer price index, there is a widespread practice followed by the NSO, MOF, and RBM, of giving the government access to data before they are disseminated publicly in electronic or hard copy form. The terms of these pre-embargo access arrangements are not made public. Advance release calendars are not disseminated, though the NSO, MOF, and RBM follow well established internal release schedules that are known to users. However, as many users rely on hard copy publications, access may be handicapped when these publications are delayed, as they often are.

Plans for improvement

12. The authorities' current plans for improving data quality already encompass all macroeconomic statistics covered by the GDDS and relate to important dimensions of the overall quality of these statistics. A fuller integration of these plans in the framework of the GDDS, now under way, is contributing substantially to improving all dimensions of data quality in an integrated manner and in accordance with internationally accepted standards. Some of these plans are dependent on technical assistance being available and on additional budgeted resources.

III. SUMMARY ASSESSMENT OF DATA QUALITY

13. Interest in assessing the quality of data derives from the objectives of complementing the GDDS with a consideration of the quality of the data being disseminated and of focusing more closely on the quality of the data that underpin surveillance of countries' economic policies. Against this background, the Statistics Department of the International Monetary Fund (IMF) has developed a tool to provide a structure and a common language to assess data quality. The DQAF comprises a generic framework and a set of dataset-specific frameworks. The frameworks cover five dimensions of data quality—integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility—and a set of prerequisites.

14. An assessment of five macroeconomic datasets (national accounts, consumer price index, government finance, monetary, and the balance of payments statistics) was conducted using the frame of reference provided by the dataset-specific DQAF. The information resulting from the application of this framework to the statistical system is presented below, following the structure of the DQAF. 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 1–5)] in the Detailed Assessment.

Table 1. Malawi: Overview of Current Practices Regarding Coverage, Periodicity, and Timeliness of Data Compared to the General Data Dissemination System

GDDS Data Category	Coverage (meets GDDS)	Periodicity		Timeliness	
		GDDS	Malawi	GDDS	Malawi
COMPREHENSIVE FRAMEWORK					
Real sector: National Accounts	Yes	A	A	10-14 mths	Constant price: 12 mths Current price: 18 mths.
Fiscal sector: Central govt. operations	NA	A		6-9 mths	
General govt. operations	NA	A		6-9 mths	
Central govt. debt	Yes	A	A	6-9 mths	6-9 mths
Financial sector: Broad money survey	Yes	M	M	2-3 mths	1 mth and 10 days
External sector: Balance of payments	Yes	A	A	6-9 mths	12 mths
DATA CATEGORIES AND INDICATORS					
Real Sector					
GDP (nominal and real)	Yes	A	A	6-9 mths	Constant price: 12 mths Current price: 18 mths
<i>GNI, capital formation, saving</i>	<i>Yes</i>	<i>A</i>	<i>A</i>	<i>6-9 mths</i>	<i>18 mths (12 mths for capital formation)</i>
Manufacturing or industrial production index/indices	Yes	M	M	6 weeks	4-5 mths
Primary commodity, agricultural, or other indices, as relevant	NA	A		3 mths	
Consumer price index	Yes	M	M	1-2 mths	2 weeks
<i>Producer price index</i>	<i>NA</i>	<i>M</i>		<i>1-2 mths</i>	
Employment	NA	A		6-9 mths	
Unemployment	NA	A		6-9 mths	
Wages/earnings (all sectors)	NA	A		6-9 mths	
Fiscal Sector					
Central govt. budgetary aggregates: revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency)	Yes	Q	Q	3 mths	3 mths
<i>Interest payments</i>	<i>Yes</i>	<i>Q</i>	<i>Q</i>	<i>3 mths</i>	<i>3 mths</i>
Central govt. debt: domestic and foreign debt, as relevant, with appropriate breakdowns (debt holder, instrument, currency)	Yes 1/	A	Q	3-6 mths	3 mths
<i>Government guaranteed debt</i>	<i>NA</i>	<i>Q</i>		<i>3-6 mths</i>	
Financial Sector					
Broad money and credit aggregates	Yes	M	M	1-3 mths	1 mth and 10 days
Central bank aggregates	Yes	M	M	1-2 mths	1 mth and 10 days
Short- and long-term govt. security rates, policy variable rate	Yes	M	M	high freq.	1 mth and 10 days
<i>Money or interbank market rates and a range of deposit and lending rates</i>	<i>Yes</i>	<i>M</i>	<i>M</i>	<i>high freq.</i>	<i>1 mth and 10 days</i>
<i>Share price index, as relevant</i>	<i>Yes</i>	<i>M</i>	<i>M</i>	<i>high freq.</i>	<i>1 mth and 10 days</i>
External Sector					
Balance of payments aggregates	Yes	A	A	6-9 mths	12 mths
Public and publicly guaranteed external debt outstanding, with maturity breakdown	Yes 2/	Q	A	3-6 mths	6-9 mths
Public and publicly guaranteed debt service schedule	Yes 3/	6 mths	Q	6-9 mths	3 mths
<i>Private external debt not publicly guaranteed</i>	<i>NA</i>	<i>A</i>		<i>6-9 mths</i>	
Gross official reserves denominated in U.S. dollars	Yes	M	M	1-4 weeks	1 mth and 10 days
<i>Reserve-related liabilities</i>	<i>Yes</i>	<i>M</i>	<i>M</i>	<i>1-4 weeks</i>	<i>3 months</i>
Total exports and total imports	Yes	M	M	8-12 weeks	2-3 mths
<i>Major commodity breakdowns with longer time lapse</i>	<i>Yes</i>	<i>M</i>	<i>M</i>	<i>8-12 weeks</i>	<i>2-3 mths</i>
Exchange rates: spot rates	Yes	Daily	M	high freq.	30-45 days

Italics indicate encouraged categories

NA = not available

1/ Comprises domestic debt only (appropriate breakdowns for foreign debt are not disseminated).

2/ Comprises central government and parastatal debt. No information is available on government guaranteed debt or on maturity breakdown.

3/ Comprises central government and parastatal debt. No information is available on government guaranteed debt.

15. Malawi's macroeconomic statistics and statistical base are considered by the IMF's African Department to be broadly accurate for effective surveillance. Nevertheless, the mission identified shortcomings in some statistical practices and datasets that may detract from the accurate and timely analysis of economic and financial policies.

Prerequisites of quality

This category in the DQAF identifies conditions within the agency in charge of producing statistics that have an impact on data quality. The elements within the category refer to the legal and institutional environment, resources, and quality awareness.

16. The **NSO** has a broadly adequate legal and institutional environment for the production of statistics. The Statistics Act of 1967 sets out clearly responsibility for the relevant statistical work, provides for data sharing and coordination, calls for the NSO to take steps to ensure that appropriate statistical methodology and international statistical standards are followed by other government agencies that compile statistics, protects the confidentiality of individual responses, and makes legal provision for statistical reporting, including the authority to mandate the completion of statistical surveys. Financial penalties for non, late, or incorrect response are nominal and have not been applied. The functions specified for the NSO are rather ambitious and go beyond the current capacity of the office. A decentralized statistical system has evolved, including statistical offices in the ministries, other public entities, and in the regions, that has tended to lead to duplication of effort and delays in data collection. These issues are currently being addressed through a review of the Statistics Act. Coordination between the principal data producing agencies and government's users is undertaken through quarterly (or as needed) meetings of high level and technical committees established by the NSO, comprising representatives of key government agencies (the RBM, MOF, MEPD, and the NSO). Notwithstanding these efforts, underlying user concerns about the untimeliness of national accounts and balance of payments statistics and the lack of an agreed cycle of revisions, revision methodology, and the absence of published revision studies, has led to conflicting and unexplained national accounts and balance of payments statistics being published by the RBM, MEPD, and NSO. This appears to result from a continuous process of revision by the Technical Committee on National Accounts and Balance of Payment Statistics (chaired by the NSO). The publication of different and unexplained statistics by these agencies may give the impression to users that more than one agency is producing statistics (a concern expressed in the user survey conducted by the mission).

17. The staff and financial resources allocated to the **NSO** for the basic task of collecting, processing, and compiling national accounts, consumer price index, and balance of payments statistics have become inadequate in recent years, a reflection of budget cuts. In balance of payments statistics, the situation prompted the RBM to establish a balance of payments compilation unit. Computing resources in the NSO are generally also inadequate, and especially inadequate for the source data collection for the national accounts. Although donor assistance has been critical for the development of new data sources, the lack of resources in the NSO has resulted in new data sources not being maintained on a regular basis. NSO staff are generally well motivated and there is low staff turnover despite low salaries (compared with the RBM and private sector financial institutions). The importance of quality awareness is underscored in the NSO's mission statement and in its Strategic Plan. In addition, the Technical Committee on National Accounts and Balance of Payments Statistics has served to provide oversight and

guidance on quality issues of national accounts and balance of payments statistics, but there is no equivalent review body for the consumer price index. There is a general awareness that lack of resources and weakening data sources have resulted in some slippage in quality and timeliness over time notwithstanding significant financial and technical support provided by foreign donors. User surveys have been undertaken periodically in support of the Strategic Plan.

18. The Finance and Audit Act of 1966 provides the **MOF** with an adequate legal and institutional environment for the collection, processing, and dissemination of fiscal data for budget monitoring and management purposes. The Act does not require the compilation and dissemination of government finance statistics. The yet to be implemented Public Finance Management Act states that all financial reports, financial statements, and associated information and accounting procedures required by the Act shall be in accordance with generally accepted accounting practices. Dedicated staff resources have only recently been allocated by the MOF for the compilation of government finance statistics, which will be adequate when the staff are trained. Computing resources are adequate. Quality awareness in the production of fiscal data for budget monitoring and management purposes is generally good. Tradeoffs are made between timeliness and the degree of detail in published fiscal data. No formal user surveys are undertaken to obtain feedback on data quality.

19. Under the Reserve Bank of Malawi Act of 1989, the **RBM** has an adequate legal and institutional environment for the collection and processing of monetary statistics. Although there is no specific mandate in the RBM Act to publish monetary statistics, the RBM has assumed responsibility. The RBM has established a unified data collection system for statistical and supervisory purposes. The RBM has also established a balance of payments compilation unit that works in conjunction with the NSO. However, there is no clear mandate for the work of this unit. Staff and computing resources are adequate, salaries are competitive, and steps have been taken to ensure that resources are used efficiently. Although the RBM does not have a mission statement for its statistical work, processes are in place to enhance quality awareness and staff are encouraged to undertake research studies on monetary statistics. No formal user surveys are undertaken to obtain feedback on data quality.

Integrity

Integrity identifies features that support firm adherence to objectivity in the collection, compilation, and dissemination of statistics so as to maintain users' confidence. Elements refer to the professionalism and ethical standards that should guide policies and practices, which should be reinforced by their transparency.

20. To provide greater assurance to the public of the integrity of the NSO, efforts are under way to establish the NSO as a semi-autonomous body rather than one reporting to a government minister. Regarding professionalism, it is understood that staff are free from political or other influences in choosing the most appropriate sources and methods. Because of resource constraints and compilation pressures, there are limited opportunities for staff to participate in conferences or prepare methodological papers. To draw attention to professional standards, the Commissioner of the NSO responds to erroneous interpretations of statistics published by the NSO. Press releases and conferences on the release of key statistics are not normally conducted (with the exception of updates to the consumer price index in which there is great public interest). Transparency is underscored through the Statistics Act, which governs the terms and

conditions under which statistics are collected and is publicly available. However, the Statistics Act and codes of conduct of the NSO are not published on the NSO's website or in its publications. The arrangements for the release of data through publications rather than through press releases or electronic release would appear to indicate that government users have prior access, through the Technical Committee on National Accounts and Balance of Payments Statistics, to new releases of national accounts and balance of payments statistics. These arrangements for prior access are not widely known. Ethical standards are laid down in the code of conduct for civil servants though this is not actively promoted to staff.

21. The professionalism of **MOF** staff is underscored by the compilation of fiscal statistics on an impartial basis using available data sources, mainly data generated by the accounting system, and it is understood that staff are free from political or other influence in choosing the most appropriate sources and methods for compiling budget execution data. However, there is insufficient recognition of user needs for timely government finance statistics data that correspond fully with international standards. The transparency of fiscal data reported to Parliament is ensured through the Finance and Audit Act, which establishes the terms and conditions under which these data are produced. The MOF relies on the statistical publications of the NSO and RBM for the wider dissemination of fiscal statistics, although the scope of the fiscal tables published by the NSO and RBM is limited. Because of the manner in which data are released, the members of the Technical Committee on National Accounts and Balance of Payments Statistics have prior access to fiscal data, which is not widely known. Ethical standards are laid down in the code of conduct for civil servants and the Treasury code of conduct for accounting officers and staff are made aware of this.

22. The statutory provisions under which the **RBM** compiles monetary statistics are adequate to ensure the professionalism of staff in the compilation of statistics. Adequate attention is given to the training of staff who are encouraged to write research papers on statistical matters. As a matter of policy, the RBM seeks to prevent misinterpretation or misuse of statistics in the press or other media. In practice, such instances are rare. Transparency is not fully assured since the terms and conditions under which monetary statistics are compiled are not prescribed. Although there is no formal policy of giving government or other privileged users prior access to newly released data, this is the unintended consequence of current dissemination practices of not having press releases. Ethical standards are laid down in the RBM's code of conduct and staff are made aware of this.

Methodological soundness

Methodological soundness refers to the application of international standards, guidelines, and agreed practices. Application of such standards, which are specific to the dataset, is indicative of the soundness of the data and fosters international comparability. Elements refer to the basic building blocks of concepts and definitions, scope, classification and sectorization, and basis for recording.

23. **National accounts statistics** broadly follow the concepts and definitions of the *System of National Accounts 1968 (1968 SNA)* and have not been updated to take into account the recommendations of the *System of National Accounts 1993 (1993 SNA)*. The scope of the accounts and classification/sectorization systems broadly follow the *1968 SNA* and the second revision of the *International Standard Industrial Classification of All Economic Activities (ISIC*

Rev 2), and do not take into account subsequent revisions to these standards or other international classification standards (such as those for the classification of the functions of government and individual consumption by purpose). The accounts do not comprise the full set of recommended core tables. However, given the nature of the economy and resource constraints faced by the NSO, the scope of the national accounts is reasonable. For these accounts, the basis for recording is not completely in accordance with the international standards because government accounts and some external transactions are recorded on a cash basis, accounting periods of most enterprises are not on a calendar year basis, and agricultural work in progress is not recorded in the period it is produced.

24. The **consumer price index** follows the concepts and definitions recommended in the International Labor Organization (ILO) guidelines for a consumer price index and in the 1993 *SNA* for household consumption. The scope of the consumer price index is broadly consistent with international standards, covering all resident households living in both urban (covering four major cities) and rural areas and families of all sizes and income levels. Owner-occupied dwelling services are not measured. The classification of consumption activity follows international standards as does the basis for recording, where the weights and prices used in the index are based on actual market transactions inclusive of discounts and trade and transport margins, and prices are recorded on an accruals basis.

25. For **government finance statistics**, the annual budget publications largely adhere to the concepts and definitions recommended in the 1986 *Manual on Government Finance Statistics (GFSM 1986)* for revenue, expenditure, and financing. A migration path to *Government Financial Statistics Manual 2001 (GFSM 2001)* is under development. The scope of government accounts is weakened by the exclusion of extra-budgetary government agencies, the absence of a requirement to produce consolidated central or general government accounts, and the absence of a common accounting period for all statutory agencies. Investment expenditures financed by foreign grants outside the budget system are not adequately covered. The classification/sectorization of fiscal data for revenue, expenditure, and financing stocks and flows is not fully consistent with *GFSM 1986*. Thus, nontax revenue includes capital revenue, a detailed economic classification of development expenditure is not available, proceeds from privatization are not recorded in net lending, and domestic financing transactions include changes in arrears. The basis for recording is generally consistent with *GFSM 1986*.

26. The concepts and definitions of monetary statistics are not fully consistent with the *Monetary and Financial Statistics Manual (MFSM)*. The scope of the monetary survey, which is limited to the RBM and commercial banks, does not include other financial institutions that accept deposits. The classification/sectorization used appropriately distinguishes between resident and nonresident sectors but the subdivision of the resident sector does not provide sufficient information on the sectoral distribution of deposits and credits. The basis for recording does not fully relate to market valuation and accrual recording.

27. **Balance of payments statistics** are not in conformity with the concepts and definitions of *Balance of Payments Manual*, fifth edition (*BPM5*), though such data have been prepared and will be published. The scope of the balance of payments methodology is broadly consistent with international standards. The classification/sectorization used in published statistics are not in conformity with *BPM5*, although broadly in conformity with *Balance of Payments Manual*, fourth edition (*BPM4*). Direct investment is not included in the published statistics and net

foreign assets of commercial banks are included in reserve assets. The basis for recording is broadly in accordance with international standards, except that the source data for external debt and other foreign exchange transactions are on a cash basis and the data for changes in reserves and the net foreign assets of commercial banks are inclusive of valuation changes.

Accuracy and reliability

Accuracy and reliability identifies features that contribute to the goal that data portray reality. Elements refer to identified features of the source data, statistical techniques, and supporting assessments and validation.

28. The data sources used for the compilation of **national accounts statistics** are generally inadequate. Although the business information register is fragmented and outdated, the coverage of large scale units in the business register is good in terms of value-added. The basic data source, the annual economic surveys conducted from the register, require periodic visits to ensure an adequate response. In the event, response has been around 50 percent, although it has recently improved. Penalties for nonresponse are inadequate and not applied. The use of alternative data sources (such as monthly production surveys and semi-annual business intention surveys) is limited to certain sectors. For the agriculture sector, administrative data sources for crop estimates have proved unreliable. Periodic household surveys of employment, income, and expenditure are a critical source, but the last survey (for 1997/98) did not produce results considered adequate for national accounts compilation. As a result, despite significant efforts to ensure the adequacy of basic data sources, there are gaps in the data sources especially for medium and small scale establishments and informal and hidden activities (non-observed activities) that affect the coverage of national accounts. In consequence, there remains considerable dependence on administrative data sources for which the definitions, scope, and classifications are only distantly related to the needs of national accounts, and are frequently untimely. Timeliness has also been affected by the low capacity of the software systems and by delays due to the time required to review inconsistencies in reported data.

29. The statistical techniques used for national accounts compilation suffer from the use of an outdated base year (1994). In the production approach, there is widespread use of outdated fixed ratios to determine costs, output, and value-added. Goods for processing by foreign enterprises are underestimated due to the inter-company use of transfer prices. Data on output and intermediate consumption are not adjusted for holding gains/losses on inventories. Single deflation/extrapolation techniques are used to derive constant price value-added, which may have limitations, especially given the restricted array of indicators available (in the absence of a producer price index, the consumer price index is widely used as a deflator). On the expenditure side, only government final consumption expenditure, gross fixed capital formation, and net exports of goods and services are independently compiled. Private final household consumption expenditure is not estimated from available household survey data. Changes in inventories are not compiled although source data are available. Processes followed to assess and validate source, intermediate, and final data are generally limited. Statistical techniques used to estimate production by the informal economy are generally inappropriate (based on population growth) and constrained by limited and poor data sources. A supply and use table is not used to address discrepancies in the accounts. Revision studies of the magnitude and direction of revisions between preliminary and final data are investigated but not used to inform compilation processes.

30. The data sources available for the compilation of the **consumer price index** are generally good. However, there is no comprehensive and up-to-date business register of retail establishment units to provide a sampling frame for the selection of outlet samples, and internationally accepted sampling techniques are not used. The weights are reasonably current, being derived from the 1997/98 integrated household survey (IHS), which broadly matches the requirements of the consumer price index in terms of definition, scope, valuation, and time of recording. However, the accuracy of the IHS results is unknown. The consumer price index is compiled on a timely basis. The statistical techniques used are generally sound, though the approach to assessing quality changes needs improvement. Processes followed to assess and validate source, intermediate, and final data follow international standards, except that there is paucity of information to support the validation of the IHS results. No analysis of revisions has informed statistical processes.

31. The data sources available for the compilation of **government finance statistics** are generally adequate for recurrent revenue and expenditure but weak for foreign grants and development expenditure. There are doubts about the quality of published quarterly data as evidenced by the fact that an errors and omissions line is included that can amount to more than 50 percent of total financing (probably largely due to inconsistencies in the data coverage for revenue/expenditure, and the data for financing). The source data generally contain enough detail to allow classifications that correspond to international standards. Source data are generally timely, allowing preliminary monthly data on central government operations to be available to the MOF within four weeks after the end of the reference period. Detailed information on the economic and functional operations of statutory agencies and local governments is not available. Because the data sources are generally comprehensive, there is no need to use statistical techniques. For the most part, the assessment and validation of source, intermediate, and final data cannot be undertaken for secondary sources, but these data are generally of good quality on an annual basis. Revisions of data are made from time-to-time but no formal analysis of the size and direction of revisions is made.

32. The data sources available for the compilation of **monetary statistics** are generally adequate, and broadly approximate the required definitions, scope, classifications, valuation, and time of recording. There is room for improvement in sectorization (to identify local governments) and in the classification of financial instruments (to identify shares and other equity and repos). Data sources are not timely enough for four new commercial banks. The statistical techniques used in data processing and verification are appropriate. Assessment and validation of source, intermediate, and final data are not needed as source data are of high quality and data compilation procedures are computerized, although occasional discrepancies are investigated by the RBM's Accounts and Banking Supervision Departments. Revisions to published data are unusual and thus, no revision studies are undertaken.

33. The data sources available for the compilation of **balance of payments statistics** are inadequate. Given the very limited conduct of statistical surveys, data sources are weak for services and the financial account. There is a considerable reliance on administrative data sources that are not designed for balance of payments purposes. Summary preliminary statistics on foreign trade are generally available two-three months after the reference date. Data provided by commercial banks on sales of foreign exchange are generally timely, but do not closely follow balance of payments classifications, and unclassified service account transactions in this source are large. Efforts have been made to develop supplementary data sources, such as the semi-

annual business surveys. In the same vein, data from the Private Capital Flows Survey—not yet established on a regular basis- and the new manual and report forms to capture banks purchases and sales of foreign exchange adapted to *BPM5* classification—to be implemented—will provide a potential data source for estimating transactions in the current and financial account, such as inward direct and other investment in the private sector. In most cases, a considerable effort is required to adjust source data to approximate the definitions, scope, classification, valuation, and time of recording required. While most data sources are timely, there are significant delays in the receipt of some key data sources, such as data for tourism credits. Given the limited conduct of surveys, the scope for using statistical techniques is limited, and those that are used are not generally sound, such as the adjustments of trade returns from c.i.f. to f.o.b., and the lack of estimation of informal cross-border imports. There is little assessment and validation of source, intermediate, and final data because of the limitations of the data sources. Revision studies are not undertaken on a formal basis.

Serviceability

Serviceability focuses on practical aspects of how well a dataset meets users' needs. Elements refer to the extent to which data are relevant, produced, and disseminated in a timely fashion with appropriate periodicity, are consistent internally and with other datasets, and follow a predictable revision policy.

34. In general, the NSO monitors the relevance of **national accounts, consumer price index, and balance of payments statistics** through consultation with users that are undertaken in conjunction with updates to the NSO's Strategic Plan, and through regular meetings of the high level and technical coordination committees that the NSO has established to discuss data sharing and user needs with other government agencies. However, there is no advisory group representing non-government users that systematically assesses the relevance of official economic statistics or an established process of review to assess how well user needs are being met. While the periodicity of national accounts and balance of payments statistics meets GDDS recommendations, the timeliness does not. The periodicity of the consumer price index fully meets, and the timeliness exceeds, GDDS recommendations. National accounts, consumer price index, and balance of payments statistics are generally internally consistent and consistent over time. However, national accounts statistics suffer from the lack of a proper reconciliation framework (supply and use tables). In balance of payments and national accounts statistics, although efforts are made to adjust forward for data sources that are no longer available, or backward for new data sources, changes in data sources have adversely affected the consistency of data over time. The consumer price index is fully consistent, both internally and over time. Regarding revision policy and practice, although there is a revision schedule for national accounts and balance of payments statistics, this is not widely known and preliminary and revised data are not clearly indicated. Reasons for revisions are closely monitored within the NSO but are not documented or made public.

35. The MOF has no regular and formally established process of consultation with users on the relevance and usefulness of its **government finance statistics**, and feedback is obtained on an indirect ad hoc basis through individual user requests. The methodological basis and aggregated classification structure are not always sufficient to meet user needs. The timeliness and periodicity of the GDDS data categories and indicators for the budgetary central government operations fully meet GDDS recommendations, although monthly data are disseminated with a

two year lag. The annual data are internally consistent and inconsistencies over time can be ascribed to changes in the budget laws. Quarterly data are, however, inconsistent within the data set as reflected in large errors and omissions. Revisions are made routinely to monthly data and are incorporated in subsequent monthly/quarterly publications. Annual data are revised once the audited results for all government accounts are available. There is no specific release or formal announcement of revisions and preliminary data are not clearly identified as such.

36. For **monetary statistics**, although the RBM has not established a formal process of consultation with users to obtain feedback on the relevance of its statistics, they are generally considered to be relevant. The timeliness and periodicity of published data fully meet the GDDS recommendations. Monetary statistics are not fully internally consistent and not consistent over time, because the exclusion of four commercial banks from the monetary survey contributes to inconsistencies in inter-bank positions, and historical time series were not revised when the monetary survey was expanded in September 2001. There is no revision policy as monetary data are considered to be final.

Accessibility

Accessibility deals with the availability of information to users. Element refers to the extent to which data and metadata are clear and easily available and to which assistance to the users is adequate to help them find and use the data.

37. The dissemination of **national accounts, consumer price and balance of payments statistics** produced by the NSO is mainly ensured through its *Statistical Yearbook* and *Quarterly Statistical Bulletin*. However, these do not meet user needs for data accessibility. Delays in the release of national accounts and balance of payments statistics have resulted from lags in producing the omnibus publications due to the need to assemble the data and printing holdups. As a result, release dates are uncertain and not widely known (and not indicated in the publications). A consequence is that government users have prior access. At present, there are no press releases for national accounts and balance of payments statistics and data posted on the NSO's website are very aggregated and are not linked to more detailed sources. There is no analysis and little use of charts in the NSO's publications. Analysis of national accounts and balance of payments statistics is found in the statistical publications of the RBM and the MEPD. Unfortunately, the national accounts and balance of payments data in these publications are not easily reconciled with data published by the NSO. The publication of different and unexplained statistics by these agencies is confusing. In contrast, the use of press releases for the dissemination of the consumer price index, for which the release dates are widely known, fully meet the recommendations of the GDDS for data accessibility. These arrangements for prior access are not widely known. The consumer price index is released simultaneously to all users.

38. Regarding metadata accessibility for statistics published by the NSO, the metadata available for national accounts statistics is outdated and that for the consumer price index does not adequately inform users of the conceptual basis of the index and its conformity with international standards. Summary metadata for the consumer price index is included on the NSO's website, while data for national accounts, consumer price index, and balance of payments statistics are posted on the IMF's DSBB in fulfillment of Malawi's GDDS participation, which broadly meets the recommendations of the GDDS; however it is outdated for the consumer price

index. The NSO provides assistance to users through dedicated email addresses provided in its publications and on request to the Commissioner.

39. **Government finance statistics** produced by the MOF and disseminated through MEPD publications (for annual data) and through RBM and NSO publications (for monthly/quarterly data) do not meet user needs for data accessibility. The lack of detail as well as lack of government finance statistics time series does not facilitate interpretation and meaningful comparisons of the data. The unavailability of comprehensive data on the financial position of the general government can lead to an underestimation of the government's influence on the economy. There is no dedicated government finance statistics publication and the dissemination of monthly/quarterly data is inadequate, being very summary and comprising data that appear to be of a provisional nature. Although there is no pre-announced schedule for the release of fiscal data, annual data on government finances are released in the budget documents, the date of which is pre-announced. Monthly/quarterly releases of fiscal data are usually made available to members of the Technical Committee on National Accounts and Balance of Payments Statistics when available, which is likely to be in advance of the release of such data through the publications of the RBM and NSO. Non-published (but non-confidential) fiscal data are made available upon request. However, this service is not publicized and has been little used.

40. Regarding metadata accessibility for fiscal statistics produced by the MOF, summary metadata is posted on the IMF's DSBB, in fulfillment of Malawi's GDDS participation, which broadly meets the recommendations of the GDDS, and will be provided on the MOF's website now being developed. Assistance to users is provided through contact persons given on the IMF's website. However, this information is outdated.

41. The presentation of **monetary statistics** in the RBM's publications does not fully meet user needs for data accessibility. Data for the monetary survey and reserve money aggregates are presented in a clear manner together with charts and analysis. Data are released in the RBM's monthly and quarterly publications as well as electronically on the RBM's website. An advance release calendar is not disseminated, although release schedules are widely known. Non-published (but non-confidential) monetary data are made available upon request. However, this service is not publicized and has been rarely used. The RBM does not provide supporting metadata in its publications, but summary metadata is provided on the IMF's DSBB in fulfillment of Malawi's GDDS participation, which broadly meets the recommendations of the GDDS. However, there is no hyperlink to the DSBB on the RBM website. To provide assistance to users, the RBM has a dedicated email address posted on its website, but only the Director of the Research and Statistics Department is identified in the RBM's publications as a contact person with whom queries should be raised.

Table 2. Malawi: Data Quality Assessment Framework—Summary Presentation of Results

Element	National Accounts	Consumer Price Index	Producer Price Index	Government Finance Statistics	Monetary Statistics	Balance of Payments Statistics	Comments: Para. No. *	Plans for Improvement**
0. Prerequisites of quality								
0.1 Legal and institutional environment	LO	LO	NA	LO	LO	LO	NSO 16, 17 MOF 18 RBM 19	NSO: A project to review and update the Statistics Act is under way. NSO: Undertake staff recruitment and training program. Allocate and monitor funds through an internal expenditure management committee. NSO: Establish a unit for statistical standards and methods and conduct a new customer's satisfaction survey.
0.2 Resources	LNO	LNO	NA	LO	O	LNO		
0.3 Quality awareness	LO	LO	NA	LO	LO	LO		
1. Integrity								
1.1 Professionalism	O	O	NA	O	O	O	NSO 20	RBM: Educate commercial banks and other financial institutions on the importance of monetary statistics. NSO: Strengthen the Appointments and Disciplinary Committee. Improve interaction with the Civil Service Commission. Design and implement an induction program for staff.
1.2 Transparency	LO	LO	NA	LO	LO	LO	MOF 21	
1.3 Ethical standards	LO	LO	NA	O	O	LO	RBM 22	
2. Methodological soundness								
2.1 Concepts and definitions	LO	O	NA	LO	LO	LO	NA 23, BOP 27 CPI 24	NSO: Introduce 1993 <i>SNA</i> and <i>BPM5</i> methodologies. RBM: Expand monetary survey into depository corporations survey. MOF: Start compiling government finance statistics according to <i>GFSM 1986</i> and implement the <i>GFSM 2001</i> in planned stages. MOF: Incorporate the activities of extra-budgetary accounts. NSO/MOF: Introduce 1993 <i>SNA</i> and <i>BPM5</i> methodologies
2.2 Scope	LO	LO	NA	LNO	LO	LO		
2.3 Classification/sectorization	LNO	O	NA	LNO	LO	LNO	GFS 25	
2.4 Basis for recording	LO	O	NA	LO	LO	LO	MS 26	
3. Accuracy and reliability								
3.1 Source data	LNO	LO	NA	LNO	LO	LNO	NA 28, 29	NSO: Experience from the 1st IHS is guiding the 2nd IHS. Improved agriculture survey being implemented. Plans to develop a producer price index. Conduct studies, enhance the use of administrative data sources and conduct new surveys (cross-border trade, informal sector, workers remittances, and road transport). RBM: Separate local governments and shares and other equity in the banks' reports. NSO: The base year of NA will be changed to 1998. NSO: The accuracy of the 2nd IHS will be assessed. MOF: Continue the implementation of the IFMIS. MOF: Monitor expenditure in line ministries and reduce time lag for reporting actual expenditure. MOF: Restructure the loan details according to debt relief agreements.
3.2 Statistical techniques	LNO	LO	NA	O	O	LNO	CPI 30	
3.3 Assessment and validation of source data	LNO	LNO	NA	LO	O	LO	GFS 31 MS 32	
3.4 Assessment and validation of intermediate data and statistical outputs	LO	LO	NA	O	O	LO	BOP 33	
3.5 Revision studies	LO	LO	NA	LO	O	LO		
4. Serviceability								
4.1 Relevance	LO	LO	NA	LO	LO	LO	NA 34	NSO: Reduce the time lag in data dissemination. RBM: Revise historical series of expanded monetary survey. NSO, RBM and MOF: Announce well in advance any revision in statistical methodologies.
4.2 Timeliness and periodicity	LO	O	NA	O	LO	LO	CPI 34	
4.3 Consistency	LO	O	NA	LNO	LO	LO	GFS 35	
4.4 Revision policy and practice	LNO	LO	NA	LNO	O	LNO	MS 36 BOP 34	
5. Accessibility								
5.1 Data accessibility	LNO	O	NA	LNO	LO	LNO	NA 37, 38 MFS 41	NSO: Publish an updated handbook on sources and methods for national accounts and balance of payments statistics. RBM: Publish monetary statistics' methodology. MOF: Include methodological notes on government finance statistics in publications. NSO: Develop and maintain an electronic databank of statistics.
5.2 Metadata accessibility	LNO	LNO	NA	LO	LO	LO	CPI 37, 38 BOP 37, 38	
5.3 Assistance to users	LO	LO	NA	LO	LO	LO	GFS 39, 40	

* Paragraph numbers refer to Section III, Summary Assessment of Data Quality, in the present document.

** Authorities' plans as posted on the DSDB (GDDS), included in the Strategic Plan 2002-2006, and supplemented by information obtained from the authorities during the mission.

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

IV. STAFF'S RECOMMENDATIONS

42. Based on the results of the data quality assessment, discussions with the authorities in the statistics-compiling agencies, and responses from data users, the following measures are proposed to increase further Malawi's adherence to international statistical standards. Recommendations are subdivided into "high priority" and "other." Some of the recommendations can be accomplished with unchanged resources and others are contingent on additional resources being made available or specifically address the need for resources. Recommendations are shown in order of priority

General Recommendations

High priority

- Recognize the responsibility of the RBM for publishing monetary statistics; recognize the responsibility of the MOF for collecting, compiling, and publishing government finance statistics; and establish the joint responsibility of the RBM and NSO for collecting, compiling, and publishing balance of payments statistics. For example, to ensure a more effective utilization of the resources made available by the RBM for balance of payments compilation, the RBM could assume responsibility for compiling the financial account of the balance of payments and the IIP, and for collecting data and conducting statistical surveys needed for this, such as the Capital Flows Survey. Avoid duplication of effort in the compilation and publication of national accounts, balance of payments, and government finance statistics by improving coordination within the National Statistical System.
- Undertake a complete review of data dissemination practices in conjunction with users, addressing the following: (i) improve the presentation of statistical information (such as tables, text, charts); (ii) increase the use of websites for the dissemination of official statistics; (iii) introduce statistical analysis (main features, commentary); (iv) use advance release calendars indicating at least no-later-than release dates; (v) publicize the availability (including the terms and conditions) of detailed unpublished statistics, and (vi) introduce strict and unambiguous embargo arrangements to ensure the simultaneous release of data or prerelease to a list of persons or officials holding designated positions within the government but outside the agency producing the data, who have prerelease access to the data (such as for two working days) and the dissemination (such as on a website) of the schedule according to which they receive access.
- Make the revisions policies and practices followed by the data producing agencies known to the public, and promote better understanding of revisions by developing and publishing studies on current revisions and by labeling preliminary and final data in the publications.
- Post and update on a regular basis the GDDS data dimension table on the NSO's website (hyperlinks between NSO, MOF, and RBM) and update the summary metadata.
- Develop a dissemination policy for the release of new statistics by the NSO, MOF, and RBM. Publish final annual data of national accounts, balance of payments, and

government finance statistics comprising detailed tables and accounts in accordance with the *1993 SNA*, *BPM5*, *GFSM 1986*, and standard international classifications. Publish preliminary national accounts and balance of payments statistics within six-nine months on a more summary basis, reflecting data availability. Publish quarterly fiscal data in the same format as the annual data, and publish monthly data on a more summary basis, reflecting data availability. Post these data on respective agencies' websites, at least in a summary form, and refer to the publications for more detailed information.

Other

- Create an advisory group representing users and producers of macroeconomic statistics charged with recommending ways to ensure the relevance of statistics.
- Publicize key features of the Statistics Act and the Code of Conduct of the Public Service through NSO's publications and on its website to enhance public confidence and cooperation in the statistical process and reinforce staff knowledge of ethical standards.
- Periodically review penalties under the Statistics Act for non-response to statistical surveys..
- Complete the planned development and publication of detailed documentation for national accounts, consumer price index, government finance, monetary, and balance of payments statistics on concepts, methods, and data sources, noting variations from international standards. Include documentation of revision policies and practices.
- Allocate more resources to meet the NSO's mandate to compile national accounts, consumer price index, and balance of payments statistics with due regard to quality issues and consistent with international statistical standards.

National Accounts

High priority

- Acknowledge the NSO as the official compiler of national accounts statistics in the RBM and MEPD's publications.
- Use the information available on inventories from the economic survey and financial statements as well as the data from the 1997–1998 IHS to prepare estimates on changes in inventories and household final consumption expenditures, respectively.
- Revise the questionnaire for NSO's annual economic surveys to include a breakdown of sales by principal products and expenditures by main inputs.
- Ensure adequate resources are available for the NSO to conduct the planned surveys (such as economic multipurpose survey, household survey, informal sector surveys) needed to improve the coverage of national accounts statistics.
- Allocate two additional permanent staff to the National Accounts Section of the NSO.

Other

- Ensure that the business register is updated regularly; improve as planned the quality and broaden the scope of national accounts estimates by implementing the *1993 SNA*, changing the base year and by developing a producer price index. Improve the

- estimates of informal, hidden, and unrecorded activities by using employment data and other relevant data from the IHS.
- Utilize the results of the 2003–2004 IHS to rebenchmark the household consumption expenditure estimates when the results of the survey are available.

Consumer Price Index

High priority

- Enhance the effectiveness of price measurement for the consumer price index by applying systematic, comprehensive, and consistent approaches to quality adjustment of product prices.
- Establish a Consumer Price Index User Advisory Group consisting of representatives from policy departments, the private sector, and universities, to provide advice on conceptual issues.
- Evaluate trends in consumer prices against other relevant economic statistics, in particular import and export prices, and commodity prices.

Other

- Implement the planned review and rebase of the consumer price index, utilizing the results of the 2003-2004 second IHS, as soon as possible after the survey results are available. Use the geometric mean to calculate average prices.
- Ensure adequate staff resources are available to the Consumer Price Section of the NSO.

Government Finance Statistics

High priority

- Continue to train staff in the compilation of Government Finance Statistics.
- Continue to seek full coverage of donor aid and development expenditure in the fiscal database; reclassify, where needed, source data to permit consolidation according to *GFSM 1986*; collect quarterly data on the operations of extra-budgetary agencies; and take steps to reduce statistical discrepancies in monthly/quarterly data between financing and revenue/expenditure.
- Disseminate fiscal data consistent with *GFSM 1986* on the MOF's website and statistical publications.
- Complete the planned development of a migration path to *GFSM 2001*, establish a timetable for its implementation and publicize the planned changes in methodology.

Other

- Collect quarterly data on the operations of local government and disseminate government finance statistics for the general government.

Monetary Statistics

High priority

- Prepare and publish, including on the RBM's website, a statement on the terms and conditions that govern data collection, compilation, and dissemination of monetary statistics; and make available a catalogue of published statistics.
- Expand the monetary survey as planned into the depository corporations survey, and implement the recommendations of the *MFSM* for classification and valuation, giving users advance notice of these changes.
- Revise the historical series of the present (four bank) monetary survey backwards and revise historical series when further expanding the survey, giving users advance notice of these changes.
- Include the central bank survey results in monthly publications.

Other

- Specify in the RBM Act that the RBM has the responsibility for compiling and publishing monetary statistics.

Balance of Payments Statistics

High priority

- Complete the planned conversion of balance of payments statistics into *BPM5*, publish the data and relevant metadata.
- Expand the coverage and improve the accuracy of source data by the better use of administrative data (such as by estimating freight and insurance by sampling customs returns); collecting more complete and detailed information on grants to permit the separate identification of current and capital grants; and implementing, as planned, the new report forms for the reporting of foreign currency transactions by banks.
- Improve statistical techniques for estimating unrecorded merchandise imports, as planned, through the use of partner country data sources, and estimating, as planned, workers' remittances by obtaining information from the Post Corporation and Western Union.
- Expand, as planned, the external debt database to include private sector debt.

Other

- Establish reporting of balance sheet information by financial institutions (such as banks and insurance companies).
- Develop, as planned, new statistical surveys for balance of payments compilation (such as a combined general/direct investment enterprise survey, transportation surveys, and a surveys of embassies and aid agencies); and by improving existing ones (such as the travel credit survey).

INTERNATIONAL MONETARY FUND

MALAWI

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

October 29, 2004

	Contents	Page
1	Introduction.....	2
2.	Reactions by the Authorities.....	2
3.	Monetary Statistics.....	2
4.	Government Finance Statistics	3
5.	National Accounts.....	4
6.	Price Statistics.....	5
7.	Balance of Payments.....	5

1. Introduction

This report is written in response to the findings of the Report on Observance of Standards and Code (ROSC) mission that visited Malawi between September 1–16, 2003. The ROSC data module provides a review of Malawi's data dissemination practices against the General Data Dissemination System (GDDS) of the International Monetary Fund. It provides an in-depth assessment of the five macroeconomic accounts: monetary, government finance, national accounts, consumer price index, and balance of payments data sets.

2. Reactions by the Authorities

The Ministry of Finance (MOF), National Statistical Office (NSO) and the Reserve Bank of Malawi (RBM) welcome the findings of the Report on Observance of Standards and Codes (ROSC) Mission on all macroeconomic accounts and agree to publishing of the final report.

The findings of the Mission that prepared the data module of the ROSC are a true reflection of the current compilation and dissemination practices of these accounts. Although the Mission identified a number of problems regarding the compilation and dissemination of monetary and financial statistics, it was gratifying to note the Mission's appreciation of the great efforts that were being made by the Malawian authorities to strengthen the statistical system despite tight resource constraints. To this effect, Malawi has been participating in the GDDS since 2002, reflecting the authorities' strong commitment to adhere to internationally accepted good practices.

Consequently, the Government intends to undertake the following tasks consistent with the GDDS framework:

3. Monetary Statistics

RBM intends to improve, in due course, the quality and coverage of its monetary and financial statistics in accordance with the Monetary and Financial Statistics Manual (MFSM, 2001). The RBM intends to undertake the following tasks consistent with the GDDS framework:

- (i) Review the standard core report forms to adequately identify resident sectoral distribution of deposits and credit. This will also help in the separation of local governments, shares and other equity in the banks' reports;
- (ii) Fully utilise the accrual accounting method of valuation and recording;

- (iii) Carry out workshops and seminars to educate commercial banks, other financial institutions and other stakeholders on the importance of monetary and financial statistics and the scope for improvements;
- (iv) Expand the monetary survey to a depository corporations survey and fully adopt the concepts and definitions as recommended in the MFSM (2001);
- (v) Expand the institutional coverage of the depository corporations survey and accordingly revise the series of the expanded survey;
- (vi) Publish a statement of methodology on the compilation practices of the monetary and financial statistics in the various Bank publications
- (vii) Provide a link of the Malawi Metadata page available on the IMF's website on the RBM's website;
- (viii) Closely work with other institutions responsible for data compilation and dissemination to ensure data consistency across sectors;
- (ix) Institute regular consultations with users of monetary and financial statistics in the form of surveys or regular meetings to ensure feedback and identify any emerging data requirements;
- (x) With respect to Balance of payments, the RBM intends to work closely with the NSO to ensure accuracy and consistency in BOP data estimates and
- (xi) At a later date, with technical assistance, the Bank intends to compile stock data on three separate flow components – transactions, revaluation, and other changes in volume of assets- as required in the MFSM (2001).

4. Government Finance Statistics

The MOF intends to improve the reporting of fiscal data in accordance with the Government Statistics Manual (GFSM 2001) consistent with the GDDS framework. However, MOF proposes to continue data reporting in accordance with GFSM 1986 before migrating to GFSM 2001. Nevertheless, most of the problems encountered will be solved after training more staff in the compilation of GFS and after instituting a proper migration path for the new GFSM 2001. With respect to coverage, data quality, integrity, methodological soundness, accuracy and reliability, serviceability and accessibility, Government intends to carry out the following:

- (i) The MOF will improve coverage of central and general government because fiscal data only covers central government operations;

- (ii) In terms of data quality, the Public Finance Management Act will be implemented as stipulated in terms of all financial reports, financial statements, and associated information and accounting procedures in accordance with generally accepted accounting practices;
- (iii) The government will ensure that the code of conduct for civil servants and Treasury code of conduct for accounting officers is followed and make an effort to provide timely sufficient government finance statistics;
- (iv) The Government is requesting for more technical assistance in order to facilitate the migration from GFSM 1986 to the GFSM 2001.
- (v) In terms of accuracy and reliability, sound statistical techniques used for compiling government finance statistics will be implemented and data on functional operations of statutory agencies and local governments has to be made available;
- (vi) The MOF need to promote consultations with users outside government and that monthly and quarterly government finance statistics have to be made consistent both in the short and long term;
- (vii) In terms of accessibility, Government will make an effort to publish monthly and quarterly data so that data is made accessible to different users in the economy

5. National Accounts

Some of the issues which Government intends to carry are as follows:

- (i) The NSO is currently working towards switching to 2000 base year when relevant data (AES) are available and is reviewing concepts, definitions and methodology by moving towards the 1993 SNA.
- (ii) NSO is working hand in hand with the Ministry of Agriculture in crop estimates to come up with more reliable information.
- (iii) Both financial and technical assistance are required for the NSO to carry out this survey. Technical assistance would be required to assist NSO with the methodology for survey design, analysis and for introducing the data into the national accounts.
- (iv) Technical assistance would also be required to assist in the move towards SNA 93.

6. Price Statistics

As already observed, most of the issues on price statistics are being followed. However, plans are underway to start compiling Producer Price Index that would be used in deflating National Accounts Current Price Series.

In this case, financial and technical assistance would be required to assist in improving methodology and compilation.

Metadata on the consumer price index were posted on the IMF's Data Dissemination Standards Bulletin Board in February 2004.

7. Balance of Payments

Several issues have been observed under Balance of Payment but the Government intends to carry out some of the following measures:

- (i) The Government is adopting the BPM5 presentation of data which will be incorporated in the 2003 Balance of Payments Statistical Yearbook, and this presentation of data has already been published in an analytical format in the NSO's Quarterly Statistical Bulletin of July-September 2003. All reviews on BOP data will fall under a different framework in the same context of BPM5.
- (ii) To improve coverage and quality of data, the Government will be working in collaboration with donor in the collection and compilation of grants/ donor aid data. The bottom line is to examine, alongside the data suppliers, grants in cash and kind received by the government of Malawi, and possibly split between current and capital transfers. This will improve coverage and quality of data.
- (iii) A statement regarding the compilation and methodological practices followed in preparing Malawi's balance of payments data will be prepared and availed to the public, alongside the published data, when the first set of major improvements are implemented.
- (iv) Malawi has also benefited from the Development Finance International (DFI) in terms of the first and second phases of the survey on foreign private investment both financially and technically. The capacity transfer will continue possibly for the next two years to ensure full capacity transfer, with financing of the surveys internalized within our work programmes.
- (v) Technical assistance will be required in drafting the survey form for insurance companies, Embassies and IO's. Embassies and IO's, being extraterritorial enclaves, would require special treatment in terms of approach since

experience from other countries reveals a lot of reservations by these institutions towards government surveys. Technical assistance will also be required in implementing the methodology set out in the BPM5, compiling quarterly balance of payments data, the compilation and further analysis of IIP.

INTERNATIONAL MONETARY FUND

MALAWI

Detailed Assessments Using the Data Quality Assessment Framework (DQAF)

Prepared by the Statistics Department

Approved by Robert W. Edwards and Abdoulaye Bio-Tchané

October 29, 2004

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

Contents	Page
Acronyms.....	3
I. National Accounts Statistics	5
II. Price Statistics (Consumer Price Index)	33
III. Government Finance Statistics	53
IV. Monetary Statistics.....	73
V. Balance of Payments Statistics	90
Text Tables	
1. DQAF: Summary Presentation of Results for National Accounts Statistics	30
2. DQAF: Summary Presentation of Results for Consumer Price Index.....	51
3. DQAF: Summary Presentation of Results for Government Finance Statistics	71
4. DQAF: Summary Presentation of Results for Monetary Statistics	88
5. DQAF: Summary Presentation of Results for Balance of Payments Statistics	115
Table	
I. Results of Malawi's User Survey	136
Appendices	
I. Summary of Malawi's Data Dissemination Practices against the General Data Dissemination System (GDDS)	117
II. Summary of the General Data Dissemination System (GDDS).....	126
III. Data Quality Assessment Framework—Generic	128
IV. Users' Views.....	133

ACRONYMS

<i>1968 SNA</i>	<i>System of National Accounts 1968</i>
<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
ADMARC	Agriculture Development and Marketing Corporation
AES	Annual Economic Survey
ASYCUDA	Automated System for Customs Data
ATDCD	Agriculture, Transport and Data Collection Division
BOP	Balance of Payments Statistics
BIR	Business Information Register
<i>BPM4</i>	<i>Balance of Payments Manual</i> , fourth edition
<i>BPM5</i>	<i>Balance of Payments Manual</i> , fifth edition
COFOG	Classification of the Functions of the Government
COICOP	Classification of Individual Consumption by Purpose
COPNI	Classification of the Purposes of the Non-profit Institutions Serving Households
CPI	Consumer Price Index
CS-DRMS	Commonwealth Secretariat—Debt Recording and Management System
DAMD	Debt and Aid Management Department
DAH	Department of Animal Health
DAMD	Debt and Aid Management Division
DOF	Department of Fisheries
DSBB	Dissemination Standards Bulletin Board
DFID	United Kingdom Department of International Development
DQAF	Data Quality Assessment Framework
EDMS	External Debt Management Section
ESCOM	Electricity Supply Commission of Malawi
ESD	Economic Statistics Division
FTS	Foreign Trade Section
GDDS	General Data Dissemination System
GDP	Gross Domestic Production
GFS	Government Finance Statistics
<i>GFSM 1986</i>	<i>A Manual of Government Finance Statistics 1986</i>
<i>GFSM 2001</i>	<i>Government Finance Statistics Manual 2001</i>
HS	Harmonized Commodity Description and Coding System
IFMIS	Integrated Financial Management Information System
IHS	Integrated Household Survey
ILO	International Labor Organization
IMF	International Monetary Fund
<i>ISIC</i>	<i>International Standard Industrial Classification of all Economic Activities</i>
ITRS	International Transactions Reporting System
MAFSI	Ministry of Agriculture, Food, Security and Irrigation
MATECO	Malawi Tea Corporation
MIPA	Malawi Investment Promotion Agency
MCI	Ministry of Commerce and Industry

MEFMI	Macroeconomic and Financial Management Institute of Eastern and Southern Africa
MEPD	Ministry of Economic Planning and Development
MS	Monetary Statistics
<i>MFSM</i>	<i>Monetary and Financial Statistics Manual</i>
MLVT	Ministry of Labor and Vocational Training
MOF	Ministry of Finance
MRA	Malawi Revenue Authority
MS	Monetary Statistics
NA	National Accounts
NABOPB	National Accounts and Balance of Payments Branch
NAS	National Accounts Section
NCIC	National Construction Industry Council
NORAD	Norwegian aid agency
NSO	National Statistical Office
OPC	Department of the Office of the President and Cabinet
PCFS	Private capital flows surveys
RBM	Reserve Bank of Malawi
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
SHESEA	Survey of Household Expenditure and Small Scale Economic Activities 1990/1991
SPC	Secretary to the President and Cabinet
SUR	Sales and excise
TCNABOP	Technical Committee on National Accounts and Balance of Payments Statistics
TIPSB	Trade, Industry and Price Statistics Branch
UN	United Nations
UNICEF	United Nations Children's Emergency Fund
WTO	World Trade Organization

DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

The following detailed information on indicators of statistical practices in the areas of the national accounts, prices, government finance, money and banking, and balance of payments statistics was gathered from publicly available documents and information provided by the officials. This information, which is organized along the lines of the generic DQAF (see Appendix II), was used to prepare the summary assessment of data quality elements, based on a four-part scale of observance, shown in Malawi's Report on the Observance of Standards and Codes (ROSC)—Data Module. This report was prepared by a mission¹ from the IMF's Statistics Department that visited Lilongwe during September 1–16, 2003.

I. NATIONAL ACCOUNTS STATISTICS

0. Prerequisites of quality

0.1 Legal and institutional environment

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

The Statistics Act of December 29, 1967 indicates that the National Statistical Office (NSO) is responsible for the collection, compilation, analysis, abstraction and publication of statistical information. The NSO is a government department in the Office of the President and Cabinet. It compiles and disseminates national accounts statistics according to Article 4 of the Act and the matters concerning the statistical information stated in its First Schedule. Although the Act does not clearly specify that the NSO has the responsibility for compiling and disseminating national accounts statistics, the matters include almost every aggregate of the system of national accounts (capital investment, savings, income, earnings, profits, salaries, personal expenditure and consumption, as well as statistics by industry).

The Commissioner of the NSO is empowered by the Article 4 of the Statistics Act "...to organize a coordinated scheme of statistics relating to Malawi and to ensure that common definitions for statistical purposes are used in respect of all official statistics collected or published by any Department of the Government." In addition, the Statistics Act states that "...the statistical inquiries requiring returns from more than five respondents shall not be conducted by any government department, local authority or statutory body unless approved by the Director of the NSO."

¹ The mission team was led by Mr. Simon Quin and comprised Ms. Lorraine Ocampos, Mr. Satoru Hagino, Ms. Lisbeth Rivas (all STA), Messrs. Louis Venter and David Collins (experts), and Ms. Maria Delia M. Araneta, (STA—Administrative Assistant).

The legal framework of Malawian statistics broadly follows international standards. Even so, the functions specified for the NSO are rather ambitious and go beyond the current statistical capacity of the office. Moreover, the Malawian institutional environment has resulted in a rather decentralized statistical system which includes statistical offices in the ministries, in other public entities and in the regions. Due to this decentralization, duplication of effort exists. To address these and other concerns, the Statistics Act and the institutional framework of the statistical function are being revised with financial support from the United Kingdom Department of International Development (DFID) to: (a) update the penalties for non compliance; (b) establish the National Statistical System and improve the coordination of statistics collection; (c) broaden the coverage of statistics; (d) empower other government agencies to collect information; and (e) give a semi-autonomous character to the NSO.

Operational responsibility for compiling and disseminating national accounts lies with the NSO's National Accounts Section (NAS) within the National Accounts and Balance of Payments Branch (NABOPB) of the Economic Statistics Division (ESD). Source data are collected by the Agriculture, Transport and Data Collection Division (ATDCD) and the Trade, Industry and Price Statistics Branch (TIPSB) of the NSO. The NSO compiles and disseminates preliminary and final estimates of GDP from twelve to eighteen months respectively from the reference date. Gross National Income and Savings estimates are compiled by the NSO and published by the RBM and the MEPD.

Prior to release, the national accounts estimates are discussed by an interagency Technical Committee of National Accounts and Balance and Payments (TCNABOP) chaired by the NSO. The TCNABOP is comprised of representatives of the Reserve Bank of Malawi (RBM), the Ministry of Finance (MOF) and the Ministry of Economic Planning and Development (MEPD). The role of the TCNABOP is discussed in the next section. The publication of different national accounts data by the NSO, RBM, and MEPD has caused considerable confusion among users, as noted ahead in the user survey discussed in Appendix III.

0.1.2 Data sharing and coordination among data producing agencies are adequate

The NSO collects basic data provided by public and private institutions to compile national accounts statistics. The RBM and the MOF also compile source data from administrative records used for compiling national accounts. Coordination between the principal data producing agencies and government users is undertaken through a high level Economic Management Committee, chaired by the MOF, and the TCNABOP.

The NSO produces preliminary annual national accounts estimates within 12 months of the reference year and final national accounts estimates within 18 months of the reference year. Prior to release, the national accounts estimates are discussed by the TCNABOP. The TCNABOP serves as a forum for bringing together key data producing agencies to facilitate data collection for national accounts; as an aide to key government users in interpreting the data; to provide feedback to the NSO from a user perspective on data quality issues; and as a vehicle for determining the government's needs for updated estimates. The TCNABOP discusses major changes in data sources, compilation methods, and methodology, and has

prior access to preliminary and final national accounts statistics published by the NSO. In addition, the TCNABOP reviews/approves national accounts flash estimates/forecasts prepared by the NSO for the government. The latter are commonly produced for the budget three months after the reference year (based on the limited available data) and are included in budget documents and in publications of the RBM and the MEPD. The practice has also evolved whereby the TCNABOP requires ad hoc updates to the national accounts estimates produced by the NSO to meet the needs of key government users. These updates have also been published by the RBM and the MEPD. It was understood that all these national accounts estimates are approved by the TCNABOP. In none of these cases is the source or nature of the estimate indicated, or their context in a revision cycle. Consequently, their relationship to the official national accounts estimates published by the NSO is unclear. The lack of an agreed cycle of revisions, revision methodology, and the absence of revision studies has led to conflicting and unexplained national accounts statistics being published by the three agencies at the same time. The publication of different and unexplained national accounts statistics by the three agencies is contrary to the spirit of the TCNABOP and may serve to undermine the public perception of the integrity of the agencies.

More recently a General Data Dissemination System Committee has been established to coordinate data dissemination among data producing agencies.

Since the move of the NAS to Lilongwe, coordination and cooperation among the NSO, the RBM, the MOF and the MEPD have improved.

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

The NSO personnel that compile national accounts have access to individual records from the data sources and are aware of the confidentiality of the data and the penalties imposed by the statistical legal framework.

Article 7 of the Statistics Act states that “Information collected under this Act shall be used for statistical purposes only, and, except for the purposes of prosecution under this Act- (a) no individual return or part...; (b) no answer given...; (c) no report abstract or document containing particulars..., shall be published, admitted in evidence or shown to any person not employed in the performance of any functions under this Act unless consent in writing thereto has been obtained from the person [business] making such return or giving such answer...”

Article 9 and the Second Schedule of the Statistics Act state that “...every person employed in the performance of any functions under this Act shall, before commencing those functions, make and subscribe before a magistrate or commissioner for oath an oath of office and secrecy.” Oaths are also made by temporary employees of the NSO. Penalties for contravening the confidentiality provisions include a fine (which is in the process of being substantially increased in the revised law) and imprisonment for one year.

In surveys and other statistical inquiries, respondents are informed of their rights and obligations with regard to the provision of information. They are also informed that the

information provided will be used for statistical purposes only. All questionnaires used for censuses, surveys and special investigations by the NSO have a reference to the confidentiality requirements regarding the information in a section placed on the first page that reads: “Confidential: The purpose of this inquiry is to provide basic data for measuring Malawi’s... [indicator]...The information you provide will be treated with strict confidence under the Statistics Act, 1967.”

Aggregation rules have been developed to ensure that residual disclosure does not occur when aggregated survey results or other information are disseminated. Normally, data compiled for dissemination are reviewed for possible indirect disclosure of confidential data. Actions are taken to secure the premises of the NSO and its computer systems to prevent unauthorized access to individual data. The NSO takes appropriate measures to keep the confidentiality of stored data and in the process of destroying records. The original data bases and working sheets for compiling national accounts are administrated by the ESD of the NSO. There are several levels of security that go from the internal net to the administrating system of the databases. It is necessary to have an authorized user’s name and a password to have access to them. As for the security of the whole system, two levels exist: internal and external. The internal level is provided by the security of the operating system Windows XP and Outlook Express and the external one by the Norton antivirus software. To store the data, the NSO uses two servers, one in Zomba and one in Lilongwe.

There is a UNICEF’s project to establish an interactive database called Malawi’s Socio-Economic Database (MASEDA). The data for 2001 are available on CD Rom, but the database is not yet interactive on the Internet.

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

There are legal provisions that authorize the NSO to request information from private entities and to impose fines in situations of non-compliance. Article 5 of the Statistics Act states that “...the Director may conduct or direct any statistical inquiry relating to the matters specified in the First Schedule...Where any statistical inquiry is being made...an authorized officer may require any person to supply him with such particulars as may be prescribed...” When the timeliness and/or the completeness of the answers are not adequate, the NSO contacts the respondents and informs them of the importance of responding. This form of moral persuasion has had variable success.

There are no conflicts between the legal authority to produce statistics and other laws.

The NSO provides assistance to respondents in completing and submitting the forms. In questionnaires, respondents are given the telephone number and the e-mail address of the contact person in the NSO. To encourage response, the surveys and the questionnaires are publicized with an explanation of the statistical objectives of the survey.

Despite the existence of legal provisions for obtaining information, and penalties for noncompliance in Article 5 of the Statistics Act, they have not been enforced. Moreover,

penalties are so low that are not effective to enforce response to surveys. The intent is to encourage voluntary reporting by explaining in detail to respondents the use that will be made of their information, its confidential nature, and its importance for the country in terms of quantifying and characterizing its economic activity and social situation. However, some enterprises refuse to respond to surveys. A simplified Annual Economic Survey (AES) questionnaire has been designed for these respondents.

Resource constraints obligated the NSO to send questionnaires by mail, which negatively affected the response rate to surveys and the timeliness of the source data. However, since the year 2000, the staff of the NSO have been visiting enterprises with the financial support of some international donors to improve the responses rate to surveys.

The NSO has considered the information burden imposed on respondents by the statistical system. Consequently, the questionnaires of the AES have been revised and adapted to the nature of each economic activity in order to simplify them.

0.2 Resources

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

The NAS consists of two economists who report to the Chief of the NABOPB, one of them with only three months experience working in national accounts. There is an acute shortage of staff at the NABOPB. Despite the fact that statistical information processing takes place in another unit of the NSO, human resources are not adequate for compiling the national accounts. Due to the unattractive salaries, it is difficult to recruit and maintain qualified staff. Motivation of the personnel is also a concern. Only one of the two professionals has received training in national accounts.

The lack of trained resources and funding for the statistical function has been compensated by technical assistance or financial support from the European Union, the IMF, the World Bank, a Norwegian aid agency (NORAD), the DFID and other donors during recent years. The IMF has provided formal and on-the-job training in national accounts methodology and compilation methods through a national accounts long term advisor from 1998 to 2001. The European Union and NORAD are in the process of giving technical assistance to the NSO.

Overall, sufficient computing resources are allocated with respect to staff numbers and efforts are made to use the existing computing technology at full capacity for compiling and disseminating national accounts. Each of the specialist statisticians has a PC, while they are shared at lower levels. The DFID provided adequate computers to the NSO. Spreadsheet programs (Excel) are used for compiling and analyzing the statistical series. An Access database was developed to improve the compilation process. However, some computer hardware is out-dated which hampers efficient processing of data and management of the databases. Only one computer, the one assigned to the chief of the NABOPB, has access to Internet.

Despite the financial support of various international donors, the overall financial resources are insufficient to carry out the basic tasks of processing and compiling national accounts. There are major problems with funding surveys, form printing, and travel for data collection and attendance at workshops and seminars. The NSO submits bids to the MOF and the actual allocation is about one third of the proposed budget. At present, external funding finances an important part of the total budget allocated to the compilation of source data. Therefore, the domestic resource allocation for maintenance work is a cause for concern. In addition, the responsibility for the compilation of agricultural production statistics was recently transferred to the NSO without any additional resources.

0.2.2 Measures to ensure efficient use of resources are implemented

Managers create the conditions to promote a vision and direction of the NSO that is shared with the staff. Consistency between concepts and methodologies across the different units within the NSO is promoted. Data compilation procedures are managed to minimize processing errors in coding, editing, and tabulation. There is no internal process to measure resources used to compile the statistical series or to compare the resource usage of the statistical program vis-à-vis other statistical programs. Non-periodic reviews of working processes are undertaken to ensure that they are improved upon. Also, sporadic reviews of budgeting procedures are undertaken to promote the most efficient employment of scarce resources in addressing major data problems or meeting new data needs. The NSO seeks outside expert assistance to evaluate methodologies and compilation methods.

The tasks and future work plans of the NSO are included in its Strategic Plan 2002–2006, (Strategic Plan), which is shortly to be updated. This plan is presented to the MOF and the Cabinet and establishes the goals, products, and work actions of the NSO. Nevertheless, most of them are subject to external funding. The NSO carries out a quarterly evaluation of the tasks and work actions against the Strategic Plan, and takes action as needed. The division chiefs within the NSO meet weekly in order to measure progress, define the work to be undertaken and propose methodological improvements. Monthly meetings of section supervisors, senior statisticians and principal statisticians are held to inform staff of the objectives, achieve conceptual consistency and enforce work programs. Each year the ESD aims to develop a plan to meet the objectives of each unit. However, annual plans have not been lately developed. The staff are aware of these plans when they are available. Innovations have been introduced in the computer processes to reduce time and costs during the statistical collection, coding, editing and tabulation of source data. In the event of errors and inconsistencies, they are clarified with the respondents to correct them. The information obtained is stored in databases or worksheets that go through another process of validation by applying additional consistency checks. A work sheet in Excel to compile the accounts has been developed.

Efficiencies are sought by encouraging consistent concepts and methodologies across the different units within the NSO. There are clear responsibilities assigned among the different areas. There are also guidelines that describe the duties of every position of the ESD.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

Although the NSO has not established an explicit program of quality awareness, many elements of such a program are already in place, especially in monitoring data collection and processing, and the Strategic Plan also serves this goal. In addition, plans are prepared to measure progress every quarter. One of the goals of the Strategic Plan is to change the methodology of national accounts compilation to be in line with the *System of national Accounts 1993 (1993 SNA)*. In addition, the NSO mission statement emphasizes the quality of data: “The mission of the NSO is to provide high quality, timely and independent statistical information and promote its use for policy formulation, decision-making, research, transparency, and general public awareness.”

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

Some actions are undertaken to identify problems at the various stages of data processing, such as by using statistical filters, processing through inter-temporal comparison, and disseminating revised data. The TCNABOP provides some guidance to the NAS on data quality issues. There are procedures for the receipt of feedback on the quality of the national accounts statistics and on strategies for improving data production. The first users’ survey was conducted in 2000 to obtain feedback on data quality issues to update the Strategic Plan. A new user’s survey is expected to be conducted later this year. During the period 2000–2002, NAS staff revised methodologies and in some cases, analyzed the source data to cross-check them with other sources in order to improve work procedures. Exports statistics are compared with the data provided by enterprises in the case of agriculture products. Agricultural output from the AES and the Ministry of Agriculture, Food Security, and Irrigation (MAFSI) are cross-checked with the data on production from the Tobacco Control Commission, the Tea Association of Malawi and the ILLOVO Sugar Group. However, there are no formal mechanisms for assessing the quality of national accounts statistics.

Under the Strategic Plan, productivity indicators have been prepared to monitor efficiency in data collection and processing. For example, the ESD keeps records and monitors the number of enterprises visited, the number of surveys processed, and the response to surveys.

0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs

The Management of the NSO recognizes the alternatives among the dimensions of data quality; for example, between timeliness and accuracy and reliability and that the quality of national accounts data is a function of the coverage and timeliness of source data. This situation is taken into account in determining how national accounts statistics are to be compiled as well as the revision cycle. The publications of the RBM and the MEPD do not

provide guidance to users on how deficiencies in source data may have affected such trade-offs or the quality of the resulting estimates.

Regarding government users' needs, the NSO has regular meetings with those entities that participate in the TCNABOP to determine their needs and new data requirements.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

National accounts statistics are compiled on an impartial basis because of the independence and professionalism of the staff and the general adherence to international standards, guidelines, and procedures. Although the current Statistics Act does not explicitly address the issue of the autonomy of the NSO, the revised Act will clarify this situation.

The NSO currently is a Department of the Office of the President and Cabinet (OPC) reporting to the Secretary to the President and Cabinet (SPC), with no external interference in the performance of the statistic function. In 1998, the Public Sector Change Management Unit of the NSO undertook a functional review of the NSO, which was updated in 2001 and recommended that the NSO become a semi-autonomous agency of government, governed by a revised National Statistical Act and accountable to a management board.

The Strategic Plan of the NSO has the following mission: "To provide high quality, timely and independent statistical information and promote its use for policy formulation, decision-making, research, transparency, and general public awareness." The second core value is "Integrity and Independence: Produce and disseminate statistics in an objective and independent manner without any political or any outside interference."

Recruitment and promotion is undertaken through the Civil Service Commission with open selection processes based on merit.

The procedures for collection and compilation of national accounts statistics are governed by technical considerations. Professionalism is promoted by the publication of methodological papers on special studies and by organizing meetings of professional groups. For example, special studies on the Annual Economic Survey, the 1999 Agriculture Estimates revisited, Core Welfare Indicators, Cross-Border Trade, Government Issues, among others, have been prepared for internal use, presented in public presentations, and some of them have been published. Staff who attend domestic and international courses and conferences present their content to the rest of the staff after coming back to the NSO. Staff are internally evaluated.

In order to protect the reputation of the NSO, national accounts publications are revised and validated by all levels within the institution.

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

Choices of sources and statistical techniques are made on the basis of statistical considerations and international standards. Sources are selected according to coverage needs, proper treatment, statistical quality, timeliness, cost, and respondent work load. Respondents' information is used for statistical purposes only.

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

The Commissioner responds to any erroneous interpretations of statistics published by the NSO. Explanatory material is provided in NSO publications with the aim of informing users and avoiding misunderstanding. The NAS has given presentations to journalists, universities, and other organizations on the methods used to compile national accounts statistics.

1.2 Transparency

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

The Statistics Act governs the terms and conditions under which statistics are collected and is publicly available. The NSO does not reproduce the Statistics Act, the Oath of Office and Secrecy and the Chapter on Conduct and Discipline of the Malawi Public Service Regulations on its website or in its publications.

However, NSO's publications include the address of the NSO, the phone number, fax, the email address to send inquiries (enquiries@statistics.gov.mw) as well as the website of the NSO (<http://www.nso.malawi.net>). The Library of the NSO is not indicated as the place where supplementary information on the NSO and its products can be found.

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

Through the TCNABOP, the RBM, the MOF and the MEPD have prior access to preliminary data on national accounts. In effect, prior access is also available to other governmental officials and international organizations should they make a request after the data is approved for publication by the TCNABOP. The list of users receiving advanced access to national accounts statistics is not published.

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

All NSO's publications are identified with the name of the NSO and the logo of the Government of Malawi. The statistics compiled by other institutions and the sources of basic information are identified in the NSO's publications. National accounts statistics compiled by the NSO are also identified as such in the publications of other institutions. However, the public is not completely aware of which institution has the mandate to compile and

disseminate national accounts statistics since the RBM and the MEPD also disseminate national accounts data.

The bulletins and press notes produced by the NSO have the logo of the government. The NSO has a policy of releasing their publications on national accounts in a standard format in which the presentation, titles, colors, typography, are consistent over time.

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

Major changes in methodology and source data are announced in advance, for example the implementation of a program for changing the base year. The Strategic Plan includes in Annex A of the Statistical Activity Plan: Proposed Activities and Outputs for 2002–2006. Users of statistics are informed through press releases and publications when new data are disseminated. In particular, when a new base year is published, press conferences, press releases, and meetings with public and private institutions are conducted to explain the methodological improvements and the differences between the old series and the new series.

1.3 Ethical standards

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

Staff and officials of the NSO are provided with guidelines on ethical standards providing correct behavior when staff are confronted with potential conflict of interest situations, through the Malawi Public Service Regulations (1991). However, these regulations are not made available to staff when joining the institution. An induction course on guidelines for staff behavior has not been offered in recent times to new staff.

Article 1:201 on Conduct and Discipline of the Public Service Regulations is applied to permanent as well as temporary staff. Article 2:120 also provides regulations on Misconduct for Temporary Employees. However, these Regulations do not cover interference by third parties concerning the compilation of statistical data.

2. Methodological soundness

2.1 Concepts and definitions

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

The national accounts of Malawi broadly follow the concepts and definitions of the *System of National Accounts 1968 (1968 SNA) Rev. 3* as a general framework. This framework is outdated as the *1993 SNA Rev. 4* is the current internationally recommended standard for compiling national accounts statistics.

2.2 Scope

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

The Malawian national accounts do not cover all tables and accounts determined as the minimum requirement by the Inter-Secretariat Working Group on National Accounts (ISWGNA) since the *1993 SNA* has not yet been implemented.

The set of tables and accounts covered by the national accounts are limited to the following annual estimates:

- value added and gross domestic product (GDP) at constant prices by activity,
- expenditures of GDP at current and constant prices,
- gross national product/income at current factor cost and at market prices,
- gross national disposable income and gross national savings,
- global supply and use at current and constant prices,

The delimitation of the constituent units of the economy is generally in accordance with the *1968 SNA*. The territorial enclaves in the rest of the world are included as part of the economy.

Due to data constraints, all workers who work part of the year in a foreign country are not included in the constituent units of the economy. Similarly, the compensation of foreign workers who work part of the year in Malawi is not recorded as imports of factor services. Estimates for the import of factor services are generally out of scope as they are made only by extrapolation using historical fixed ratios or by using fixed dollar amounts from 1998.

Foreign enterprises in the business of goods for processing (tobacco and textiles) under special customs regimes are not completely included as part of the economy. The production and assets boundaries are in accordance with the *1968 SNA*. Own-account production of all goods for own final consumption, output of goods for own-account fixed capital formation and illegal output sold are not covered as the *1993 SNA* recommends. Valuables and historical monuments, patented entities, applications and data bases are not included in the assets boundary. The coverage of small scale establishments, informal and hidden activities is very limited.

2.3 Classification/sectorization

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

The classification systems used for national accounts purposes are not consistent with the current internationally accepted standards, guidelines, and good practices:

- The *1968 SNA* is followed for classifying institutional units, transactions, and other flows.
- The *International Standard Industrial Classification of All Economic Activities (ISIC) Rev. 2* is used to classify the economic activity of enterprises instead of the *ISIC Rev. 3*, except in the case of agricultural production, which is separated by major products. However, the results of the AES recently available for 1999–2001 were classified according to *ISIC Rev. 3*. They are in the process of being incorporated in the national accounts estimates.
- The Classification of the Functions of the Government (COFOG) is not used to classify the functions of government.
- The Classification of Individual Consumption by Purpose (COICOP) is not used since household final consumption expenditure is not compiled.
- The Classification of the Purposes of the Non-profit Institutions Serving Households (COPNI) is not used because final consumption expenditure of the NPISH is not compiled.
- The Harmonized System (HS) of the African Region is applied to exports and imports of goods. It is based on the World Trade Organization (WTO) and the United Nations classifications. The classification by broad economic categories is also applied to imports.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

- Value added is valued at factor cost.
- GDP is valued at market prices. Sales and excise (SUR) taxes (tobacco and alcoholic beverages) are included in the valuation of GDP.
- Output for own-use is not completely included in production estimates.
- Deductible sales tax (value added tax) is not excluded from the valuation of final uses.
- Selective taxes on consumption and non-deductible sales taxes are not included directly in final uses. They are included by setting the GDP calculated by the expenditure approach equal to that of the production approach.
- There are no subsidies in Malawi.
- Imports are recorded at c.i.f. and converted to f.o.b. by applying a factor of 15 percent for freight and insurance. Nevertheless, information on insurance and freight for merchandise imports is available in the customs declarations processed by the Trade Unit of the NSO. Exports are valued on an f.o.b. basis.
- Foreign trade transactions in foreign currency are converted to Malawi Kwacha using the daily average exchange rate. When the actual date of the foreign transaction is not available, an annual average exchange rate is used.
- Corrections are not made when transfer prices are detected (tobacco growing and processing).

2.4.2 *Recording is done on an accrual basis*

- Transactions and flows are recorded on an accrual basis with the exception of government's transactions and some external transactions other than goods, which are recorded on a cash basis.
- Accounting periods of enterprises are different from calendar years. Proper adjustments are not made. Transactions are assigned to the main period.
- Work in progress for growing crops is not recorded in the period when it is produced. Agriculture production is allocated to the harvest year.

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

Grossing and netting procedures are adhered to in so far as the source data permit. Most transactions between establishments within the same enterprise are recorded on a net basis instead of on a gross basis since data are collected at the enterprise level. In the case of important corporations, some establishments are separated by collecting additional information (sugar cane and sugar, tobacco growing and processing).

3. Accuracy and reliability

3.1 Source data

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

Source data are collected through: (i) annual and monthly surveys of enterprises; (ii) household surveys; (iii) censuses, non-regular surveys or ad-hoc surveys; and (iv) administrative data sources.

Surveys of Enterprises

The sample frame for the surveys of enterprises is the 2000 Business Information Register (BIR) of the NSO. It is based on the lists of companies best known to the NSO, the Registrar General of the Ministry of Labor and Vocational Training (MLVT), the administrative register of taxpayers of the Malawi Revenue Authority (MRA), lists of companies of the Ministry of Agriculture, Food, Security and Irrigation (MAFSI) and the Ministry of Commerce and Industry (MCI), lists of clients of the utilities companies and lists of enterprises of the producer associations (Transport and National Construction Industry Council (NCIC)). In 2001, the BIR was updated for some of the cities of the southern region, but this task had to be discontinued due to funding constraints. The classification of economic activity used in the BIR (ISIC Rev. 2) needs to be updated according to the ISIC Rev. 3. There are some economic classification problems in this register.

The 10,500 units from the register are stratified into three groups according to three employment strata, which vary depending on the economic activity at 4 digit level of the ISIC Rev. 2:

- Forced stratum: Large-scale units (more than 100 employees)
- Medium stratum: Medium-scale units (five to 99 employees)
- Small stratum: Small-scale units (less than five employees)

The AES is the basic annual survey that has been used for compiling national accounts since 1964. The current sample includes 327 large-scale enterprises. The classification of the main economic activity of the sample units has been updated to *ISIC* Rev. 3. A new development is under way in order to consider medium-scale units as those with 20 to 99 employees and small-scale those with one to 19 employees.

The sampling method used is probability proportional to size of establishment. The response rate in 1998 was 50 percent owing to the method of collection employed (questionnaires were sent through postal services). The response for 2001 increased to 75 percent since establishments were actually visited. However, current resource allocation is limited for regular establishment visits. The latest published AES results are for 1998. In order to improve responses to surveys, it is suggested including in the revised Statistics Act that penalties for non-compliance will be updated annually by using the increase in the consumer price index (CPI) of the previous year.

Manufacturing monthly production surveys and a business intention survey (Business Interview form) are also conducted by the NSO. A monthly index of industrial production is compiled using a sample of 75 enterprises. The base year of the index is 1984. The firms chosen represent 75 percent of the manufacturing production and 100 percent of the electricity and water production in the base year. The index is used to extrapolate the value added of manufacturing when the results of the AES are not available.

Annually, the large units are surveyed exhaustively. The sample is stratified by economic activity. Scientific random sampling techniques are not used for the medium and small-sized units. The NAS does not apply proper imputation methods to handle nonresponse (such as using similar respondents from the same economic activity, size class, and region as the missing firm). Grossing up factors are not derived scientifically. In general, employment data from 1990/1991 is used to gross up the estimates at the national level. In other cases, the growth rate of the sample (only large enterprises) is applied to the value added of the economic activity at the national level (including medium and small scale units). Production or turnover per employee is not taken into account to improve enterprise strata and imputation methods.

Agriculture estimates are based on the data on cultivation areas, crops, and livestock of the agricultural surveys conducted by the MAFSI. Information on agriculture is collected in three rounds: in November–December of the previous year (forecasts of the crops), January–February (revised forecast for the current year), April–May–June (actual production in

Tonnes/Hectare). Due to serious deficiencies in the estimates made by the MAFSI, namely grossly overestimated agricultural production due to flaws in the survey implementation, and because agricultural extension workers have an incentive to overestimate production as among their duties, they teach farmers production practices. The tragic consequences of the drought and food crisis in early 2002 placed agriculture production data under review. As a result, the Economic Management Committee decided to transfer the function of collecting agricultural information to the NSO. However, additional resources have not been allocated to carry out this additional task. New questionnaires have been designed to start collecting agricultural data in the short term.

The coverage of the total economic activities (in terms of value added) is incomplete since in the case of manufacturing, private construction, and services, medium and small scale units are not covered. These two strata seem to be important in Malawi.

Household Surveys

The Malawi Integrated Household Survey (IHS) is a periodic survey conducted every five to seven years. It collects data on employment, incomes, and expenditures. The survey covers all geographic areas and socio-economic groups. A three-stage clustered random sampling technique is applied. The 1987 Population Census was used as sample frame. A total of 12,960 households were interviewed in the last IHS (1997–1998). The grossing-up factors are derived scientifically. Data on the purchases of consumption goods and production for own-consumption are collected. Information on own-account fixed-capital formation is not collected even though own account construction seems to be very important in Malawi. Purchases of valuables are not covered. However, they do not seem to be important in Malawi. The last IHS has not been used in the compilation of national accounts estimates. Current national accounts estimates are based on the results of the Survey of Household Expenditure and Small Scale Economic Activities 1990/1991 (SHESSEA). In the opinion of the NAS staff, the quality of the results of the 1997–98 IHS is not adequate for national accounts compilation due to the fact that only 7,000 questionnaires were suitable for calculating expenditure. However, in the case of agricultural products, the results from the survey seem to be more in line with empirical observations than the MAFSI's estimates on production. Moreover, the sample of the 1990–91 IHS was half (3,000 households) of the 1997–98 sample. A new IHS for 2003–2004 is schedule to commence in March 2004.

Censuses and Non-Regular and Ad Hoc Surveys

The last Population Census was conducted in 1998, but its results have not yet been used in national accounts compilation. A periodic Medium Business Economic Survey (MBES) covers a sample of medium-scale enterprises. It was conducted in 1994 and 1998. A sample of medium and small enterprises was also surveyed in 2001–2002 (GEMINI survey) with funding from the DFID. The results of this survey will be incorporated in national accounts estimates in the near future. A new survey on informal activities is planned to be conducted.

Administrative data sources

The MOF compiles statistics on revenues and expenditures of the central government, some local governments, and some decentralized institutions (2 universities), as well as on other important public records. Data are available monthly and annually. This information includes all defense-related expenditure and is sufficiently detailed to measure output, intermediate consumption, fixed-capital formation, and final consumption of government services. Other administrative sources for compiling national accounts statistics are the records of the Planning Unit of the MAFSI, the Agriculture Development and Marketing Corporation (ADMARC), the Department of Animal Health (DAH), the Department of Fisheries (DOF), the Malawi Tea Corporation (MATECO), the Auction Holdings (tobacco), the Tea Association, ILLOVO (sugar), the Electricity Supply Commission of Malawi (ESCOM), and the Blantyre and Lilongwe Water Boards.

The NAS receives annual reports of commercial banks and other financial intermediaries from the RBM. The NAS also receives from the NSO's Trade Unit annual data on imports and exports of goods based on the Automated System for Customs Data (ASYCUDA), data on imports and export from some producers associations and on imports and exports of services from the Balance of Payments Section of the NSO. However, estimates of informal cross-border trade which seems to be important in Malawi are not included in trade statistics. Imports on temporary regimes include machinery for construction, goods for repairing and goods for processing. Re-exports also include machinery for construction, goods for repairing, and goods after processing. Goods for processing should be classified as exports if they have changed in nature in the processing process.

Despite the significant progress made in recent years, there are still information gaps that undermine the normal process of compiling the national accounts. The NSO has a fragmented and outdated BIR. The quality of sample frames for conducting census/surveys of statistical units is affected by a non-comprehensive and outdated business register. No employment information is obtained on a regular basis for grossing-up results from surveys.

The price statistics program includes the compilation of a monthly CPI, export and import unit value indices, and an interest rate index elaborated by the NSO. Agriculture prices are processed by the MAFSI. Malawi does not compile producer price indices.

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

Due to the use of information only distantly related to national accounts, definitions, scope, and classifications of national accounts estimates do not fully follow international practices. Compilers are aware of these problems and take appropriate actions to reduce these differences. There is a mixture of valuations (factor cost/producer prices) in output and value added.

There are also problems with the time of recording in some source data. The use of cash accounting for government operations is not consistent with the principle of accrual accounting for national accounts.

3.1.3 Source data are timely

The consumer price indices are obtained on a timely basis. The NSO's survey-based source data (AES) are characterized by frequent delays due to low response rates, poor quality of reporting, or data processing difficulties. Low capacity handling in the software systems is hampering efforts to improve the timing and quality of data. The electronic data processing system (ASYCUDA and EURO TRACE) used to compile trade data has helped to reduce the important lag that these data had in the past. Currently, the delays are due to the time required to review inconsistencies in the reported data. Some delay is also experienced in government finance data.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

The base year (1994) of national accounts estimates is outdated, as relative price and sectoral structures are likely to have changed over the last nine years. Subsequently, the NSO is working on changing the base year of national accounts statistics from 1994 to 1998 since the last IHS and population census were conducted for that year.

Production approach procedures

In general, current output estimates are made for nine industries at the four-digit level of the ISIC, Rev. 2. In the case of agriculture, estimates are made at the product level. Nevertheless, the estimates of some industries are limited to value added. Intermediate consumption estimates are not compiled at the same level of detail as output. Even though cost structures from annual surveys are used, in some activities the reliance on fixed ratios that are more than five years old (1994) is excessive.

Output and value added of goods (tobacco and textiles) for processing generated by foreign enterprises are underestimated since transfer prices are not corrected.

The output of owner-occupied dwellings is calculated by using the number of owner occupied dwellings from the 1986 Housing Survey valued at the current average rental obtained from the CPI. Agricultural work in progress is not estimated. Data on output and intermediate consumption are not adjusted for holding gains/losses on inventories. The perpetual inventory method is not used for estimating consumption of fixed capital. This variable is estimated on the basis of information on depreciation from the AES and business statements. Depreciation is deflated by the CPI, an inappropriate method. The cash data on government revenues are not converted to accrual by allocating them to the period which they relate.

Constant price data are calculated as follows:

- In manufacturing and electricity, production indices (1984=100) calculated using information of 75 enterprises are used to extrapolate value added (e.g., the intermediate demand follows the trend in supply in terms of volume and prices) when information from the AES is not available. In agriculture, the production volume of main products is valued at 1994 prices and fixed cost structures more than five years old are used to obtain value added. Value added for the other activities is deflated by the non-food CPI, a method that departs from best practice. In electricity, water and transportation, respective components of the CPI are used to deflate figures at current prices.
- Volume measures of taxes on products are estimated by deflating figures at current prices by the CPI, a method that departs from best practice. To obtain taxes at constant prices, the average tax rate for the base year by product category should be applied to the supply at constant prices of those product categories.
- Output volume of trade margins is estimated by applying volume indices of the supply of tradable goods. Trade margins at current prices are estimated by inflating estimates at constant prices by the CPI.
- Constant price series of financial services are obtained by deflating current figures by an interest rate index.
- The GDP volume change is not measured using annual chain indices. The base year will move from 1994–1998 by mid 2004.

Expenditure approach procedures

The GDP estimate by expenditure components is not derived independently. Only government final consumption expenditure, gross fixed capital formation, and exports are independently compiled. Government final consumption expenditure excludes incidental sales. The estimate is based on the expenditure data of the central government, local governments, and the decentralized public institutions. Government final consumption expenditure at constant prices is obtained by deflating current price estimates by the CPI, a method that departs from best practices.

Gross-fixed capital formation is estimated under four categories: the public sector divided into general government and public corporations, large-scale enterprises, medium-scale enterprises and small scale enterprises. Expenditure on investment spending by government is provided by the MOF. Investment of public corporations and large-scale enterprises is collected in the AES while that of medium-scale enterprise is estimated according to the information of the 1994 and 1998 MBES. For the small-scale units, investment is assumed equal to construction output of small- scale units. The estimate of construction output of small-scale units is based on the information obtained from the 1990 SHESSEA.

Total gross capital formation in machinery and equipment is based on the data on imports and output of these products. Imports of capital goods recorded as capital formation may be overestimated (since some supplies might be included in the customs data that comprise

intermediate consumption—such as replacements and spares). Not all imports of capital goods are used in the same period that they are imported. There is a lag between the date the machinery is imported and the date it is installed for use in the production process. On average, at least two or three months of inventories should be estimated for these goods. To estimate fixed capital formation at constant prices, the estimate at current prices is deflated by a weighted average of the unit value index of imports and the CPI, an inappropriate method.

The sum of total changes in inventories and total private final consumption expenditures is estimated as a residual between the GDP calculated by the production approach and the sum of fixed capital formation, government final consumption expenditure, and the trade balance. However, there is information available on inventories from the AES, the business interviews forms (trend), and the financial statements of enterprises that is not used to calculate an estimate of changes in inventories. Private final consumption expenditure is not compiled, even though information on household expenditures from the 1997/98 IHS is available. Household final consumption expenditure estimates from the IHS should be cross-checked with the data on output and imports of consumption goods.

Exports and imports of goods and services at constant prices are obtained by deflating the current values by unit value indices of exports and imports. However, constant price estimates of exports and imports of services should have their own price indices. For example, in the case of exports of services, indices could be calculated using the developments of the CPI of services and the percentage change of the exchange rate. For imports of services, indices could be also calculated using the developments of the price indices of trade partners and the percentage change in the exchange rate.

Estimates of the national GDP include the imports and exports of factor services deflated by the implicit price index of imports and exports of goods.

When complete source data are not available, econometric models are used to estimate expenditures variables, a method that departs from best practices.

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

Output estimates at constant prices for small establishments and own account workers are not made using employment statistics and the output per capita of these units from the base year. Statistical procedures used to incorporate informal activities follow a detailed approach using population growth, which is an inappropriate method. Hidden and illegal activities are not incorporated. Data on incomes and costs of own account workers could be obtained from a module to be included in the household survey.

3.3 *Assessment and validation of source data*

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

Information on non-sampling errors, such as over/under coverage, misclassification, measurement problems, and response errors is not available for all surveys. Sampling errors are only available for the MBES and the IHS Information on imputation methods for non-response and percentages of source data imputed is not available either. Normally, high-value transactions are confirmed with respondents. Actual coverage of source data cannot be assessed as the sample frame is incomplete and outdated.

The accuracy of budgetary data, international trade, agriculture data, price statistics, and other secondary sources used to compile national accounts statistics are assessed as the source data available permit.

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

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

Intermediate data on the production of major sectors (e.g., agriculture and fishing) are, to some extent, validated against related indicators. Independent information for validation procedures is very limited.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

There are no systematic procedures to routinely identify potential discrepancies in intermediate data. Any discrepancies detected are assessed and investigated. Trends and developments of similar products in the African region are cross-checked.

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

The statistical discrepancies between components of GDP by activity and GDP by expenditure are not investigated. Supply and use tables are not used to investigate discrepancies and make the statistical outputs consistent. Other indicators of problems (validation against unofficial estimates, bias in the GDP estimate) are not investigated.

3.5 Revision studies

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

The direction and magnitude of revisions between preliminary and final data are investigated. The sources of errors, omissions, and fluctuations in the data are also investigated. The results of current revisions are not used to inform compilation processes, although the investigations and results of major revisions are informed. For example, changes in source data, methodology, and final estimates are publicized as the Notes on the 1999 revised National Accounts Estimates posted on the NSO's website and the *Malawi National Accounts Handbook 1990–1994* published in August 1998.

4. Serviceability

4.1 Relevance

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

A formal process of consultation takes place regularly with policy ministries through the meetings held by the TCNABOP and, from time to time, through a user's survey and seminars with representatives of the private sector and academia. The first survey on consumer satisfaction was conducted in 2000. A new survey is scheduled to be conducted later this year (2003).

Participation of NSO staff in international statistical meetings and seminars organized by regional and international organizations is limited.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The preliminary version of the annual GDP estimates is disseminated by the NSO within 12 months; therefore, it does not meet the timeliness recommended by the General Data Dissemination System (GDDS). The final version is disseminated by the NSO 18 months after the end of the reference year.

4.2.2 Periodicity follows dissemination standards

GDP estimates are compiled only on an annual basis, as recommended by the GDDS. Quarterly GDP data are not compiled.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

Sets of GDP estimates are derived by the production and the expenditure approaches. Similar and consistent growth rates are obtained from the series of GDP by activity and GDP by expenditure category. GDP estimates at current prices, volume measures, and (implicit) deflators are consistent within the “value = volume × price” framework. Estimates from the production approach are considered better, and some expenditure components are derived as a residual. However, the lack of a proper reconciliation framework hampers data consistency.

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

National accounts series from 1964 to 2001 are available. The latest major revision of GDP estimates, with the adoption of the base year 1994, allows for coherent time series for the period 1994–2001. As for previous years, interpolation was not undertaken to prepare comparable series between the 1964 and 1978 based series and the 1994 based series. Detailed methodological notes to identify and explain breaks and discontinuities in the time series, their causes, as well as adjustments made to maintain consistency over time, are available when there is a change of base year. The *Malawi National Accounts Handbook 1990–1994* includes a comparison between the old and new series. Unusual changes in economic trends are not explained. An analytical text of the data developments is not included in the *Statistical Yearbook* of the NSO.

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

The national accounts statistics are consistent with balance of payments statistics. Monetary statistics are generally consistent with national accounts estimates since the data sources used in their compilation are the same. The coverage of government finance statistics is different from that of national accounts estimates since government finance data include only central government.

4.4 Revision policy and practice

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

The practice of revisions to provisional estimates follows a predictable pattern. A preliminary estimate is published by the NSO with a time lag of 12 months. A final estimate of GDP is disseminated by the NSO 18 months after the reference period. The revisions of benchmarks, base years, and methodology, do not follow a regular schedule. However, this policy is not known to users. Adequate documentation of revisions is not included in the publication of the statistical series or in the database accessible to users through the NSO website.

New source data are not incorporated as early as possible, and not through a regular, well-established, and transparent schedule. The revision schedule does not take into account the timing for preparing important official economic policy documents.

4.4.2 *Preliminary data are clearly identified*

Users are not alerted that the initially published data are preliminary and subject to revision. Preliminary data are not labeled. The revised data are disseminated with the same level of detail as previously published for the data being revised. The RBM and the MEPD disseminate GDP forecasts and estimates that do not concur with the figures disseminated by the NSO.

4.4.3 *Studies and analyses of revisions are made public*

Only analysis and causes of major revisions (e.g., change in the base year) are made public. Analysis on the extent and causes of current revisions are undertaken, but are not made public.

5. **Accessibility**

5.1 **Data accessibility**

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

National accounts statistics are accessible on the NSO website. However, the data are disseminated at an aggregated level. In hard copy publications, tables of national accounts estimates are presented in a clear manner. Analyses of recent developments are not disseminated with the data. Datasets are not published with various levels of detail that broadly facilitates meaningful comparisons. However, an analysis of the developments of the revision of the estimates for 1999 was posted on the NSO's website. Previous publications—the *National Accounts Report 1973–1979*—had more information and details than current publications.

5.1.2 *Dissemination media and formats are adequate*

The primary dissemination media is hardcopy publication. After the hardcopy publication is published, the data are posted on the NSO website. Data should be posted at the NSO website as soon as it finalized since printed publications take time to issue. Data are published in hardcopy for the period 1995–2001. Longer series are available from 1964. Electronic versions are also available in diskette and CD Rom at the NAS or by e-mail at enquiries@statistics.gov.mw free of charge.

The annual national accounts data are released through the following hard copy publications:

- *Statistical Yearbook*
- *Quarterly Statistical Bulletin*
- *Malawi in Figures*

The website of the NSO does not reproduce the data regularly. Longer time series cannot be accessed electronically.

5.1.3 Statistics are released on a pre-announced schedule

No pre-announced schedule for the release of data is available to the public. However, the statistics are released according to an internal schedule that is known to the “main users.”

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

The national accounts series are not made available to all users at the same time. Data are available to some government users and other users upon request before being disseminated.

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

Unpublished (but nonconfidential) data are provided upon request, free of charge. However, the availability of non-published statistics and the terms and conditions under which they are made available are not publicized.

5.2 Metadata accessibility

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

The Malawi National Accounts Handbook of August 1998 presents the sources and methods for the period 1990–1994. This metadata is outdated. Updated comprehensive metadata, including information on concepts, definitions, classification, data sources, and statistical techniques is not available to the public. The NSO plans to develop updated metadata in the short term.

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

Limited updated metadata are available to the public in the IMF website according to the GDDS framework. Outdated documentation is available to inform general users about the statistical series. Specialized users might find some explanations very general.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The name of the contact person (the Commissioner of Statistics) and the email address (enquiries@statistics.gov.mw) to which users can send their queries and requests on national accounts statistics is publicized in the publications and on the NSO website (<http://www.nso.malawi.net>). The address, phone, and fax numbers of the office in Zomba

are also posted on the NSO website. However, a direct contact person for each subject field is not publicized in the publications.

In addition, the Library and the Publication and Information Branch of the NSO provide information to users about the contact person, their phone number and email address in order to answer additional information requests. The services provided by these units are publicized on the NSO website.

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

A catalogue of publications, documents, and other services to users is widely available to the public in the NSO *Guide to Statistical Sources in Malawi 2001*, at the back of the *Quarterly Statistical Bulletin*, and on the NSO website. The prices of the statistical products and services are publicized and assistance is provided in placing orders.

Table 1. Malawi: Data Quality Assessment Framework: Summary of Results for National Accounts
(Compiling Agency: NSO)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment			X			The Statistics Act does not clearly specify the responsibility of compiling national accounts. Duplication of effort in NA dissemination. Lack of coordination among data producing agencies. Respondent burden. Shortage of human and financial resources. Some computing resources are obsolete. TCNABOP does not address duplication of effort. User feedback is not undertaken on a regular basis.	A project to review and update the Statistics Act is under way. Resources are to be implemented by international donors in the context of the National Strategic Plan for 2002–2006.
0.2 Resources				X			
0.3 Quality awareness			X				
1. Integrity							
1.1 Professionalism		X				Statistics Act and Public Service Regulations not disseminated. The approval process for disseminating statistics is not known by the public. Code of conduct of the Public Service is not known by the staff.	
1.2 Transparency			X				
1.3 Ethical standards			X				
2. Methodological soundness							
2.1 Concepts and definitions			X			1968 SNA used as a general framework. Output for own use and informal and hidden activities not adequately covered. ISIC Rev. 2. ISIC Rev. 3 being implemented. No other standard classifications used. Government and some external data on a cash basis, Annual average exchange rates used. Work in progress not recorded. Data at enterprise level.	A change in the methodology to be in line with the 1993 SNA will be undertaken.
2.2 Scope			X				
2.3 Classification/Sectorization				X			
2.4 Basis for recording			X				

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Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
3. Accuracy and reliability							
3.1 Source data				X		BIR not updated regularly. 1997/98 IHS not used. Medium/small scale and non-observed (informal and hidden) activities not investigated. Non-response to surveys not adequately addressed, leading to long delays. Accounting periods of enterprises differ from calendar years. No producer price indices.	2002–2004 IHS currently in the initial stage of preparation. Improved agriculture survey being implemented. Plans to conduct a producer price survey to compile producer price indices.
3.2 Statistical techniques				X		Wide use of single indicator method. Value added and taxes deflated by CPI. Excessive reliance in old fixed ratios. . . Statistical models used to compensate for absence of data not always appropriate.	The base year will move from 1994 to 1998 on the basis of the 1998 IHS, the GEMINI survey and the 1998 population census.
3.3 Assessment and validation of source data				X		No routine assessment of the AES. Information on imputation methods and processes only available for the IHS.	
3.4 Assessment and validation of intermediate data and statistical outputs			X			Supply and use tables not used to address discrepancies in data.	
3.5 Revision studies			X			Studies and analyses of revisions are not undertaken on a routine basis.	
4. Serviceability							
4.1 Relevance			X			There is not a permanent initiative to evaluate whether the programs meet the needs of users. Participation in international meetings and seminars is limited.	
4.2 Timeliness and periodicity			X			Preliminary GDP disseminated after 12 months not meeting the GDDS.	The NSO plans to improve the timeliness of final data disseminated.
4.3 Consistency			X			Limited consistency between national accounts and government finance data.	
4.4 Revision policy and practice				X		Public is not informed of revision policies. Preliminary data not labeled. Analyses of revisions not disseminated.	

Table 1. Malawi: Data Quality Assessment Framework: Summary of Results for National Accounts
(Compiling Agency: NSO)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria							
Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
5. Accessibility							
5.1 Data accessibility				X		No analysis of current-period is included. Formats are too aggregate. Statistics are not released on a pre-announced schedule. Data is available to some users prior to official release. The availability of non-published sub aggregated data is not publicized. NSO's website is not updated regularly. Metadata are scarce and outdated. Contact persons by each subject field are not publicized. Service provided for email inquiries not working properly.	
5.2 Metadata accessibility				X			
5.3 Assistance to users			X				

II. PRICE STATISTICS (CONSUMER PRICE INDEX)

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The Statistics Act (December 1967) assigns responsibility to the National Statistical Office (NSO) for the collection, processing and dissemination of statistical information. The NSO is a government department in the Office of the President and Cabinet. It compiles and disseminates Consumer Price Index (CPI) statistics according to Article 4 of the Act and the matters concerning the statistical information stated in its First Schedule. The First Schedule lists thirty six matters covering a wide range of both general and specific population, social and economic statistics. While the Consumer Price Index is not specifically mentioned as one of the matters, matter number 23 is “Wholesale and retail prices of commodities”

No other agencies are involved in the production of the Consumer price Index and it is accepted that the NSO is the responsible agency.

The Department for International Development Project (DFIP), with British financial support, is in the process of reviewing and improving the Act, in order to: (a) update the penalties for non-compliance; (b) establish the National Statistical System; (c) broaden the coverage of statistics; (d) empower other governmental agencies to collect information; and (e) make the NSO a semi-autonomous agency. The aim is to complete the revision of the Act by December 2003.

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

Article 4 of the Statistics Act empowers the Commissioner of the NSO to:

- (i) organize a coordinated scheme of statistics relating to Malawi; and
- (ii) ensure that common definitions for statistical purposes are used in respect of all official statistics collected or published by any Department of the Government.

The Act goes on to state that statistical inquiries requiring returns from more than five respondents shall not be conducted by any Government Department, local authority or public or statutory body unless approved by the Commissioner of the NSO.

A high level Economic Management Committee, comprising the heads of the NSO, the Reserve Bank of Malawi (RBM), the Ministry of Finance (MOF), and the Ministry of Economic Planning and Development (MEPD) was formed to discuss, make decisions and take financial actions in the area of statistics.

The Commissioner of the NSO is empowered to form data set specific technical committees as appropriate comprising the NSO and relevant agencies. In this regard, a TCNABOP was created to discuss forecasts, methodological issues, etc. Although a Consumer Price Index, or, more generally, Price Indexes, committee has not been formed, on occasions—e.g., with the recent rebase of the CPI—the TCNABOP has been used as a forum for discussing, and providing information on, CPI issues.

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

The Statistics Act states the rights and obligations of both parties involved in statistical collections—the NSO and survey respondents—in relation to reporting and confidentiality.

In relation to confidentiality of individual responses, Article 7 of the Act clearly states that information collected under the Act shall be used for statistical purposes only and that no information from individual returns is to be released to a third party without the written consent of the respondent. Further, statistics must be arranged so that it is not possible to identify any information relating to an individual respondent.

The relevant parts of the Act are summarized on survey questionnaires so that respondents are aware of their rights and obligations with regard to the provision of information. They are also informed that the information provided will be used for statistical purposes only. All questionnaires have a reference to the confidentiality provisions on the first page.

Article 9 and the Second Schedule of the Act require officers joining the NSO to take an oath of office and secrecy. Penalties for contravening the confidentiality provisions of the Act include a fine (which is in the process of being substantially increased in the revised law) and imprisonment for one year. Oaths are also taken by temporary employees of the NSO.

Staff are also subject to the provisions of the Malawi Public Service Regulations which includes penalties for unprofessional behavior.

CPI data are released at levels of aggregation, and in index number form, that do not allow the identification of data from an individual organization.

There is a UNICEF project to establish an interactive data base for storing all statistical data sets. The 2001 data are available on CD Rom and is not yet interactive on the Internet. The NSO computer system is password protected.

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

Article 5 of the Act states that the Commissioner of the NSO has the power to collect statistical data and require persons to complete questionnaires, and provide answers to questions asked by authorized officers. There are penalties for non-compliance, though these are very outdated and are in the process of being updated and strengthened.

In practice, because the penalties are currently so low, the Act is not invoked for respondents who fail to comply. To increase response rates, the NSO relies on efforts to increase respondent goodwill and rigorous attempts to persuade non-respondents to co-operate. Non-response is not an issue for the CPI as the price data are predominantly collected in the field by price collectors who either observe the commodity prices or actually purchase products (in the case of stalls).

Resource constraints necessitated the use of mail questionnaires rather than personal visit for many surveys which adversely affected response rates and the timeliness of source data. However, the consumer price collection has continued as a personal field collection.

Efforts are made to minimize respondent burden. For example, there used to be a single annual economic survey questionnaire for all sectors. Customized questionnaires have now been developed for each sector to reduce burden by removing questions that are not relevant to that sector.

0.2 Resources

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

NSO resources are not adequate to undertake their work program. NSO submits bids to the Ministry of Finance each year for sufficient resources to perform the work program but the actual allocations are only about one third of that requested.

The CPI has one specialist statistician and three compilers in Zomba. There are three regional field price collectors in Blantyre, five in Lilongwe, three in Zomba and three in the northern region.

Apart from the inadequacy of the staff numbers, they are not adequately trained. The NSO has had limited success with their nominations for participation in IMF training courses. The specialist statisticians have tertiary qualifications.

The CPI unit in Zomba is responsible for all aspects of the monthly CPI compilation and dissemination including data entry, input editing and data validation, imputation for missing prices and seasonal products, quality adjustment, aggregation, analysis and dissemination within two weeks of the end of the reference period. In addition, product and outlet samples need to be maintained on an ongoing basis, and the index needs to be periodically rebased. With such limited resources, it is clear that all of these functions cannot be fully performed.

Despite the low salaries, staff turnover has not been high.

Computers have been provided to CPI staff under the DFID project. However, the transfer of responsibility for the compilation of agricultural production statistics to the NSO without additional resources has led to the need to spread these computers more thinly. As a result, personal computers need to be shared amongst the compiling staff.

Resources for administrative expenses such as form printing and travel are completely inadequate which inhibits the timely conduct of new surveys, meeting for training purposes, and respondent field follow-up.

0.2.2 Measures to ensure efficient use of resources are implemented

Managers in the NSO promote a vision and set of strategic goals for the organization that are shared with staff.

Occasional reviews of work processes are undertaken to achieve improvements. Also, reviews of budgeting procedures are undertaken to promote the most efficient employment of scarce resources in addressing major data problems or meeting new data needs.

An NSO Strategic Plan 2002–2006 is presented to the Ministry of Finance and the Cabinet. The goals, work plans, scheduling and outputs are articulated, most of which are subject to external funding. The NSO evaluates the tasks and work plans each quarter, compares the scheduled activities with those implemented, and determines which activities need to be rescheduled in order to ensure the efficient allocation of resources. The NSO division chiefs meet weekly in order to measure progress, define the work to be undertaken and propose methodological improvements. Monthly meetings of section supervisors are held to inform staff of plans, achieve conceptual consistency and enforce work programs.

Efforts are made to achieve consistency of concepts and the more efficient use of resources through discussions at regular meetings and through cross fertilization amongst specialist staff. In addition, the Publications Section also has a role in harmonizing reports through a publications committee.

An internal critical analysis of each month's CPI processing, and the results, identifies problem areas where improvements can be made.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

Managers are very aware of the issue of quality and it is promoted through the Strategic Plan, and emphasized in the regular management meetings. "Produce better quality statistics" is the first of the NSO's goals articulated in the plan along with strategies such as establishing a statistical standards unit, seeking users' views, applying consistent publication standards, periodically reviewing methods and providing specialized training to staff.

One of the core values guiding NSO staff is "Quality Methods" which aims to use the best available expertise and methodology in the delivery of services, to ensure quality statistics that are accurate, timely and relevant to users. "Customer Satisfaction" is another NSO core value.

The NSO mission statement emphasizes data quality: “The mission of the NSO is to provide high quality, timely, and independent statistical information and promote its use for policy formulation, decision-making, research, transparency, and general public awareness.”

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

CPI compilation procedures include cross checks of data between regions and querying/rationalization of outliers.

At the end of each processing cycle, an internal critical review is undertaken to identify any data or processing problems and ways that improvements can be made.

Consultation with users is undertaken before the regular update of the Strategic Plan. A Customer Satisfaction survey has been planned for the first time focusing on the quality of the statistical services provided and how they could be improved, the mechanisms for the delivery of statistics, knowledge of the NSO and how to obtain statistics, and the identification of data gaps.

There is a need for resources to ensure more effective supervision and control over field collection staff in the collection of monthly data on prices.

There is currently no body distinct from the data producing agency that provides guidance on quality and strategies for improving data production.

The future establishment of the proposed unit for statistical standards and methods will provide guidance on how to improve data production processes.

0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs

The NSO is very conscious of the tradeoffs between quality and timeliness. Many users tend to favor timeliness and advocate the early release of initial survey results with very low response rates while the NSO tries to take a more balanced approach to ensure confidence in the accuracy of the results.

The release of the CPI is very timely.

The forward work program is planned within the framework of the Strategic Plan with its strong focus on quality through its Core Values and Goals.

There is currently no CPI specific user advisory group to address new and emerging data requirements. However, the TCNABOP is occasionally used as a forum for discussing CPI issues such as the 2000 rebase.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The CPI is compiled on an impartial basis because of the independence and professionalism of staff and the general adherence to international standards, guidelines and procedures. Although the current Statistics Act does not explicitly address the issue of the autonomy of the NSO, the revised Act will clarify the situation.

The NSO currently is a Department of the Office of the President and Cabinet (OPC) reporting to the Secretary to the President and Cabinet (SPC), with no external interference in the performance of the statistical functions. In 1998, the Public Sector Change Management Unit undertook a functional review of the NSO, which was updated in 2001 and recommended that the NSO become a semi-autonomous agency of government, governed by a revised National Statistical Act and accountable to a Management Board.

The Strategic Plan of the NSO has the following mission: “To provide high quality, timely and independent statistical information and promote its use for policy formulation, decision making, research, transparency, and general public awareness.” The second core value is “Integrity and Independence: Produce and disseminate statistics in an objective and independent manner without any political or any outside interference.”

Recruitment and promotion is undertaken through the Civil Service Commission with open selection processes based on merit.

Unfortunately, there are limited opportunities for staff to participate in conferences or prepare methodological papers, because of compilation pressures.

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

The choice of data sources and statistical techniques for the CPI is made by staff from the area, based on professional statistical considerations and in the light of international standards and practices. Data sources are soundly based on household and business surveys.

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

The Commissioner of the NSO is entitled to comment on erroneous interpretations of statistics and has done so in the past through interviews, press conferences, and press notes. Explanatory material is provided in the CPI press release, with the aim of informing users and avoiding misunderstanding.

1.2 Transparency

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

The Statistics Act, which governs the terms and conditions under which statistics are collected, the Oath of Office and Secrecy and the Chapter on Conduct and Discipline of the Malawi Public Service Regulations are not reproduced on the NSO website. The Statistics Act ensures the confidentiality of individual respondent's data and this is summarized on survey forms. In the case of consumer prices which are obtained through personal collection, respondents are advised of the terms and conditions on request, though the price data are generally in the public domain and confidentiality is not usually an issue.

The statistical publications do not contain information on this legal framework, although they do invite comments or observations on the content and provide contact details including the website address. The NSO Strategic Plan, including the mission statement, is included on the website.

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

There is no release of the CPI prior to the pre-announced embargo. Government does not have early access.

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

NSO publications clearly display the Government of Malawi logo and the name of the agency. Attribution of the NSO is provided in joint publications. Other agencies attribute the NSO as the source of the data when it is reproduced.

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

Advance notice is given when there are major changes to statistics (e.g., the rebases of the CPI and the national accounts) through newspapers and the NABOP technical committee. The Strategic Plan includes in Annex A of the Statistical Activity Plan: Proposed Activities and Outputs for 2002–2006. Users are informed through press releases and publications when new data are disseminated.

1.3 Ethical standards

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

Guidelines on ethical standards are provided in the Malawi Public Service Regulations 1991, along with the penalties for breaching the standards. However, these guidelines are not made

available to staff when they join the NSO and an induction course on guidelines for staff behavior is not offered to new staff.

Articles 7 and 8 of the Statistics Act deal with conflicts of interest of its employees and Article 9 requires NSO staff to declare an oath of secrecy about confidential information.

These guidelines and laws do not appear to be well known to staff and it would be beneficial to give additional attention to promoting them to new staff and periodically reminding staff of the main guidelines.

2. Methodological Soundness

The CPI was first compiled for Malawi in the late 1960's and related only to the largest two cities (Blantyre and Lilongwe). At the time of the 1980 rebase, the scope was expanded to cover the other two major cities (Mzuzu and Zomba). Rural areas were covered following the 1990 rebase. At the end of 2002, the index was rebased to 2000 using the results of the 1997–98 Integrated Household Survey and linked to the previous series to form a continuous long term monthly and annual time series. The CPI is compiled and published monthly.

2.1 Concepts and definitions

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

The concepts and definitions of household consumption expenditure used in determining the CPI weights follow the International Labor Office (*ILO*) guidelines. The index is a consumption CPI, rather than being restricted to monetary expenditures, and thus includes consumption from own production. The scope is broadly consistent with the 1993 System of National Accounts (*1993 SNA*) definition of consumption expenditure, with the exception of the treatment of owner-occupied dwellings.

The specifications of the products for repeat pricing are defined as narrowly as feasible with the aim of pricing to constant quality. The transaction prices are valued at purchasers' prices and the present weights were drawn from the 1997–98 Integrated Household Survey (IHS).

2.2 Scope

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

The CPI covers consumption by all resident, non-institutional households in Malawi. It includes both urban and rural households, and families of all sizes and income levels and households whose primary activity is farming or fishing. Separate indexes are published for each of the four major urban centers, each broken down into a High income, Medium income

and Low income index. A total Urban index, Rural index and a composite National consumer price index are also published.

The index covers market goods for consumption purchases, consumption of goods from own production and major market services for consumption purchases. Illegal market goods and services are not directly covered. The index does not include imputed rents of owner-occupied dwellings or dwelling purchases; owner-occupied dwellings are therefore not included in the CPI.

2.3 Classification/sectorization

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

The classification of institutional units and transactions are consistent with the *1993 SNA*. The Classification of Individual Consumption by Purpose (COICOP) is followed at all levels in the index hierarchical structure. In the creation of CPI elementary aggregates, COICOP commodities were split in some cases.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The weights in the CPI are based on the IHS results in which expenditure on consumer goods and services is valued at market purchasers' prices inclusive of trade and transport margins (on goods) and product taxes. The prices recorded in the index are actual market transaction prices with the product specifications defined in terms of all the price determining characteristics, as far as feasible, in order to support pricing to constant quality. In some cases it is necessary to use generic product specifications in order to achieve continuity of pricing, e.g., "men's" cotton long sleeved business shirt" because the source of the imported shirts changes over time so it is not feasible to fully specify the brand, style, etc.

2.4.2 Recording is done on an accrual basis

Prices of goods and services are collected throughout each month from regional samples of outlets comprising stores, shops, restaurants, etc and informal market stalls. Prices are recorded in the period in which the goods or services are purchased. In the case of items whose prices change infrequently and on a regular basis, such as school fees and electricity and water charges, prices are collected annually from the appropriate authorities.

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

The only second hand goods included in the CPI are imported (e.g., second hand clothing) so netting procedures are not applicable.

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 sample frame for the IHS is based on the previous Census of Population and Housing. There is no comprehensive and up-to-date business register of retail establishment units to provide a sampling frame for the selection of outlet samples for the monthly Consumer Price Survey. Therefore outlets are selected, and maintained, by price collectors on a judgmental basis at a micro-regional level drawing on local knowledge.

The CPI weights have been constructed using the latest available household survey results. There have been three rebases: 1980 and 1990, using results from the 1980 and 1990 Household Expenditure Surveys, respectively; and 2000, using results from the 1997–98 Integrated Household Survey. It is planned to use results from the forthcoming 2003–04 Second Integrated Household Survey for the next CPI rebase.

The first IHS was conducted in respect of 1997–98 with assistance from the World Bank. The survey provided a wide range of demographic and social data to support Poverty Reduction Programs, as well as providing expenditure and consumption data by commodity (and other data) as inputs to the CPI and National Accounts. .

The sampling frame for the 1997–98 survey was derived from the 1997 Census of Population and Housing. Multi-stage clustered random sampling was used with three-stage sampling for rural districts and two-stage sampling for each of the four major urban centers.

Malawi was divided into twenty seven Districts. For the Urban Districts, sample enumeration areas (EAs) were defined, while the Rural Districts were initially divided into Traditional Authorities (TAs)—which are something akin to very detailed local government areas—and then EAs.

In the office, samples of TAs and EAs were selected using Probability Proportional to Size (PPS) techniques. Then, for efficiency reasons, area sampling of households was undertaken in the field using simple random sampling prior to interviewing the householders. There were 720 EAs with twenty households being selected from each rural EA and ten households from each urban EA. Interviewers progressively moved from District to District over a twelve month period, first selecting the sample of households within each selected TA, and then conducting the interviews and arranging for the completion of diaries. Collection was spread over a twelve month period in order to account for seasonal effects during the year.

For expenditure and consumption data for detailed commodities, a diary was completed by literate households over a twenty eight day period with the interviewer calling back every

three days to code and check the data and prompt as necessary. For illiterate households, the diary was completed by the interviewer on a three daily recall basis.

In relation to dwellings, information was asked about income if a dwelling was rented out, expenditure if rent was paid, and imputed dwelling rent for an owner-occupied dwelling.

The 1997–98 survey was the first integrated household survey and it covered a very wide range of demographic, social and economic characteristics. Particular problems were encountered which resulted in a high proportion of the forms from the 12,960 households sampled not being usable. There were also significant problems with the timeliness of collection and processing, partly because of delays in receiving funding to pay interviewers.

In summary, the IHS had high household coverage, comprehensive geographic coverage of urban and rural areas, used scientific sampling techniques and collected information on expenditure on market goods and services, value of goods produced for own consumption and the rental value of owner-occupied dwellings.

A monthly consumer price collection is undertaken by regional price collectors personally visiting the outlets. In the case of formal stores, supermarkets, etc the prices of the selected items are observed and recorded. In the case of the stalls in formal markets, products are actually purchased to ensure that realistic transaction prices are obtained.

Because of the volatile nature of the prices of perishable items such as fruit and vegetables, eggs and meat, they should be priced more frequently than monthly in order to yield reliable indicators of month-to-month price movements. It is standard practice in most countries to price such items more frequently, e.g., weekly. However, because prices of perishable items are based on actual prices from market stalls, there are budget constraints that currently inhibit more frequent price collection in Malawi.

There are 235 items priced for each of the four cities included in the urban index, with three price quotations obtained for each item. Thus, 2,820 prices are collected each month for the urban index. For the rural index, 90 items are priced in each of the 18 rural districts. Three prices are collected for each item in each district, so 4,860 prices are collected for the rural index. In total, 7,680 prices are collected each month for the national index.

Prices for certain items such as education and utilities are average prices collected on an annual basis.

The price collection is undertaken throughout the month with the outlets visited on the same day of each month, or as close as practically possible. Judgmental sampling is used for the initial selection of outlets at the time of a rebase with the objective of representing both formal and informal outlets in all of the current thirty Districts in the three broad regions (North, Central and South). Local knowledge of the field collectors plays a major part in the selection, and the outlets need to be significant in terms of turnover and reasonably stable (i.e. they have been operating for some time). The sample of outlets is maintained by the

field collectors on an ongoing basis. The press is monitored as a supplementary source of information on price development. Also, at the time of an IHS, price data obtained through that survey can be cross-checked against prices for comparable products obtained from the ongoing consumer price collection.

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

The IHS commodity data broadly matched the requirements of the CPI in terms of definitions, scope, valuation basis, and time of recording. In terms of classification, there was a need to undertake a concordance between the IHS classification and the COICOP classification used for the CPI. IHS data related to 1997–98, so the value data were revalued to year 2000 prices, the reference period of the rebased CPI, in calculating the index weights.

3.1.3 Source data are timely

The 1997–98 IHS data were *not* produced on a timely basis. There were long delays in obtaining results because of teething problems with the complex new survey, quality problems with the reported data, funding delays, etc. In the light of the lessons learnt from the first survey, the NSO is much more confident about the conduct of the second IHS and is optimistic about having the results available for CPI rebasing about six to seven months after the end of the survey reference period. Consumer price data are available on a very timely basis, supporting the release of the CPI 15 days after the end of each reference month.

3.2 Statistical techniques

3.2.1 Data compilation employs sound statistical techniques

The IHS provided expenditure and consumption commodity data at an adequate level of detail for use in the CPI. It was necessary to link the IHS classification to COICOP to obtain a concordance and derive the new CPI weighting pattern. The 2003–04 IHS will use the COICOP classification so that the next CPI re-weighting exercise will be more straightforward than the previous one.

The CPI weights broadly conform to the *1993 SNA* definition of household consumption expenditure, the main exception being the exclusion of housing services provided by owner-occupied dwellings.

For CPI weighting, goods and services purchased are valued at the economic cost at the time of purchase, and those produced for own final consumption are valued at market prices at the time of production. Prices of individual, homogeneous items, collected from different outlets are averaged for each region before forming price ratios.

Elementary aggregate indexes are calculated using the ratio of arithmetic mean prices approach. Higher level index aggregation is undertaken using the standard, long-term

Laspeyres formula. The weight reference period is 1997–98, about five years old, and is planned to be updated to 2003–04 after the conduct of the IHS for that year. The 1997–98 value weights were revalued to the prices of 2000, the time reference period.

After the 2000 rebase, the new index was linked to the old index as at January 2000 to form a continuous monthly and annual index back to the beginning of 1990.

Prices for temporarily missing products are generally imputed clerically on the basis of the movement in the index for the next level of aggregation (i.e. the movement in prices for similar products). Out-of-season product prices are imputed using in-season product price movements. When a product becomes permanently unavailable, a replacement is spliced into the sample using overlapping prices.

Some endeavors are made to compensate for changes in quality when the associated price movement is very high (say greater than 20 *percent*), mainly using the overlap method under which the price difference between the old and the new product is assumed to represent the difference in quality. However, it appears as though the approach to quality adjustment is not comprehensive, rigorous or consistent and that there is scope for improvement in this important area.

New products are introduced into the index at the time of a rebase.

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

The scope of the CPI approximates household final consumption expenditure with the main difference being the exclusion of imputed dwelling rent from the CPI. The CPI is used in disaggregated form by national accounts to derive constant price estimates. No data adjustments and transformations are made to the CPI data.

3.3 Assessment and validation of source data

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

No information is available from the 1997–98 IHS on sample errors because the SPSS processing software used did not have the capability to derive them. Information was not able to be gleaned about imputation methods used for non-response in the IHS because of staff changes. However, processes such as rigorous forms testing and intensive field supervision were geared towards minimizing the non-sampling errors.

Sample errors are not available for the consumer price survey because scientific sampling techniques are not used for item and outlet selection. Non-response is not an issue as personal price collection is used.

Adjustments were made to the IHS data for the underreporting of consumption of alcohol and tobacco products by reference to alternative sources.

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

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

The CPI is not compared with data from the unit value based Import or Export Price Indexes to validate results and increase understanding of price transmission processes. There is no Producer Price Index against which to make comparisons, although it is a proposed new collection for the NSO.

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

Different prices can prevail in different regions, so when there are disparate movements between regions, reference is made to the monthly collectors' reports which contain a summary of the main market movements to see if they can be rationalized. If they cannot be justified, queries will be raised with the appropriate regional office CPI supervising officer.

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

Imputation for missing data are undertaken once only within an elementary aggregate, and then there is a single aggregation within each region and then between regions, with no inconsistencies.

3.5 *Revision studies*

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

Preliminary monthly index numbers are not produced. In general they are final when first released. The exception is associated with the periodic rebases where delays in calculating the new weights result in the index numbers for each month from the period of the new base to the current period being recompiled using the new weights, and revised retrospectively.

For example, with the 2000 CPI rebase, the new weights were not available until late 2002 so the monthly index numbers for the period from January 2001 to December 2002 were initially released on the basis of the old 1990 weights. When the new weights became available, the index numbers from January 2001 to December 2002 were recalculated, linked onto the old series at January 2001 to form a long term continuous series, and a revised series

published for the January 2001 to December 2002 period. The new weights were not applied prior to January 2001 and the previous series was not revised but simply arithmetically re-referenced from year 1990 = 100.0 to year 2000 = 100.0 while retaining the same monthly and annual percentage movements. The alternative approach, which many countries adopt in order to avoid revisions, is to only use the new weights for the current and future months, and retain the use of the old weights for all index periods until the new weights are available. That is, the link to introduce the new weights is deferred until the index month of the first calculation using those new weights.

While an internal revision study was undertaken at the time of the release of the 2000 rebased series, it was not published and does not appear to have informed statistical processes.

4. Serviceability

4.1 *Relevance*

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

A major goal of the NSO articulated in their Strategic Plan is to “Enhance the service provided to users” by remaining close to policy debates and understanding the needs of users. Processes of user consultation associated with the update of the Strategic Plan, plans to conduct a Customer Satisfaction Survey, and the regular meeting of the TCNABOP Committee, which has occasionally addressed CPI issues, are geared towards obtaining feedback on the utility of the statistics produced.

However, there is no CPI-specific user advisory group to focus on important conceptual CPI issues which is a major deficiency in the mechanism for ensuring the ongoing relevance of that measure.

Opportunities to participate in international and regional meetings are limited.

4.2 *Timeliness and periodicity*

4.2.1 Timeliness follows dissemination standards

The CPI is released 15 days after the end of the reference month and therefore exceeds the GDDS requirements.

4.2.2 Periodicity follows dissemination standards

The CPI is compiled and released monthly and therefore meets the GDDS requirements.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

The CPI is internally consistent with aggregation initially within each region, and then across regions.

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

Consistent and continuous monthly and annual CPI time series are available from January 1990 to July 2003. It is NSO practice that when the CPI is rebased, it is recompiled and revised back to the new weighting base period using the new weights, and then the revised series (with the new weights) is linked to the previous series (with the old weights).

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

The NSO does not compile a Producer Price Index. The CPI data are broadly consistent with the national accounts household consumption expenditure estimates with the main difference being the exclusion of owner-occupied dwelling services from the CPI.

4.4 Revision policy and practice

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

Following each household survey, the CPI is rebased and revised weights introduced. A regular pattern has now been established with rebases to 1990 incorporating revised weights from the 1990 Household Budget Survey, and 2000 incorporating revised weights from the 1997–98 Integrated Household Survey. There are now plans to rebase the index again when the results from the Second Integrated Household Survey 2003–04 are available.

No preliminary indexes numbers are produced and they are final when first released, subject to the policy described under 4.3.2 above. Documentation on this revisions policy and practice is not published.

4.4.2 Preliminary data are clearly identified

Index numbers are final when first published, subject to the revisions to the recent short-term series associated with a rebase (see 4.3.2 above).

4.4.3 Studies and analyses of revisions are made public

While there was some internal study of the revisions to the recent index numbers associated with the 2000 rebase, no analysis was published.

5. Accessibility

5.1 Data accessibility

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

The CPI is first released through a news release called Stats Flash which is supplied to the media and subscribers. Data are well presented with text describing main features, a graph of index number time series of main aggregates and tables with thirteen months and two years of index numbers for commodity groups and broad regions. These data are also released on the NSO website. More detail is provided in subsequent publication releases.

5.1.2 Dissemination media and formats are adequate

Subsequent to Stats Flash and release on the website, additional details and longer time series are progressively published in the Monthly Statistical Bulletin, Quarterly Statistical Bulletin and Statistical Yearbook.

5.1.3 Statistics are released on a preannounced schedule

There is a pre-announced schedule providing the release date of the next monthly CPI.

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

The CPI is released simultaneously to all users. It is embargoed until the day of release.

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

After the release of summary data in Stats Flash, additional details can be obtained on request. All the data that are available from the CPI are subsequently published in the Monthly and Quarterly Statistical Bulletins.

5.2 Metadata accessibility

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

The published meta data are very sketchy providing only minimum information. They are not adequate to provide users with a full understanding of the conceptual basis of the index and the extent to which it conforms to international standards and best practice. The GDDS meta data were out of date at the time of the mission; however, they were updated in February 2004.

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

Comprehensive sources and methods documentation is not produced.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The names of specific individuals who can be contacted are not specified on NSO publications. The Quarterly Statistical Bulletin and the Annual Statistical Yearbook are released over the name of the Commissioner of Statistics.

Contact details presented include: mailing address of the NSO, switchboard telephone number, fax number, email address and website address. Callers contacting the NSO switchboard will be transferred to the appropriate specialist when they indicate their area of interest.

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

There is a Catalogue of Publications which lists the CPI News Flash, Monthly and Quarterly Statistical Bulletins, and the Statistical Year Book.

Table 2. Malawi: Data Quality Assessment Framework—Summary of Results for Price Statistics (Consumer Price Index)
(*Compiling Agency:*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment			X			The Statistics Act needs strengthening and compliance enforced.	The DFIP is currently reviewing and redrafting the Act.
0.2 Resources				X		Staff, computing and administrative resources are inadequate.	
0.3 Quality awareness			X			There is no separate body to provide guidance on quality and process issues.	The NSO plans to establish a statistical standards unit and conduct a Customer Satisfaction Survey.
1. Integrity							
1.1 Professionalism			X				
1.2 Transparency				X		The Statistics Act and Code of Conduct of the Public Service are not publicized by the NSO either internally or externally.	
1.3 Ethical standards			X			See 1.2 above.	
2. Methodological soundness							
2.1 Concepts and definitions			X				
2.2 Scope				X		Owner-occupied dwellings are excluded.	
2.3 Classification/sectorization			X				
2.4 Basis for recording			X				
3. Accuracy and reliability							
3.1 Source data				X		Collection and processing problems with the First IHS (1997–98) affected the quality and timeliness of the results.	Experience from the First IHS is guiding the Second IHS.
3.2 Statistical techniques				X		Quality adjustment techniques need to be applied with more rigor.	
3.3 Assessment and validation of source data					X	There is no information from the HIS on sample errors, imputation techniques, etc. to support an assessment of the accuracy of the results.	The NSO will assess the accuracy of the Second HIS results.
3.4 Assessment and validation of intermediate data and statistical outputs				X		The CPI is not validated against the international trade indexes.	
3.5 Revision studies				X		Analyses of revisions have not informed the statistical processes.	

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

Table 2. Malawi: Data Quality Assessment Framework—Summary of Results for Price Statistics (Consumer Price Index)
(*Compiling Agency:*)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
4. Serviceability							
4.1 Relevance			X			There is no CPI-specific user advisory group.	
4.2 Timeliness and periodicity		X					
4.3 Consistency		X					
4.4 Revision policy and practice			X			The revisions policy and practices, and analyses of revisions, are not published.	
5. Accessibility							
5.1 Data accessibility		X					
5.2 Metadata accessibility				X		Published meta data are not comprehensive.	
5.3 Assistance to users			X			The names of specific contact officers are not included in publications.	

III. GOVERNMENT FINANCE STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

No specific legal responsibility has been assigned to a single agency to compile government finance statistics (GFS), however, the *Finance and Audit Act, 1966*, (Article 44) assigns the responsibility to collect, process and disseminate data on the execution of the central government budget to the Minister of Finance. The act also stipulates that the Minister presents a full set of government accounts, after it was certified and reported on by the Auditor General within five months after receipt by him (AG), to the National Assembly at the next meeting following the Minister's receipt of the documents. Article 33 of the act prescribes a list of accounts that the Secretary to the Treasury must submit to the Auditor General within a period of six months after the end of each fiscal year.² Based on these data, the MEPD compiles summary budgetary central government fiscal data (GFS³), which are also used for fiscal analysis. The act does not assign the responsibility to compile and disseminate government finance statistics in line with international standards such as those set out in the *Government Finance Statistics Manual, 1986 (GFSM 1986)*. The yet to be implemented *Public Finance Management Act (No. 7 of 2003)*, however, states that all financial reports, financial statements, associated information, and accounting procedures required by the Act shall be in accordance with generally accepted accounting practice.

The RBM publishes monthly and quarterly fiscal data on budgetary central government operations in their publications. The NSO in accordance with the *Statistics Act* disseminates fiscal data in the *Quarterly Statistical Bulletin*. The MOF only publish annual statistics in the Budget Review and in the Public Sector Financial Statistics which is a document published every five years.

The Debt and Aid Management Division (DAMD) of the MOF is responsible for compiling external government debt data. The RBM compiles and disseminates data on the domestic and external debt of the Malawian government. Although this division of responsibilities is informal it is well established. The DAMD is using the Commonwealth Secretariat Data

² Fiscal year for the central government commences in July of each year.

³ The assessment of government finance statistics is against the existing international standard, as set out in the IMF's Government Finance Statistics Manual, 1986 (GFSM 1986). In this section, "fiscal data" refers to data on government operations in general, and "GFS" refers to the fiscal data compiled and disseminated in accordance with the GFSM 1986.

Recording and Management System (CS-DRMS 2000+) to administer the external debt the RBM has on-line access to the data.

0.1.2 Data sharing and coordination among data producing agencies are adequate

Data sharing and coordination among the agencies producing GFS are adequate. Meetings between MOF and RBM are held on a weekly and monthly basis. Government debt issues and financing of government are also regularly discussed among the agencies. The formal meeting between these agencies is also supplemented with regular informal contact and feedback. Prior to their publication, fiscal data are discussed by an inter-agency TCNABOP, chaired by the NSO. The inter-agency TCNABOP is comprised of representatives of the MOF, Ministry of Economic Planning and Development, RBM and NSO. The inter-agency TCNABOP, meets quarterly.

Although source data are received on a timely basis by the GFS compilers, the lack of data sharing between the MOF, RBM and other agencies through an electronic network, hampers the work of compiling GFS.

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

Data on government finances is not considered to be confidential. Data collected on the finances of government is used in policy decision-making. As such, the fiscal authorities are accountable to the National Assembly and the public in general. Official publications containing details of government finances (budget document, audit reports, parliamentary submissions, etc.) and can be obtained from the MOF. To the extent that the confidential requirement is applicable, appropriate legal provisions and operational procedures are in place for purposes of confidentiality.

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

A general legal mandate given to the appropriate Minister ensures compliance with the requirement to provide information on government finances. The *Finance and Audit Act, 1966*, (Article 32F) states that every statutory body shall, as soon as possible and not later than six months after the end of each financial year submit an annual report to the appropriate Minister. The Act also provides the Minister with the authority to specify the format in which it should be presented. The report shall include a balance sheet, an income and expenditure account, and the annual report of the auditor of the statutory body.

Foreign aid grants to finance government operations are not always reported to the MOF as these grants are in some cases paid directly to line ministries. Following a report on *Malawian Poverty Reduction Strategy* an Aid Coordination Committee was established to coordinate aid between the ministries and the aid organizations.

0.2 Resources

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

Three staff members of the Macroeconomics Statistics Unit in the MOF are compiling government fiscal data for use by government and for the GDDS. Although the government provides employees with opportunities to attend workshops, seminar and training courses, only one of these employees did attend a two-week regional GFS course under MEFMI and there is a critical need for training on the *GFSM 2001*. Employees are allowed to further their studies by entering higher training institutions while in employment.

Although all of the employees have access to their own personal computer most of the source data they received are still in a hard copy format. All three the above mentioned employees are competent in the use of Excel applications.

0.2.2 Measures to ensure efficient use of resources are implemented

There is no specific allocation of resources for the compilation of GFS, nor is there separate cost information on the compilation of budget execution data. There is no evident sign of inefficient use of resources. Available staff, albeit stretched out, are managed efficiently under present constraints.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

All participants in the process of compiling government finance data are focused on the quality of information available and strive to improve quality. Data are produced from actual records in the accounting system of government for which clear rules and a code of conduct exists. Monthly meetings are scheduled between the MOF and RBM to reconcile the data calculated by the MOF and the financing data, which are obtained from the RBM. The government also promulgated two new Acts during 2003 to replace the Finance and Audit Act of 1966. The new Acts, of which substantial parts will be introduced within eighteen months, are the Public Audit Act (No 6 of 2003) and the Public Finance Management Act (No. 7 of 2003). Two of the main features of the new Acts are that the Office of the Auditor General shall have independence, that it be no longer part of the MOF and that all financial reports, financial statements associated information and accounting procedures required by the Public Finance Management Act shall be in accordance with generally accepted accounting practice. In August 2002 the Cabinet Committee of the Economy directed that the Public Sector Investment Program (PSIP) should be revived because most ministries lack basic information about the projects that they are in charge of.

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

The collection and processing of government finance data is vested in the accounting system of government. Various processes are in place to monitor the quality of the collection processing and dissemination of the data. In accordance with the *Finance and Audit Act, 1966* (Article 14), the Secretary to the Treasury designates a controlling officer for each expenditure vote. This officer is responsible and accountable for all revenue and expenditure of the vote, and the recording of it.

The Auditor-General has the responsibility to perform annual audits, examine and inquire financial reports and report on the outcome. The annual audit reports is submitted to Parliament and discussed extensively by the Public Accounts Committee. The audited reports are available to the public from the MOF.

No arrangements are in place to obtain feedback from users of fiscal statistics outside the government.

0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs

Although not communicated explicitly, a tradeoff between quality and availability of data is made. The RBM and NSO are making trade-offs between comprehensiveness and timeliness in their publication of monthly and quarterly government statistics. Therefore, included in this dissemination is an item *Errors and omissions*, which in some quarters amounted to more than 50 per cent of total financing. This indicates that either or both the quality and comprehensiveness of quarterly data are not very good. Comprehensive information on the expenditure of the statutory agencies units and local governments are not available from the systems in use. Government finance statistics is therefore limited to the budgetary central government. Due to the need to have comprehensive statistics on the nature of the expenditure the expansion of the coverage of government is planned.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

The accounting system regulations issued by the MOF provide for the strict application of accounting principles and control mechanisms. Fiscal statistics are compiled on an impartial basis using available sources, mainly data generated by the accounting system.

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

Staff of the MOF are understood to be free from political or other influence in choosing the most appropriate sources and methods for compiling budget execution data. Compilers of fiscal statistics have full access to budget execution data and the available data on off-budget operations. No statistical techniques are used in the compilation of the government data since all the data currently disseminated are obtained from actual accounting records.

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

The dissemination of government finances data in MEPD publications and in the publications of other agencies is accompanied by an analysis of the outcome of government finances that minimizes the possibility of misuse or erroneous interpretation. The official in MOF responsible for the provision of government finance data to the other agencies also provides advice and explanations to these agencies for incorporation in the publication. However, comments on fiscal data are only addressed through formal channels within the MOF.

1.2 Transparency

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

The *Finance and Audit Act, 1966* and the new *Public Finance Management Act (No. 7 of 2003)* as well as the *Finance Regulation* based on the act are available to the public. These documents contain the general terms and conditions under which government finance data are collected and reported. Some of these terms are also disseminated on the IMF DSBB. However, no other documentation describing the process of collection, processing and dissemination are available to the public either in hard copy or electronically. Neither the mission nor the staff of the MOF was able to access the website of the MOF.

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

Monthly reports on government finances are compiled for use within the government sector for financial management purposes. These reports are not disseminated to the public, although they are made available on request. Neither the availability of the reports, nor the internal access to the statistics, is publicly identified.

All the reports, on government finances, disseminated to the public are subject to a process of discussion before dissemination. The TCNABOP meets on a regular basis to discuss the information prior to release. This committee is also informed of any methodological changes

or major revisions of data. This discussion is not made public but most of the government agencies compiling statistics and uses statistics form part of the TCNABOP.

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

Although the MOF does not disseminate government finance data on a monthly or quarterly basis in their own publications, this information is released in publications of the MEPD, RBM and NSO. The statistical product is accompanied by a footnote that discloses the MOF as the source. Information on the domestic debt and external debt of the Malawian government is included in the publications of the RBM, a footnote in Table 8 (External debt stock) of the *Annual Financial and Economic Report* of the RBM identifies the RBM as the source of the data.

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

Although explanations of major changes in methodology and revisions are not disseminated with the data, the TCNABOP is given notice of major changes in methodology and source data.

1.3 Ethical standards

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

All government employees are subject to the Malawi Public Service Regulations (MPSR). The document describes the conditions of employment of civil servants, the code of conduct, and disciplinary procedures that will be followed in cases of misconduct. In addition to these general ethical standards set for staff, the *Finance and Audit Act, 1966 and Treasury Instructions* also governs the code of conduct of accounting officers. These officials, being the custodians of government, are subject to specific regulations on their responsibilities, authority and accountability.

2. Methodological Soundness

An interim period is provided for countries that have yet to adopt the *2001 GFS Manual (GFSM 2001)*. Because Malawi has not yet adopted the *GFSM 2001* the assessment below relates to the GFS guidelines outlined in the *GFSM 1986*. However, after the interim period, assessment of methodological soundness shall be based on the *GFSM 2001* for all countries.

2.1 Concepts and definitions

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

(i) Central government budgetary operations

The overall structure in terms of concepts and definitions in use in Malawi's annual Economic Report (Budget Document No. 2 and No. 3 published by the Ministry of Economic Planning and Development (MEPD)) largely adheres to the concepts and definitions of the internationally accepted standard as prescribed in *GFSM 1986*. Fiscal data in Malawi covers most of the activities of the budgetary central government. The quarterly dissemination of fiscal data for budgetary central government in the RBM's *Financial and Economic Review* (Tables 2.1, 2.2, and 2.3) is largely based on the methodology of the *GFSM 1986*. Documents produced for internal use adhere more closely to the international accepted standard as recommended in *GFSM 1986*.

Plans are being developed by the authorities in Malawi to implement an accrual framework for the government financial accounts. The yet to be implemented *Public Finance Management Act (No 7 of 2003)*, also states that all financial reports, financial statements associated information and accounting procedures required by the Act shall be in accordance with generally accepted accounting practice.

The authorities, with technical assistance from the IMF, are in the process of compiling GFS for the budgetary central government for the year 2000/01 in the framework prescribed in *GFSM 2001*. The authorities are also starting to implement an Integrated Financial Management Information System (IFMIS), which will improve the availability of source data and assist the compilers of GFS.

(ii) Statutory agencies and local government

Compilation and dissemination of GFS for statutory agencies⁴ and local governments as disseminated in Public Sector Financial Statistics 1990/91–1997/98 published by the then Ministry of Finance and Economic Planning in 2002 partly adheres to the international accepted standard as prescribed in *GFSM 1986*. This information⁵ was not consolidated into GFS for general government in accordance with the standard as recommended in *GFSM 1986*.

⁴ Statutory agencies include extra-budgetary agencies and public enterprises.

⁵ See page 61 to page 62 of the publication.

2.2 Scope

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

The MOF does not compile or disseminate GFS for the general government. The scope of GFS disseminated on central government operations covers the revenue, expenditure and financing of all budgetary central government units and excludes extra-budgetary agencies. The final actual data on statutory agencies and local governments are published in audited reports, which are produced for each agency and local government and presented to the appropriate minister. If some of these statutory agencies (the extra-budgetary agencies) are included, it covers the complete central government sector, but GFS for central government is not compiled or disseminated on a consolidated basis. However, the financial year of some of the statutory agencies differs from that of the budgetary central government, which limits the possibility of expanding the scope of the data on government finance operations to cover the central government. The government units covered in budgetary central government operations of Malawi meet the guideline of the GDDS.

Data on cash transactions of budgetary central government are available, but the data also include amounts for grants received in kind and may exclude certain transactions in foreign aid received and development expenditure as these transactions are not fully covered. The data on central government operations are presented and disseminated according to a national analytical framework and do not cover the full scope of data as recommended by the tables recommended in the *GFSM 1986*.⁶

2.3 Classification/sectorization

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

The data disseminated on budgetary central government operations and debt are not fully consistent with the classification recommended in the international standards *GFSM 1986*.

Although the classification of domestic revenue, expenditure and financing broadly follows the analytical framework of the *GFSM 1986*, concepts and definitions of revenue, expenditure and lending minus repayments differ from the international standard in significant ways:

⁶ The full scope of the GFSM 1986 recommends the following tables: (i) Summary Table of Major Components (Table III. K.); (ii) Government Revenue and Grants (Table A); (iii) Classification of the Functions of Government (Table B); (iv) Economic Classification of Government Expenditure and Lending minus Repayments (Table C); (v) Financing by Type of Debt Holder (Table D); (vi) Financing by Type of Debt Instrument (Table E).

Revenue and grants

- Data on domestic revenue distinguish between tax revenue and non-tax revenue. Although tax revenue is classified according to the *GFSM 1986*, non-tax revenue includes capital revenue.
- Grants include all receipts in cash and in kind, as well as the cash value of debt relief.

Expenditure

- Detailed economic data on all development expenditure, which allows for detailed classification, is not available. Therefore development expenditure, which may not be completely covered, also includes expenditure of a current nature.

Net lending

- Proceeds from privatization are not recorded as net lending. The *GFSM 1986* recommends that all government receipts reducing equity be recorded as a repayment of lending for policy purposes.

Financing

- Domestic financing transactions include the net change in arrears as financing activities whereas that should be recorded as expenditure in a cash system of recording transactions.
- The quarterly dissemination of fiscal data for budgetary central government in the RBM's *Financial and Economic Review* includes an item *Errors and omissions*, which in some quarters amounted to more than 50 per cent of total financing.

Fiscal data for the budgetary central government are compiled and disseminated on a monthly, quarterly and annual basis. The last data disseminated for statutory agencies and local government were for the year 1997/98.

2.4 Basis for recording

2.4.1 Prices used to value flows and stocks reflect actual or expected cash payments.

Budgetary central government operations are largely recorded in accordance with the *GFSM 1986* on a cash basis. Tax revenue is recorded when payments are received, and non-tax revenue is recorded when deposits are made. In the annual analysis of expenditure, expenditure is recorded when checks are written or payments are made. In the case of monthly and quarterly, however, expenditure is recorded when funding of a line ministry takes place and not at the time of the actual expenditure. Revenue also includes a monetary amount for grants received in kind, while payments of arrears are excluded from expenditure.

In accordance with the *GFSM 1986*, debt liabilities are recorded at face value (i.e., the amount to be repaid at the end of the contract), rather than market value. Transactions in foreign currencies are converted to MK using the official exchange rate prevailing at the time of the transactions. The stock of foreign debt is converted using the exchange rate prevailing at the end of the period to which it refers, which is in line with the international standard.

2.4.2 Recording is done on a cash basis

Not all transactions are recorded when the actual payments are made. Recording of transactions is therefore not done on a strictly cash basis in accordance with *GFSM 1986*. Transactions in kind are monetized which is not in line with cash accounting and financing transactions include the net change in arrears as financing activities whereas that should be recorded as expenditure in a cash system of recording transactions. All these difference form part of the item *Financing not included elsewhere* or *Statistical discrepancy* depending on which annual analysis is used.

In the quarterly analysis of expenditure, expenditure is recorded when funding of a line ministry has taken place. The difference between actual spending and funding as well as the partial accrual accounting is captured in the item *Errors and omissions*.

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

Grossing/netting procedures are broadly adhered to because all non-industrial payments and receipts of central government are correctly treated on a gross basis. Corrective transactions on tax refunds and expenditure recovered are correctly netted against the appropriate class of tax or expenditure. Activities of departmental enterprises are, however, recorded on a gross basis contrary to the international standard which recommends netting their transactions before recording the net result in the accounts of the unit of government they report to.

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 collection programs in use to compile source data are comprehensive for data on revenue and recurrent expenditure of budgetary accounts, but data collection programs covering all foreign grants and development expenditure, should be investigated. In the Economic Report 2003 (p.109) it is stated that most ministries lack basic information about the projects that they are in charge of. Audited annual statements are available for the statutory agencies and the local governments. Comprehensive data covering the recurrent revenue and expenditure of budgetary central government operations are obtained from administrative records generated by the accounting systems of government. Data on tax

revenue are compiled by the MRA from their administrative records. Data on grants and donor funds received are compiled from information received from reports by ministries and from the records of the Aid Coordination Committee.

Net domestic financing data are compiled by the RBM from the administrative records of the RBM. The Commonwealth Secretariat Debt Recording and Management System (CS-DRMS 2000+) shared by the RBM and the DAMD serves as the source for compiling external financing.

However, the disseminated data include an item *Errors and omissions*, which in some quarters amounted to more than 50 per cent of total financing. This indicates that the quality of quarterly data or the comprehensiveness of the source data are not very good.

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

Detailed source data for government revenue and expenditure excluding development expenditure are largely consistent with the definitions, time of recording and valuation recommended in the *GFSM 1986*. The source data for development expenditure are, however, not always available in enough detail to enable compilers of statistics to make classifications, which broadly corresponds to the classifications used in the *GFSM 1986*. Detailed information on all the economic and functional operations of statutory agencies is not available from the present system, as only audited reports are available. Data also were not available for local government.

3.1.3 Source data are timely

The source data on central government operations and central government debt are timely, but in hard copy. Preliminary monthly data on budgetary central government operations are available, for internal use by the MOF, within four weeks after the end of the reference period. Although a full set of monthly data is not disseminated on a timely basis to the public, quarterly data are disseminated to the public within three months after the end of the reference period. Data on the statutory agencies and local government are available on an annual basis (Audited Accounts), and only several months after the end of their financial year-end.

All data are considered to be preliminary until the completion of the audit of the annual financial statements of government. Data are then revised at which time it is considered to be final.

3.2 *Statistical techniques*

3.2.1 *Data compilation employs sound statistical techniques*

Fiscal data compilation covering the budgetary central government is based on administrative records with no need to employ any statistical techniques in the compilation process. Most source data contain sufficient details to enable reclassification into the budget framework and the *GFSM 1986* framework.

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

Actual outcomes for the current year are compared with the outcomes in previous years to derive a medium-term trend. This, as well as, econometric modeling are used for projections in the preparations of the medium-term budget estimates.

3.3 *Assessment and validation of source data*

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*

As the source data used in the reports on budgetary central government are normally not available elsewhere, they cannot be validated from secondary sources. The fact that the reports are based on actual administrative records, minimizes the likelihood of inconsistencies. The MOF has identified problems experienced with the coverage of information on foreign grants and development expenditure.

Should large deviations between preliminary and actual outcomes become apparent, their causes are investigated, data are revised in the next publication and corrective measures are initiated to avoid a recurrence of the error or omission. The *Errors and omissions* line between the overall deficit and net financing also serves as a monthly indicator of the accuracy of source data.

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

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

Intermediate data are validated against other information where applicable during discussions in the TCNABOP.

3.4.2 Statistical discrepancies in intermediate data are assessed and investigated

The authorities involved in the compilation of government statistics are aware of the discrepancies in data on government finances and efforts are made to improve the data quality. In an effort to improve the quality of government statistics the authorities adopted a new *Public Finance Management Act (No 7 of 2003)* and *Public Audit Act (No 6 of 2003)*. Efforts are also made to improve the information system by implementing an *Integrated Financial Management Information System*. Staff are also trained in the recording and analysis of data.

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

Due to the fact that the MOF only compiles and disseminate data on budgetary central government on a cash basis it is difficult to assess differences between government data and data disseminated in the monetary and national accounts.

The size of the statistical discrepancy and other potential indicators of problems in statistical outputs are monitored and unusual behavior investigated when they become apparent.

3.5 Revision studies

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

Revisions of data are incorporated whenever improved information becomes available. Data are finally revised after the completion of the annual audits of government accounts by the Auditor General. No formal studies and analyses of revisions are carried out and disseminated to the public.

4. Serviceability

4.1 Relevance

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

The usefulness of the data for users within government is monitored, but the relevance of data and needs of other users are not monitored. There is a perception among some compilers that there is little demand for GFS among the wider user community.

Data on central government operations are used in the process of determining and evaluating fiscal policy developments. Progress with the execution of fiscal policy decisions can be

measured against stated policy objectives. Members of parliament and selected government committees are considered to be the main users of fiscal data.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The timeliness of quarterly disseminated budgetary central government operations data is one quarter after the end of the reference period. This complies with the GDDS recommendation to publish quarterly budgetary central government operations data within one quarter after the end of the reference period. These data are considered to be preliminary. Detailed annual audited data on central government operations become available within twelve months after the end of the fiscal year. Annual data on the consolidated central government and general government are not compiled. The GDDS encourages subscribers to publish annual consolidated general government data within six to nine months after the end of the reference period.

A monthly report on preliminary budgetary central government operations, which is only distributed within government, is available within two to four weeks after the end of the reference month. Monthly data, however, are disseminated with a two-year lag in the publication of the RBM. The NSO disseminates some monthly information on the revenue and expenditure of central government with a three month-lag.

The timeliness of central government domestic debt data published in the *RBM's Financial and Economic Review* is within one—two quarters after the reference period. This complies with the GDDS recommended practice to publish annual central government debt data within one—two quarters after the end of the reference period. Annual data on external debt are available, however, this data are disseminated only as a total outstanding amount and not according to the GDDS recommended practices. The MOF is in the process of developing a quarterly report on government debt in which the information in order to comply with the GDDS will be disseminated.

4.2.2 Periodicity follows dissemination standards

The periodicity of the data on budgetary central government operations disseminated to the public is quarterly. This complies with the GDDS requirement to disseminate quarterly data on budgetary central government operations. The government also disseminates quarterly interest payments which is part of the encourage data. Monthly reports on budgetary central government operations are distributed for use within government.

The GDDS requires the dissemination of annual consolidated central government data and encourage the dissemination of annual general government data. Malawi does not meet this due to a lack of comprehensive data on statutory agencies and local government operations. Some of the statutory agencies financial year differs from that of the budgetary central government, which limits the possibility of expanding the scope of the data on government

finance operations to cover the central and general government. However, the new *Public Finance Management Act* mandates that by the end of June 2005 the financial year, of all statutory agencies shall be the same as the financial year of central government.

Malawi does not meet the GDDS timeliness requirement for central government debt, because it does not currently publish all the information according to the appropriate breakdowns according to the recommendations. The MOF is, however, in the process of developing a quarterly report on government debt in which the information to comply with the GDDS will be disseminated. The GDDS recommended practice is to publish annual data with appropriate breakdowns (currency, maturity, debt holder and instrument) as relevant, an extension to quarterly data as well as the annual dissemination of government guaranteed debt is encouraged.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

Quarterly and monthly data on budgetary central government operations in the quarterly reports of the RBM are not always consistent within the dataset. Major aggregates on central government operations such as total revenue, grants, recurrent expenditure and development expenditure does not always equal the sum of their respective components in the disseminated tables. In the disseminated tables an item *Errors and omissions, Statistical discrepancy or Financing not included elsewhere* is added in order to equal the deficit and financing. As this item captures the difference between the recorded revenue, expenditure and financing it may influence the perceived quality and integrity of the source data and compilation process or technique.

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

All the parties involved in the compilation of statistics regard consistency in the methodology used in the compilation of government statistics as important. Changes, such as improvements in classification and other reforms in the compilation of source data enhanced the quality, periodicity and timeliness of data without adversely affecting the consistency of datasets over a reasonable period of time.

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

The dataset on budgetary central government operations serves as input into the national accounts estimates for the government sector compiled by the NSO. However, statistical techniques are employed to derive calendar year data from the fiscal year data. Data for national accounts are also supplemented with information on statutory agencies and local government finances obtained from other sources. Statistics in the national accounts are therefore not reconcilable with those presented in the budgetary central government operations table. The envisaged expansion of the coverage of fiscal data to include some

statutory agencies (extra-budgetary institutions) and local government will facilitate reconciliation and the compilation of data on general government operations.

The dataset for budgetary central government operations and the monetary survey cannot be reconciled due to differences in the coverage of government. The monetary survey includes all the central government accounts in their claims against the government.

4.4 *Revision policy and practice*

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

Revisions during the year are performed routinely and are incorporated in the data disseminated when the following month(s) and quarter(s) data are disseminated. Annual data are revised once the audited results for all government accounts are available. These audit reports are available within twelve months after the end of the fiscal year. There is no specific release or formal announcement of the revisions, and revised data are not clearly identified as such.

4.4.2 *Preliminary data are clearly identified*

Preliminary data are not identified as such in the publications of both the RBM and NSO. Budget documentation makes a clear distinction between budget estimates and actual outcomes.

4.4.3 *Studies and analyses of revisions are made public*

Although revisions are regularly done studies and analysis of revisions are not formally undertaken and disseminated to the public.

5. *Accessibility*

5.1 *Data accessibility*

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

Statistics for budgetary central government are presented in the quarterly reports of the RBM and NSO. Annual data are presented in the budget documents. The layout and classification of the data follows budget guidelines rather than the international accepted standard, which result in difficulties with international comparability. However, information presented in the *budget documents* can be compared with information contained in the annual budget of government. Statistics are thus presented in a way suitable for a restricted audience for use in monitoring progress made with government finances and policy execution. The unavailability of comprehensive data on the financial position of the general government can lead to an underestimation of government's influence on the economy.

5.1.2 Dissemination media and formats are adequate

Statistics on the budgetary central government operations are only disseminated in a hard copy format. Although the report prepared by the MEPD is mainly for purposes of reporting to the National Assembly it can be bought by the public in bookshops.

5.1.3 Statistics are released on a pre-announced schedule

Annual data on government finances are released at the time of the Minister of Finance's Budget Speech to parliament. The date of the Budget speech is pre-announced and would normally be presented to parliament in June of each year. Quarterly and monthly data, which are released in the publications of the RBM and NSO, are not released on a pre-announced schedule.

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

Data on budgetary central government operations are not released to all users at the same time as these data are discussed in the TCNABOP before release. Monthly data are distributed upon request to interested users before it is released in the publications of the RBM and NSO. The fact that these reports are available upon request is not made public.

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

Non-published (but non-confidential) data are made available upon request. However, this service is not publicized.

5.2 Metadata accessibility

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

Metadata describing the central government operations and the central government debt are only disseminated on the DSBB of the IMF. These metadata contain brief descriptions of concepts and classifications in use, and broadly describe differences with international practice. Metadata revisions, in principle, follow the annual cycle mandated by the GDDS, but there are delays.

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

No detailed technical descriptions of the methodology and compilation practices other than that those disseminated on the DSSB are available to the public.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

The contact persons for central government operations and debt data are disseminated on the metadata pages of the DSBB, however, some of the contact persons have already left the department.

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

Although a catalogue is not available of MOF publications from the MOF, information on documents and other services, including information on any charges, can be obtained by contacting the MOF.

Table 3. Malawi: Data Quality Assessment Framework—Summary of Results for Government Finance Statistics
(Compiling Agency:)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LN	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment			X			Responsibility for GFS is not clearly defined. Although there are regular meetings to share data, the data are in hard copy Dedicated staff have just been appointed but they lack training Very large discrepancy between above the line and below the line data	
0.2 Resources			X				
0.3 Quality awareness			X				
1. Integrity							
1.1 Professionalism		X					
1.2 Transparency			X			Internal Government access to statistics prior to release is not publicly identified..	
1.3 Ethical standards		X					
2. Methodological soundness							
2.1 Concepts and definitions			X			Disseminated data partly adhere to the standards and guidelines. Extra-budgetary agencies and enterprises are grouped together as statutory agencies. GFS are not disseminated for central and general government.	Incorporate the activities of extra-budgetary agencies. Start compiling GFS according to GFSM 1986 and implement the GFSM 2001 in planned stages
2.2 Scope				X			
2.3 Classification/Sectorization					X	Classification of revenue, expenditure and net lending differ from the standards Expenditure data are not always captured when payments are made. Transactions include goods in kind and financing includes arrears.	
2.4 Basis for recording							

Table 3. Malawi: Data Quality Assessment Framework—Summary of Results for Government Finance Statistics
(Compiling Agency:)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LN	NO		
3. Accuracy and reliability							
3.1 Source data				X		Source data on development expenditure, foreign aid grants, extra- budgetary agencies and local government are not comprehensive and timely.	Continue the implementation of the IFMIS. Restructure the loan details according to debt relief agreements.
3.2 Statistical techniques		X					
3.3 Assessment and validation of source data			X			Source data do not include all the data on foreign grants and development expenditure.	Monitor expenditure in line ministries and reduce the time lag for reporting actual expenditure.
3.4 Assessment and validation of intermediate data and statistical outputs		X					
3.5 Revision studies			X			No published revision studies	
4. Serviceability							
4.1 Relevance			X			The needs of users outside government are not monitored.	
4.2 Timeliness and periodicity		X		X		Published statistics are not consistent within the data set. Large errors and omissions between above and below the line data.	Monitor expenditure in line ministries and reduce the time lag for reporting actual expenditure.
4.3 Consistency				X		Preliminary data are not identified in the publications of the RBM.	Announces well in advance any revision in statistical methodologies.
4.4 Revision policy and practice							
5. Accessibility							
5.1 Data accessibility				X		Data for central and general government are not available. Government users have prior access. Data are only available in hard copy.	
5.2 Metadata accessibility			X			Metadata are disseminated only on the DSBB of the IMF.	Include methodological notes in GFS publications
5.3 Assistance to users			X			Names of contact persons are out-dated. No catalogue on publications is available from the MOF.	

IV. MONETARY STATISTICS

0. Prerequisites of quality

0.1 *Legal and institutional environment*

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

The Reserve Bank of Malawi Act of 1989 (RBM Act) specifies, in Section 4 (1) (i), that one of the principal objectives of the Reserve Bank of Malawi (RBM) is to collect economic data of the financial and other sectors for research and policy purposes. Thus, according to Section 62 of the RBM Act, “The Bank may for monetary policy and research purposes require banks, other financial institutions and companies to submit within a reasonable period such information and in such format as may be prescribed by the Bank.” Section 4 (2) of the RBM Act states that in pursuing, or in performing any functions in the pursuit of, its principal objectives, the RBM shall act with due regard to the interest of the national economy and to the economic policies of the government. Although the RBM Act does not specify that the RBM has the responsibility for compiling and publishing monetary statistics, the RBM considers that its mandate to collect statistics for “monetary policy and research purposes” is sufficient authority to collect statistics from financial entities for the purpose of compiling and publishing monetary statistics.

The Money and Banking Section of Financial Services Division situated within the Research and Statistics Department compiles and disseminates monetary statistics. No other agency than the RBM is involved in producing monetary statistics. Monetary statistics compiled by the RBM are published by the NSO as authorized by Statistics Act of 1967.

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

The RBM adopts a unified reporting system for monetary data, whereby commercial banks report balance sheet data for both monetary statistics and bank supervision purposes. Thus, according to Section 48 (2) of the RBM Act, “Banks and other financial institutions shall within the period determined by the Bank and in the format prescribed, submit to the Bank financial and other statements regarding their business and any additional information which the Bank may require.” Based on this authority, the RBM’s Banks Supervision Department collects data (in duplicate) from all commercial banks and nonbank financial institutions (New Building Society, Malawi Savings Bank, finance companies, and insurance companies), and one copy of the data is transferred to the Research and Statistics Department for the compilation and dissemination of monetary statistics. Central bank accounts are prepared by RBM’s Accounts Department and shared by the Research and Statistics Department. Arrangements are in place to ensure the efficient and timely flow of source data within those RBM departments that are involved with the collection, compilation and dissemination of monetary statistics. Regular meetings are held between these departments to ensure the use of proper concepts on a consistent basis.

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

Monetary statistics do not disclose data on individual banks. All RBM staff are required to abide by the appropriate rules and regulations to prevent disclosure of information of confidential nature. Thus, Section 8 of Rules and Orders of the RBM stipulates the obligation of staff to keep secrecy, and they sign the oath of secrecy when they join the RBM. The staff who are found to have violated the oath face warning, suspension, or dismissal. In addition, the Statistics Act of 1967, which covers statistical information on banking and insurance, stipulates in Section 7 that information collected under this Act shall be used for statistical purposes only, and that no individual return will be published unless consent in writing thereto has been obtained from the person making such return.

In the RBM, access to individual data are restricted to the staff who require the information in the performance of their duties, and passwords have been built into the software programs to prevent unauthorized access to individual data.

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

Under the unified data reporting system, data collection for monetary statistics compilation is strengthened by RBM's supervisory authority to require any bank or nonbank financial institution to furnish information as the RBM may deem necessary and to impose on-site inspections to a bank or financial institution that failed to comply with the requirement. Thus, according to Section 22 (1) of the Banking Act of 1989, "The Reserve Bank may periodically or at its discretion examine or cause to be examined by inspection the business of any bank or financial institution in order to determine whether it is in a sound financial condition and complies with the requirements of this Act or any Act relevant to its banking business." Furthermore, the RBM could eventually impose pecuniary penalties on such bank or financial institution, although such a case has never happened.

0.2 Resources

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

The current number of staff (four) is adequate for the Money and Banking Section of the Financial Service Division to perform the required duties related to the compilation of the monetary survey. However, when the monetary survey is expanded to include the New Building Society, Malawi Saving Banks, and finance companies as discussed in 2.2.1, staff (three) of the Other Financial Institutions Section of the Financial Service Division need to be involved in the compilation of the monetary survey.

The Research and Statistics Department recruits staff on a highly competitive basis. All staff are encouraged to attend courses and seminars organized by international organizations and other central banks. Among four staff of the Money and Banking Section, three have participated in the monetary and financial statistics course organized by the IMF. In addition,

the RBM encourages the staff to pursue a higher-level degree, and are required to sign a bond that commits them to remain in employment with the RBM for a minimum period of two years. Although no special effort is made, otherwise, to retain the trained staff, RBM's overall incentives (e.g., salaries, house loan, training opportunities and facilities) are regarded as adequate for minimizing staff turnover.

Computing resources, coupled with support services, as well as financial resources, provided for compiling monetary statistics are adequate to perform required tasks. Given that the RBM is the focal point for monetary statistics for Malawi's GDDS participation and that the Research and Statistics Department is assigned to prepare metadata of Malawi's monetary statistics, the necessary resources are assigned by the Research and Statistics Department.

0.2.2 Measures to ensure efficient use of resources are implemented

Processes and procedures are in place at the RBM to ensure that resources are used efficiently. All departments of the RBM are required to prepare an annual business plan, which starts with the mission statement and identifies key development projects, critical success factors (necessary conditions for proceeding projects), performance targets, operational strategies, and necessary staffing and training. The plans are reviewed and approved by senior management. In the process of drafting and discussing the business plan, overlaps in activities and use of resources are eliminated.

In addition, the RBM has been consulting Price Waterhouse Coopers of Zimbabwe on a job evaluation exercise. The purpose of this exercise is to identify qualifications and experiences that are needed to fulfill the task of each position and improve the salary structure. This exercise helps to ensure appropriate recruitment, allocation, and training of human resources.

Procedures in place to ensure efficient use of resources include an integrated database network for research as well as statistics compilation and publication purposes (Research and Statistics Database), in which Research and Statistics Department inputs the latest version of its data.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

Recognizing that its statistics must have the confidence of users, the RBM seeks to exercise quality control at various stages of data production and dissemination. Thus, the mission statement of the Research and Statistics Department states that its staff are committed to provide prompt and accurate economic and financial information to the monetary authorities, government, the general public and cooperating international institutions through accurate and timely publications and data on economic conditions.

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

Data sent through the data collection system are automatically cross-checked and any discrepancies and/or excessive variations are checked by the Research and Statistics Department and Bank Supervision Department. This process involves verifying data sources with reporting institutions. The two departments make sure that the data reporting practices followed by banks are consistent with the guidelines established by the RBM. Consistency between monetary and other data such as those on cross-border capital flow and public finance is fully checked within the Research Department. The data releases are reviewed by the Director of the Research and Statistics Department before being signed off by the General Manager of Economic Services. The General Manager, who supervises Research and Statistics, Bank Supervision, Financial Market Operations, Information Technology, and International Operations Departments, checks those data with secondary data reported by other departments than Research and Statistics Department, to ensure consistency.

0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs

The RBM recognizes that there are tradeoffs among the dimensions of quality (for example between timeliness and accuracy/reliability). High priority is assigned to insuring the timeliness of monetary data, for this reason, banks that cannot yet meet the monthly reporting requirements in terms of timeliness are excluded from the monetary survey. This has delayed the expansion of the monetary survey to include all eligible entities.

To review existing monetary statistics, as well as to identify any emerging data requirements, meetings within the RBM and with the government (e.g., National Economic Management Committee and Monetary Policy Committee) are convened every month. Although users do contact the Research and Statistics Department frequently, the Research and Statistics Department does not have regular contact with users in the form of users' surveys or regular meetings with users.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

Professionalism of the staff involved with monetary statistics is ensured through the recruitment process, as well as by the assignment structure. Thus, the recruitment process focuses on those who have at least bachelor degree in economics, and the assignment structure encourages the staff to prepare research papers (so far, one paper titled "Exchange and Interest Rate Determination in Malawi: Past and Present" has been posted on the RBM website, but there are several other unpublished papers) and attend training courses and

seminars on monetary policy and statistics (although, by and large, the staff find little time to engage in research since much of their time is devoted to statistical compilation, data checking, and analysis).

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

Monetary statistics are compiled from the RBM's and commercial banks' accounting data. There is no other source from which data are needed. No use of statistical techniques is involved in monetary statistics compilation.

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

The RBM staff seeks to prevent misinterpretation or misuse of statistics in the press and other media. If misinterpretation of monetary data is found in the newspapers, the RBM may prepare an appropriate reply, which is sent to the press by the governor. However, such instances are rare.

1.2 Transparency

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

The terms and conditions under which monetary statistics are collected, compiled and disseminated, including the obligation to compile and disseminate the statistics and to safeguard the confidentiality of individual responses, are not available to the public. The authority to compile and disseminate monetary statistics is not described in the RBM Act.

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

There is no formal request to allow internal governmental access to monetary data prior to their release. However, the government generally has access to monetary data prior to their release in RBM's publications, and this access is not publicly known.

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

References to the monetary statistics as the statistical products of the RBM are included in RBM publications and in the tables of monetary data published by the NSO.

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

No advance notices on major changes in methodology, source data and statistical changes are provided. When monetary statistics were expanded to include four commercial banks, instead

of two, in January 2002, the change was explained at the same time of the data release, although government users were alerted in advance.

1.3 Ethical standards

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

All RBM staff are required to abide by the Rules and Orders of the RBM, updated and circulated by the Human Resource Department. Whenever the Rules and Orders are revised, directors of departments are supposed to remind their staff of the revision. The Rules and Orders are available from the RBM library to all staff.

2. Methodological Soundness

2.1 Concepts and definitions

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

The analytical framework used by the RBM in compiling the monetary surveys is broadly consistent with the guidelines outlined in the *Monetary and Financial Statistics Manual (MFSM)*. The monetary survey is derived by consolidating the RBM accounts and commercial banks accounts. Key aggregates identified in the monetary surveys are net claims to the central government; net claims on public nonfinancial corporations; claims on the private sector (comprising private enterprises, households and nonprofit organizations, as well as nonbank financial institutions); net foreign assets; as well as broad money (currency with the public; demand time, savings, and foreign currency deposits) and credit aggregates. For the central bank, reserve money aggregates are identified based on the RBM accounts.

However, the monetary survey refers to the concept recommended in the IMF's draft *Guide to Money and Banking Statistics in International Financial Statistics* of December 1984. For the purpose of presenting consolidated monetary statistics, the term "the depository corporations survey" and its concept should be used as recommended in the *MFSM*.

2.2 Scope

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

The monetary survey currently covers the RBM and commercial banks, excluding new four commercial banks. It does not include the New Building Society, Malawi Savings Bank, two finance companies, and credit cooperatives, although these nonbank financial institutions accept deposits and therefore should be included in conformity with the recommendation of the *MFSM*.

2.3 Classification/sectorization

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

At present, the sectorization scheme adopted for the monetary surveys appropriately distinguishes between nonresident and resident sectors, but the subdivision of the resident sector data does not provide sufficient information on the sectoral distribution of domestic credit. Thus, under the present sectorization scheme, the resident sector data are subdivided by (1) central government; (2) public nonfinancial corporations; and (3) private sector (comprising private enterprises, households and nonprofit organizations, as well as nonbank financial institutions). This means that a separate identification of local government and other financial corporations is lacking. A project has been undertaken, therefore, to introduce the detailed sectorization scheme prescribed in the *MFSM*.

The delineation among money issuers (which should include the RBM and other depository corporations), money holders (which should include households, nonprofit institutions serving households, private and public nonfinancial corporations, local governments, and other financial corporations), and central government, is broadly consistent with the *MFSM*. However, in the RBM's monetary survey, public nonfinancial corporations and local governments are not classified as money holders and their deposits are excluded from monetary aggregates in the same way as those of the central government.

The classification of financial instruments used for monetary statistics is in broad conformity with the guidelines outlined in the *MFSM*. Thus, the data separately identify (1) Monetary gold and Special Drawing Rights; (2) Currency and deposits; (3) Securities other than shares; (4) Loans; and (5) Other assets/liabilities. However, the data do not identify (6) Shares and other equity; (7) Insurance technical reserves; and (8) Financial derivatives. In addition, the securities repurchase agreements (repos) are not recorded as collateralized loans, but as sales/purchases of securities.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

The general recommendation of the *MFSM* is that the valuation of financial assets and liabilities should be carried out on the basis of market prices or market price equivalents. The exception to this rule is that loans should be valued at their book values without adjustment for expected losses. These principles are broadly followed in the RBM's monetary statistics.

Thus, (1) monetary gold is valued at market prices (the International Operations Department keeps records of the amount in U.S. dollar); (2) loans are valued at current book value without adjustment for expected loan losses arising from anticipated defaults by borrowers. However, (3) securities other than shares are recorded at issue price (for discounted bills) or face value (for interest bearing bonds) despite fluctuations in their market prices.

The conversion of foreign-currency denominated assets and liabilities to domestic currency is carried out at prevailing market exchange rates. For this purpose, the RBM as well as commercial banks use the end-period mid-point rate. While the RBM and commercial banks carry out conversion of its foreign-currency denominated positions on a daily basis, the RBM obtains the data from commercial banks only on a monthly basis.

The *MFSM* recommends the compilation of stock data and data on three separate flow components—transactions, revaluations, and other changes in the volume of assets—that together account for the period-to-period changes in outstanding stocks. The RBM does not compile these separate flow components. For example, the effects of exchange rate movements are not identified as revaluations and write-offs of loans are not identified as other changes in volume in the monetary survey.

2.4.2 Recording is done on an accrual basis

Consistent with the general principle of accrual accounting, accrued interest is identified in the original accounting records of the RBM and commercial banks. On such accrued interest, the recommendation of the *MFSM* is that it should be added to underlying financial instruments such as deposits, loans, and securities other than shares, and sectorized by the debtor sector (in case of assets) or by the creditor sector (in case of liabilities). The RBM, however, includes it in unclassified assets and liabilities.

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

In line with the general principle of the *MFSM*, assets and liabilities of the RBM and commercial banks are collected and compiled on a gross basis. Claims on particular transactors are thus not netted against liabilities to those transactors.

For the compilation of the sectoral balance sheet of the RBM and that of commercial banks, the data on financial assets and liabilities are aggregated into major categories (e.g., claims classified by debtors and deposits classified by creditors). In the monetary surveys, claims on the central government are netted against liabilities to the central government, and foreign assets and liabilities are netted out in line with the methodologies of the *MFSM*. However, as discussed in 2.3.1, such netting is also applied to the deposits of public nonfinancial corporations and local governments in the RBM's monetary survey, which is not in line with methodologies of the *MFSM*.

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 source data for compiling the central bank data are the balance sheet data prepared by the RBM's Accounts Department on a daily basis. These balance sheet data are generated by a computerized ledger system based on complete recording. Source transactions are recorded and balance sheet data are generated from a predetermined classification of accounts.

The source data for commercial banks are the individual returns collected on a monthly basis. The incoming returns come in the form of a report form which is filled out by every bank and submitted in duplicate to the RBM's Banks Supervision Department. This submission takes the form of either a hard copy, fax, or electronic mail. The reporting format provides, by and large, sufficient detail to compile the monetary survey in conformity with guidelines outlined in the *MFSM* with some limitations as discussed in 3.1.2.

No use of supplementary data are involved in compiling the monetary survey and reserve money aggregates, although those supplementary data are collected from commercial banks for research and publication purposes. All source data needed for compiling the monetary survey and reserve money aggregates are kept under periodic reviews to ensure that data collection remains comprehensive.

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

Source data for the monetary survey and reserve money aggregates broadly approximate the required definitions, scope, classifications, valuation, and time of recording. However, the details of sectorization (local governments) and classification of financial instruments (shares and other equity and repos) used in the report form are inadequate as discussed in 2.3.1. In addition, financial derivatives (e.g., foreign exchange forward contracts) are treated as off-balance sheet transactions.

3.1.3 Source data are timely

The accounting records of the RBM and commercial banks, and the subsequent preparation of balance sheet data, are sufficiently timely to allow for compilation of the monetary survey and reserve money aggregates. The RBM balance sheet data are compiled on a daily basis with a lag of only one working day. Four major commercial banks report data on a monthly basis with a lag of 15 days. This enables the central bank and monetary surveys to be compiled within one month and 10 days. However, reports from four new commercial banks

are not timely enough (there has been occasional slippage) for these banks to be included in the monetary survey.

3.2 *Statistical techniques*

3.2.1 *Data compilation employs sound statistical techniques*

Data compilation procedures minimize processing errors such as coding, editing, and tabulation errors. The RBM's report form is designed to encourage computer processing. The computer program processes source data promptly.

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

No data adjustments and transformations are involved.

3.3 *Assessment and validation of source data*

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*

The Governor of the RBM, General Manager for Economic Services, and Director of the Research and Statistics Department receive questions on monetary data from several sources, for example, the government of Malawi, the press, the research community, and international organizations. Responses to these questions are prepared by the staff of Research and Statistics Department. In the process, the Department uses the opportunity to monitor the accuracy of the RBM's monetary survey.

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

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

No secondary data sources, such as data on financial market operations and sample surveys, are used to check the accuracy of the commercial banks' balance sheets.

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

The Research and Statistics Department identifies statistical discrepancies and, in collaboration with the Accounts and Banking Supervision Departments, investigates their sources.

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

Procedures have been established for collaboration between the Research and Statistics and several other departments—namely, Accounts, Banks Supervision, and Financial Market Operations, International Finance Operations, Internal Finance Departments—for resolving problems posed by large or unexplained fluctuations in monetary, credit, or reserve money aggregates.

3.5 Revision studies

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

The monetary survey and reserve money aggregates can be revised. These revisions, however, rarely affect major statistical aggregates since they occur infrequently and tend to be of small magnitude. In light of this, no revision studies are undertaken.

4. Serviceability

4.1 Relevance

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

The RBM undertakes certain actions to ensure that monetary statistics address issues of concern to users. A process of consultation takes place periodically with other departments within the RBM. In addition, the relevance of monetary statistics is often discussed in meetings with the government (e.g., National Economic Management Committee and Monetary Policy Committee). Although users do contact the RBM for data relevant their needs to be compiled and disseminated, neither working groups involving users are established, nor are user surveys organized to ascertain users' needs.

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

The RBM uses the *Monthly Economic Review* as its primary vehicle for monetary data dissemination. The normal timeliness for the publication of the monetary survey and reserve money aggregates is at longest one month and 10 days and slippages are rare. This degree of timeliness is fully consistent with the GDDS, which requires (1) that the monthly data on commercial banks should be disseminated within one to three months after the end of the reference month and (2) that the monthly data on the central bank should be disseminated within one to two months after the end of the reference month.

However, the entire central bank survey is published only in the *Financial and Economic Review* published on a quarterly basis with a timelag of about four months. This means that the monthly central bank survey (except reserve money aggregates) is available after four to six months after the end of the relevant month in the RBM's publications, although the Research and Statistics Department provide major users of monetary statistics with the weekly central bank survey and post the monthly central bank survey on the RBM's website.

4.2.2 Periodicity follows dissemination standards

The periodicity of the monetary survey and reserve money aggregates is monthly. This degree of periodicity is fully consistent with the GDDS, which requires monthly periodicity for both central bank and commercial banks data.

4.3 Consistency

4.3.1 Statistics are consistent within the dataset

The RBM's monetary survey is internally inconsistent due to the narrow coverage of commercial banks. Since four commercial banks excluded from the monetary survey have deposits with central bank and positions with four commercial banks included in the monetary survey, their exclusion contributes to inconsistencies in the interbank positions.

Similarly, inconsistencies exist between the balance sheet of nonbank financial corporations and commercial banks due to the narrow coverage of commercial banks in the monetary survey.

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

The monetary survey is not consistent over a period of more than five years. The monetary survey were expanded from the RBM and two commercial to the RBM and four commercial banks in September 2001. At the same time, historical series were not revised from December 1999, when two additional banks were established.

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

The RBM's monetary survey is broadly consistent with other statistical systems, such as balance of payments statistics and government finance statistics. Changes in stock in net foreign assets are calculated from the monetary survey and used in balance of payments statistics for the data of financial accounts. Changes in the government position with the RBM and commercial banks are calculated and used in government finance statistics for the data of central government's domestic financing.

4.4 Revision policy and practice

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

The RBM's published monetary survey and reserve money aggregates are final in principle. Revision of the data is indicated in a footnote.

4.4.2 Preliminary data are clearly identified

There are no preliminary data.

4.4.3 Studies and analyses of revisions are made public

Although the monetary survey and reserve money aggregates can be revised, revisions rarely affect major statistical aggregates. Since they are infrequent and tend to be of small magnitude, no revision studies are undertaken.

5. Accessibility

5.1 Data accessibility

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

The RBM publishes the monetary survey and reserve money aggregates in a clear manner. In the *Monthly Economic Review*, a chart and analysis of current-period developments are disseminated with the table of the monetary survey and reserve money aggregates to facilitate the analysis. In the *Financial and Economic Review* published on a quarterly basis, the central bank and monetary surveys, as well as more detailed data are published in the form of the RBM and commercial banks balance sheets, and their long-term data series starting 1974, are published.

5.1.2 Dissemination media and formats are adequate

The RBM releases data through a variety of publications. These are the *Monthly Economic Review*, *Financial and Economic Bulletin (Quarterly)*, *Mid-Year Economic Review*, and *Annual Financial and Economic Reports*. The *Monthly Economic Review* is available on the RBM's Internet website (<http://www.rbm.malawi.net>).

5.1.3 Statistics are released on a preannounced schedule

The RBM does not disseminate an advance release calendar to provide an advance notice of the release dates for the monetary survey and the reserve money aggregates.

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

The monetary survey and reserve money aggregates are not made available at the same time. Once the Director of the Research and Statistics Department has approved the *Monthly Economic Review*, which acts as the primary vehicle for the dissemination of the reserve money aggregates and monetary survey data, it is sent to the publishers and hardcopies are sent to the subscribers. The arrival date of *Monthly Economic Review* differs, depending on the promptness of postal services. In addition, the *Monthly Economic Review* is posted on the RBM website several days after its publication. Although data of the monetary survey and reserve money aggregates are posted on the RBM website as soon as they are provided to major users such as government, slippage of posting can occur due to technical reasons. No press release is conducted for the monetary survey.

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

Subaggregates, which are not published, are made available upon request approved by the Director of the Research and Statistics Department. At the same time, requests for unpublished subaggregates have been rare.

5.2 Metadata accessibility

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

All RBM publications in which monetary statistics are published contain some notes and/or footnotes providing users with information about published data. The only metadata on the monetary survey and reserve money aggregates, however, are those that are available from the Dissemination Standards Bulletin Board (DSBB). Currently, the DSBB is not hyperlinked to the RBM website.

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

No attempt is made to develop metadata of the various levels of detail adapted to the needs of the different categories of audience. However, user needs are generally similar in terms of levels of details.

5.3 Assistance to users

5.3.1 Contact person for each subject field is publicized

In the RBM publications, the Director of the Research and Statistics Department is identified as a contact person and the e-mail address is indicated (research@rbm.malawi.net). When users request assistance in the form of clarification and explanation of data, the request is channeled to the Research and Statistics Department, which prepares an appropriate

response. A contact person is also identified in the GDDS metadata, but the DSBB is not hyperlinked to the RBM website. As a result, statistics users in Malawi cannot specify individuals who are responsible for monetary statistics.

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

All RBM publications except *Monthly Economic Review* are free. The RBM provides assistance needed to place orders for its publications. However, a catalogue of publications is not available on the RBM's Internet website (<http://www.rbm.malawi.net>).

Table 4. Malawi: Data Quality Assessment Framework—Summary of Results for Monetary Statistics
(Compiling Agency:)

Element		NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
			O	LO	LNO	NO		
0. Prerequisites of quality								
0.1	Legal and institutional environment			X			The RBM Act does not specify that the RBM has the responsibility for compiling and publishing monetary statistics	
0.2	Resources		X				There are no regular user surveys and users meetings.	
0.3	Quality awareness			X				
1. Integrity								
1.1	Professionalism		X				The terms and conditions under which statistics are collected, processed, and disseminated are not available to the public. Internal governmental access prior to release is not publicly identified.	The RBM will educate commercial banks and other financial institutions on the importance of monetary statistics (short-term).
1.2	Transparency			X			When the monetary survey was expanded to include four commercial banks, instead of two, advance notice of this change was not given to users.	
1.3	Ethical standards		X					
2. Methodological soundness								
2.1	Concepts and definitions			X			The framework of monetary survey, rather than depository corporations survey, is used.	The RBM will convert the monetary survey into the depository corporations survey (short-term).
2.2	Scope			X			New Building Society, Malawi Saving Bank, finance companies, and credit cooperatives are not covered.	The RBM will publish the monetary survey that include four new commercial banks, New Building Society, Malawi Saving Bank, finance companies (short-term) and collect data from credit cooperatives (medium-term).
2.3	Classification/sectorization			X			Deposits held by Local government and public nonfinancial corporations are excluded from money. Repos are not treated as loans.	The RBM will reclassify local government and public nonfinancial corporations into money holders and repos into loans (short-term).
2.4	Basis for recording			X			Securities are not valued at market prices. Accrual interest is included in other assets/liabilities. Three flow components (transactions, revaluations, and changes in volume) are not prepared.	The RBM will introduce market valuation of financial assets and add accrued interest to underlying instruments (short-term) and compile the three flow components (medium-term).

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

Table 4. Malawi: Data Quality Assessment Framework—Summary of Results for Monetary Statistics
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Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria						
Element	NA	Assessment			Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO		
3. Accuracy and reliability						
3.1 Source data			X		Local governments are not reported as a separate sector. Shares and other equity are not reported as a separate asset category. Reports from four new commercial banks are not fully timely.	The RBM will prepare a separate sector for local governments and a separate asset category for shares and other equity in the reporting from banks and nonbank financial institutions (medium-term). The RBM will educate commercial banks and other financial institutions on the importance of monetary statistics (short-term).
3.2 Statistical techniques		X				
3.3 Assessment and validation of source data		X				
3.4 Assessment and validation of intermediate data and statistical outputs		X				
3.5 Revision studies		X				
4. Serviceability						
4.1 Relevance			X		No user surveys or meetings are conducted.	
4.2 Timeliness and periodicity			X		The entire central bank survey is available four to six months after the relevant month.	
4.3 Consistency			X		The historical series were not revised, when the coverage of the monetary survey was expanded from two banks to four banks.	Revise historical series of expanded monetary survey.
4.4 Revision policy and practice		X				
5. Accessibility						
5.1 Data accessibility			X		Schedules for data release are not published. Dates of data release differ, depending on the delivery dates of monthly publications. Publication on the website delays.	
5.2 Metadata accessibility			X		No metadata are available in the RBM publications. The DSBB, which contains metadata, is not hyperlinked to the RBM website.	The RBM will make metadata available in its publications and on its website (short-term).
5.3 Assistance to users			X		Statistics users in Malawi cannot identify individuals who are responsible for monetary statistics. No catalogue of publications, documents, and other services is available.	

V. BALANCE OF PAYMENTS STATISTICS

Prerequisites of quality

0.1 *Legal and institutional environment*

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

The Statistics Act (December 1967) assigns in its Article 4 and in its primary schedule, primary responsibility to the National Statistical Office (NSO) for the collection, processing and dissemination of balance of payments statistics, as well as for trade, financial, other economic, and social statistics.

The Commissioner of the NSO is empowered by the Article 4 of the Statistics Act “... to organize a coordinated scheme of statistics relating to Malawi and to ensure that common definition for statistical purposes are used in respect of all official statistics collected or published by any Department of the Government.” In addition, the Statistics Act states that “... the statistical inquiries requiring returns from more than five respondents shall not be conducted by any government department, local authority or statutory body unless approved by the Director of the NSO.”

The legal framework of Malawian Statistics broadly follows international standards. Even so the functions specified for the NSO are rather ambitious and go beyond the current statistical capacity of the office. Moreover, the Malawian institutional environment has resulted in a rather decentralized statistical system which includes statistical offices in the RBM, in the ministries, in other public entities and in the regions. Due to this decentralization, duplication of efforts exists. To address these and other concerns, the Statistical Act and the institutional framework of the statistical functions are being revised to: update penalties, establish a National Statistical System, improve the coordination of statistics’ collection, and broad the coverage of statistics, among other important issues.

The RBM is also involved in producing part of the balance of payments statistics providing to the NSO data for part of the current account (services, income and transfers) and for the capital and financial accounts, stemming from the International Transactions Reporting System (ITRS) reports and from the data base on grants and public external debt compiled by the Debt and Aid Management Division (DAMD) of the MOF in conjunction with the External Debt Management Section (EDMS) of the RBM.

The Balance of Payments Section of the NSO also collects source data from other public sector agencies, such as the Malawi Revenue Authority (MRA), the Civil Aviation Department, the Department of Immigration, Air Malawi and other large companies involved in foreign trade and/or the production of goods and services. Prior to release, the balance of payments estimates are discussed by an inter-agency TCNABOP, chaired by the NSO, and comprising representatives of the NSO, RBM, MOF, and MEPD. The role of this committee

is discussed in the following section. The publication of different balance of payments data by the NSO, RBM, and MEPD has caused considerable confusion among users, as noted ahead in the user survey discussed in Appendix III.

0.1.2 Data sharing and coordination among data producing agencies are adequate

In general, arrangements and working procedures between the NSO and other data producing agencies, as well as within relevant NSO's units, are in place to facilitate the adequate flow of source data for the compilation of balance of payments statistics. Coordination between the principal data producing agencies and government users is undertaken through a high level Economic Management Committee, chaired by the MOF, and the TCNABOP.

The NSO produces preliminary annual balance of payments estimates within 12 months of the reference year and final annual balance of payments estimates within 18 months of the reference year. Prior to release, the balance of payments estimates are discussed by the TCNABOP. The TCNABOP serves as a forum for bringing together key data producing agencies to facilitate data collection for balance of payments; as an aid to key government users in interpreting the data; to provide feedback to the NSO from a user perspective on data quality issues; and as a vehicle for determining the government's needs for updated estimates. The TCNABOP discusses major changes in data sources, compilation methods, and methodology, and has prior access to preliminary and final balance of payments statistics published by the NSO. In addition, the TCNABOP approves balance of payments flash estimates/forecasts for the government. The latter are commonly produced for the budget three months after the reference year (based on the limited available data) and are included in budget documents and in publications of the RBM and the MEPD. The practice has also evolved whereby the TCNABOP, to meet the needs of government users, requests/approves ad hoc updates to the balance of payments estimates produced by the NSO. These updates have also been published by the RBM and the MEPD. It was understood that all balance of payments estimates published by the NSO, RBM, and MEPD are approved by the TCNABOP. However, the proliferation of updates or their context in a revision cycle is unexplained. Consequently, the relationship of balance of payments statistics published by the RBM and MEPD to the official balance of payments estimates published by the NSO is unclear. This is contrary to the spirit of the TCNABOP and may jeopardize the public perception of the integrity of the three institutions.

More recently, a General Data Dissemination System Committee has been established to coordinate data dissemination among data producing agencies.

Since the move of the NSO's National Accounts and Balance of Payments Branch (NABOPB) from Zomba to Lilongwe in December 2002, the coordination and cooperation between the NSO and the RBM for the production of balance of payments statistics has improved considerably. Besides the quarterly meetings of the TCNABOP there are several informal meetings and frequent telephone consultations between the NSO and the RBM for the compilation of balance of payments statistics.

The introduction of the ASYCUDA in the main ports (Mzuzu, Lilongwe, Lilongwe International Airport, Blantyre, Chileka International Airport and Mwanza), has led to improvements in the quality of the NSO provisional trade figures, which now become available with a lag of two to three months. Trade Data from these ports are transmitted electronically from the MRA to the Foreign Trade Section of the NSO in Zomba. Customs declarations from the non-computerized ports (which may represent about five percent of the total documents) are sent to the NSO and processed by using the Eurotrace software.

The coordination and cooperation between the two public sector institutions, DAMD of the MOF and EDMS of the RBM, in charge of compiling external debt data have improved substantially since the implementation of the Commonwealth Secretariat—Debt Recording and Management System (CS-DRMS) in 2000. Arrangements are in place between the MOF and the RBM for having full on-line access to public sector external debt transactions recorded and updated by the DAMD. The RBM is the sole institution disseminating external debt data and is in charge of remitting external public debt data to the NSO for balance of payments compilation purposes.

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

The Statistics Act states the obligations of both parties in relation to reporting and confidentiality. Surveys being implemented invoke the Statistics Act (1967), the Reserve Bank of Malawi Act (1989) and the Investment Promotion Act (1989) as assurance of confidentiality and it is explicitly pointed out that the information submitted will be treated as confidential and used strictly for statistical, economic analysis and policy formulation purposes only.

According to the Statistics Act (Article 9 and second schedule) the officers joining the NSO are required to take an oath of office and secrecy. Surveys stress that officers are under oath not to disclose any individual company's information to a third party.

Aggregation rules are in place to ensure that individual data are not disclosed. Tables and outputs prepared by the Balance of Payments Section prevent direct and indirect disclosure of individual data. Rules are also in place to restrict access to individual data to staff who require the information to perform their duties. Passwords are needed for accessing computers available in the Balance of Payments Section. The NSO has customized a UNICEF data base system—MASEDA—which has been used for storing all statistical data sets.

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

According to the Statistics Act (Article 8) reporting of data is mandatory, and the legal framework provides for the imposition of penalties for failure to provide the requested information. However, given the outdated level of financial penalties, in the survey questionnaires the penalties are not invoked and therefore not used on respondents who fail

to respond. The intent is therefore to encourage voluntary reporting as is usually made in the framework of the business interviews conducted twice a year (February–March and September–October), or to organize awareness workshops before and after launching surveys, as it was the case with the recent survey on private capital flows (PCFS).⁷ In the same vein, follow up procedures are implemented to ensure the timely receipt of the data through reminders, phone calls, and follow-up visits.

There are no conflicts between the legal authority to produce the data on balance of payments statistics and other laws. For example, commercial banks' information on foreign exchange transactions are produced in the framework of the Exchange Control Act (1989) which in its Article 6 determines the "power to obtain information" related with transactions to which the regulation applies. It also determines specific actions against false statement of information (Article 33) and restrictions on disclosure of information obtained by virtue of the provisions of this regulation (Article 35).

0.2 Resources

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

The number of staff currently assigned to the NSO is not adequate to perform the existing tasks, including the full conversion of the data from *BPM4* to *BPM5*. The head of the NABOP is assisted for the balance of payments by two statisticians, one of them being the head of the Balance of Payments Section. Despite low salaries, over the past five years the staff turn over rate in the NSO has not been high. The Balance of Payments section of the RBM comprises one senior and three junior economists.

All professional staff are required to have a bachelor's degree or to have concluded at least $\frac{3}{4}$ of the university studies in economics or statistics. The NSO through DFID financing sponsors the completion of post-graduate training abroad, and the RBM has also a program for post graduate students.

NSO staff demonstrate initiative and dedication to their responsibilities. Nevertheless, some staff lack formal training, mainly in balance of payments methodology and compilation techniques. The Head of the balance of payments section has participated in the Fund's balance of payments statistics course and/or other formal courses on the subject. In the balance of payments section of the RBM only one economist attended the balance of payments course at the IMF.

⁷ With the financial support of the UK Department for International Development (DFID) and the technical assistance of the Development Finance International (DFI) an NGO based in the UK, a second, better structured, Private Capital Flows (PCF) survey has been conducted and expected to be fully processed at end-2003. This survey has been a joint initiative of the NSO, the RBM and the Malawi Investment Promotion Agency (MIPA).

The lack of resources and funding of the NSO have been compensated with technical assistance and financial support from the European Union, the IMF, the World Bank, the UK Department for International Development (DFID) and other donors. The NSO has been receiving several long term and peripatetic technical assistance, like the Multisector Statistics Mission in 1995 and the assistance in methodology and compilation methods through a long term advisor from 1998 to 2001. Since July 2002 an IMF peripatetic advisor has been assisting the NSO in the adoption of *BPM5* and has been providing on the job-training.

Each balance of payments staff has their own computer, provided in the framework of the DFID project; the software is adequate and updated. Spreadsheet programs (Excel) are used for compiling and disseminating balance of payments. An Access database was developed to improve the compilation process. Only the computer of the NABOB Chief has internet access, which is not the case in the RBM where all economists have internet access and their own computer.

Despite the international financial support the overall financial resources are insufficient to carry out the basic tasks of processing and compiling balance of payments. At present, external resources finance a large percentage of the budget allocated to the compilation of balance of payments, in particular new surveys initiatives. Therefore, the dependence on extra budgetary funds for undertaking key responsibilities such as surveys is a cause for concern.

0.2.2 Measures to ensure efficient use of resources are implemented

Managers in the NSO promote a vision and a sense of direction that are shared with the staff. To improve the efficiency, consistency is promoted, especially between concepts and methodologies across the different units within the NSO. Data compilation procedures are managed to minimize processing errors in coding, editing, and tabulation and innovations have been introduced to deal more efficiently with these matters. In the event of significant errors and inconsistencies, they are clarified with the respondents to correct them, as has been the case with the recent PCFS.

The future work plans of the NSO are included in the *Strategic Plan 2002–2006*, which allows for the prioritization of work plans and the development of annual work programs to be accommodated within existing budget allocations. The NSO carries out a quarterly evaluation of the tasks and work actions against the Strategic Plan, and takes actions as needed. This is reinforced through frequent meetings of section chiefs within the NSO so as to measure progress, define the work to be undertaken and propose methodological improvements. Each year the NSO develops a project to meet the objectives and plans of each unit. These comprise statistical projects as well as studies related with the topics of the Department. The staff are aware of these projects.

The NSO is constantly seeking outside expert assistance to evaluate statistical methodologies and compilation systems, such as the above mentioned technical assistance.

0.3 Quality awareness

0.3.1 Processes are in place to focus on quality

Although there are no formal processes in place to focus on quality overall, many elements of a quality awareness program are already in place, especially in monitoring data collection and processing, and the Strategic Plan also serves this goal. In addition, the NSO mission statement emphasizes the quality of data.

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

Some basic reviews are undertaken to identify problems at some stages of collecting and processing data. New data are compared with data declared for previous periods. When large inconsistencies are detected, the respondents are contacted for making appropriate corrections. Foreign trade source data not received electronically and hence being processed in the NSO are manually reviewed to verify the use of appropriate custom coding, and to detect inconsistencies between physical volumes and transaction values. There is no documentation that would facilitate consistent quality review procedures at the various stages of collecting, processing, and disseminating of data.

The inter-agency TCNABOP is an important technical body outside the NSO that serves as data reviewer and provide guidelines on the quality of the balance of payments statistics and on strategies for improving data compilation. For example, the inter-agency TCNABOP decided to cross check customs data with data from main associations of exporters, from the auction company (Auction Holdings Limited) and from the Tobacco Control Commission, so as to capture tobacco smuggling to neighboring countries. The inter-agency TCNABOP decided as well to correct the data on travel credit (derived from the ITRS) to exclude payments for imports that had been misclassified by reporting banks, and which had previously resulted in doublecounting of imports.

There are some procedures for receiving feedback on the NSO's statistics and on strategies for improving data quality issues. A users' survey has been conducted this year and is being processed and in the context of the business interviews feedback from users (main enterprises) on data quality issues are usually obtained.

0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs

The management of the NSO recognizes the tradeoff between timeliness and accuracy and reliability in the development of its work plans, and that the quality of balance of payments data is a function of the coverage and timeliness of source data. The need to improve data quality is taken into account in planning the forward work program. Nonetheless, the significance of the tradeoffs made in the statistics currently produced is not fully

communicated to users of statistics, and few formal processes are in place to deal with quality considerations and to guide planning for existing and emerging needs.

1. Integrity

1.1 Professionalism

1.1.1 Statistics are compiled on an impartial basis

Balance of payments statistics are compiled on an impartial basis because of the independence and professionalism of staff, although the Statistics Act does not explicitly address the general need for the professional independence of the NSO. The NSO currently is a Department of the Office of the President and Cabinet (OPC) reporting to the Secretary to the President and Cabinet (SPC), with no external interference in the performance of the statistical functions. In 1998, the Public Sector Management Unit undertook a functions review of the NSO, which was updated in 2001 and recommended that the NSO become a semi-autonomous agency of government, governed by a revised National Statistics Act and accountable to a Management Board.

The Strategic Plan of the NSO has the mission “To provide high quality, timely, and independent statistical information and promote its use for policy formulation, decision-making, research, transparency, and general public awareness.” The second core value is “Integrity and Independence: Produce and disseminate statistics in an objective and independent manner without any political or any outside interference.”

Professional competence is a key element in staff hiring within the guidelines of the Civil Service Commission with open selection process based on merit. Professionalism is promoted by the publication of methodological papers. For example, special studies on trade issues were undertaken (non registered trade, adjustments to trade data).

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

The choice of source data and statistical techniques for the balance of payments is made by the NSO balance of payments staff and is based on statistical considerations. The balance of payments staff work closely with their counterparts in the RBM’s balance of payments unit. Moreover, the inter-agency TCNABOP can also advise in the choice of sources and the introduction of new methodological changes. The selection and design of surveys are based only on statistical considerations, taking into account international recommendations, and can be conducted in conjunction with other institutions represented in the inter-agency TCNABOP, as has been the case with the PCFS and the business interviews.

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

When there is an erroneous interpretation, the NSO, through the Commissioner, provides comments and clarifications to the media. Nevertheless, the NSO has rarely been in the situation of providing explanatory material when releasing balance of payments data. This can be related with the likely lack of public interest in delayed balance of payments publications. The NSO does not organize occasional workshops for professional associations for promoting adequate use of balance of payments indicators.

1.2 Transparency

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

The terms and conditions under which statistics are collected are governed by the Statistics Act which is publicly available. Confidentiality of individual respondent's data collected is guaranteed by the Article 7 of this Act. Nonetheless, the NSO does not reproduce the Statistics Act, the Oath of Office and Secrecy and the Chapter on Conduct and Discipline of the Malawi Public Service Regulations on its website or in its publications. The NSO, however, provides in its publications contact numbers and the email address (enquiries@statistics.gov.mw), as well as the website of the NSO (<http://www.nso.malawi.net>), where the users could direct comments, suggestions or questions on any NSO statistics, or find more information about the data producing agency and its products.

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

Through the TCNABOP, the RBM, the MOF, and the MEPD have prior access to published data on balance of payments statistics. In effect, prior access is also available to other governmental officials and international organizations should they make a request at the time that data are approved for publication. The public is not aware of the revision process of balance of payments data through the TCNABOP and that there is government access prior to their release to the public.

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

The Statistical Yearbook and other publications of the NSO all carry the NSO and Government of Malawi logos. The statistics compiled by other institutions are appropriately attributed in the NSO's publications. However, balance of payments statistics published by the RBM and the MEPD are not appropriately attributed. Thus, the public is not completely aware of which institution has the mandate to compile and disseminate balance of payments statistics. The RBM publications that include balance of payments tables and contain what appear to be updates to data published by the NSO stress that the figures may differ from those of the NSO due to revisions, but it is not clear who the revisions are made by. In the

case of joint surveys such as the business interviews or the PCFS the part attributable to the NSO is identified.

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

Users are alerted of major changes in methodology, source data, and statistical techniques in the framework of the Plan for Improvements, as included in the GDDS metadata.

1.3 Ethical standards

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

Articles seven and eight of the Statistics Act deal specifically with conflicts of interest of its employees. Article 9 requires an oath of declaration of secrecy on information related to the NSO from all NSO personnel. Staff and officials of the NSO are provided with guidelines on ethical standards outlining correct behavior when the staff is confronted with potential conflict of interest situations, through the Malawi Public Service Regulations (1:001). However, these regulations are not made available to staff when joining the institution. An induction course on guidelines for staff behavior is not offered to new staff. Article 1:201 on Conduct and Discipline of the Public Service Regulations is applied to permanent as well as temporary staff. Article 2:120 also states regulation on Misconduct for Temporary Employees. However, these regulations do not cover interference by third parties concerning the compilation of statistical data.

2. Methodological Soundness

2.1 Concepts and definitions

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

Concepts and definitions used to compile the balance of payments statistics are in broad conformity with the guidelines presented in *BPM4*. Progress has been made in the transition to the methodology of *BPM5*. The NSO has prepared a preliminary balance of payments statement in broad compliance with the classification/sectorization recommended by *BPM5* for the period 1994–2002. The NSO has provided these data to the IMF's Statistics Department for publication in the 2003 *Balance of Payment Statistics Yearbook* and will be subsequently revised in *International Financial Statistics*. The NSO plans to release balance of payments data according to *BPM5* for 1994–2002 at end-October 2003 in its publications and in the NSO website.

There are some departures, such as the definition of residence underlying the treatment of foreign currency transactions reported in the partial ITRS report form (Form E), discussed further in the following section and the inclusion in reserve assets of net assets over which

the monetary authorities do not necessarily exercise direct and effective control such as the the commercial banks' net foreign assets

2.2 Scope

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

In principle, the balance of payments statistics cover all resident-nonresident transactions of the economic territory of Malawi. However, due to lack or limitations of data sources transactions between residents and non residents are not fully covered, and between residents or non-residents incorrectly included. Among the former are the following: (a) under-reporting of informal merchandise trade (due to undercoverage in the trade returns); (b) under-reporting of services credits and debits, mainly passenger transportation other than air transport, construction, communication, financial and insurance services other than life insurance, and all other services credits not captured in the ITRS reports; (c) underreporting of employee compensation credits; (d) underreporting of workers' remittances credits and migrants' transfers credits; and (e) underreporting of financial account transactions of the nonfinancial private sector, including inward and outward direct investment.

In the exchange control regulations (which govern the database for the ITRS reports) the concept of residence is not clearly defined. The Exchange Control Act (1989), Article 26, mentions that the regulation does not apply to persons "not ordinary resident in Malawi," and, in the case of "foreign companies," as foreign-owned companies are defined, in part, as those in which "more than one half of the dividends payable...is receivable by or for the benefit of residents of Malawi" (Exchange Control Act (1989), Part VI), while *BPM5* considers as "direct investor, who is resident in other economy, owns 10 percent or more of the ordinary shares or voting power ..." (*BPM5*, paragraph 362). Thus, misinterpretation at the time of filling the forms may arise. These possible deviations are taken into account in the new designed forms—to be implemented—in which not only the nationality of the applicant is requested but also their status as resident or non-resident of Malawi. These new forms, however, do not define the period of time that a transactor has to be located/operating in the country to be considered as a resident. The only reference to a period of time is in a footnote included in the forms for debt and non-debt transactions (but not for current account transactions), which states that "non-residents constitute persons normally living and working in Malawi but who are paid entirely from source outside Malawi or persons living or working in Malawi for a period of less than six consecutive months in any twelve-months period." The definition for individuals in these forms is inconsistent with the one year rule recommended in *BPM5*, and that for enterprises is inconsistent with the center of economic interest rule recommended in *BPM5*.

2.3 *Classification/sectorization*

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

In principle, the classification of balance of payments transactions conforms to the recommendations of *BPM4*. Nevertheless, deviations from the classification recommended by *BPM5* are kept under close review, and most major differences are identified.

The main deviations of balance of payments data included in national publications, apart from the presentation itself, are:

Goods: (a) are not broken down in the five categories recommended by the *BPM5* (general merchandise, goods for processing, repairs on goods, goods procured in port, and nonmonetary gold); (b) Goods for processing (that is, goods that enter Malawi for processing and return to the country of origin without a change of ownership) are not identified separately within “goods for processing” (exports and imports). The trade statistics division can identify the data on tobacco and textiles imported for processing and then re-exported but they are included as reexports;⁸ and (c) imports of construction machinery are treated as temporary imports and then as reexports, although no change of ownership has taken place.

Services: (a) Transportation services are not disaggregated by means of transport (sea, air, other transport). Import c.i.f. data are adjusted to f.o.b. basis using a fixed factor (15 percent)⁹, and this correction is entirely attributed to freight and allocated in air transport, even though ASYCUDA offers the possibility to provide separate data on insurance and freight (though it is not mandatory in Form 12), as well as on ports of entry which can be the source of information for means of transport; (b) for insurance services: as mentioned, freight insurance is included under freight transportation; (c) Travel services are not disaggregated by purpose of traveler; (d) Business service credits from enterprises that process goods and reexport to a third economy are not identified within other business services (merchanting and other trade related services).

Current and Capital Transfers: transfers (specifically grants) are not disaggregated and classified into current and capital transfers or broken down into grants in cash and kind, or by general government and other transfers (NGO’s and religious organizations).¹⁰The lack of

⁸ Through the Customs Procedure Code (CPC) goods for processing can be identified.

⁹ Based on a study undertaken by the NSO in 1999

¹⁰ There is no information on private sector transfers since 1999, when the surveys to NGO and religious organizations were discontinued. Since then, simple estimations of the amount received have been made.

identification of all imports under foreign grants combined with the lack of information on grants in kind may result in underreporting of current transfers credits.

Financial Account: *BPM5* recommends that portfolio investment and other investment transactions be classified in four institutional sectors (monetary authorities, general government, banks, and other sectors). However, Malawi's published balance of payments statistics show a breakdown into three institutional sectors (government, public enterprises and private sector). This institutional breakdown does not identify: (a) transactions of monetary authorities and banks (included under reserve assets); and (b) transactions of the general government, which are included under the government or public enterprises, together with other nonfinancial public sector transactions.

Reserve assets: Include foreign assets and liabilities of commercial banks when the RBM not necessarily exercises direct and effective control over the assets. The net foreign-assets of commercial banks should not be included in reserves.

2.4 Basis for recording

2.4.1 Market prices are used to value flows and stocks

Balance of payments statistics are compiled in millions of Malawi Kwacha. When the actual date of the transaction is not available, an annual average exchange rate is used. The exchange rate prevailing on the day of transaction is used for exports and imports of goods, and also daily exchange rates for the transactions obtained through the ITRS reports. Disbursement and debt service payments are converted into local currency using the exchange rate at the time of the transaction.

Transactions are valued at market prices when they are available. Services are valued at the price paid for the services provided. Goods are valued on an f.o.b. basis. Goods for processing may not always be at market prices, as recommended by *BPM5*, but based on inter-company use of transfer prices¹¹.

Reserve assets include exchange rate revaluations. No attempt has been made to re-value the stock data into their original currencies and then convert the change in original currency to domestic currency/unit of account at the average exchange rate for the applicable period.

¹¹ *BPM5* (paragraph 100) states that “for transactions between affiliated parties, the determination of values comparable to market values may be very difficult, and compilers may have no other choice than to accept valuations based on explicit costs incurred in production or any other values assigned by the enterprise.”

2.4.2 Recording is done on an accrual basis

In general, change of ownership is the principle governing the recognition of transactions and their time of recording. Merchandise trade statistics are recorded largely according to the time of clearance by customs (as with other countries), which may not be at the same time that the goods change ownership. Services, income and financial transactions are recorded on a cash basis. Amortization and interest payments are recorded on a cash basis. No adjustments to convert interest to due for payment or accrual basis have been made so far. Recording of debt service occurs when DAMD receives payments acknowledgment from the RBM.

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

Grossing/netting procedures are broadly consistent with *BPM5*. Most current account items are recorded on a gross basis. Financial account items are mainly recorded on a net basis, separately for the individual asset and liability components.

3. Accuracy and Reliability

3.1 Source data

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

The primary data sources (surveys and/or ITRS reports) are clearly insufficient and not fully dependable to compile the balance of payments statistics. Therefore, data from primary sources are supplemented with information from secondary data sources, for example:

Goods: foreign trade statistics prepared by the FTS of the NSO on the basis of data on import and export declarations for goods collected by the MRA through customs declaration are the basis of information for goods. For all types of imports, exports, and re-exports, one single document (except for goods in transit) is used, namely "Form 12." Goods are classified by the Harmonized Commodity Description and Coding System (HS) of the Customs Co-operation Council.

Services: The major sources of information for the services account are for:

(a) transportation services: passenger and freight air transportation credits from Air Malawi, transportation services debits from Air Malawi, and landing fees for use of airport landing facilities by foreign airlines from the Civil Aviation Department; (b) travel: debits from the ITRS records (adjusted to exclude payments for imports); (c) travel credits are obtained through exit cards filled by non residents in major ports of departure. The data are obtained from the Department of Immigration and compiled by the Tourism Section in NSO. Under-reporting is large and the processing delay of about two years is excessive. Benchmark surveys are not conducted; (d) other services debits are obtained from the ITRS records.

Income: dividends paid are obtained from the ITRS records; other investment income: interest on reserves assets from the RBM; interest on public external debt from the Debt Recording and Management System (CS-DRMS) updated by the DAMD of the Ministry of Finance (MOF) and shared on-line with the External Debt Management Section (EDMS) of the RBM.

Current and capital transfers: grants are obtained from the data base prepared by the MOF and the RBM.

Financial Account: (a) direct Investment: there is no data on direct investment. Data for 2000 and 2001 will be obtained from the PCFS for 2003; (b) external public debt: from the data base updated by the DAMD/MOF and shared on line with the EDMS/RBM; (c) commercial banks net foreign assets are obtained from the RBM, though classified under reserve assets.

Reserve Assets: are provided by the RBM and they do not distinguish from valuation changes, such as changes due to exchange rate variations.

Currently there are very few data obtained from surveys of the private sector.¹² Business interviews are conducted twice a year which, for balance of payments statistics, capture information from enterprises and industry associations for tobacco, coffee, tea and sugar. Information from Air Malawi and the Civil Aviation Department are also obtained from these surveys.

The PCFS launched in 2003 will fill the large gap in the reporting of private sector financial account transactions. This will include inward direct investment and direct investment income, together with portfolio and other investment transactions and their servicing. About 350 enterprises were requested to provide data on their 2000 and 2001 transactions. In the previous survey conducted in 2001, enterprises were requested to provide data on 1999 and 2000 transactions, but the survey outcomes were not used as data on transactions, exchange rates variations or price and other changes were not supplied. The current survey will not provide specific data on specific transactions of the goods for processing companies.

The ITRS (Form E) captures information sent by commercial banks on banks' customer purchases in foreign currency. The forms are sent by the commercial banks to the International Operations Department of the Reserve Bank of Malawi and processed by the Balance of Payments section of the Research and Statistics Department of the RBM. This source data is not dependable since it covers only sales of foreign exchange by banks to their

¹² Due to lack of resources and very poor response rates (20 to 30 percent), many surveys were discontinued in 1999, such as the NGOs and religious missions' surveys, as well as the workers' remittances (from the Post Office Service) and the private sector surveys that captured information on private loans, profits from direct investment, interest payments, dividends and directors' fees.

customers. No information is available on the purchases of foreign exchange by banks from their customers. Own-account transactions by banks are reported separately. Because the definition of residence in the exchange control regulations does not follow *BPM4* or *BPM5*, there can be some misclassification of transactions. In addition, the percentage of reported transactions that are unclassified or misclassified due to misreporting is very high (in 2002 almost 25 percent of the total transactions were classified under travel). For transactions that fall below the reporting threshold there is no sample survey of banks to obtain information on the classification of low-value transactions.

The Department of International Operations has developed a more comprehensive ITRS, covering both purchases and sales of foreign exchange and adapted to the new presentation of *BPM5*. The manual and the new Form E are planned to be launched in full by January 2004.¹³

Foreign trade data from primary sources are supplemented with information from numerous secondary data sources. The local media and the internet are monitored for information on international transactions that is used to update survey registers. The business interview surveys are crucial to maintaining contacts with the business community and to identify new developments that need to be taken into account in the balance of payments compilation process.

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

Not all source data are in conformity with the requirements needed for balance of payments statistics compilation. Moreover, insufficient human and financial resources make adjustments to the source data difficult. Notwithstanding these constraints, balance of payments statistics staff have developed specific procedures to adjust data, particularly on foreign trade to improve coverage, classification, and valuation and conform to the guidelines set out in *BPM5*.

¹³ A copy of the new forms and the manual has been sent in July to the IMF for revision and comments. A response is being awaited before launching the new forms.

The customs data using the ASYCUDA system are subject to the following scope and valuation adjustments:

- In the case of tobacco, which represents about 60 percent of total exports, data are adjusted to obtain unrecorded tobacco exports¹⁴ (smuggling to neighboring countries) by comparing customs data with production of tobacco as provided by the Tobacco Control Commission (TCC) (a government agency that regulates the market and conducts planters surveys) and tobacco sales in Malawi provided by the Auction Holdings Limited (AHL) (the sole auction company).
- Volume adjustment of other main exports such as tea, coffee, and sugar, are made when major differences are detected by obtaining data from large exporters of these products.
- Imports c.i.f. are adjusted to f.o.b. by applying a 15 percent fixed factor.
- Travel debits obtained from the ITRS reports are adjusted to exclude payments for imports of goods.

No other adjustments of data from the various sources are made to improve coverage, classification, and valuation, such as unrecorded import trade (cross-border trade and trade with main trading partners such as South Africa, which are estimated to be considerable¹⁵). No adjustment of transfer prices used in inter-company trade is made. There is no adjustment to capture workers' remittances from Malawians working abroad, which is believed to be important, particularly from South Africa and the United Kingdom.

The DAMD/MOF debt data base is not fully suitable for obtaining public external debt transactions and positions on an accrual basis as recommended by the *BPM5*. Data obtained from this data base are recorded on a cash basis and no adjustment is made. The database on grants is also insufficient and no adjustment is made to improve coverage and classification. There is an incomplete coverage of donor agencies, and there is no break down into current and capital, and into cash and kind transfers.

¹⁴ The inefficiency of the tobacco-marketing system creates incentives to bypass the auction system and sell directly to buyers in neighboring countries. Given the absence of processing facilities in these countries the tobacco is reimported into Malawi for processing and subject to lesser fees. This situation may change when the plans to install processing plants in Mozambique and Zambia are realized.

¹⁵ In the case of South Africa a simple exercise with bilateral data (from DOT/IMF) shows that the annual unrecorded imports (f.o.b.) from this main trading partner (roughly 40 percent of total imports) was about 65 percent, expressed in relation to Malawi's recorded imports, between 1998 and 2000.

3.1.3 Source data are timely

Generally, the data collection system provides for the timely receipt of administrative data for balance of payments compilation. For example, source data on foreign trade has a monthly release with a time lag of two to three months. The introduction of ASYCUDA in the six major ports of entry is a substantial improvement on timeliness and data quality. Data on services and income from the ITRS reports are processed with a time lag of one month in respect of the reference period and sent to the NSO approximately three times a year. Information from Air Malawi and the Airport Authority are obtained at the time of the second business interview that takes place in September–October. Nonetheless, they could be available five to six months after the reference period. The new data base system (CS-DRMS) for the compilation of external debt data updated from the Ministry of Finance and shared on line with the RBM, has improved substantially the timeliness of the data obtained to one month from the reference period. The information is sent to the NSO upon request, approximately twice a year. The reporting of the RBM's reserve assets and financial system's foreign assets and liabilities is time. The major delay of approximately two years arises from the tourism section of the NSO that processes the exit cards obtained from the Immigration Department.

The PCFS conducted in 2003 clearly identified the deadline for reporting. Follow up procedures were used to improve the response rates such as telephone calls and personal visits. This improved considerably the response rate, which is currently around 85 percent.

3.2 *Statistical techniques*

3.2.1 *Data compilation employs sound statistical techniques*

Current data compilation procedures try to minimize processing errors. Trade data, as well as external debt data are received electronically, thereby reducing compilation errors. Trade data from the six major ports are transmitted electronically from the Malawi Revenue Authority (MRA) to the FTS in Zomba, whereas customs documents from the non-computerized ports are processed manually by the FTS/NSO by using the Eurotrace software, but before the data is forwarded, a postclearance check of the documents is conducted by the Audit division of the MRA, in terms of unit prices and quantities. The data from the ITRS reports are received in hardcopy and processed manually from the Balance of Payments Statistics Section of the RBM. No automatic controls to detect errors in processing the ITRS data are available. With the forthcoming introduction of the new ITRS the quality, the coverage (adapted to *BMP5*) and the timeliness of the data is expected to improve substantially, especially once the banks will be prepared to send the information electronically.

The exit cards for the processing of travel credits is received manually and processed with a long delay, which hampers the identification of errors and is reflected in the underestimation of credits.

The recent PCFS has been designed in a way that facilitates the electronic process of information.

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

As mentioned previously, adjustments are made to the trade data. Nevertheless, the adjustment of imports from c.i.f. to f.o.b. is not sound. A fixed factor for freight and insurance equivalent to 15 percent is implemented, and this correction is completely attributed to air freight. There is no sample survey of transportation enterprises, except the information obtained from Air Malawi for passenger transport. However, customs documents (Form 12) provide separate information on insurance and freight, as well as means of transport, which are processed and included in the data base, but not used for balance of payments statistics compilation purposes.

Foreign trade data reconciliation with bordering countries (to capture cross border trade) and with major trading partners such as South Africa (to capture under coverage of imports) are not conducted, although it may be possible to correct for under-recording of imports through the use of partner countries' export data.

There are a number of transactions not covered in the balance of payments statistics that could be estimated by implementing widely used statistical techniques. Among these transactions are: financial services related to banking activities, several transport services, workers' remittances, and other current transfers.

3.3 Assessment and validation of source data

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

In general, accuracy of the data from surveys is not routinely assessed due to severe understaffing. Data collected by the 2002 PCFS will facilitate cross-checking against the 2001 PCFS and against other data sources. The PCFS is also designed to facilitate cross-checking of stock and flows and also with the financial statements of enterprises.

The mission was informed that the accuracy of bank reporting of the ITRS forms is assessed when unidentified or high-value transactions arise and followed by telephone calls or visits to the banks. However, for the most part, there is little follow-up with reporting banks and no recent meetings with banks have been held by balance of payments compilers to discuss the accuracy of ITRS reporting. For this reason, there is considerable misreporting and misclassification. No sanctions for misreporting by banks of their ITRS returns have been applied. An obvious example is the already mentioned high level of transactions classified as travel (in 2002 around 25 percent of total banks' customers foreign exchange purchases).

The information reported on exit cards is not checked for plausibility. The response rate is good but at the cost of excessive delay, and there would appear to be significant underreporting of expenditures.

Revisions are made to the statistics whenever new or improved data become available.

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

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

Some data compiled from surveys are validated against other independent data sources, such as information reported in the local press. The information obtained from the ITRS report is also compared with other data sources, such as foreign trade or travel. This may help to realize some adjustment to high-value transactions such as travel debits.

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

Resource restrictions hamper the conduct of regular cross-checking of data with related series or indicators. However, data on interest payments on external debt and receipts on reserve assets are assessed in relation to the corresponding position data.

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

There is awareness that net errors and omissions are excessively large. Staff involved in producing balance of payments data monitor developments in the errors and omissions, but the lack of source data in major accounts severely limit major corrections. There are no bilateral comparisons conducted with data of major trading partners, nor comparison with the joint BIS-IMF-OECD-World Bank Statistics on External debt.

3.5 *Revision studies*

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

The direction and magnitude of revisions between preliminary and final data are continuously evaluated. However no formal studies are conducted to keep record of revisions.

4. Serviceability

4.1 Relevance

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

An established process of consultation takes place periodically with other data producing agencies and users of statistics at the governmental level through the high level Economic Management Committee and the TCNABOP. The mission of the NSO articulated in its strategic plan is to “provide high quality, timely and independent statistical information and promote its use for policy formulation, decision-making, research, transparency, and general public awareness.” Consultation with users is undertaken before the regular update of the Strategic Plan. A Customer Satisfaction survey was recently conducted for the first time aimed at identifying users' views on the quality of statistical service, the way to improve it, the mechanisms for the delivery of statistics and the identification of data gaps. The results are currently being processed.

Notwithstanding these efforts, there is no established process of regular consultation with users of balance of payments statistics from the private sector, embassies, academia, etc., such as a user advisory group, or other established form of regular communications. The NSO, however, takes into account concerns and suggestions gathered verbally, mainly at the occasion of the business interviews.

NSO staff participate in international statistical meetings and seminars organized by international and regional organizations such as the IMF, the UN, and the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI).

4.2 Timeliness and periodicity

4.2.1 Timeliness follows dissemination standards

Annual balance of payments statistics data are disseminated by the NSO in its *Statistical Yearbook* within 12 months (preliminary) and 18 months (final) after the end of the reference period, thereby timeliness is not consistent with GDDS recommendations. Quarterly balance of payments statistics estimates have not yet been prepared. The RBM publishes in its *Financial and Economic Review* provisional estimates of balance of payments statistics at the end of the first quarter after the reference period. The MEPD, in its yearly *Economic Report* also publishes estimated figures, along with projections for the current year.

4.2.2 Periodicity follows dissemination standards

The NSO compiles annual balance of payments statistics; thereby periodicity is consistent with GDDS recommendations. The NSO has not yet started to compile preliminary quarterly

balance of payments statistics estimates as it has given priority to improving the annual data and to finalizing the conversion data to *BPM5*.

4.3 Consistency

4.3.1. Statistics are consistent within the dataset

Over the long run, annual net errors and omissions of Malawi's balance of payments statistics have been large and volatile and significantly handicap an understanding of balance of payments developments. For 2001, the NSO, RBM and MEPD show in their publications substantial differences in errors and omissions, with much larger errors and omissions being reported in the RBM and MEPD's publications.

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

Consistent time series are available for an adequate period of time. In general, when the NSO introduces changes in source data, methodology, or techniques, historical balance of payments statistics data are reconstructed as far back as possible. Preliminary balance of payments statistics, going back to 1994, have been reconstructed based on *BPM5* methodology, and are planned to be published in October 2003. When changes in source data occurs, such as the discontinuity of balance of payments statistics surveys in 1999 or the partial elimination of the exchange control in 1994, the NSO tries to maintain consistency over time through the use of estimation techniques, though source data offer limited scope for this.

Major changes in methodology and unusual changes in economic trends are explained in internal documents, but not made public. There are no methodological notes identifying or explaining the main breaks and discontinuities in the balance of payments statistics component time series.

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

Balance of payments data can be broadly reconciled with data on foreign trade, national accounts, and monetary statistics. These datasets are produced by the NSO and the RBM and the data benefit from internal consultations and reviews with all relevant divisions. Foreign trade statistics are the basis for the goods account in the balance of payments statistics. Several adjustments are made to improve coverage, classification, valuation, and time of recording. The balance of payments statistics are broadly consistent with the national accounts statistics, as the SNA's rest of the world account is compiled on the basis of data from the balance of payments statistics current account. The flows of RBM reserve assets cover the same accounts as are included in monetary statistics.

In general, balance of payments statistics components comprising public sector external debt data are based on data reported by the RBM to the NSO and obtained from the CS-DRMS

data set updated by the DAMD/MOF. These datasets also benefit from regular consultation between the MOF and the RBM.

Malawi does not compile international investment position data.

4.4 Revision policy and practice

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

Revisions of balance of payments statistics do not have an established schedule, neither are they identified in the published statistics of any of the three institutions currently publishing balance of payments statistics. Explanations and analysis of the revisions are only available in internal documents of the NSO. New source data are incorporated in balance of payments statistics as early as possible, but a regular, well-established, and transparent schedule is not made available to the public.

4.4.2 Preliminary data are clearly identified

Initially published balance of payments statistics data are preliminary and subject to revisions as new source data from administrative records and surveys become available. The revised data are disseminated with the same level of detail as previously published. There is, however, no indication in the revised data which statistics have been updated. Provisional status of the data for the latest year is not indicated. None of the Institutions publishing balance of payments statistics alert users that the initially published data are preliminary and subject to revision. Only the projections for the current year published by the MEPD are indicated as such in a footnote.

4.4.3 Studies and analyses of revisions are made public

External users are not informed of the causes of the revisions. The nature of the revisions is investigated and data sources and compilation procedures are reviewed only sporadically.

5. Accessibility

5.1 Data accessibility

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

The presentation of balance of payments statistics data disseminated to the public by the NSO does not facilitate proper interpretation. The NSO only disseminates balance of payments statistics data in its Statistical Yearbook through one official summary table, accompanied by few tables with data on foreign trade. There are no charts, explanatory texts to facilitate analysis, nor key concepts and definitions. Moreover, interpretation and analysis is hampered by inadequate classification of major balance of payments statistics transactions,

such as services, investment income and lack of presentation of exceptional financing transactions (see 2.3.1)

The NSO prepares a set of detailed tables on balance of payments statistics components (not included in publications or the website), that is provided to internal and selected users outside the NSO, mainly other government officials and staff from international organizations. These tables are useful to facilitate proper interpretation of balance of payments statistics specifically for current account transactions.

The publications of the RBM and the MEPD include balance of payments statistics along with other tables and an analysis in the main text. A summary (and incomplete) quarterly balance of payments statistics presentation is included in the quarterly bulletin of the RBM.

Other shortcomings in publications are: (a) the lack of recognition of a sole compiler of balance of payments statistics, having as a result three institutions publishing balance of payments statistics with differing figures not only for preliminary data but also for historical ones; and b) several publications errors with disparities among tables presenting similar data (i.e., RBM's quarterly publication).

Balance of payments statistics are not seasonally adjusted, since no quarterly balance of payments statistics is produced.

5.1.2 Dissemination media and formats are adequate

Balance of payments statistics dissemination media and formats are largely inadequate. The NSO publishes only balance of payments statistics data in its Statistical Yearbook and a very aggregated table (three lines) in its website. The RBM and the MEPD also publish annual balance of payments statistics data. The RBM's website publishes balance of payments statistics, though with some delay.

The dissemination media and format could be improved, e.g., by acknowledging a sole compiler of balance of payments statistics and avoiding data disparities among institutions, and by presenting more disaggregated data to facilitate the analysis. The main publications that include balance of payments statistics are:

- The *Statistical Yearbook* of the NSO includes a summary table with data on balance of payments statistics aggregates (annual data for the past seven years), accompanied by two tables with data on exports and imports for a series of years and by main trading partners; and two other tables on foreign assets and liabilities of the RBM and of commercial banks. The publications include neither explanatory text nor charts on balance of payments statistics.
- The main RBM's publications that contain balance of payments statistics are: (a) the *Annual Financial and Economic Report* which includes in the statistical section a summary table of balance of payments statistics aggregates (annual data for the past seven years), and two tables with data on main exports commodities and on the trade

balance for the past nine years. The main text includes an analysis of the economic and financial development of the year of reference with a brief analysis of the Balance of Payments, including exchange rate performance and the external debt situation with a table of stock of external debt by debtor for the past eight years; and (b) the *Financial and Economic Review*, which is a quarterly publication. The statistical Annex Tables include a balance of payments statistics table, and four other tables containing data on imports and exports for the past two decades, indices of volume and unit values for imports and exports, domestic exports by main commodities since 1965, and a last table with selected foreign exchange rates. In the statistical part there are also tables on net international reserves of the monetary authorities and of the commercial banks. The analytical part has a special section dedicated to Balance of payments, the external debt situation (including a table on the external debt service by main debtors) and the exchange rate performance. In this part a table with quarterly balance of payments statistics with a summary presentation of Trade Balance (no current account), Capital Account Balance and changes in foreign assets is included.

- The MEPD's annual *Economic Report* contains in the overview of the macroeconomic program for the fiscal year a section with an analysis of the balance of payments with a summary table for the last five years with a projection of the current year. It contains also a table with exports by main products for the last five years that includes projections for the current fiscal year.

Over the last past years, no separate balance of payments statistical publications have been prepared. The last issue released by the NSO of a separate publication that included several disaggregated tables was the *Balance of Payments 1987–1990*.

5.1.3 Statistics are released on a preannounced schedule

Balance of payments data are not released according to a preannounced schedule. There is no specific date and/or time when balance of payments statistics are released to the public.

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

Balance of payments data are not released simultaneously to all users of statistics. Once balance of payments statistics are presented to the Technical Committee data are occasionally provided to selected users mainly government officials and staff of international financial institutions.

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

In addition to the balance of payments data included in NSO and RBM's publications and disseminated in the website, a number of nonpublished but nonconfidential balance of payments sub aggregates are made available upon demand. When requested, special tabulations based on unpublished (but nonconfidential) data are usually provided to several users, such as bilateral foreign trade data, sub aggregates of minor export products, among

others. No specific reference is made in balance of payments statistics publications on the availability of nonpublished sub aggregates, and the terms and conditions on which they are made available.

5.2 *Metadata accessibility*

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

Metadata, including documentation on concepts, scope, classifications, basis for recording, data sources, and statistical techniques is not available for balance of payments statistics in national publications. This information is only available, though in a summarized fashion, in the GDDS tables published in the IMF website. It contains: I. Analytical framework, concepts, definitions and classifications; II. Scope of the data; III. Accounting Conventions; IV. Data Sources; and V. Compilation practices. Departures from internationally accepted standards are not documented.

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

No brochure is available in national publications to inform general users about balance of payments statistics and other external sector statistics. Nonetheless, in the GDDS tables published by the IMF and updated regularly by the authorities, a summary of sources and methods to inform users on the balance of payments statistics compilation methods and techniques is available.

5.3 *Assistance to users*

5.3.1 Contact person for each subject field is publicized

The NSO publications and website identifies a general note indicating that the NSO is the contact source and include specific addresses that may be contacted by users, as well as an email address: enquiries@statistics.gov.mw. A specific contact person within the balance of payments area is not identified but the inquirer is supposedly referred to the area specialist in a prompt and knowledgeable way. Assistance to users is not monitored through periodic users' surveys or through an equivalent mechanism.

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

A catalog of all NSO publications and documents are listed in the NSO *Quarterly Statistical Bulletin* and in the webpage, and updated periodically, as well as the list of prices for each statistical product.

Table 5. Malawi: Data Quality Assessment Framework—Summary of Results for Balance of Payments Statistics
(Official Compiling Agency: National Statistical Office)

Element	NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
		O	LO	LNO	NO		
0. Prerequisites of quality							
0.1 Legal and institutional environment			X			NSO has legal mandate, but RBM disseminates different balance of payments data. Lack of coordination in revisions and publications policy among agencies.	A project to review and update the Statistics Act is under way
0.2 Resources			X			Human and financial resources are clearly insufficient	Undertake staff recruitment and training program. Allocate and monitor funds through an internal expenditure management committee
0.3 Quality awareness			X			Few formal processes in place to deal with quality considerations	Establish a unit for statistical standards and methods and conduct a new customer's satisfaction survey
1. Integrity							
1.1 Professionalism							
1.2 Transparency		X				Prior access by government agencies to new releases of data, which is not made clear to public. balance of payments statistics compiled by the NSO not necessarily identified as such by the RBM and the MEPD	
1.3 Ethical standards			X			There is scope for wider dissemination of ethical guidelines among staff.	Strengthen the Appointment and Disciplinary Committee. Improve interaction with the Civil Service Commission. Design and implement an induction program for staff
2. Methodological soundness							
2.1 Concepts and definitions			X			Publications still in <i>BPM4</i> format, though progress in transition to <i>BPM5</i> .	Fully adopt the <i>BPM5</i> presentation and compilation of data
2.2 Scope			X			Definition of residence in ITRS reports not consistent with <i>BPM4</i> or <i>BPM5</i> .	New designed ITRS forms will be introduced
2.3 Classification/sectorization			X			Several departures from <i>BPM4</i> or <i>BPM5</i>	
2.4 Basis for recording			X			Transactions valued at market prices when available; income and financial transactions on cash basis	

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

Table 5. Malawi: Data Quality Assessment Framework—Summary of Results for Balance of Payments Statistics
(Official Compiling Agency: National Statistical Office)

Element		NA	Assessment				Comments on Assessment	Plans for Improvement and Target Dates
			O	LO	LNO	NO		
<p>Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria</p>								
3. Accuracy and reliability								
3.1	Source data			X		Data collection system not comprehensive	Enhance the use of administrative data sources and conduct new surveys (workers remittances, road transport). Surveys on Foreign Private Investment are planned for a continuous annual scale	
3.2	Statistical techniques			X		Constrained by limited surveys. Adjustments to imports from c.i.f. to f.o.b. not sound; no foreign trade data reconciliation with major trading partners		
3.3	Assessment and validation of source data				X	ITRS records not cross-checked at the time of collection, exit cards not checked on plausibility	New exchange control forms adapted to <i>BPM5</i> will be introduced	
3.4	Assessment and validation of intermediate data and statistical outputs				X	Cross check not regularly conducted; no bilateral comparisons and comparisons with other international data sources	Incorporate informal cross-border trade estimates	
3.5	Revision studies				X	Limited and not undertaken on a formal basis		
4. Serviceability								
4.1	Relevance			X		No established process of regular consultation with the private sector	Reduce the time lag in data dissemination	
4.2	Timeliness and periodicity			X		Timeliness not consistent with GDDS recommendations		
4.3	Consistency			X		Large and volatile errors and omissions.	Announce well in advance any revision in statistical methodologies	
4.4	Revision policy and practice				X	Neither established revision schedule nor identified in published statistics; no indication that data preliminary and subject to revisions		
5. Accessibility								
5.1	Data accessibility			X		Presentation too aggregated and with <i>BPM4</i> format, no charts, explanatory texts. Statistics not available to all users at the same time	Publish a statement regarding balance of payments compilation and methodological practices, in conjunction with published data	
5.2	Metadata accessibility			X		Only in GDDS webpage	Develop and maintain an electronic databank of statistics	
5.3	Assistance to users			X		No identified specific contact person but dedicated e-mail address provided		

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
Real Sector					
Comprehensive Framework					
National Accounts					
Producing and disseminating the full range of national accounts aggregates and balancing items in nominal and real terms, yielding Gross Domestic Product, Gross National Income, Gross Disposable Income, Consumption, Saving, Capital Formation, and Net Lending/Borrowing. Producing and disseminating sectoral accounts and national and sectoral balance sheets as relevant.	Compilation is based largely on the 1968 SNA, using the production approach with 1994 as the base year for constant price series. Major expenditure aggregates are compiled, with private final consumption expenditure and changes in inventories as a residual estimate. Estimates of gross national product (GNP), disposable income and saving are also disseminated. Production accounts for the financial and non financial institutional sectors are compiled. Underground and informal sector activities are estimated indirectly.	Annual	Annual	10–14 months	Constant price: 12 months Current price: 18 months
Data Categories and Indicators					
National Accounts Aggregates					
GDP (nominal and real)	GDP (nominal and real)	Annual (quarterly encouraged)	Annual	6–9 months	Constant price: 12 months Current price: 18 months
Gross national income, capital formation, saving	Gross national income Capital formation	Annual	Annual	6–9 months	Constant price: 12 months Current price: 18 months
Production Index/Indices					
Manufacturing or industrial indices	Index of industrial production compiled from data of 75 large scale firms in the manufacturing and utilities sectors representing	Monthly	Monthly	6 weeks	4–5 months

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
	80 percent and 100 percent of production respectively. Base year 1984				
Primary commodity, agricultural, or other indices, as relevant	Not compiled	As relevant	NA	3 months for all indices	NA
Real Sector					
Data Categories and Indicators					
Price Indices					
Consumer price index	Data compiled for seven major groups. Base year 2000, with weights based on the 1997/98 Integrated Household Survey. Indices compiled at national, urban and rural levels. Separate indices published for each of the four major urban centers, and each is broken down into three income groups.	Monthly	Monthly	1 or 2 months	2 weeks
<i>Producer price index</i>	Not compiled	<i>Monthly</i>	NA	<i>1 or 2 months</i>	NA
Labor Market Indicators					
Employment	Not compiled	Annual	NA	6–9 months	NA
Unemployment	Not compiled	Annual	NA	6–9 months	NA
Wages/earnings (all sectors)	Not compiled	Annual	NA	6–9 months	NA

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
Fiscal Sector					
Comprehensive Framework					
Central Government Operations					
Producing and disseminating comprehensive data on transactions and debt, emphasizing (1) coverage of all central government units; (2) use of appropriate analytical framework; and (3) development of a full range of detailed classifications (tax and nontax revenue, current and capital expenditure, domestic and foreign financing) with breakdowns (debt holder, instrument, currency), as relevant.	Not compiled	Annual	NA	6–9 months	NA
<i>General government or public sector operations data strongly encouraged where sub national levels of government or public enterprise operations are of analytical or policy importance.</i>	Not compiled	<i>Annual</i>	NA	<i>6–9 months</i>	NA
Central Government Debt					
Producing and disseminating comprehensive data on central government domestic and foreign debt, with breakdowns (debt holder, instrument, currency, etc., as relevant).	<i>Outstanding domestic government debt is disseminated with the appropriate breakdowns.</i> Outstanding foreign government debt is disseminated, but not with the appropriate breakdowns.	Annual	Annual	6–9 months	6–9 months

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
Data Categories and Indicators					
Central Government Budgetary Aggregates					
Revenue, expenditure, balance, and financing with breakdowns (debt holder, instrument, currency), as relevant	The coverage follows the recommendations of the <i>GFSM 1986</i> , but not with all the relevant breakdowns.	Quarterly	Quarterly	1 quarter	1 quarter
Fiscal Sector					
Data Categories and Indicators					
Central Government Budgetary Aggregates					
<i>Interest payments</i>		Quarterly	Quarterly	1 quarter	1 quarter
Central Government Debt					
Domestic debt and foreign debt, as relevant, with appropriate breakdowns (currency, maturity, debt holder, instrument), as relevant	<i>Outstanding domestic government debt is disseminated by the RBM on a quarterly basis by type of debt holder and debt instrument.</i> Outstanding foreign government debt is disseminated <i>annually</i> by the RBM, without the appropriate breakdowns.	Annual (Quarterly encouraged)	Quarterly for domestic debt	1–2 quarters	1 quarter
<i>Government guaranteed debt</i>	<i>Not compiled</i>	<i>As relevant</i>	<i>NA</i>	<i>3 months for all indices</i>	<i>NA</i>
Financial Sector					
Comprehensive Framework					
Broad Money Survey or Depository Corporations Survey					
Producing and disseminating comprehensive data	The depository corporations survey covers the RBM and the	Monthly	Monthly	2–3 months	1 month and 10 days

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
emphasizing: (1) coverage of all depository corporations (banking institutions), (2) use of an appropriate analytical framework; and (3) development of classifications of external assets and liabilities, domestic credit by sector, and components of money (liquidity) and nonmonetary liabilities.	four commercial banks, which account for around 75 percent of the deposits and loans of the entire depository corporations. Four other commercial banks, New Building Society, Malawi Savings Bank, two deposit-taking finance companies, and credit cooperatives are not covered by the survey. The methodology for producing the depository corporations survey broadly follows the Fund's <i>Monetary and Financial Statistics Manual (MFSM)</i> . Classification according to economic sector is adequate. Shortcomings in the classification of accounts are local governments as well as shares and other equity.				
Financial Sector					
Data Categories and Indicators					
Broad Money and Credit Aggregates					
Net external position, domestic credit, broad or narrow money	<p>Net foreign assets. Total foreign assets less total foreign liabilities of the RBM and commercial banks.</p> <p>Domestic credit. Net claims on government (central and local governments) plus net claims on nonfinancial public enterprises, and claims on private sector.</p> <p>National definitions of money. M1: currency outside banks and demand deposits; M2: M1 plus</p>	Monthly	Monthly	1–3 months	1 month and 10 days

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
		GDDS	Current Practice	GDDS	Current Practice
GDDS	Current Practice				
	saving and time deposits and foreign currency deposits with commercial banks.				
Central Bank Aggregates					
Reserve money	Currency outside banks, plus commercial banks' cash and deposits with the RBM.	Monthly	Monthly	1–3 months	1 month and 10 days
Interest Rates					
Short and long-term government security rates, policy variable rate	Treasury bill rates and treasury bond rates.	Monthly	Monthly	Disseminated on as part of a high-frequency (e.g., monthly) publication	1 month and 10 days
Money or interbank market rates and a range of deposit and lending rates	Interbank rates and RBM bill rates. Passive rates: saving deposits rates. Active rates: the RBM lending rates to banks, commercial bank lending rates, and mortgage loan rates.	Monthly	Monthly	Disseminated on as part of a high-frequency (e.g., monthly) publication	1 month and 10 days
Stock Market					
Share price index, as relevant	Share index calculated for only domestic-listed shares.	Monthly	Monthly	Disseminated on as part of a high-frequency (e.g., monthly) publication	1 month and 10 days

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
External Sector					
Comprehensive Framework					
Balance of Payments					
Producing and disseminating comprehensive data on the main aggregates and balancing items of the balance of payments, including e.g., imports and exports of goods and services, trade balance, income and transfers, current account balance, reserves and other financial transactions, and overall balance, with detailed components as relevant.	Balance of payments data are published according to <i>BPM4</i> . Progress has been made in the transition to the methodology of <i>BPM5</i> . In general, aggregates and balancing items disseminated as recommended. Nevertheless, non recorded trade is only partially estimated; coverage of services is incomplete; there is no information on capital account; and financial account is incomplete.	Annual	Annual	6–9 months	12 months
<i>International Investment Position</i>	<i>Not compiled</i>	<i>Annual</i>	<i>NA</i>	<i>6–9 months</i>	<i>NA</i>
Data Categories and Indicators					
Balance of Payments Aggregates					
Imports and exports of goods and services, current account balance, reserves, overall balance	Imports and exports of goods and services, current account balance, reserves, overall balance.	Annual (Quarterly encouraged)	Annual	6 months	12 months

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
GDDS	Current Practice	GDDS	Current Practice	GDDS	Current Practice
Public and publicly guaranteed external debt outstanding (with maturity breakdown) ¹⁶	Data are not disseminated for public sector external debt with appropriate breakdowns by remaining maturity, currency composition, and economic sector of each loan. Data on publicly guaranteed debt are not disseminated.	Quarterly	Annual	3–6 months	6–9 months
External Sector					
Data Categories and Indicators					
Balance of Payments Aggregates					
Public and publicly guaranteed debt service schedule	A summary statement of the overall debt service payment is published in the RBM's quarterly financial and economic review. Data on publicly guaranteed debt are not disseminated.	6 months	Quarterly	6–9 months	3 months
<i>Private external debt not publicly guaranteed</i>	<i>Not compiled</i>	<i>Annual</i>	<i>NA</i>	<i>6–9 months</i>	<i>NA</i>
International Reserves					
Gross official reserves denominated in U.S. dollars	Gross official reserves comprise SDR holdings, reserve position in the Fund, foreign currency deposits in foreign banks and securities, and Treasury balances with Crown Agents. Dissemination is in Malawi	Monthly	Monthly	1–4 weeks	1 month and 10 days

¹⁶ The external debt data category reflects the decision of the Executive Board of the IMF in March 2000 to enhance the GDDS. Individual country presentations will be revised to reflect the enhancements as they are updated over time. Provisional information on external debt data, if available, is shown with the metadata for balance of payments and central government debt.

Malawi—Current Data Dissemination Practices vis-à-vis the GDDS Data Dimension

Coverage		Periodicity		Timeliness	
	Current Practice	GDDS	Current Practice	GDDS	Current Practice
	Kwacha.				
<i>Reserve related liabilities</i>	<i>Include Deposits of International agencies</i>	<i>Monthly</i>	<i>Monthly</i>	<i>1-4 weeks</i>	<i>3 months</i>
Merchandise Trade					
Total exports and total imports	As recommended, compiled in accordance with the recommendations of the US "International Trade Statistics, Concepts and Definitions", Imports are valued c.i.f. and exports are f.o.b.	Monthly	Monthly (provisional)	8-12 weeks	2-3 months
<i>Major commodity breakdowns with longer time lapse</i>	<i>Goods are classified by the harmonized system</i>	<i>Monthly</i>	<i>Monthly (provisional)</i>	<i>8-12 weeks</i>	<i>2-3 months</i>
Exchange Rates					
Spot rates	Coverage as recommended	Daily	Monthly	Dissemination as part of a high-frequency (e.g., monthly) publication	30-45 days

Summary of the General Data Dissemination System (GDDS)

Data coverage, periodicity, and timeliness

Dissemination of reliable, comprehensive, and timely economic, financial, and socio-demographic data is essential to the transparency of macroeconomic performance and policy. The GDDS contains specific recommendations concerning coverage, periodicity, and timeliness for comprehensive frameworks as well as for data categories and indicators.

Quality

Data quality must have a high priority. Data users must be provided with information to assess quality and quality improvements. The GDDS recommends:

- dissemination of documentation on methodology and sources used in preparing statistics; and
- dissemination of component detail, reconciliations with related data, and statistical frameworks that support statistical cross-checks and provide assurance of reasonableness.

Integrity

To fulfill the purpose of providing the public with information, official statistics must have the confidence of their users. In turn, confidence in the statistics ultimately becomes a matter of confidence in the objectivity and professionalism of the agency producing the statistics. Transparency of practices and procedures is a key factor in creating this confidence. The GDDS, therefore, recommends:

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

Access to the public

Dissemination of official statistics is an essential feature of statistics as a public good. Ready and equal access by the public are principal requirements. The GDDS recommends; and

- dissemination of advance release calendars; and
- simultaneous release to all interested parties.

Plans for improvement

The GDDS recommends that plans for improvement be developed for all areas in which shortcomings exist and that these plans be disseminated.

The GDDS also recommends that any needs for assistance be identified in the metadata. This may also be helpful for donors and technical assistance providers to prioritize their activities.

For each participating member country, the GDDS metadata provide descriptions of the dimensions listed above, together with plans for improvement and needs for assistance. This information is posted on the DSBB; participating countries are encouraged to also post the metadata on their national websites.

Source: Guide to the GDDS, February 2002: <http://dsbb.imf.org>

Data Quality Assessment Framework—Generic Framework
(July 2001 Vintage)

Quality Dimensions	Elements	Indicators
<p>Prerequisites of quality¹</p>	<p>0.1 Legal and institutional environment—<i>The environment is supportive of statistics.</i></p> <p>0.2 Resources—<i>Resources are commensurate with needs of statistical programs.</i></p> <p>0.3 Quality awareness—<i>Quality is a cornerstone of statistical work.</i></p>	<p>0.1.1 The responsibility for collecting, processing, and disseminating statistics is clearly specified.</p> <p>0.1.2 Data sharing and coordination among data producing agencies are adequate.</p> <p>0.1.3 Respondents' data are to be kept confidential and used for statistical purposes only.</p> <p>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</p> <p>0.2.1 Staff, financial, and computing resources are commensurate with statistical programs.</p> <p>0.2.2 Measures to ensure efficient use of resources are implemented.</p> <p>0.3.1 Processes are in place to focus on quality.</p> <p>0.3.2 Processes are in place to monitor the quality of the collection, processing, and dissemination of statistics.</p> <p>0.3.3 Processes are in place to deal with quality considerations, including tradeoffs within quality, and to guide planning for existing and emerging needs.</p>
<p>1. Integrity</p> <p><i>The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.</i></p>	<p>1.1 Professionalism—<i>Statistical policies and practices are guided by professional principles.</i></p> <p>1.2 Transparency—<i>Statistical policies and practices are transparent.</i></p> <p>1.3 Ethical standards—<i>Policies and practices are guided by ethical standards.</i></p>	<p>1.1.1 Statistics are compiled on an impartial basis.</p> <p>1.1.2 Choices of sources and statistical techniques are informed solely by statistical considerations.</p> <p>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</p> <p>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</p> <p>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</p> <p>1.2.3 Products of statistical agencies/units are clearly identified as such.</p> <p>1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.</p> <p>1.3.1 Guidelines for staff behavior are in place and are well known to the staff.</p>

**Data Quality Assessment Framework—Generic Framework
(July 2001 Vintage)**

Quality Dimensions	Elements	Indicators
<p>2. Methodological soundness</p> <p><i>The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1 Concepts and definitions— <i>Concepts and definitions used are in accord with internationally accepted statistical frameworks.</i></p> <p>2.2 Scope—<i>The scope is in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.3 Classification/sectorization— <i>Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.</i></p> <p>2.4 Basis for recording—<i>Flows and stocks are valued and recorded according to internationally accepted standards, guidelines, or good practices.</i></p>	<p>2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices: see dataset-specific framework</p> <p>2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices: see dataset-specific framework.</p> <p>2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices: see dataset-specific framework.</p> <p>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 internationally accepted standards, guidelines, or good practices.</p>

**Data Quality Assessment Framework—Generic Framework
(July 2001 Vintage)**

Quality Dimensions	Elements	Indicators
<p>3. Accuracy and reliability</p> <p><i>Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.</i></p>	<p>3.1 Source data—<i>Source data available provide an adequate basis to compile statistics.</i></p> <p>3.2 Statistical techniques—<i>Statistical techniques employed conform to sound statistical procedures.</i></p> <p>3.3 Assessment and validation of source data—<i>Source data are regularly assessed and validated.</i></p> <p>3.4 Assessment and validation of intermediate data and statistical outputs—<i>Intermediate results and statistical outputs are regularly assessed and validated.</i></p> <p>3.5 Revision studies—<i>Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.</i></p>	<p>3.1.1 Source data are collected from comprehensive data collection programs that take into account country-specific conditions.</p> <p>3.1.2 Source data reasonably approximate the definitions, scope, classifications, valuation, and time of recording required.</p> <p>3.1.3 Source data are timely.</p> <p>3.2.1 Data compilation employs sound statistical techniques.</p> <p>3.2.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.</p> <p>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.</p> <p>3.4.1 Main intermediate data are validated against other information where applicable.</p> <p>3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.</p> <p>3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated.</p> <p>3.5.1 Studies and analyses of revisions are carried out routinely and used to inform statistical processes.</p>

**Data Quality Assessment Framework—Generic Framework
(July 2001 Vintage)**

Quality Dimensions	Elements	Indicators
<p>4. Serviceability</p> <p><i>Statistics are relevant, timely, consistent, and follow a predictable revisions policy.</i></p>	<p>4.1 Relevance—<i>Statistics cover relevant information on the subject field.</i></p> <p>4.2 Timeliness and periodicity – <i>Timeliness and periodicity follow internationally accepted dissemination standards.</i></p> <p>4.3 Consistency—<i>Statistics are consistent within the dataset, over time, and with major datasets.</i></p> <p>4.4 Revision policy and practice—<i>Data revisions follow a regular and publicized procedure.</i></p>	<p>4.1.1 The relevance and practical utility of existing statistics in meeting users’ needs are monitored.</p> <p>4.2.1 Timeliness follows dissemination standards. 4.2.2 Periodicity follows dissemination standards.</p> <p>4.3.1 Statistics are consistent within the dataset (e.g., accounting identities observed). 4.3.2 Statistics are consistent or reconcilable over a reasonable period of time. 4.3.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.</p> <p>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 made public.</p>

**Data Quality Assessment Framework—Generic Framework
(July 2001 Vintage)**

Quality Dimensions	Elements	Indicators
<p>5. Accessibility</p> <p><i>Data and metadata are easily available and assistance to users is adequate.</i></p>	<p>5.1 Data accessibility—<i>Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.</i></p> <p>5.2 Metadata accessibility—<i>Up-to-date and pertinent metadata are made available.</i></p> <p>5.3 Assistance to users—<i>Prompt and knowledgeable support service is available.</i></p>	<p>5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).</p> <p>5.1.2 Dissemination media and formats are adequate.</p> <p>5.1.3 Statistics are released on the preannounced schedule.</p> <p>5.1.4 Statistics are made available to all users at the same time.</p> <p>5.1.5 Nonpublished (nonconfidential) subaggregates are made available upon request.</p> <p>5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines or good practices are annotated.</p> <p>5.2.2 Levels of detail are adapted to the needs of the intended audience.</p> <p>5.3.1 Contact person for each subject field is publicized.</p> <p>5.3.2 Catalogs of publications, documents, and other services, including information on any charges, are widely available.</p>

Note: The elements and indicators included here bring together the “pointers to quality” that are applicable across the five identified dimensions of data quality.

Users' Views

Summary of Results of Survey of Data Users

With the assistance of the authorities and the Office of the IMF Resident Representative, and as a complement to the IMF staff's own assessment of the quality of Malawi's macroeconomic statistics, the mission that visited Lilongwe during September 1–16, 2003, conducted an informal survey of users of macroeconomic statistics. The survey questionnaire was sent to ministries and state agencies, donor agencies and embassies, banks and other financial institutions, and the University of Malawi. The questionnaire was completed by 12 of the sample of 24 users to whom the questionnaire was sent. The survey asked users to evaluate six specific aspects of national accounts, prices, fiscal, monetary, and balance of payments statistics—namely (i) coverage and detail; (ii) periodicity and timeliness; (iii) methodological soundness; (iv) accuracy and reliability; (v) data revision; and (vi) dissemination practices—as well as provide an overall assessment. Two follow-up meetings were held with survey respondents, one with the donor community and the other with the financial community (mainly banks and building societies).

The ratings given by survey respondents are summarized in Table 1. The following draws conclusions from these and from supplementary comments that respondents provided in the comment boxes in the survey questionnaire, or raised in discussion at the follow-up meetings. Some addressees of the survey that did not complete the questionnaire provided their comments at the follow-up meetings.

Coverage and detail

Users were broadly satisfied with the coverage of national accounts, the consumer price index, fiscal, monetary, and balance of payments statistics, with national accounts statistics receiving the lowest relative rating and monetary statistics the highest. Ratings were somewhat higher on the level of detail provided, with national accounts statistics again receiving the lowest relative rating and monetary statistics the highest.

Periodicity and timeliness

Users were very satisfied with the periodicity of the consumer price index, broadly satisfied with the periodicity of fiscal, and monetary statistics, and less satisfied with national accounts and balance of payments statistics. Users were very dissatisfied with the timeliness of national accounts, fiscal, monetary, and balance of payments statistics. In discussion, monthly fiscal data were considered too aggregated and unreliable as well as untimely, while quarterly and annual fiscal data were considered reliable but untimely. In further discussion of the timeliness of monetary statistics, it was explained that user concern had arisen partly because updates of RBM's website had not been made on a regular basis. While users recognized that resource constraints have prevented the development of quarterly national accounts and balance of payments estimates, they stressed the need for more timely annual national accounts and balance of payments data, and for more reliable preliminary estimates.

Many users considered that the NSO did not adhere closely to its schedule for releasing preliminary and final national accounts and balance of payments statistics.

Methodological soundness

Users expressed strong reservations about the soundness and appropriateness of the underlying methodology used for national accounts and fiscal statistics, and doubts about the underlying methodology used for the consumer price index and balance of payments statistics. The mission concluded that these concerns were not rooted in knowledge of the methodology followed (as indicated in Text Tables 1 and 5), but appeared to reflect concerns about the integrity of the data producing agencies (especially for national accounts and fiscal statistics) which also were not shared by the mission. In the case of national accounts statistics, such doubts appeared to have been prompted by the size and frequency of revisions. In contrast, monetary statistics were given the highest rating for methodological soundness.

Accuracy and reliability

Users considered national accounts, prices, fiscal, and balance of payments statistics to be, on balance, biased and inaccurate, although there was a large proportion of “don’t knows”. In contrast, monetary statistics were considered to be unbiased and accurate, though views were fairly evenly spread even here. These rather negative assessments appeared to reflect doubts about the integrity of the data producing agencies and concerns about deterioration in source data (especially for national accounts and balance of payments statistics).

Data revision

Users considered that insufficient information is provided about revisions to national accounts, consumer price index, fiscal, and balance of payments statistics. They were aware that data are frequently revised and for reasons that were largely unexplained. They were not aware of the existence of a revision policy, or of published revision studies, and expressed concern that preliminary data are not always clearly indicated. There was a general feeling that the frequency of revision was related to inadequacy of source data. Users stressed that if the quality of data is adversely affected by inadequacies in source data, it would be important to keep them informed so that they could better interpret the data.

Dissemination practices

In the absence of a publicly disseminated calendar that announces in advance the dates at which official statistics are disseminated, users rely on past experience to indicate when key hardcopy statistical publications are likely to be released, but noted frequent delays. They were aware that more current data can often be obtained by contacting the data producing agency directly. To this end, many users had attempted to cultivate personal contacts at these agencies, either directly or by email. Many found these arrangements burdensome and frequently unsatisfactory (if for one reason or another a contact could not be found). Users

were also confused when they found that different statistics were published by different agencies without indication of the relationship between them. A consequence of this was that users could not easily access national accounts, fiscal, and balance of payments statistics. Some users expressed concern that government may have prior access to the data and even worried whether two sets of books were maintained (this was for fiscal and national accounts statistics).

Users were generally dissatisfied with the accessibility and adequacy of information pertaining to official statistics, such as explanatory notes, methodological descriptions, references concerning concepts, classifications, and statistical practices).

Overall assessment of data quality

Users were asked to rank the overall quality of official statistics on a scale of one to five, with one rated as poor and five as excellent. On this scale, consumer price index and monetary statistics were rated relatively well, and national accounts, fiscal, and balance of payments relatively poorly. Most users had no views as to how Malawi's statistics compared with neighboring countries, but those that did mostly considered the quality of Malawi's statistics to be about the same, and some thought that national accounts statistics were worse.

**Table 1. Results of Malawi's User Survey
(Answers in Percent of Responses Received)**

1. Which official statistics do you use regularly?

	Yes	No	Not applicable	Do not know
National accounts	92	8	0	0
Prices	100	0	0	0
Fiscal	92	8	0	0
Monetary	100	0	0	0
Balance of payments	100	0	0	0
Production indices	50	50	0	0
Labor market	50	50	0	0
Merchandise trade	50	50	0	0
International reserves	100	0	0	0
External debt	83	17	0	0

2. Where do you obtain official statistics?

	Yes	No	Not applicable	Do not know
Official press releases	100	0	0	0
Private sector summaries	66	34	0	0
Official policy papers	83	17	0	0
International Organizations	92	8	0	0

3. Do you refer to official descriptions of the sources and methods that were used to compile the official statistics?

	Yes	No	Not applicable	Do not know
	75	25	0	0

4. For what purposes do you use official statistics?

	Yes	No	Not applicable	Do not know
Analysis of current developments	100	0	0	0
Analysis of trends	100	0	0	0
Econometric analysis/forecasting	25	75	0	0
Economic research	25	75	0	0
Comparison with other countries	33	67	0	0
General economic background	100	0	0	0

5. Are you satisfied with the coverage of official statistics?

	Yes	No	Not applicable	Do not know
National accounts	25	50	0	25
Prices	50	33	0	17
Fiscal	50	33	0	17
Monetary	75	8	0	17
Balance of payments	58	25	0	17

6. Are you satisfied with official statistics in terms of their level of detail?

	Yes	No	Not applicable	Do not know
National accounts	33	42	0	25
Prices	75	17	0	8
Fiscal	66	17	0	17
Monetary	75	8	0	17
Balance of payments	58	34	0	8

7. Are you satisfied with the frequency of compilation of official statistics?

	Yes	No	Not applicable	Do not know
National accounts	42	33	0	25
Prices	83	9	0	8
Fiscal	58	25	0	17
Monetary	66	17	0	17
Balance of payments	33	42	0	25

8. Do you consider that official statistics are disseminated with the appropriate timeliness?

	Yes	No	Not applicable	Do not know
National accounts	25	42	0	33
Prices	75	8	0	17
Fiscal	33	50	0	17
Monetary	33	42	0	25
Balance of payments	25	42	0	33

9. Is there a publicly disseminated calendar that announces in advance the dates at which official statistics are disseminated?

	Yes	No	Not applicable	Do not know
National accounts	0	92	0	8
Prices	8	84	0	8
Fiscal	0	92	0	8
Monetary	8	84	0	8
Balance of payments	0	92	0	8

10. If there is a calendar of release dates, are official statistics released on the dates announced?

	Yes	No	Not applicable	Do not know
National accounts	0	8	92	0
Prices	8	17	75	0
Fiscal	0	17	83	0
Monetary	0	17	83	0
Balance of payments	0	17	83	0

11. Is there enough information about revisions to official statistics to satisfy your needs?

	Yes	No	Not applicable	Do not know
National accounts	25	42	0	33
Prices	42	16	0	42
Fiscal	25	33	0	42
Monetary	33	25	0	42
Balance of payments	25	33	0	42

12. Can you easily access official statistics?

	Yes	No	Not applicable	Do not know
National accounts	25	42	0	33
Prices	75	17	0	8
Fiscal	42	41	0	17
Monetary	75	8	0	17
Balance of payments	42	50	0	8

13. Can you easily access information pertaining to official statistics you use (explanatory notes, methodological descriptions, references concerning concepts, classifications, statistical practice)?

	Yes	No	Not applicable	Do not know
National accounts	17	50	0	33
Prices	33	50	0	17
Fiscal	17	66	0	17
Monetary	17	66	0	17
Balance of payments	17	66	0	17

14. Is the above information about methodology sufficiently clear and at an adequate level of detail to be useful to you?

	Yes	No	Not applicable	Do not know
	25	33	0	42

15. How do you get access to official statistics?

	Yes	No	Not applicable	Do not know
Official hard copy releases	100	0	0	0
Hard copy publications	92	8	0	0
Hard copy specifically requested	92	8	0	0
Official website	83	17	0	0
E-mail requests	66	34	0	0

16. Is the underlying methodology of official statistics sound and appropriate?

	Yes	No	Not applicable	Do not know
National accounts	17	41	0	42
Prices	42	25	0	33
Fiscal	25	33	0	42
Monetary	50	17	0	33
Balance of payments	33	34	0	33

17. Do you consider official statistics to be unbiased and accurate?

	Yes	No	Not applicable	Do not know
National accounts	8	50	0	42
Prices	25	42	0	33
Fiscal	8	50	0	42
Monetary	33	34	0	33
Balance of payments	25	42	0	33

18. How would you compare the quality of official statistics of Malawi with those of other countries in the region?

	Better	Same	Worse	Do not know
National accounts	0	17	8	75
Prices	0	33	0	67
Fiscal	0	33	0	67
Monetary	0	33	0	67
Balance of payments	0	33	0	67

19. How do you assess the overall quality of official statistics? (Please rate on a scale from 1–5 with 1 rated as poor and 5 as excellent)

	1	2	3	4	5	No rating
National accounts	17	17	41	0	0	25
Prices	0	8	42	17	8	25
Fiscal	17	17	25	8	0	33
Monetary	0	0	42	25	0	33
Balance of payments	0	34	33	8	0	25