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COORDINATION IN NATIONAL ACCOUNTS FOR
SUSTAINABLE GROWTH AND DEVELOPMENT**

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Session 4 - Institutional capacity building in countries

Economic statistics in South Africa

Introduction

Stats SA's program of economic statistics is characterised by a continuous production of monthly, quarterly, annual and less frequent releases focusing on changes in South Africa's economy and its component industries and activities. The content of the program is summarised in Attachment A.

All elements of the basic economic statistics program are input to the compilation of annual and/or quarterly national accounts at current and constant prices. The responsibility for compilation of estimates of GDP is divided between Stats SA and the South African Reserve Bank (SARB). Stats SA is responsible for producing the production and income-based measures of annual and quarterly GDP, while the SARB produces the expenditure-based measures. There is close liaison between the two organisations on reconciliation of their estimates. Many of Stats SA's economic statistics series are used by the SARB in the compilation of the expenditure-based GDP series.

Formalising the institutional arrangements

There is a strong interdependency between Stats SA and SARB; both institutions are data providers and each is a user of the other's data. They also have common requirements and demands on them: the implementation of international standards, training of staff in the compilation of macroeconomic statistics, and dissemination of statistics to local users and international organisations. Although close co-operation between the organisations has existed successfully for a number of years, it has recently been formalised through a memorandum of understanding covering the following areas of collaboration:

- the development, improvement and publication of statistics according to the 1993 System of National Accounts (SNA93);
- the development, improvement and publication of statistics according to the 2001 Government Finance Statistics manual;
- meeting international obligations relevant to the areas of co-operation;

- training and development of staff in the areas of co-operation;
- data archiving towards the Management System for Statistical Information (MSSI); and
- agreement on quality and standards with a view to eventual certification of statistical outputs.

This has allowed for formalised discussion to take place through twice-yearly forums where issues included in the memorandum as discussed. They typically take the form of senior officials sharing experiences, concerns and challenges which show the way for future joint projects and activities. In practice, this arrangement proved advantageous to both organisations over the last year or so, in which SARB officials were briefed and provided useful feedback on developments relating to Stats SA's latest household income and expenditure survey, and the redevelopment of the CPI and PPI.

Shared responsibility in national accounts

Although the responsibility for national accounts is shared between the two institutions, Stats SA is the only institution mandated to publish official statistics. Nevertheless SARB publications are broadly seen by local and international users as having official status, given the history, reputation and stature of the Bank.

The 1993 SNA was jointly implemented, with Stats SA responsible for GDP from the production and income approaches while SARB derives the components of expenditure on GDP. On a quarterly basis, although there is considerable, frequent consultation between the national accountants of the two organisations, the estimates of GDP on the three conceptual bases are not formally reconciled, and a statistical discrepancy is published on the expenditure side of the accounts.

On an annual basis, reconciliation is done through a series of supply and use tables developed by Stats SA. Again a statistical discrepancy is calculated, but as a component of gross domestic expenditure. This allows for the production/income estimates to be treated as the official GDP, without a statistical discrepancy.

SARB further publishes annual sets of integrated economic accounts, incorporating aspects of government finance statistics (using data are supplied by Stats SA), as well as balance of payments statistics. In addition, Stats SA is responsible for developing social accounting matrices (based on its own supply and use tables and the integrated economic accounts from SARB), environmental economic accounts as well as tourism satellite accounts.

Data sources and dependencies

Stats SA has a large economic statistics program, summarised in Attachment A. It includes a wide range of macro-economic indicators. In respect of short-term indicators,

it has good coverage from monthly series on the primary and secondary sectors of the economy, but limited coverage of the tertiary sector. It has quarterly financial and labour series covering both the private and public sectors. There is also an annual economy-wide survey, producing measures of performance by broad industry sector, which is supplemented by a rotating program of more detailed industry specific surveys producing measures of industry structure, performance and operations. Since 2001 the economic statistics survey program has been based on a dependable sampling frame drawn from Stats SA's business register. This was achieved by amending legislation to obtain access to the taxation records of businesses from the South African Revenue Service; most important of the taxation-based sources is the list of businesses registered with the value added tax system.

Prices statistics have also been extensively reviewed over the last couple of years, with CPI moving from a postal survey to a system of direct price collection from retail outlets by trained price collectors. The basket for the PPI has also been refreshed and new weights assigned to products in it. Its systems and operations are currently being overhauled.

There are still gaps, particularly the absence of short-term measures of activity in the services industries. The frame source for the quarterly survey of employer businesses producing measures of employment and wages by industry, is being reviewed to assess whether it would be better based on the list of businesses registered under the PAYE system also managed by the South African Revenue Services.

Another gap relates to the unavailability of annual official statistics on the Agriculture sector; Stats SA only conducts periodic censuses of this sector. Although a programme is underway to establish an annual survey of commercial agriculture, the national accounts are still reliant on the Ministry of Agriculture for quarterly and annual statistics.

Although Stats SA publishes a monthly series relating to mining production and sales, it does not collect the data itself. They are sourced from the Department of Minerals and Energy. Issues of quality and timeliness arise from time to time, which can require considerable senior management intervention to resolve.

The financial sector is explicitly excluded from Stats SA surveys, with SARB providing the required data for national accounts from their own records and surveys. With respect to government finance statistics, Stats SA focuses only on expenditure related items on a national and provincial level. The other components of GFS are dealt with by SARB. On a local government level Stats SA conducts surveys related to both the income and expenditure.

Stats SA currently has no role in the production of foreign trade statistics. They are collated at a high level by SARB for inclusion in the balance of payments. Foreign trade statistics are the responsibility of the South African Revenue Service.

Quality of statistics

Given the various government sources of statistical information, the coordination of government statistical activity is vitally important. In this respect Stats SA has a memorandum of understanding with the Department of Minerals and Energy as well as the one between itself and SARB. The arrangements for access to data from the Department of Agriculture and the South African Revenue Service are not yet formalised, which poses a risk to the body of economic statistics in South Africa. Key economic statistics are the responsibility of agencies whose mandate does not include the collection or production, and which are not part of their core activity. There is a danger that poor statistical practice or the loss of key staff could lead to an unacceptable fall in statistical quality, and even to discontinuation of series.

Stats SA has recognised the need to develop quality assurance mechanisms for the statistics produced by other agencies, to ensure that they are of the standard sufficient to be able to certify them as ‘official’ statistics, a measure of assurance to users that the data are of acceptable quality. It has developed the South African Data Quality Assessment Framework for this purpose. It is used to assess statistics produced by other agencies, as a basis for certifying them as ‘official’.

Advantages of joint responsibility

An effective national accountant requires a unique skill set: thorough knowledge of the national accounts framework and its international standards, and of the macroeconomic relationships underlying that framework; the ability to apply that knowledge through deep understanding of the strengths and weaknesses of the data sources being used in the compilation of the annual and quarterly accounts; and the judgment to be able to confront and adjust survey estimates for coverage and reporting deficiencies, timing issues, and inconsistencies with other estimates.

Given the importance of judgment in their skill set, national accountants are typically extremely difficult to recruit and retain, principally because their skill set can only be acquired through experience on-the-job; formal, academic understanding of national accounting is necessary, but certainly not sufficient. It takes some years for a national accountant to become fully effective.

The pool of resources in the national accounts area of Stats SA is limited. In the civil service environment it is difficult to retain them, given severe constraints on the ability to remunerate them competitively. This makes it difficult to develop a critical mass of national accountants with the required experience. The training opportunities within South Africa to teach the required fundamentals in this discipline are limited.

Sharing the responsibility with SARB therefore greatly expands the expertise involved in the development of the national accounts. Stats SA has the advantage of access to its survey unit record data and to unpublished ‘behind the scenes’ knowledge about the core economic statistics. The SARB has close links with balance of payments, financial

intermediation and government finances which allows it to form a different perspective on the numbers going into the national accounts.

Disadvantages of joint responsibility

Data confrontation and harmonisation within the national accounts framework inevitably takes place at a very detailed level. The ability to do this adequately can become limited when estimates relevant to the national accounts are produced by two (or more!) different institutions. Although data are exchanged (within the limitations of data confidentiality, embargo access etc), there are practical limits imposed by a lack of common understanding of the assumptions and methodologies underlying estimates, and their status.

Further challenges for the national accounts

In addition to the human resource issue touched all above, the largest challenge relates to documentation and evaluation of the sources and methods used in national accounts compilation in both Stats SA and the South African Reserve Bank, to achieve a deep common understanding by both agencies of the status and quality of statistical sources being accessed to compile the accounts, and the methods used.

A further challenge is to identify and engage productively and regularly with a core user community of active national accounts users in government agencies, academic institutions and the business sector. Identifying such a core and setting up a user group is certainly manageable. The real challenge is in maintaining a mutually beneficial relationship with them; given the thinness of the number of national accountants in Stats SA, far from a critical mass, and their variable levels of skill and experience, there is a danger that they may not be in a position to properly service and respond to the interests of such a user group. Nevertheless it is important that the group be formed, and plans are in train to do so.

Stats SA's program of economic statistics

The program is characterised by a continuous production of releases that identify changes in economic behaviour. There are on average about 170 releases a year: 132 monthly releases of 11 publications; 24 quarterly releases of 6 quarterly publications; 9 annual publications, together with a small number of less frequent publications.

The economic statistics environment currently has the following elements:

1. Quarterly and annual GDP as well as other associated products.
2. Annual financial statistics of the consumption expenditure of general government (central and provincial), as well as universities and technikons (technical colleges) and extra-budgetary accounts and funds. Government consumption expenditure is reported on a pure cash basis. At the local government level Stats SA conducts surveys covering both the income and expenditure.
3. Monthly CPI, comprising national and provincial indexes.
4. Monthly PPI, comprising price indexes products for the domestic market, products for export, and imported products.
5. An annual sample survey covering the formal market sector of the South African economy (except commercial agriculture at this stage), collecting a set of financial data sufficient for the calculation of industry value added and gross profit, as well as some balance sheet items. The Annual Financial Survey (AFS) is conducted at a broad level of industry detail (1 and 2 digit SIC). The survey, which is used directly in the compilation of the annual national accounts, is complementary to and provides a context for a program of large sample surveys of individual industry sectors, covered next.
6. The Large Sample Surveys (LSS) program comprises a rolling set of industry surveys covering most industry sectors of the formal market economy every 3-4 years. The industry detail is considerably greater than in the AFS, but the financial data set is the same, so that, for the industry sector in scope of the LSS program in any one year, the LSS results are used in the AFS estimates instead of directly collecting for that sector in the AFS for that year. The LSS program also collects value data (and quantity where appropriate) for product (goods and services) inputs and outputs primary the in scope-industries within the industry sector being covered in a particular year. While the relationship between the AFS and LSS programs is complementary, and considerable effort is made to avoid unnecessary overlaps, decisions have been taken recently to change the balance between the two programs from 2009, with the AFS also taking on responsibility for detailed financial statistics, and the LSS program refocused on the collection,

- production and analysis of product statistics (material and service inputs and goods and services outputs) for detailed industries.
7. The Annual Agricultural Survey program, while not formally part of the LSS program, is broadly consistent with it. The sample surveys collect a range of financial data in respect of enterprises engaged in commercial agriculture, as well as data on land holdings, crop production etc. Every fifth year a full census of agricultural enterprises is conducted instead of the agricultural survey for that year.
 8. The Quarterly Financial Survey (QFS) is a subset of the AFS, and is designed to produce a range of financial current indicators.
 9. The Quarterly Employment Survey (QES) is a quarterly sample survey of employer entities measuring the demand for employment in the formal market sector. Data collected include end of quarter employment and quarterly earnings. The main focus is on the industrial dissection of employment trends. The best measure of the level of formal sector employment (and unemployment) will come from the household-based Labour Force Survey (LFS). This survey is currently under redevelopment to bring it from a six-monthly to a quarterly frequency.
 10. There are a number of other quarterly indicators, particularly relating to building and electricity generation statistics.
 11. All but one of the monthly economic indicator series are based on surveys of enterprises engaged in manufacturing, wholesale and retail trade, and motor trades. All the surveys collect turnover, and the Monthly Manufacturing Survey also collects opening and closing inventories, to support estimates of manufacturing production in index form; it also collects quantity information on the production of some manufacturing commodities. The Monthly Retail Trade survey supports turnover estimates by category of retailer, but not at this stage a dissection of turnover by broad retail commodity. All estimates are published at current and constant prices. All the series apart from retail turnover are seasonally adjusted, and trend estimates are produced for all the monthly series. There are now sufficient observations to support a seasonal reanalysis of the retail turnover series with a view to producing seasonally adjusted series.
 12. The monthly Mining Production series are based on an administered by-product source.

All of the Stats SA surveys of businesses depend for their frames and samples on Stats SA's business register.