National Accounts Workshop for SADC countries

16-19 June 2009, Windhoek, Namibia

Strengthening statistical capacity-building in support of progress towards the Internationally Agreed Developments Goals in the Southern African Development Community region

Country presentation

South Africa
National Accounts Workshop for SADC countries

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Method and sources to compile gross domestic expenditure in South Africa.

1. Principal data sources and calculation methods.

The following discussion concentrates on the sources and methods utilised to compile the gross domestic expenditure aggregates. Attention will be given to bench year sources as well as quarterly estimates and constant price estimates. Special attention will be given to final consumption expenditure of households.

2. Final consumption expenditure of households.

The benchmark years for durable, semi durable and non durable goods and most services are sourced from the Income and expenditure survey of households done every 5 years. Estimates of expenditure on goods and services are compiled using average expenditure per households by population group and province multiplied by the number of households according to the population census and verified by the supply and use tables estimations.

Base year estimates are extrapolated using retail sales from monthly surveys by STATSSA and the Retailer Liaison Committee (RLC). Nominal expenditure is divided by relevant components of the consumer price index to obtain constant price estimates.

The following expenditure categories are explained in more detail due to exceptions from above general method of compilation:
**Personal transport equipment**: - bench year estimate equals number of motor vehicles sold multiplied by their average retail price sourced from NAAMSA. Used cars sold are the value added by used cars sold and trade margins of the motor trade. Registration of vehicles according to purpose of use provide split between final demand and business. Quarterly data by extrapolating bench year or constant levels by number of cars sold and multiplied quarterly by the price index of motor vehicles and revised annually by number of vehicles sold multiplied by average retail price. Annual model used for revision vehicles are grouped according to price classes to get a weighted level, a smaller and less extensive calculation than the calculation used for the bench year due to capacity constraints.

**Food, beverages and tobacco** is estimated from the Income and expenditure survey as described in the first paragraph but includes farm produce consumed by farmers for own account in the bench year.

**Petrol, diesel and oil**: - Benchmark year and other years estimated by multiplying quantities sourced from petroleum companies and allocated between consumers and other purchasers by an average retail price. Verified by the Income and expenditure survey of households and supply and use estimates.

**Rent, owner occupied and tenant occupied dwellings**: - Population census provides number and type of dwelling, weighted by using size and quality of dwelling multiplied by average annual rental obtained by STATSSA. Other years and quarterly data are estimated by using the capital stock of residential buildings and average annual/quarterly rental values. For constant price estimates the base year is extrapolated using real capital stock of residential buildings.

**Domestic services**: - Bench year level is calculated by using remuneration and number of workers as obtained from the Large Labour Survey (LLS) conducted by STATSSSA and verified by expenditure on this item from the Income and
Expenditure Survey of Households. Quarterly data is obtained by extrapolation of benchmark figures with the number of dwellings adjusted with the CPI component of domestic workers. Other years are the sum of the quarters.

**Medical services**: - Bench year level obtained from the income and expenditure survey of households verified by the annual report of the Registrar of Medical Schemes. Quarterly data obtained by extrapolating bench year level with retail sales of pharmaceuticals and medicine and revised with the annual Report of Medical Schemes. Deflated with the CPI for medical and pharmaceutical products, hospital and doctor services to derive constant values.

**Transport and communication**: - Expenditure on passenger and goods transported sourced from Metrorail and Transnet. Expenditure on fixed line communication and postal services sourced from Telkom and SA Post Office while mobile phone expenditure is sourced from Vodacom for quarterly and annual data. These amounts for the bench year will be verified by the income and expenditure survey. The bench year level will be expanded by expenditure on taxi’s fare calculated by the Buro of Market research and forms part of the informal sector. Expenditure on short term insurance is sourced according to a survey conducted by the SARB.

**Financial services**: - Final consumption of financial services by households derived from the FISIM calculations, data sourced from the aggregated income statements of banks provided by Bank Supervision, a department in SARB. Service charges of long term insurance or insurance of life are sourced by surveys done by the capital market division of the SARB.

**Consumption expenditure by non-residents in domestic market**: - Balance of payments data regarding travelling costs, tourist expenditure and remuneration of contract workers. Nominal expenditure is divided by the total CPI to obtain constant price estimates.
**Direct purchases by resident household abroad**: - Balance of payments data regarding expenditure abroad.

3. **Consumption expenditure by general government.**

The consumption expenditure of general government is the sum of expenditure on non-wage goods and services, compensation of employees, sales of government services and consumption of fixed capital.

The sources and method of estimation is:

**Expenditure on non-wage goods and services**: - Government Financial Statistics sourced from National Treasury and verified with publications by STATSSA on general government for the bench year and other years. The quarterly estimates are obtained by extrapolating with information obtained from the GFS analyses. Constant prices are derived by deflating nominal values with relevant producer price indices.

**Compensation of employees**: - Benchmark years and other years is the same as for non-wage goods and services. The constant price data is obtained by extrapolating bench year data with employment data sourced from STATSSA for central government, provincial governments, local authorities and other statutory institutions.

**Sales of government services**: - Benchmark years and other years is the same as for non-wage goods and services. The constant price data is obtained by deflating nominal values with a derived price deflator of intermediate inputs.

**Consumption of fixed capital**: - Benchmark year, other years and for quarters allowance for depreciation of general government buildings and structures, transport equipment and machinery and equipment estimated by SARB. For
constant price data allowance for depreciation of the real value of fixed capital stock is made.

4. Gross fixed capital formation

The sources and methods of compiling gross fixed capital formation will be discussed for the private sector according to assets type, public corporations and then general government.

**Private sector fixed capital formation**: - The bench year level is determined by utilising the Annual financial statistics published by STATSSA and Large Sample Surveys of specific sectors, verified by supply and use tables. The other years are estimated by extrapolating bench year level according to results of quarterly sample surveys by the SARB and STATSSA of business enterprises supplemented by annual reports of companies and the Annual financial statistics published by STATSSA to revise previous year. Nominal values are deflated by appropriated price indices. Residential and non residential buildings and construction works are deflated by separated weighted price indices compiled by the SARB while transport equipment and machinery and other equipment are divided by appropriate PPI price indices.

The following asset types deviated from the above statement:

**Private residential buildings**: - Benchmark and other years STARSSA information on building plans passed and buildings completed. For quarterly estimates use Sample survey of STATSSA of buildings completed.

**Leasing contracts**: - Benchmark and other years use SARB survey on financial institutions

**Transfer costs**: - Benchmark and other years is the sum of quarterly estimates of transfer fees paid to general government plus agent and legal fees calculated as a percentage of the value of transactions in real estate.
**Public corporation’s fixed capital formation:** - Benchmark and other years and quarterly data estimated from quarterly surveys conducted by the SARB.

**General government’s fixed capital formation:** - Benchmark and other years estimated from information obtained from GFS analyses and verified by the statistical survey on actual and expected capital expenditure of the public sector and expenditure by the general government.

5. Change in inventories

The compilation of the change in inventories is discussed under the heading industrial and commercial inventories and other non-farm industries and Agricultural stocks-in-trade.

**Industrial and commercial inventories:**- Benchmark years the book value of inventories (adjusted by inventory revaluation) is sourced from annual financial statistics and sector specific Large Sample Surveys conducted by STATSSA and surveys by SARB among public corporations. Other years by SARB and STATSSA quarterly surveys but Annual financial statistics are in the more recent period available to verify quarterly surveys. The book value of inventories are deflated by PPI price indices or specific price indices (diamonds)

**Agricultural stocks-in-trade:** - Bench year, other years and quarterly inventories estimated from data received from the South African grain information services (SAGIS) and various marketing agents. For constant data the bench year is extrapolated using quarterly change in physical quantities.

6. Challenges.

1. Estimation of the NPISH.
2. FISIM – broaden coverage to more than the banks.
3. Measurement of financial services associated with the acquisition and disposal of financial assets (Sic 83).
4. Owner occupied dwellings – breakdown of houses (dwellings build with bricks) into categories of luxury, large, medium and small houses and rent paid for each type of dwelling.