SINGAPORE

GDP PRODUCTION & EXPENDITURE APPROACH

INTRODUCTION

GROSS DOMESTIC PRODUCTS

The core concept of the SNA is the GDP, or gross value added. It is the totality of all goods and services produced in the system over the relevant time period, usually a year. GDP is expressed in purchasers' values and can be measured in three ways.

- **The production approach**: GDP is equal to total output minus total intermediate consumption plus taxes less subsidies on products not included in the value of output.
- The expenditure approach: GDP is equal to final consumption expenditure plus gross capital formation plus exports minus imports.
- The income approach: GDP is equal to compensation of employees plus taxes less subsidies on products plus operating surpluses plus imports.

GDP PRODUCTION

- COVERAGE
- DATA SOURCE
- METHODOLOGY
- RECONCILIATION AND REVISION POLICY
- DISSEMINATION

COVERAGE

- Transactions coverage: Includes (as far as possible) all activities within the production boundary as set out in the SNA 2008.
- Geographic coverage: Whole of Singapore.

DATA SOURCES

Monthly/Quarterly

DOS relies on high frequency administrative data, supplemented with data from monthly or quarterly surveys conducted by DOS or the research and statistics units of other government agencies. These surveys include:

a. Monthly Survey of Manufacturing Activities

b. Monthly Survey of Retail Sales / Food & Beverages Services

c. Quarterly Business Expectations Survey of the Services Sector

d. Monthly and Quarterly Survey of Financial Institutions

e. Survey of Monthly and Quarterly National Income Estimates

f. Quarterly Survey of Service

Annual

The annual estimates of nominal GDP are based on detailed industry accounts compiled from more comprehensive and reliable data sources instead of being simply the sum of its quarterly estimates. This includes data collected from annual surveys, which generally

cover a larger sample of firms and collect more details, henceforth more representative of the prevailing economy.

METHODOLOGY

The compilation of quarterly GDP estimates for the production approach requires an extensive number of timely and reliable short-term economic indicators of the level of economic activity in each industry. The use of proxy indicators of inputs or outputs for the compilation of quarterly national accounts is an internationally accepted practice.

Input indicators measure the quantity or value of one or more inputs used by the specific industry, e.g. employment, wages. Output indicators measure the quantity or value of output of the specific industry, e.g. passenger-kilometers for the passenger air transport sector. Output indicators, being direct indicators of production, are preferred to indirect input indicators as the latter do not reflect productivity changes. However, in the absence of suitable output indicators, input indicators would have to be used.

The indicators used can also be categorised into value and volume indicators. Value indicators measure the value of the output, material inputs or the wage of the workers employed. Volume indicators measure the quantity (or volume) of output produced, material inputs or employment. Trends of general price indices like the Consumer Price Index (CPI) and GDP deflator or wage indices may be used to proxy price changes when more appropriate price indices are not available.

RECONCILIATION AND REVISION POLICY

Reconciliation

Differences between GDP compiled from the production approach and GDP compiled from the expenditure and income approaches are allocated to a statistical discrepancy item in the expenditure-based and income-based estimates respectively. The annual Supply and Use Tables (SUT) are used to reconcile GDP by the 3 approaches. No statistical discrepancy is recorded when benchmark SUTs are compiled (every 5 years). The last benchmark SUT was carried out for the year 2015.

Revision

The data are provisional when first released, and this status is indicated in the quarterly and annual Economic Survey of Singapore (QES/AES). Quarterly and annual data for earlier years are revised at the time of publication of the annual Economic Survey of Singapore (AES). The data usually become final 2 years after first release, and the final data are published in the QES and AES publications.

DISSEMINATION

The advance output-based, CVM of GDP are compiled from data for the first two months of the quarter and serve as an early indication of GDP growth for the quarter. They are released no later than two weeks after the end of the reference quarter. Subsequently, more comprehensive data are incorporated in the preliminary nominal and CVM of GDP estimates, which are released no later than eight weeks after the end of the reference quarter and published in the Economic Survey of Singapore (ESS).

The latest data and press releases on the Economic Survey of Singapore are available on: www.singstat.gov.sg/find-data/search-bytheme/economy/national-accounts.

A half-yearly-ahead advance release calendar on dates of upcoming releases is published on the SingStat Singapore: www.singstat.gov.sg/whats-new/advance-release-calendar.

Detailed information is available at:

Information Paper Series on Quarterly Estimates of Output-Based GDP
www.singstat.gov.sg/-/media/files/publications/economy/ip-e57.ashx

IMF Special Data Dissemination Standard - Singapore: https://dsbb.imf.org/sdds/dqaf-base/country/SGP/category/NAG00

GDP EXPENDITURE

- COVERAGE
- DATA SOURCE
- METHODOLOGY
- RECONCILIATION AND REVISION POLICY
- DISSEMINATION