

# Overview of the Rebasing and Rebenchmarking of Guyana's National Accounts to Reference Year 2006

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## Introduction

Supported by technical assistance projects executed by the InterAmerican Development Bank (IADB) and the Caribbean Regional Technical Assistance Centre (CARTAC), the **Bureau of Statistics (BoS) has rebenchmarking and rebased Guyana's national accounts to reference year 2006**. The BoS now expresses the production-based estimates of Gross Domestic Product (GDP) at constant prices in terms of prices prevailing in 2006, instead of prices prevailing in 1988, the base year of the existing GDP constant price estimates. The current price GDP estimates by production have also been revised. Work on the national accounts rebasing/revision exercise was initiated by the BoS in 2007.

With the aim of sensitizing data users of the planned changes, this article provides a background to, and outlines the key features of, the rebasing exercise; and highlights the main methodological and conceptual changes that have been implemented. These impact on both the overall current price ("nominal") and constant price ("real") GDP data currently compiled and published by the BoS, as well as on the industry/expenditure shares of GDP by production/expenditure.

## What is "rebasing", and why rebase?

As the pattern of relative prices in an economy changes over time, those recorded for the GDP base period become progressively less relevant for calculating volume measures of output from one period to the next; it may then be necessary to update the base period—a process that is commonly referred to as "rebasing" in national accounting. The rebasing exercise not only revalues GDP at prices prevailing in the new base year, but also serves to reconcile and revise the production and expenditure-based estimates of GDP at current prices; and provides the occasion for methodological and conceptual reviews and improvements, as well as for the incorporation of new data sources. The fact that this was last done in 1988 highlights the pressing need for such a comprehensive review.

Rebasing enables the national accounts to capture the real picture of the economy by taking account of factors, such as **relative price movements**, and **structural changes in production and consumption patterns**, which over time may contribute to an under- or over-estimation of GDP. Additionally, **the introduction of new products due to technological innovations and developments** (e.g., cell phones and internet usage); **product wise changes in the variety of products and services** (e.g., reintroduction of private education services); and **changes in international statistical methodologies and classifications** provide a compelling case for rebasing Guyana's national accounts.

With the liberalization of the economy over the past two decades, Guyana's industrial and economic structure and relative prices have changed, and the transition of informal activities into formal activities are particularly evident in industries such as retail trade. Industries such as construction, transport and communication have also been growing. These trends underscore the need for rebasing the GDP constant price estimates—on which economic growth rates are measured—as well as revising the GDP current price estimates, which, apart from being an important macroeconomic variable in its own right, is also a popular denominator for key macroeconomic indicators such as budget deficit/GDP, money supply/GDP,

and external debt/GDP ratios. These ratios inform fiscal, monetary and external debt policies, and numerate policy targets.

### **Implementing international statistical methodologies and industrial classifications**

In compiling national accounts, national statistical offices are guided by the *System of National Accounts (SNA)*, which is a set of international guidelines that provide a comprehensive conceptual and accounting framework for compiling information about the economic performance of a country.

As part of the IADB project for establishing the benchmark year (2006) estimates for rebasing the national accounts, extensive work was initiated in 2007 to bring Guyana's GDP data closer to the *SNA 1993* methodology, as the existing series are largely rooted in the *SNA 1968*. Users of the rebased GDP series will see the following changes emanating from closer alignment to *SNA 1993*:

- **Valuation of Output**

In the *SNA 1993*, output valuation is defined by three different prices: basic price, producer's price and purchaser's price. The difference between basic price and producer's price is the inclusion of excise, sales and other similar products in the latter; the difference between producer's price and purchaser's price is that the latter includes trade and transport margins. Accordingly, in the new series, users would notice the adoption of these terms, and the term "GDP at factor cost" would be replaced by "at basic prices".

- **Value Added of Financial Services**

The difference between the interest earned on deposits and interest paid on loans is viewed by national accountants as an implicit charge to customers for the services provided by banks, and is referred to as financial intermediation services indirectly measured (FISIM). FISIM was introduced in the *SNA 1993*, and is expected to be calculated as part of the national accounts revision process. While the international methodology recommends that the estimates be allocated across the institutional sectors of the economy, data constraints may not permit this in Guyana's case; the alternative methodology is to deduct FISIM from the total GDP estimates, recognizing that it is an intermediate cost to enterprises.

- **Changes in Industrial Classification**

As part of the rebasing exercise, the BoS also introduces the International Standard Industrial Classification (ISIC) Revision 4 on a best efforts basis, with modifications informed by national requirements, and/or by data limitations. The adoption of ISIC Rev. 4 allows for the capture of new and emerging activities, and enhances the international comparability of our GDP estimates. A main implication of the adoption of ISIC Revision 4 is the introduction of new industries—for example, education and health would be identified as separate industries, and *government services* has been renamed "public administration, defence and compulsory social security". The activities of government in education and health are therefore reclassified under the new sections. A new section, *information and communication*, reflects its growing importance, particularly of internet-related businesses. In the existing series, transport and communications were merged as one industry.

- **Improvements in Coverage and Data Sources**

With the aim of enhancing the scope and coverage of Guyana's national accounts estimates, the BoS used a number of new data sources, including the results of its 2007/8 and 2008/9 National Economic Surveys of Business Establishments, and the 2006 Household Budget Survey. The BoS also drew on existing cost surveys, and worked closely with a number of government ministries/agencies in collecting source data to update the cost coefficients (inputs to production as a ratio to the value of output) for a number of industrial activities.

These new sources were used as part of the benchmarking of the 2006 GDP. The benchmarking was undertaken by first developing a supply and use table (SUT). This table records the total supply and use of goods and services in the economy and how that supply is allocated, whether for intermediate or for final use, or for export. The 2006 SUT was developed with technical assistance from the United States Census Bureau (under the IADB project). An important feature of the rebasing exercise is that the SUT is being used to identify existing data gaps, and inform statistical decisions on the appropriate estimation techniques.

### **Conclusion**

The completion of the rebasing of the national accounts ensures that the BoS' methodology and compilation system are in line with international standards and practice. It also reflects a culmination of an extensive exercise that draws on the BoS' expanding database on institutional sectors of the economy (notably establishments, households, and government). However, critical to the success of the project is the strong cooperation by the private sector in providing the requisite data to the BoS, which has the legal mandate to collect and process such data, while ensuring the confidentiality of individual reporters' information.

#### **COMPARISON OF KEY NATIONAL ACCOUNTS INDICATORS:** **SERIES AT 1988 PRICES AND AT 2006 PRICES**

G\$M unless otherwise stated

At 2006 prices (Present series)	2006	2009
GDP at current basic prices (also known as nominal or current GDP)	262,880	359,549
GDP at current purchaser prices	291,964	413,114
GDP at constant 2006 basic prices (also known as real GDP)	262,880	296,417
GNP at current basic prices (US\$M)	1,246	1,760
GNP at current purchaser prices (US\$M)	1,388	2,024
Gross National Disposable Income (US\$M)	1,579	2,213
Real GDP growth rate (%)		3.3
GDP per capita (current basic prices) - US\$	1,694	2,308

At 1988 prices (Previous series)	2006	2009
GDP at current factor cost (also known as nominal or current GDP)	154,000	202,258
GDP at current market prices	183,084	255,822
GDP at constant 1988 basic prices (also known as real GDP)	5,759	6,397
GNP at current factor cost (US\$M)	698	982
GNP at current market prices (US\$M)	867	1,247
Gross National Disposable Income (US\$M)	1,020	1,436
Real GDP growth rate (%)	5.1	2.3
GDP per capita (current basic prices) - US\$	992	1,299