

ICP Africa 2005: Integration of ICP with Country CPI's and National Accounts

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Summary:

This article describes the similarities and differences in the conceptual and methodological foundations of ICP and CPI activities and identifies basis for integrating the activities of gathering price and expenditure share data for the CPI and ICP. The objective is to show that the long-term viability of the ICP and its relevance to economists and policy makers in different countries will largely depend upon the integration of these activities in all countries in the near future. Another objective of the paper is to demonstrate that the integration could play a significant role in assisting developing countries in capacity building to compile and disseminate statistical data necessary for policy formulation.

Key words: *International comparison program, consumer price indices, capacity building, integration.*

Résumé:

Cet article décrit les similitudes et les différences conceptuelles et méthodologiques fondamentales entre les activités du PCI et celles de l'IPC, il vise aussi à identifier les bases d'une intégration leurs activités respectives de collecte des prix et de détermination des coefficients budgétaires. L'objectif est de prouver que la viabilité à long terme du PCI et sa pertinence pour les économistes et les décideurs politiques dépendra en grande partie de cette intégration dans les différents pays dans un avenir proche. Un autre objectif est de démontrer que l'intégration pourrait jouer un rôle significatif de renforcement des capacités des pays en voie de développement dans la compilation et la dissémination des données statistiques nécessaires à la formulation des politiques.

Mots clés: *Programme de comparaison internationale, indices des prix à la consommation, renforcement des capacités, intégration.*

1. Introduction

International Comparison Project – ICP (later changed to Programme) gained international focus in the 1960s. In the 40 years since then, the compilers of purchasing power parities and volumes (real values) of Gross Domestic Product (GDP) have been facing a formidable task in convincing and maintaining the integrity and usefulness of the ICP.

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Critics have commented on a range of areas such as the limited coverage of the countries, the methods and techniques used in price collection, methods of calculation of Purchasing Power Parities (PPPs), unavailability of data on a yearly and timely basis etc.

For these and other reasons, the World Bank and other international organisations, have continued to use exchange rate based conversions of GDP of country aggregates even though volumes (real values) based on PPPs are superior.

Commenting on the continued international use of exchange rate based GDP conversions the Deputy Vice President of the World Bank² indicated that:

“... the central tasks facing us [before starting to apply PPPs for the Bank’s operational purposes] are *expanding country coverage* and making sure that ICP data are made available in a *timely and regular fashion* ... and [many developing countries] have found the work *financially burdensome* and have seen little *policy use* for the resulting estimates. Some developing countries have feared that ICP results, may be used to the detriment of their standing in multilateral lending agencies. The *statistical capabilities* of some of these countries have not readily supported a full-scale ICP survey”.

The African Development Bank (AfDB) is the Regional Coordinator of ICP – Africa. In its crucial role, it has made concerted efforts to address all of these issues, including the weaker areas of ICP in Africa in relation to pricing of building and construction and of machinery and equipment.

In terms of geographical coverage the coverage has been significantly improved in relation to the last round for the reference year 1993 in which 23 African countries participated. In the current round for the reference year 2005, all African countries (except Algeria, Eritrea, Libya, Seychelles and Somalia) are participating.

On the important issue of timeliness a major consideration is the availability of country national accounts. The national accounts of many countries are available with a delay of one and a half to two years after the reference year. Taking in to account this constraint, the results of the 2005 round will be available by the end of 2007.

²Quoted in International Comparison Project (ICP) Surveys and Survey frameworks, a proposal, by Jacob Rytén.

On regularity of ICP (annual data) the AfDB has encouraged the countries to incorporate the ICP needs in their regular work on national accounts and prices through the integration of ICP in their regular compilation of Consumer Price Index (CPI) and national accounts.

On technical and financial assistance AfDB provided financial and logistic support to nearly all participating countries for not only ICP related activities but also towards capacity building.

Addressing the quality issues, the AfDB has put in place rigorous methods for editing and validating data received from the countries. The validation of the data from each country and thereafter multilateral quality and consistency checks were undertaken with active participation of the countries through workshops and seminars.

2. Contents of this Article

This article describes the similarities and differences in the conceptual and methodological foundations of these ICP and CPI activities and identifies basis for integrating the activities of gathering price and expenditure share data for the CPI and ICP.

The objective is to show that the long-term viability of the ICP and its relevance to economists and policy makers in different countries will largely depend upon the integration of these activities in all countries in the near future.

Another objective of the paper is to demonstrate that the integration of the activities associated with CPI and ICP could play a significant role in assisting developing countries in capacity building to compile and disseminate statistical data necessary for policy formulation.

The international nature of the ICP has provided participating countries with much needed impetus to improve the coverage and quality of the statistics they compile and publish.

3. The CPI and ICP – An Overview

The CPI compiled and disseminated by national statistical offices on a regular basis is one of the most widely used economic statistics. The CPIs play a prominent role in establishing and monitoring government

policies, especially the monetary policy, and providing ordinary people with a measure of changes in the prices of goods and services consumed.

PPPs are of relatively recent origin, essentially designed to provide an internationally comparable set of national income aggregates from the expenditure side of the national accounts. PPPs are used for comparisons of volumes (real values) of GDP and for the assessment of national price levels at different levels of aggregation. PPPs are based on price data collected specifically for the purpose according to internationally agreed product specifications, and the results have been compiled for a number of benchmark years, beginning 1970.

Despite the conceptual similarities and closely related data collection requirements for the CPI and ICP, historically there has been very little harmonization of the activities of national statistical offices involved in both CPI and ICP work. A few guidelines to national statisticians collecting price data for PPP on how some CPI related price data could be used in compiling price data for ICP work were provided in the Handbook on ICP prepared by the United Nations (1992). However, limited efforts have been made in that direction, largely due to the ad-hoc nature of the ICP.

For ICP-Africa 2005, greater emphasis was placed on CPI-ICP integration. The AfDB has made positive efforts in the CPI-ICP integration in the African countries through preparing methodological documents, targeted missions to countries, seminars and workshops and providing the “seed” financial funding and technical assistance to nearly all the countries.

The integration of CPI and ICP work has brought about a more enthusiastic participation of the national statistical offices in the ICP. Such integration will also lead to improvement in ICP results, the elimination or minimization of anomalous results and timely and annual results.

4. CPI and PPP Compilation - Similarities and Dissimilarities

Purpose

In many countries CPIs are compiled at the national level as well as for selected cities and regions. While both CPI and PPP have the common purpose of identifying price differences, they are applied to different domains. Most of their differences in practice arise from the requirements for measuring price changes over time and across space.

Scope and Coverage

There is a difference in scope and coverage between CPI and ICP. The CPI is a measure of change over a period of time in prices of goods and services that belong to the household consumption basket in a given country. In contrast, PPPs are aimed at measuring differences in levels of prices of goods and services that belong to the expenditure side of the national accounts.

Price Data and Sampling Practices

In the case of ICP, the product listing, with specific product quality specifications, is arrived at by the ICP Regional Coordinators in close consultation and collaboration with the countries. Such a process of commodity selection for pricing can at best be described as *judgmental sample*.

The choice of commodities reflects the principle of “identical products” that has been the guiding principle of ICP work since its inception. “Identical products” ensure that quality issues do not enter into the PPP measurement and the results provide a measure of only price differences.

Expenditure Share Weights

Expenditure share weights, for the aggregation of price differences above the elementary level or basic heading level, are a common requirement for both CPI and PPP. The CPI weights are usually based on data collected through household expenditure surveys. Weights used in the calculation of PPPs refer to the shares in the national accounts, which are prepared annually. The shares of household expenditure recorded in the national accounts are principally based on data from household expenditure surveys and on data calculated through the commodity flow approach and/or the Supply and Use Tables.

Adjustments for Quality Differences

The problem of quality differences in goods and services across countries has long been considered a major problem in inter-country comparisons of prices. The concept of “identical products” was devised to address this problem. Adjustments for quality differences was mainly used in handling “comparison resistant” services and housing and other items in the capital formation aggregate.

The same problem of quality difference exists in the case of CPI comparisons. Current measures of the CPI, are known to be affected by biases resulting from the rapid change in quality and the emergence of new goods (such as electronic and information technology products and financial services), and the disappearance of old goods.

5. CPI's at the National Level

The CPI is the most common feature of price comparisons in different countries. Consumer price index numbers are constructed on a regular basis, for the country as a whole or some major cities and used for a variety of purposes.

CPI for Capital Cities or Regions

It is a common practice in many countries to compile CPI for major cities of the country as well as for specific regions for the country. In larger countries, this is a routine exercise that is designed to highlight the fact that price changes (and levels) are not uniform across the country. City and region-specific consumer price indexes are used to adjust wages and salaries and government transfers.

Price Level Differences Across Regions: Regional PPPs

It is important for the national governments to know price level differences across regions. A natural extension of the CPI work within a country would be to provide direct measures of price level differences in different regions, not just differences in the movement of prices over time. This is an exercise of particular relevance for countries that are large in size and are spread over a wide geographical area.

Such a comparison of prices across regions requires the compilation of PPP-type CPIs (referred to as regional PPPs in this paper), very similar to the PPPs within the ICP, but with many potential applications for regional analyses. For example, prices in northern Nigeria could be quite different from prices in southern Nigeria.

When different countries within a region use the same currency, as is the case with the use of FCFA for a whole group of countries in UEMOA, the conceptual framework needed for the construction of PPPs would be much the same as the ICP framework, but most problems would be on a

reduced scale, especially quality issues and representativeness of commodities associated with commodity selection. This is specially the case for the UEMOA countries and other regions where concerted efforts have been made to compile harmonised CPIs.

6. Steps taken by AfDB towards an Integration of CPI and ICP Activities

General Approach to Integration of CPI and ICP Activities

Given the common features of CPI and ICP, the AfDB emphasised to the countries the crucial need for the integration of CPIs and ICPs. To achieve such an integration, national statistical offices in the participating countries were made aware of the fact that CPI construction and computation and results from PPPs are a natural extension of their current CPI activities.

Another important step in the integration process was the emphasis on the need for countries to increase the amount of information collected and processed during the construction of CPI that can be used in the calculation of PPPs.

This was ensured through the “bottom-up” approach whereby it was ensured that all countries adopt the international Classification of Individual Consumption Expenditure by Purpose (COICOP). Secondly, through the use of Structured Product Descriptions (SPDs) devised by the ICP Global office at the World Bank, it was ensured that all CPI products of each country were included in the ICP product list. On the other hand countries were encouraged to include in their own CPI products which were important in their consumption. Such an integrated approach has benefited both activities and ensured the long term viability of the ICP work.

The primary component of ICP is the national accounts and more specifically GDP expenditures. In the assessment missions undertaken at the start of the programme, the AfDB studied the status and reliability of the national accounts of each participating country.

The assessments indicated the need for countries to embark on compiling Supply and Use Tables (SUTs) to ensure consistency within and between the different approaches in compiling GDP and thereby identify weaknesses in their national accounts. The basic framework and methodology

of the SUT was demonstrated to the countries at workshops and seminars. Some countries have already compiled SUT's and the AfDB has encouraged other countries to compile such tables.

In most countries, there is a general lack of published details on the sources and methods used in the national accounts. In the current round concerted efforts were made to address this lacuna; for the ICP 2005, all participating countries have compiled short national accounts reports which give an overview of the sources and methods that are used in the national accounts. These reports contain information on analytical framework, definitions and classifications used; nature of the basic data sources, the sources used in GDP by the expenditure approach and weaknesses in their national accounts. It is also planned that these reports would include the breakdown of GDP 2005 at the level of basic headings. It is planned that such reports will be compiled yearly with the latest GDP numbers.

Regional PPPs

The intrinsic worth of the concept of PPPs for spatial price comparisons within a given country was also emphasized and popularized. Compilation of regional PPPs will provide valuable information for policy makers and economists interested in the dynamic adjustments taking place within countries. Such PPPs will also be crucial in measuring *regional inequalities and poverty* and in analysing structural differences across regions and possible convergence of different regions within a country.

Despite the very useful applications of regional PPPs, time and resources did not allow much thrust in this area. Once the countries are used to the process of constructing PPPs for different geographic regions and use them in regular policy formulation, there will be greater willingness to participate in a wider, international comparison exercise. The ICP exercise will then be seen as a natural progression in price comparison activities.

Two major problems need to be resolved in the construction of regional PPPs within a country. The first problem relates to the compilation of regional "national accounts" that will make it feasible to compute regional GDP and identify various sub-aggregates at the regional level. The second problem is data related, and it concerns the existence of weights that are needed in aggregating item-level price data in successive stages of aggregation. In many countries such weights are available only at the national level, normally derived from surveys such as the household expenditure survey.

7. Statistical Capacity Building

The AfDB recognised that integrating international price comparisons (with its two components on national accounts and prices) with the work of national statistical offices on consumer price indexes and national accounts would *strengthen national statistical capacity, leading to improvements in the quality of price data and national accounts* available to the ICP and, hence, enhance the capacity of the African statistical system.

Measures were put in place by the AfDB during the ICP to assist on a continuous basis national statistical capacity, through technical assistance missions and the provision of financial aid. It is planned to be an ongoing exercise.

8. The Future

Through its coordinating role for ICP Africa 2005, the AfDB has emerged as the leading organisation for capacity building in the African Statistical Offices. The AfDB endeavours so far have been targeted towards ICP related components; greater emphasis will be placed in the near future on other economic and social sectors, particularly those related to Poverty and indicators required for monitoring the Millennium Development Goals.

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