

Challenges of Using National Accounts for a More Frequent Update of the Brazilian CPI Weights

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Abstract

A consumer price index (CPI) is usually calculated as a weighted average of the price change of a basket of goods and services covered by the index. The weights are meant to reflect the relative importance of the goods and services as measured by their shares in the total consumption of the households. It is often recommended in CPI's literature that the basket should be updated as frequently as possible – at least every five years – in order to ensure that the weights do not become unrepresentative leading to bias in the CPI. In addition, weights also need to be updated to reflect the introduction of new items and the removal of old ones. In general, increasing the weights updating frequency minimizes distorting impacts that changes in consumer preferences and item substitutions might have on the index. Countries like Brazil which are experiencing significant economic changes, and thus more rapid changes in the consumption pattern, should update their weights even more frequently, such as annually.

The Household Budget Survey (HBS) is the main data source for deriving expenditure shares for the goods and services covered by the Brazilian CPI. Hence, weights update depends on how often the HBS is conducted, which unfortunately is taking place on a less frequent basis (more than seven-year intervals) because the survey costs and budgets constraints. In this sense, National Accounts can be an alternative and complementary source for deriving CPI expenditure weights using the Household Final Consumption Expenditure (HFCE) estimates. There are two main practical advantages in using these data for estimating the weights. First, National Accounts data are disseminated annually on a calendar basis. Second, and most importantly, the scope and coverage of HFCE, adjusted to cover all expenditure by households within the economic territory, is consistent with the scope and coverage of the Brazilian CPI as defined by the domestic concept.

This paper contributes to this context by presenting the main challenges found for the implementation of a more frequent update of the Brazilian CPI weights using the National Accounts database. Challenges arise in different ways: (i) HFCE estimates are available only at the national level, and because of that, some sort of hypothesis or approximation should be taken to derive the regional weights; (ii) CPI and HFCE estimates are produced for different purposes and have some differences in scope and definition of consumption that must be treated; (iii) the bottom-up approach of the method of calculation of the Brazilian CPI, where the national basket of goods and services are derived from the regional ones and the national index is calculated by aggregating the regions (sub)indices due such local baskets; and (iv) non-integrated classification structures adopted for the CPI and National Accounts at IBGE.

* The views expressed in this paper are those of the author and do not necessarily reflect the views of IBGE.