Indices for population groups session: abstracts

1. Do the Poor Pay More, Store by Store?

Greg Kurtzon & Robert McClelland

This paper uses a novel data set to examine the distribution of average prices paid by different income groups. Some previous studies have used differences in prices across geographic areas or types of store as proxies for differences in prices paid by different income groups. Others have compared market baskets of highly aggregated goods by income group. But shoppers of all incomes may cross geographic boundaries or shop at outlets of any type, and important information is lost when aggregating. The results of those studies are mixed, with most pointing to slightly lower prices paid by poorer households. Here we use a quarterly survey asking consumers how much they spent at different outlets, which in 2001 also asked respondents to categorize their incomes into one of three groups. By using this survey and Bureau of Labor Statistics price data from a representative set of those outlets, we compare the average prices charged by outlets patronized by each of the income groups.

2. Various CPI Aggregation Schemes: Empirical Study of Israeli Data

Yoel Finkel and Victoria Roshal

Evidence that different household groups in Israel face different price changes as a result of group-specific consumption patterns and differences in price trends was discussed in the paper presented at the 2006 meeting of the Ottawa Group. Following this paper we calculate household-specific CPIs and analyze various aggregation schemes according to different social, income and expenditure subgroups. We extend the previous paper to a larger dataset, using annual price indices for the years 1990-2005 in order to test whether the different inflation rates faced by different population groups are persistent over time. Further, we analyze whether monthly trends show the same differential pattern as annual inflation. The dataset includes years of both high and very low inflation. This helps to assess the extent of the difference in group-specific inflation. We find that using democratic rather than plutocratic weighting schemes, and thus emphasizing low-income population, we obtain higher inflation rates. In most of the cases, and especially in high-inflation years, weaker population groups (pensioners, unemployed, etc.) face higher-than-average inflation rates. In view of the results of this paper, we suggest that when annual inflation rates are not close to zero, the general CPI cannot represent all households in the country, and using group-specific price indices might correct this distortion.
3. Inflation Inequality in Austria: Household Specific Inflation Rates

Friedrich Fritzer and Ernst Glatzer, Oesterreichische Nationalbank

Aggregate consumer price inflation commonly computed by national statistical agencies is as a weighted average of household-specific inflation rates where each household’s contribution is proportional to the household’s total expenditure level. Naturally aggregate consumer price inflation is not a perfect indicator for inflation of an individual household. Divergent consumption patterns of consumer units often imply divergent household specific inflation rates. The study evaluates consumption patterns across households and constructs group specific inflation rates for Austria for the period from January 2000 to July 2007. Furthermore, the persistence and determinants of group specific inflation differentials are investigated.

In general groups of household were composed along the following characteristics: a) household composition (i.e. female single, male single, two adult persons without children, lone parents, two and more adult persons with children and – in the latter two cases – number of children in a household); b) education of the reference person; c) household income.

The main findings are the following. First, with the exception of the period from 2000 to 2001 the plutocratic gap – i.e. the difference between the consumer price inflation where households are weighted according to their total consumption in the aggregate index (i.e. the plutocratic CPI) and an consumer price inflation where equal weight is attached to each household in the aggregate index (i.e. the democratic CPI) – is negative. Hence, in all years but 2000 to 2001 prices caused relatively more damage to households with relatively lower total spending (in general poorer households). Furthermore, the negative gap increased over time, hence, the underestimation of headline inflation for households with relatively lower spending increased. Second, in terms of percentage points the gap is relatively small. However, from 2000 to 2007 Austrian annual inflation was in the range between 1.5% and 2.4% and hence comparatively low. Third, in general headline inflation seems to be a fairly good measure for inflation of a two adult person’s goods basket with medium income, for three or more persons and singles with medium income. Headline inflation underestimates the inflation burden of two adult persons with low income and low education as well as female singles with low income and to a lesser extent for lone parents. In contrast headline inflation overestimates inflation for two adults with high income and medium to high education.

Key words: Price level, inflation, deflation, index numbers and aggregation, household specific inflation, microeconomic data.

JEL-Classification: E31, C43, C81.