

The World's Largest Open Access Agricultural & Applied Economics Digital Library

## This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

## THE EFFECTIVE RATE OF INFLATION

## J. I. Wittenberg\*

At a time when a high rate of inflation is affecting almost all the developed nations in the world, the author feels that some modification should be made concerning the concept of *the* rate of inflation so as to reflect more accurately the effect of inflation on different individuals and social groups.

The index of retail prices, which is used to measure the rate of change in prices over time suffers from the defect common to all index numbers—that is, it shows only the weighted average change in prices over a given period with the weights derived from the average expenditure pattern of households.

In the U.K. at the present time, the price of food is rising at a much faster rate than the general price level.<sup>1</sup> On average, households spend just under 25 per cent of their income on food.

However, if we isolate households in the lower social strata of the community, we find that they tend to spend a higher than average proportion of their income on food, and so the weighting system used in the index of retail prices does not adequately reflect the *effective* rate of inflation which this social group is experiencing.

<sup>\*</sup> Lecturer in Economics, Department of Agricultural Economics and Management, University of Reading, England.

<sup>&</sup>lt;sup>1</sup> See figure 1.

Although all calculations which are based on an averaging process will suffer from a similar defect, I feel that in this case some disaggregation and loss of simplicity would be worthwhile so that the effect of inflation on different groups could be appreciated. This disaggregation could be achieved by the construction of a series of retail price indices, with each index having its own weighting structure appertaining to a predetermined income level. If this were done it would then be possible to estimate the effective rate of inflation for each income group and thus the effect of policy decisions which attempt to influence the rate of change in prices could be clearly seen.

However, a word of caution is necessary here. When comparing the index numbers of different groups it would be necessary to test whether the difference in the index numbers was significantly different from zero. If the weights for each index were derived from a sample of household expenditures, the test could take the form of determining whether or not there was a significant difference in the weights between the income groups.<sup>2</sup>

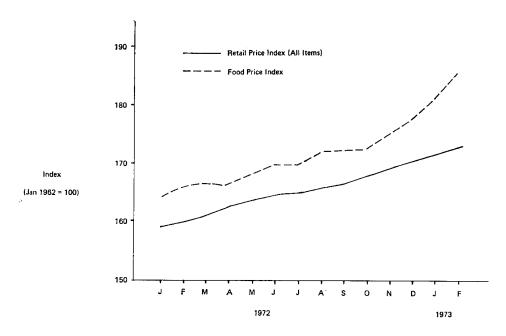


FIGURE 1: U.K. Retail Price Index and Food Price Index January, 1972–February, 1973

<sup>&</sup>lt;sup>2</sup> I am indebted to my associate, Mr D. E. Morris, for this point.