Appendix B4

Rural Quantities of Consumer Durables

No data on the annual purchase of consumer durables by rural households are available. What are available are data on the stock of rural household consumer durables at the end of each year. The difference between the year-end 1990 stock and the year-end 1989 stock (less the number of products assumed to have been discarded during 1990) yields an estimate of the number of items purchased during 1990. An annual disposal rate of 7 percent is assumed across all consumer durables. This measure of purchases of consumer durables is highly unreliable because the annual disposal rate may not be the correct one and because the year-end stock data may come with a large margin of error, but it is the only way to obtain any rural consumer durable quantity data at all; the relative quantities of different products are likely to be sufficiently accurate to be used here.

In the urban case, both data on the purchase of consumer durables per 100 households and data on the stock of consumer durables per 100 households are available for 14 consumer durables. Deriving urban purchase quantity data from the urban stock data, as done here in the rural case, yields implied urban purchase quantities which are occasionally vastly different from (higher than) the actual urban purchase quantities. The correlation coefficient between the actual and the implied purchase quantities, however, of 0.7829, is significant at the 0.1% level. If the same were true for the rural case, the relative weights given to different consumer durables in the rural basket are likely to be correct, but the quantities may just all be a bit too large (which does not matter since the adjustment factor for the product category articles for daily use in the basket ensures that consumer durables are not over-weighted in the basket). (For the data see *Urban Household Survey Yearbook 1990*, p. 29, *Statistical Yearbook 1990*, pp. 306f., *1991*, p. 288.)

The urban data hint at large margins of error. For example, it is not logically possible for the year-end 1990 stock of color TVs to exceed the sum of year-end 1989 stock of color TVs and the quantity of color TVs purchased during 1990. Yet this is what the data say; assuming a disposal rate of zero, approximately 5% of the year-end 1990 stock of color TVs appeared out of nowhere during 1990. Four out of the 14 urban consumer durables exhibit this phenomenon. A second complication is that the actual disposal rates in the case of the other 10 consumer durables vary widely, reaching a maximum of 12 % in the case of electric watches, but often located in the lower single-digit range. With such a wide spread (and the negative disposal rates for four consumer durables) it did not seem advisable to take the urban product-specific disposal rates and to apply them to the rural stock data.