Ref: Samuelson, P. & Nordhaus, W.: Economics, Indian Adaptation, 19th Edition

APPENDIX 30

We have seen in the appendix to Chapter 19 and appendix to Chapter 20 that the long-term inflation rate in India in terms of annual averages is quite stable. But when measured on year-on-year basis, i.e., by comparing the index in a week or a month with that one year back, the inflation rate can vary a lot particularly during particular short periods.

Two important factors which cause such variations in inflation in India are the cost push factor of international crude prices and the demand pull factor of deficient monsoons. This can be illustrated by studying the wholesale price index (WPI) behavior in the last two and a half years based on year-on-year inflation rate (Figure 30A-1). During this period, the overall WPI for all commodities combined has fluctuated sharply—rising from 3.1% in October 2007 to a peak of 12.8% in August 2008, then declining to −0.5% in July 2009 before again climbing up to 9.9% in March 2010.

The prices of the fuel group (for example petrol) essentially follow the pattern of international crude prices. During late 2007 and early 2008, one of the main reasons for the rise of the inflation rate in India was the rise in the crude prices. As crude prices started falling from July 2008 onwards, inflation too came down. The recession following the US financial crisis in late 2008 also contributed to the decline. But as can be seen from Figure 30A-1, inflation fell much less than the fuel prices. While the decline in fuel inflation continued, price pressures started building up in food grains and manufactured food products. This was mainly because of the demand pull factor of deficient monsoon. Poor rainfall resulted in supply bottlenecks and hence created excess demand conditions. As can be seen from Figure 30A1, food grain inflation had been rising from late 2008, and after a lag, the inflation of manufactured food products (which use primary food

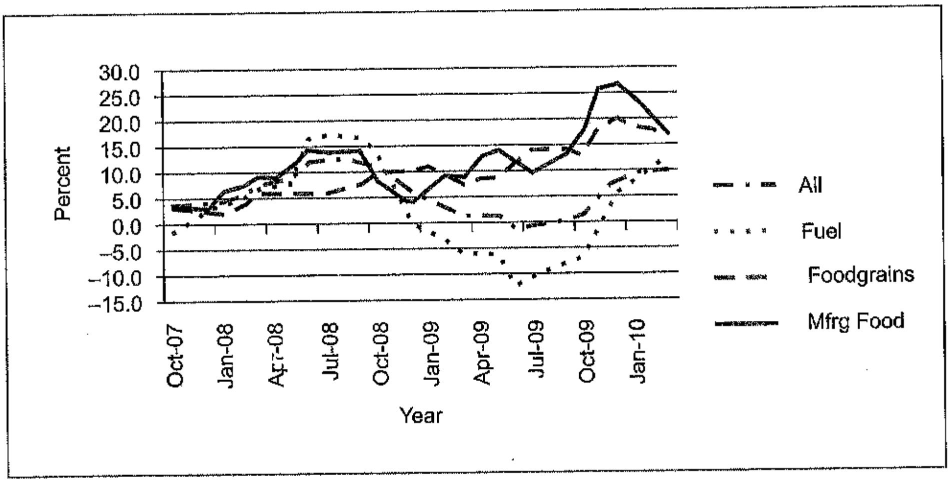

FIGURE 30A-1. Commodity Composition of WPI Inflation in India

Source: Centre for Monitoring Indian Economy, *Business Beacon* database. These are year-on-year rates of inflation of monthly WPI indexes.

grains as intermediate goods) too started rising. In fact, food inflation was rising even when overall WPI inflation was falling in the first half of 2009. The reversal of the (all commodity) WPI index around August 2009 and the rise since then has been caused by the combined cost push (crude prices) and demand pull (food) factors. As food inflation started declining since January 2010, WPI inflation started stabilizing.

Another aspect of the inflation situation in India that we observed in the appendix to Chapter 20 is that the long-term price inflation is similar whether we use WPI or CPI. But as Figure 30A-2 shows, on year-on-year basis, the inflation rates can be quite divergent. Fuel prices have a much higher weightage in WPI than in CPI. On the other hand, the food group is much more important in CPI than in WPI. Thus, it could be observed that even when WPI inflation started falling sharply since August 2008 with falling fuel prices, CPI inflation remained high and, in fact, accelerated since mid-2009, reflecting the movement of food prices. From mid-2009 with a similar price movement in both fuels and food, the two indexes again show similar movements.[1]

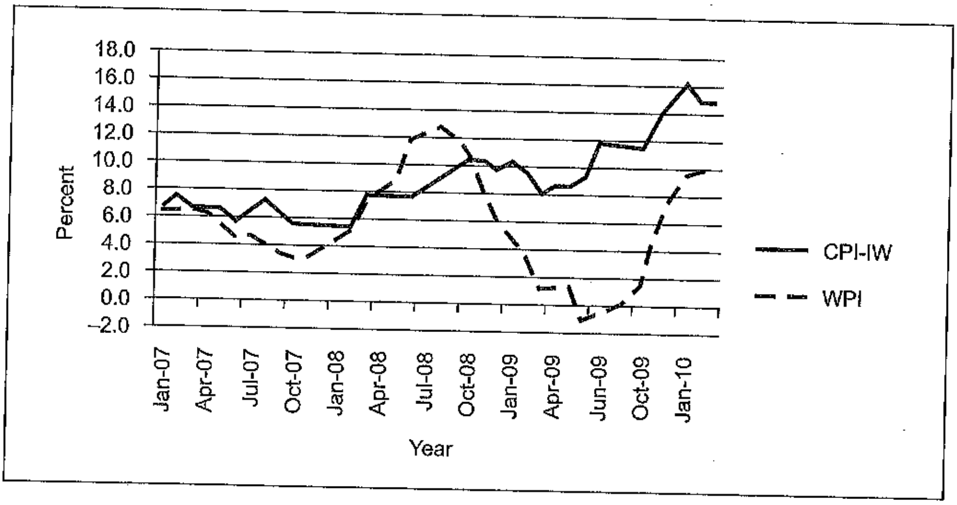

FIGURE 30A-2. CPI and WPI Inflation

Source: Same as in Figure 30A-1 These are year-on-year rates of inflation of monthly CPI (IW) general index and WPI (all commodities).

[1] The half-yearly report of the Reserve Bank of India on Macroeconomic and Monetary Developments (available at www.rbi.org.in) contains analysis of the inflation situation in the country.