

## GROWTH AND PRICES: THE HISTORICAL RECORD

Historical record on the relationship between prices and growth does not yield clear conclusions. Dr. Goldsmith presented the following table to the Joint Economic Committee:

TABLE 3-1.—*Trend of gross national product and personal consumption, 1839-1959*  
[Percent increase per year <sup>1</sup>]

|                                    | Entire period,<br>1839-1959 | 60-year subperiods |           | 40-year subperiods |           |         |
|------------------------------------|-----------------------------|--------------------|-----------|--------------------|-----------|---------|
|                                    |                             | 1839-99            | 1899-1959 | 1839-79            | 1879-1919 | 1919-59 |
|                                    | (1)                         | (2)                | (3)       | (4)                | (5)       | (5)     |
| Gross national product:            |                             |                    |           |                    |           |         |
| 1. Aggregate, current prices.....  | 4.85                        | 4.13               | 5.59      | 4.48               | 5.69      | 4.40    |
| 2. Price level.....                | 1.15                        | — .10              | 2.42      | .16                | 1.91      | 1.40    |
| 3. Aggregate, constant prices..... | 3.66                        | 4.23               | 3.09      | 4.31               | 3.72      | 2.97    |
| 4. Population.....                 | 1.97                        | 2.50               | 1.45      | 2.71               | 1.91      | 1.30    |
| 5. Per head, constant prices.....  | 1.64                        | 1.67               | 1.62      | 1.55               | 1.76      | 1.64    |

<sup>1</sup> Calculated from values in 1st and last year of period.

Source: Hearings, Joint Economic Committee, 1959, on "Employment, Growth, and Price Levels," p 271.

This table shows that with an average increase in prices of 1.15 percent over the years 1839 to 1959 the national product rose in constant prices by 3.66 percent per year. A rise of population of 1.97 percent contributed to this increase. Against the rise of price levels of 1.15, the gross national product per head in constant prices rose 1.64.

It will be noticed from this table that in the 60 years, 1839-99, the price level dropped on the average of 0.10 percent, and yet output per head in constant prices rose by 1.67 percent. But in the period from 1899 to 1959, when the rise of productivity, that is, the rise of output per head in constant prices was 1.62 percent, or roughly the same as 1839-99, the rise of prices was 2.42 percent per year. When these 120 years are broken into 40-year subperiods, it will be found that the largest average rise of productivity was in the period 1879-1919, when the increase was 1.76 per year, and this was also the period when there was the largest rise of prices, 1.91 percent.<sup>8</sup> Perhaps one might expect a larger rise of output vis-a-vis the price level in the 19th century than in the 20th since natural resources were more ample.

Discussing the duration of long swings and output, Professor Abramovitz showed that these generally run from 10 to 20 years, and that they involve a movement in the rate of growth from about 2 percent per annum to about 6 percent, an average of around 4 percent.

Professor Abramovitz did not go into the relationship between these long periods of growth or the long swings in the growth with prices, but he does suggest that there is some relationship between these and the supply of money. He agrees with Professor Friedman that—

\* \* \* whereas in ordinary recessions, there is mere retardation in the growth of the money supply, severe slumps were marked by an actual decline in the money stock. These facts can be fitted into the story already related without difficulty \* \* \*. So long as the stock of money, corrected for business cycles, rises at a sufficient rate, prosperity is well maintained, and output rises steadily, subject only to minor recessions. Presumably, such steady growth would be

<sup>8</sup> Hearings, "Employment, Growth, and Price Level. Pt. 2: Historical and Comparative Rates of Production, Productivity, and Prices," p 271.