

traceable to the stimulus which rising money balances afford to expenditures of all kinds. But if the rate of growth of money balances falls below a certain level, a fortiori, if money stock declines, demand ceases to rise fast enough to absorb our growing capacity to produce, and investment expenditure then falls.⁹

Inadequate supplies of money obviously would tend to curtail the rate of growth. In a recent period the Federal Reserve was criticized for allowing the supply of money to rise by only 1 percent per year when output was rising by several percent. Obviously, the Federal Reserve depended in part upon an increased use of the existing supplies of money. Additional money is needed not only to finance rising output, but also, because the public holds a rising part of its resources in money in relation to income, to cover increased liquidity needs. In other words, as income rises the increase in the supply of money should ordinarily be of equal proportion to the rise of output and in excess insofar as the public increasingly tends to hold a larger proportion of its income in cash.

In a paper before the Joint Economic Committee,¹⁰ Professor Friedman notes that output and prices both rise in the upward swing of the business cycle and both tend to decline during contractions. As we shall show later, the recent tendency has been for prices to rise even in contractions and also even for wages to rise during periods of economic contraction. In other words, we are not as likely, in our present institutional setup, to experience a fall of costs in periods of declining output.

Over the longer period, Professor Friedman finds it difficult to draw any conclusions between output and prices.

What happens to a nation's output over long periods of time depends, in the first instance, on such basic factors as the resources available, the industrial organization of the society, the growth of knowledge and technical skills, the growth of population, the accumulation of capital, and so on. This is the stage on which money and price changes play their parts as the supporting cast.

Indeed, Friedman holds that inflationary price rises seriously distort the effective use of resources.

In the discussion of the cyclical relationship between prices and output, Friedman acknowledges the usual arguments about the lag of costs, inclusive of wages and rates of interest. He also points out that rising prices tend to cut down on efficiency and also to reduce the amount of savings. Over the longer period, he notes that from 1865 to 1879, a period of exceedingly rapid progress, prices were cut in half, though he also notes that in general the larger growth of output was when prices were rising slightly during this period rather than in a period of price decline. In the years 1880-97, the period of generally declining prices, the increase in output was not as large as in the period of rising prices from 1897 to 1913. He also notes that in the period of the 1920's growth was rapid and prices were relatively stable. It should be noted here, however, that there was a considerable amount of profit inflation during this period; in other words, prices did not fall with costs during this period.

Dean Bach holds that there is little evidence—

that inflation has either increased or decreased significantly total economic output in the United States over the last two decades * * *.¹¹

⁹ *Ibid.*, p. 431.

¹⁰ Joint Economic Committee, "Relationship of Prices to Economic Stability and Growth," *compendium*, 1958, pp. 251-255.

¹¹ Hearings, "Relationship of Prices, Economic Stability, and Growth," Joint Economic Committee, May 1958, pp. 18-20.