

up 5 percent and output per man-hour gains 3 percent, unit labor costs are up 2 percent.

For the private nonfarm economy as a whole (and even more so, of course, for components thereof), the rate of gain in output per man-hour is highly variable over time. But if we subtract the *average* rate for the most recent decade, 1959-68 (2.8 percent per year) from the lines of central tendency in chart 1 we get the following:

| Unemployment rate (percent) | Associated increase in unit labor costs, assuming average productivity gain (percent) |     |
|-----------------------------|---------------------------------------------------------------------------------------|-----|
|                             | A                                                                                     | B   |
| 3.5.....                    | 4.9                                                                                   | 4.4 |
| 4.0.....                    | 3.0                                                                                   | 2.8 |
| 5.0.....                    | 1.4                                                                                   | 1.3 |
| 6.0.....                    | .9                                                                                    | .8  |

Note here that the rise in unit labor costs associated with the target unemployment rate is 3.0 percent a year for A and 2.8 percent for B. While we have not extended our trend lines beyond the 6-percent unemployment rate, it is evident that if they were so extended the rate associated with *stable* unit labor costs would be higher.

#### Other estimates

This last conclusion agrees fairly well with the findings of other investigators for earlier portions of the postwar period. The results of several studies (all assuming an annual increase of 2.5 percent in output per man-hour) are summarized below:

| Unemployment rate associated with stable unit labor costs |  | Percent |
|-----------------------------------------------------------|--|---------|
| Study: <sup>1</sup>                                       |  |         |
| A—1947 to 1958.....                                       |  | 5.5     |
| B—1948 to 1958.....                                       |  | 8.0     |
| C—1948 to 1957.....                                       |  | 8.0     |
| D—1948 to 1957.....                                       |  | 5.6     |
| E—1947 to 1960.....                                       |  | 6.6     |
| Average .....                                             |  | 6.8     |

<sup>1</sup> These studies are summarized in a report, *Price Stability and High Employment* (1966), prepared for the Economic Council of Canada by Ronald G. Bodkin, Elizabeth P. Bond, Grant L. Reuber, and T. Russell Robinson, p. 72. Since the results shown assume an average gain in output per man-hour of 2.5 percent, they would be reduced somewhat by our assumption of 2.8 percent.

#### Unit labor costs and prices

If prices reflected nothing but the compensation of employees, they would, of course, move exactly with changes in unit labor costs, but there are other components—capital consumption charges, earnings of proprietors, corporate profits, interest, taxes, etc., which impair this 1 to 1 relationship. There are cyclical and other variations in these components, but under similar economic conditions, or over a long period of years, changes in price averages tend to match fairly closely the movement of comparable averages of unit labor costs. The Council of Economic Advisers has commented on the proposition as follows:

“Simple arithmetic requires that, for the average of unit labor costs in the entire economy to be stable, it is necessary that the average change in hourly compensation match, as a percentage, the average change in output per man-hour in the entire economy;