Comment

You will observe that over the past 7 years (sec. B) the deviation of the inflation rate from its normal relation to the unemployment rate, as defined by the line of central tendency, has in no case been as much as one-half a percentage point, and that over the longer period (sec. A) only two of 11 deviations exceeded that limit. This is not half bad. You will note also (as in chart 1) that the normal line is a little higher for the larger set of observations than for the smaller, but is otherwise quite similar. Selected trend values for the two lines are as follows:

Unemployment rate (percent)	Associated annual increase in prices (percent)	
	A	В
3,5	4.6	3.8
5.0 5.0	1.7 1.2	1.6

Note in this case that the annual price increase associated with the 4-percent unemployment rate is a shade over 3 percent for A and a little under that figure for B, and that the rate associated with price stability is over 6 percent.

$CEA\ chart$

It is interesting to note that notwithstanding its espousal of the 4-percent unemployment target, the Council of Economic Advisers has never said in so many words what rate of inflation can be expected to accompany it. However, in the final report of the outgoing Council there is a scatter diagram portraying the relation between unemployment rates and changes in the price level, from which it is possible to derive the missing figure. Although the Council drew no line of central tendency, any reasonable line shows the 4-percent unemployment rate associated with an inflation rate in excess of 3 percent a year (somewhere amount 3.25 percent).

There is no point in being too precise here. It is sufficient to say that on the basis of recent history the inflation rate associated with the official 4-percent unemployment target is around 3 percent a year.

Conclusion

The foregoing calculations are subject, of course, to a substantial margin of error, and we should be the last to attach any great significance to the decimal points or to claim an exact reconciliation of various results. The underlying figures leave much to be desired, the number of observations is limited, and there is an element of judgment in the manipulation of the data. Nevertheless, the broad picture is reasonably clear. The average, or normal, relation between unemployment and inflation indicates that price-level stability can be achieved only with an unemployment rate far above the official target.

It may be objected that the normal relation has been derived from historical data, and is subject to change as time goes on. That is of course true. It has changed in the past and will do so in the future.

^{*} Economic Report, 1969, p. 95. The measure of inflation is the same we used in chart 2, the GNP deflator.

* See Michael E. Levy, "Full Employment Without Inflation," Conference Board Record, November 1967, p. 36.