MONETARY POLICY AND MANUFACTURING

By
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I am pleased to have this opportunity to discuss with you the impact of monetary actions on the economy, with particular regard to the manufacturing sector. To some, monetary developments may seem far removed from the production of goods. But, some of the most basic trends influencing manufacturing have their roots in monetary actions. Research at the Federal Reserve Bank of St. Louis indicates that monetary policy actions have significant effects on total spending, production, prices, and interest rates, all of which are of vital concern to those engaged in manufacturing.

First, I will review economic developments of the past year and will summarize our view of the impacts of monetary actions on general economic conditions. In addition, I will comment briefly on the effects that cyclical swings in spending have on the manufacturing sector and on the relative movements of profits and wages in manufacturing. Finally, I will conclude with a few remarks about the general economic outlook for 1973 and 1974.

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Developments in 1972 and Early 1973

Let us now examine recent trends in economic activity. During 1972 and thus far in 1973 we have witnessed considerable business expansion. Total spending for goods and services produced in our economy increased 11 percent last year, and indications are that the rapid increases have continued in early 1973. Real output has risen at about an 8 percent annual rate. Both spending and production have been expanding at roughly double their trend rates since the late 1950s.

As a result of the rapid expansion in output of goods and services, employment has risen at a 3 percent annual rate since late 1971. This is nearly double the growth of population of working force age. Reflecting the rapid increase in the number of jobs, unemployment fell from 6 percent of the labor force in early 1972 to about 5 percent recently.

Monetary and fiscal actions during the past few years provided the basis for the strong economic expansion. Growth of the nation's money stock (demand deposits and currency) accelerated from 6 percent in 1970, to 7 percent in 1971, and then to over 8 percent in 1972. Federal Government expenditures have also risen at a slightly accelerating pace in recent years.

The measured rate of inflation was not much lower in 1972 than in 1971, and there is considerable dispute regarding the

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contribution of wage and price controls to reducing actual inflation. Prices in this country rose at about a 6.5 percent annual rate at their peak in late 1969. Following the restrictive monetary and fiscal actions taken in 1969 and 1970, considerable progress was made in reducing inflation during 1970 and early 1971. Since the economy controls were imposed in August 1971, however, little further progress has been made on balance in reducing price increases.

As a matter of fact, evidence indicates that the rate of inflation was beginning to increase even before the Phase II controls were lifted. In the first eight months of 1972 consumer prices rose at a 3.2 percent annual rate; in the last four months they rose at a 3.8 percent rate.

An overall evaluation of controls is difficult. It is easy to cite specific instances in which a wage settlement was held down by actions of the Wage Board or a price increase was cut back by the Price Commission. Such actions, however, were accompanied by an acceleration in growth of total demand for goods and services rather than a slowdown. Consequently, prices tended to increase more rapidly than otherwise in sectors of the economy which were not subject to strict controls. As a result, movements in broadly based averages of wages and prices last year suggest that wage and price controls contributed little to a reduction in the rate of overall wage and price increases.

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Monetary Impact on Economic Activity

Let us now consider our view of the effect of monetary actions on economic activity. First, we have no doubts that the growth of the nation's money stock can be controlled closely enough to achieve monetary policy objectives. There is a continuing debate, however, as to how such control can best be accomplished, but that is a matter for the technicians to work out.

Next, is the subject of how monetary policy works. Our view can be stated briefly. By supplying money at a faster rate than the public desires to increase their holdings, given current levels of income, prices, and interest rates, the public's demand for other financial assets and for real goods and services is stimulated. Expressed differently, individuals and businesses, in attempting to maximize satisfaction and profits from their existing wealth, will seek to reduce their holdings of money balances in exchange for other assets which they anticipate will bring more satisfaction or profit. Spending and incomes are thereby expanded whenever the stock of money exceeds the amount currently demanded. Conversely, by providing money less rapidly than the public wishes to increase their holdings, the central banks can slow the rate of total spending in the economy.

A rise in the money stock in excess of the quantity demanded does not bring an instantaneous jump in spending. Since cash

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balances of most individuals and businesses fluctuate widely, it takes some time to recognize that money is more readily available than previously. Also, it takes time to prudently spend the redundant funds. In addition, once the funds are spent, the imbalance is not ended, but merely transferred to another. Our research indicates that an injection of money gradually stimulates spending over a period of about five quarters before its effects are dissipated.

An increase in the trend growth of spending, at first, has its primary effect on production and emloyment. As outlays increase, businesses have an incentive to produce more, and in the process add to their stocks of labor and capital. However, in the long run, production is limited by the amount of labor and capital available and by the prevailing state of technology. If the new trend of spending exceeds the long-run attainable rate of production, upward pressures are gradually placed on prices.

Studies conducted at the St. Louis Bank indicate that in the first year most of the change in the trend of spending is reflected in changes in real production. For the following four years, the effect on production reverses, and as the stimulative effects on output dissipate, the upward trend of prices gradually accelerates.

The relationship between money growth and prices, output, and employment, as developed in econometric studies at our Bank,

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are illustrated in Chart I. The top tier shows that the trend growth of money accelerated from a 1.8 percent rate in the 1950s and early 1960s to a 3.8 percent rate in the mid-1960s, and then to a 6.2 percent rate from 1967 to present. The trend growth of prices, as shown in the second panel, rose at similar rates in the 1950s and 1960s, reflecting, after about a three year average lag, changes in the trend growth of money.

The relationship between fluctuations in the money stock relative to its trend on the one hand, and changes in output and employment on the other, are shown in the bottom two tiers of the chart. During the two decades covered, money stock growth accelerated relative to its underlying trend on six occasions. Each of these periods was accompanied, after a lag of one or two quarters, by an upward movement in output. Also, during this twenty year period, there were four major recessions. These are indicated by the shaded areas on your chart. In addition, two brief slowdowns in output growth occurred in 1962-63 and 1966-67, but these were not of significant magnitude and duration to be labelled recessions.

Summing up, the experience of the last two decades has shown that despite successive increases in the trend growth of money, the trend growth of output and the average level of unemployment has not been much affected. But movements of money

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away from its trend and then back to it have been followed by fluctuations in output growth compared to potential and by deviations in the unemployment rate from its average. On the other hand, price movements have been little affected by the short-run variations in money growth. Instead, rising price trends have been the primary result of accelerating monetary trends.

Next, let me comment briefly on the effect of monetary actions on interest rates. An acceleration in monetary expansion adds to the supply of loanable funds, placing immediate downward pressure on interest rates. However, after a period of only a few months, the tendency to reduce rates is often overwhelmed by lagged effects of the monetary injection. As I outlined above, an acceleration of the money stock has expansionary effects on total spending and places upward pressures on prices. Greater spending and inflationary expectations cause greater demands for credit. The increased demand for credit which results from a large prolonged monetary expansion nearly always is much greater than the supply of credit created. Thus, net upward pressure on interest rates results during most periods of sustained rapid monetary expansion.

Let us turn to the topic of relative movements of manufacturing profits and wages. As I have indicated, Federal Reserve actions play an important role in business fluctuations. The phase of the business cycle, in turn, is a major factor determining manufacturing profits. Profits exhibit large cyclical variations, falling

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sharply during economic contractions and rising rapidly during early recoveries.

If you will refer to Chart II you will see the movement in the share of national income arising from the manufacturing sector over the business cycle. Manufacturing is affected by general economic conditions more than most sectors of the economy. Demand for manufactured products, particularly durable goods, appear to be more responsive to changes in aggregate spending and prices than the demand for agricultural products and utility services. In each of the three recession periods of 1957-58, 1960-61, and 1969-70, (the shaded areas on Chart II) you will see that income arising in the manufacturing sector declined relative to other sectors.

Turning to Charts III and IV, one can observe that the distribution of income arising in the manufacturing sector between wages and profits is also greatly influenced by general economic conditions. Wages have declined relatively little, if any, during economic contractions and risen steadily during expansions. Profits, by contrast, fall more abruptly than wages in adverse periods and rise more sharply in early recoveries.

Let me summarize what I believe these charts illustrate with regard to manufacturing. First, the greater the variability

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of monetary growth around its underlying trend, the greater the fluctuations in total production in the economy. These cycles in total real output are, in turn, magnified in the manufacturing sector. Finally, the distribution of business revenues shows a distinct cyclical pattern wherein the profits share declines sharply during economic contractions and bounces back during the recovery phase.

I believe these observed cyclical movements reflect the normal adjustment of consumers and businesses to changes in demand. Last year business profits rose about twice as fast as wages. Since controls have been imposed on wages and prices, some have viewed the more rapid rise in corporate profits as reflecting a bias of the control program in favor of profits. However, a recent study at the Federal Reserve Bank of St. Louis found that, contrary to popular belief, the distribution of corporate income in the current recovery is still heavily weighted in favor of wages. The profits share of corporate income relative to the wages share remains below what it was at a comparable phase in previous recovery periods. I would expect the profits share to rise further as the economic expansion progresses this year, but to begin to contract as the recovery reaches a more mature state late this year and into 1974.

Economic Outlook

Finally, let me turn to some remarks regarding the general economic outlook. Money growth has been constantly accelerating

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over the last three years, from 4 percent in 1969, to 6 percent in 1970, to 7 percent in 1971, and to over 8 percent in 1972. Another comparison is that money grew at a 6 percent trend rate from 1966 to 1971. Thus, the 8 percent increase last year is a substantial acceleration above trend.

Therefore, the acceleration of last year presents some conflicts in achieving stabilization goals over the near future, regardless of whether it is maintained at 8 percent or is reduced. If the 8 percent rate of money growth is maintained, we would expect the rate of inflation to accelerate considerably, along with a slowing in the rate of expansion of real output as the economy reaches its high employment potential. On the other hand, if money growth is reduced too sharply, output growth would be substantially reduced in late 1973 and in 1974. The rate of inflation, however, would still be greater than last year.

For 1973, our research suggests that it would be appropriate for the money stock to grow at about a 6 percent annual rate during the first two quarters this year, then slow to about a 5 percent rate by year's end. At the present time it appears that about a 4 to 5 percent increase in money would be appropriate in 1974 for achieving high employment of resources and a lower rate of inflation.

Given such a pattern, and assuming that the Administration's budget plan, as outlined a few weeks ago, is approximately realized, our research implies the following for economic activity. First, the

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rate of growth in nominal GNP would slow from the very high rate of last year, to about an 8 percent rate in the fourth quarter of this year and then to about a 6 to 7 percent rate in 1974. The growth of real output would decelerate through the year and well into next. It is likely that real growth in 1974 would be no more than 4 percent, which is about our long-run potential.

On the price side we are not as optimistic as some, such as the Council of Economic Advisers. Our results indicate the overall rate of price increase this year will exceed that of 1972, and even in 1974 we are not likely to experience much less than a 3 percent rise in prices with the monetary growth I outlined above. The unemployment rate would continue to decline this year and then level-off next year.

The outlook for interest rates is always hazy, but our work indicates that continued strong growth in credit demands, coupled with a slower rate of monetary growth would produce significant upward pressure on short-term interest rates this year. Long-term market interest rates, such as the AAA twenty-year corporate bond yield, are not likely to change much this year, but it is likely that the trend will be upwards as market participants gradually revise upwards their expectations about inflation. I would expect significantly higher long-term interest rates in 1974 only if the very rapid 8 percent growth of money of 1972 were continued through this year and into next.

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Conclusion

In conclusion, our studies have shown that monetary fluctuations have had a destabilizing influence on the growth of total real output and employment in the economy. Since fluctuations in aggregate demand and production have a relatively greater impact in the manufacturing sector of our economy, that sector would stand to gain most by avoidance of the stop-and-go actions we have observed in the past.

I believe that a moderate, steady, monetary growth could make it easier to achieve both stable prices and a sustained high level of employment and production, and I can assure you I am devoting my energies to achieving such stability.

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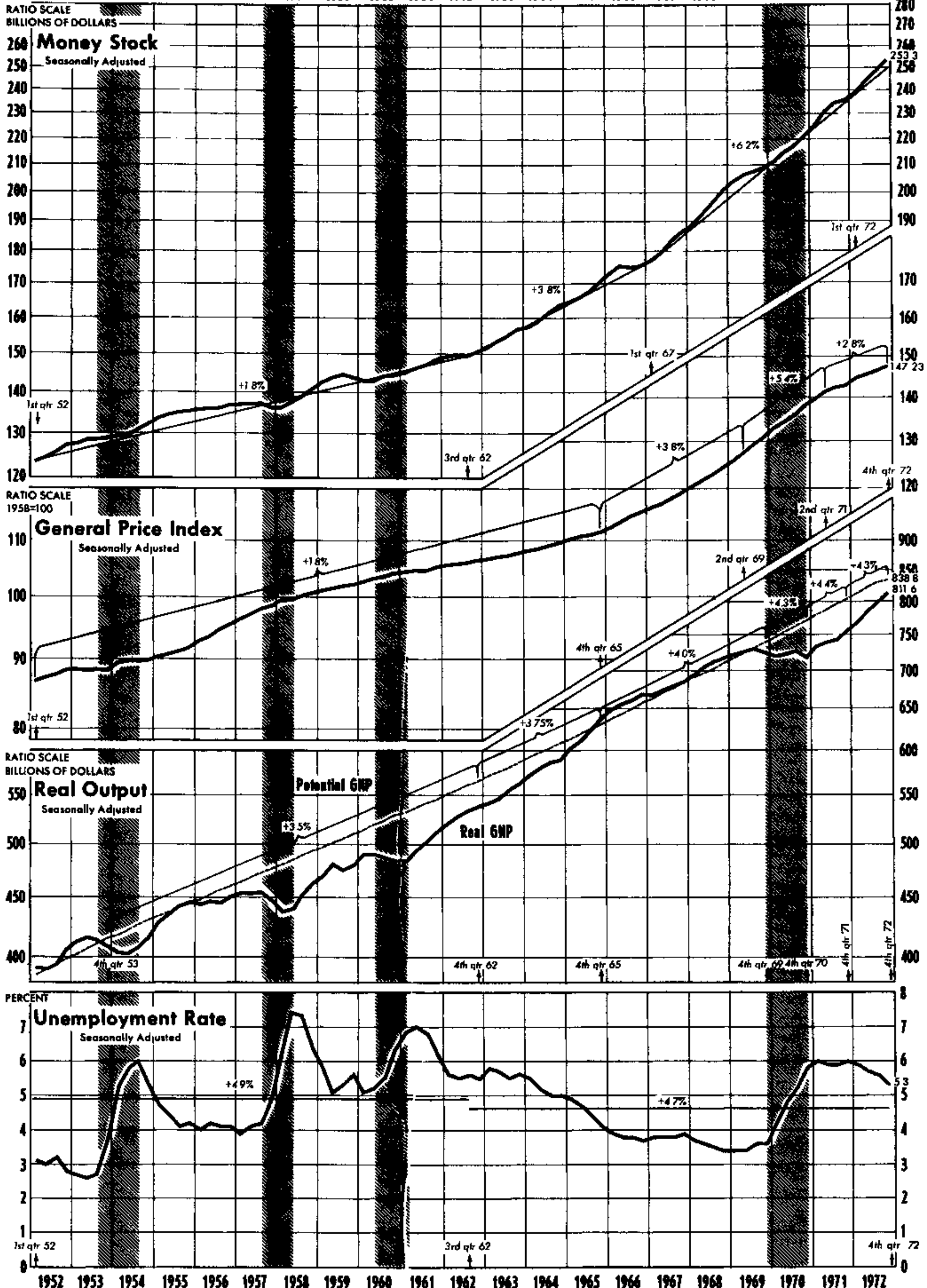
Chart I

Influence of Money on Prices, Output and Unemployment



Shaded areas represent periods of business recessions as defined by the National Bureau of Economic Research
Latest data plotted 4th quarter

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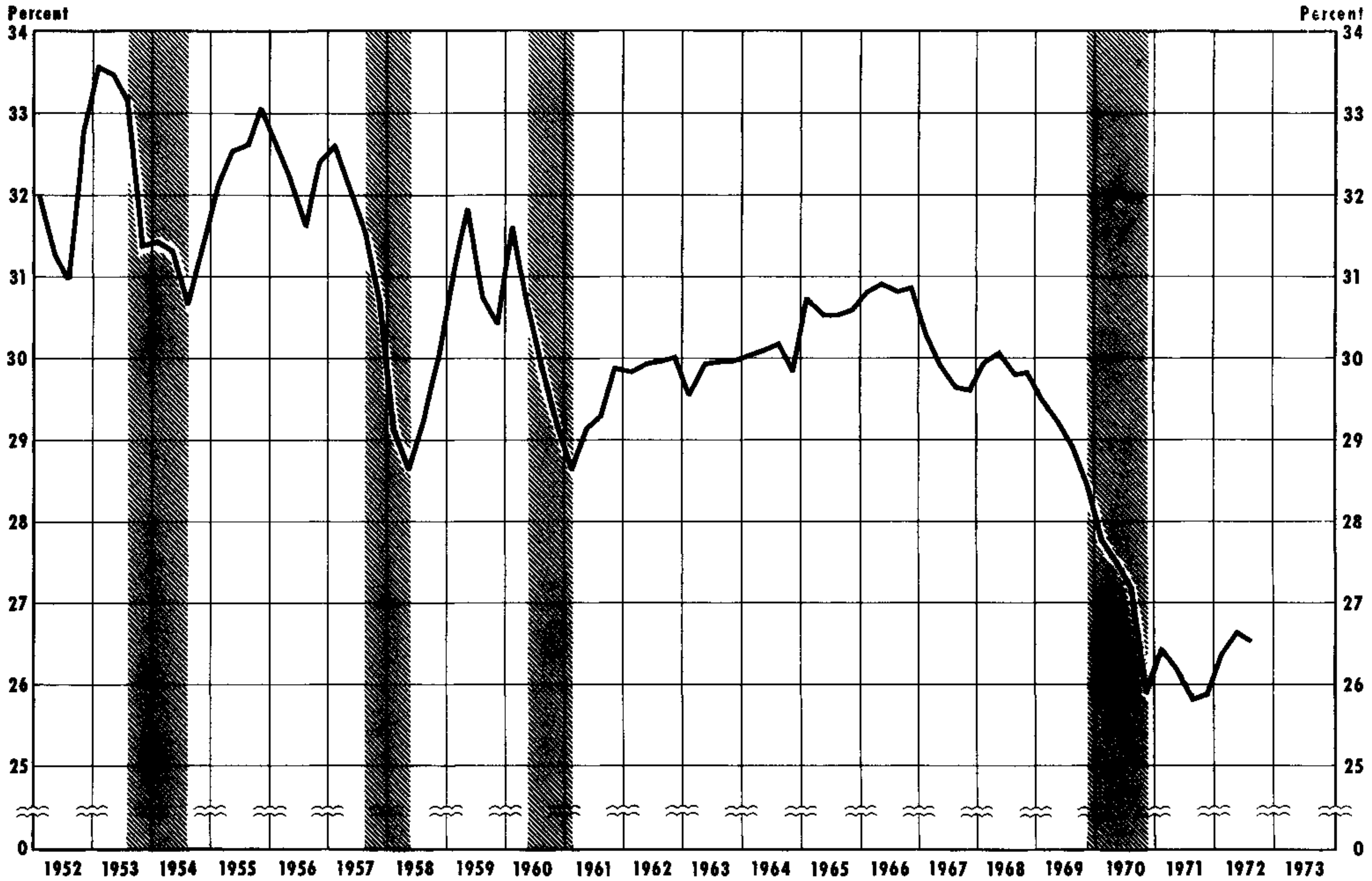
Chart II

Share of National Income Generated in the Manufacturing Sector



Source U S Department of Commerce

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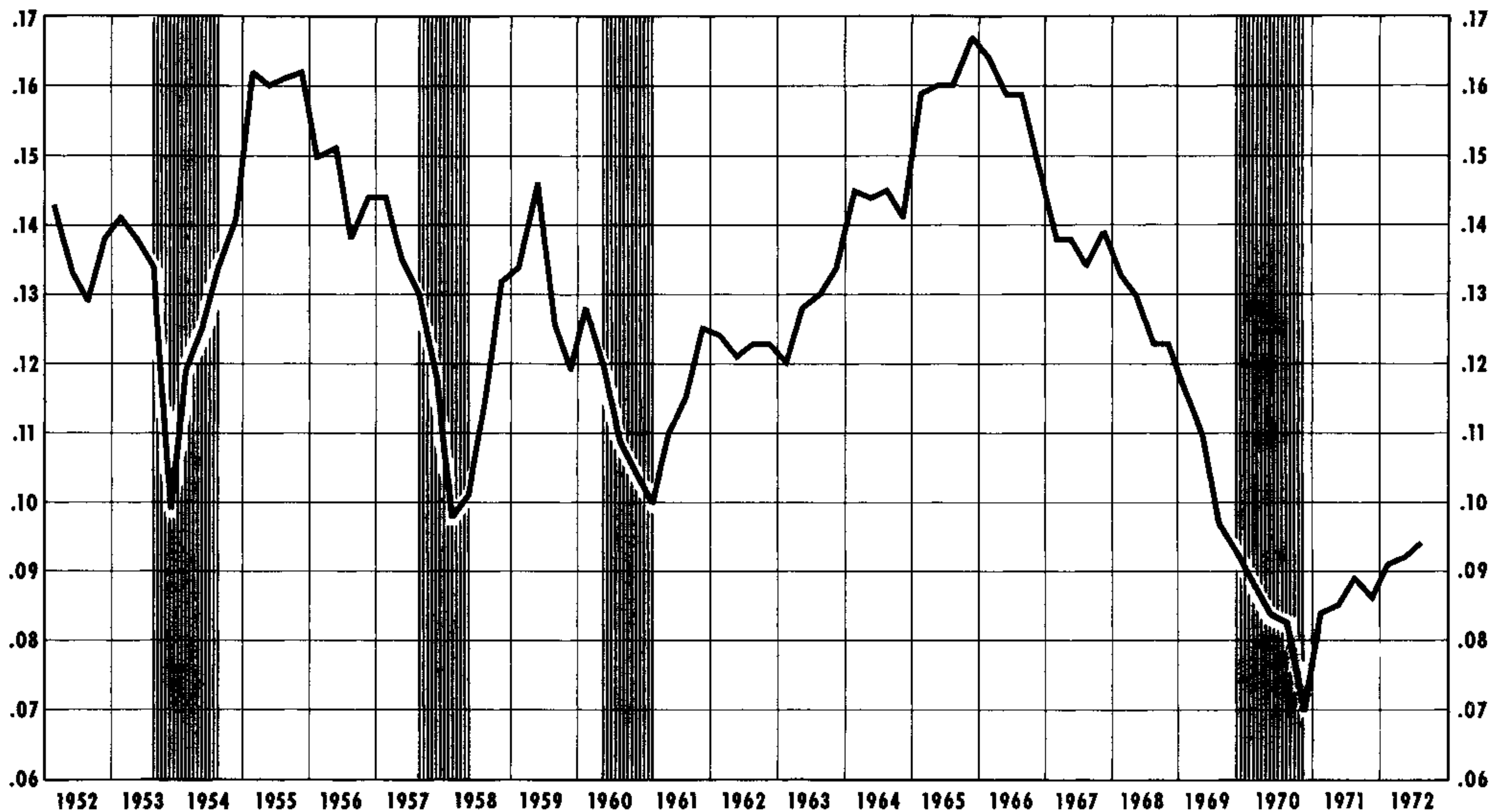
Chart III

Ratio of Profits to Wages [1]



Source U S Department of Commerce

Shaded areas represent periods of business recessions as defined by the National Bureau of Economic Research

[1] Profits are measured by profits after taxes for nonfinancial corporations Wages are measured by total compensation of employees in nonfinancial corporations

Latest data plotted 3rd quarter preliminary

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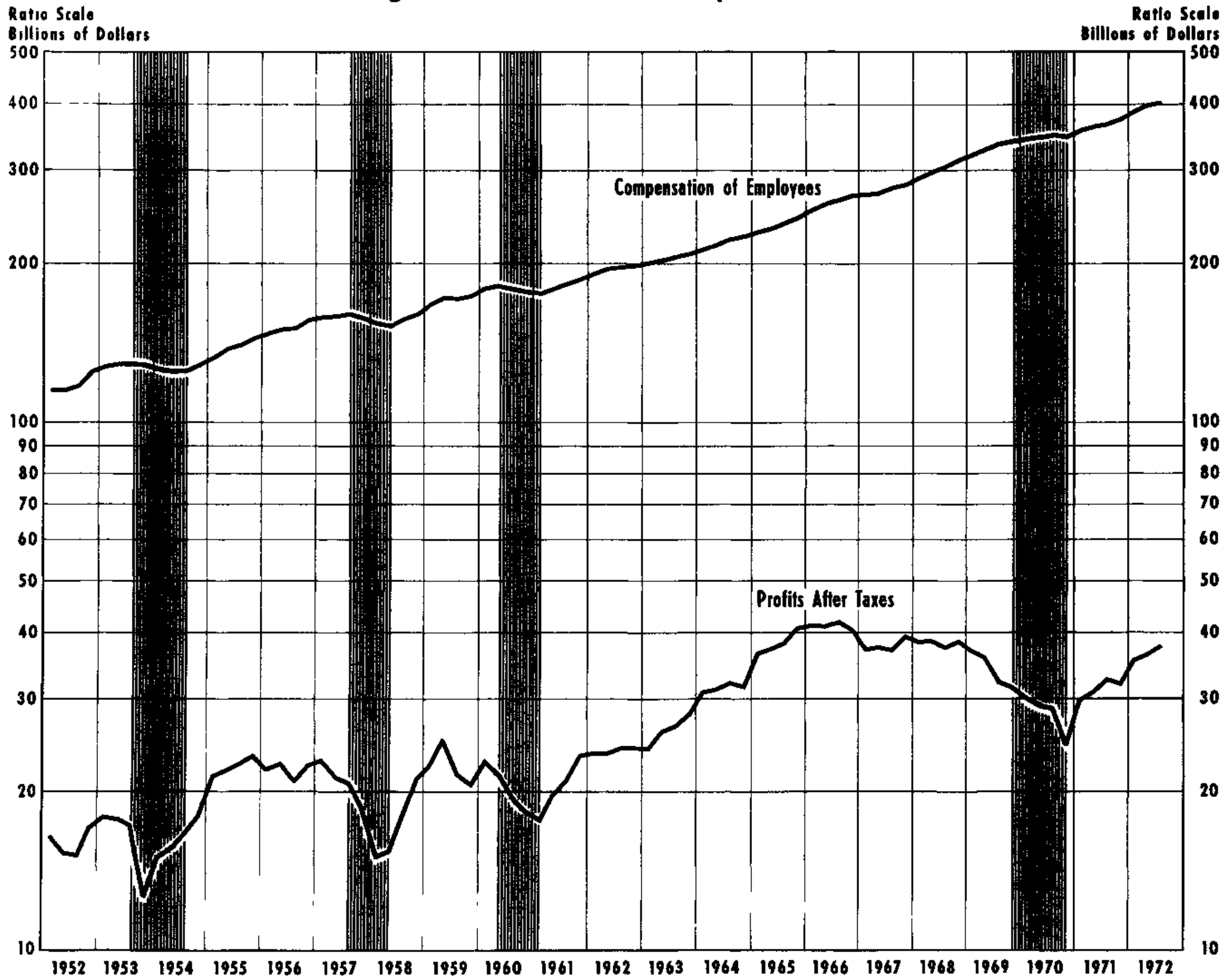
Chart IV

Wages and Profits in the Corporate Sector [1]



Shaded areas represent periods of business recessions as defined by the National Bureau of Economic Research

[1] Data are for the nonfinancial sector only

Latest data plotted 3rd quarter preliminary

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