

# Capital spending— a lack of dynamism

Although the growth of real GNP in the present recovery has been in line with growth during previous recoveries, real capital spending has been disappointing. Why has investment been so sluggish? Some of the weakness must be accounted for by the large amounts of excess capacity still so evident. Given such a situation, businessmen are especially unlikely to invest in new capacity unless they can anticipate the investment will be a profitable one. One indication that the profitability of new investment has not been particularly enticing is the relationship of the prices paid to build capacity to the prices received for the goods or services that capacity will produce. From 1958 through 1974, the prices of capital goods went up at a slightly faster pace than did product prices. In 1975 this unfavorable differential widened significantly. Although the differential remained virtually stable in 1976, the high level of capital goods prices is still apparently one of the significant deterrents to investment.

There are a number of other deterrents affecting the climate for investment, and many are related to the actions or inactions of the Federal Government. Businessmen would apparently like to see the Government resolve their uncertainties about price monitoring, ease some environmental and safety regulations, and allow a larger investment tax credit. Any help on the tax front would be particularly welcome now because corporations are paying taxes on book profits—profits which are not adjusted downward for the much higher costs of replacing inventory and capital goods in an era of inflation. Another important concern of executives is inflation itself, for major increases in prices would in the end bring on a recession. Since some businessmen fear an inflation-recession sequence, they don't want to add capacity that would be redundant within a comparatively short time.

There has been widespread concern on all sides, business included, about the lackluster performance of capital spending. Much of the worry relates to the long-run effects of this performance on the stock of fixed business capital. If that stock grows, the potential level of employment as well as the potential volume of output increases. If that growth is below par, employment opportunities appear more slowly and increases in the volume of output are held down. Moreover, if there is insufficient production capacity, demand for some products may outstrip supplies, thus creating bottlenecks and putting upward pressure on prices. Since it takes time to construct and to complete new capital projects, a significant advance in the level of real investment may be needed this year if production bottlenecks are to be avoided in late 1978 and beyond.

## **Some measures of weakness**

In the 1973-75 recession the decline in real capital spending, as well as the decline in the economy as a whole, was the steepest since before World War II (Table 1). The decline was also longer than usual. In four of the five previous recessions, the low in real capital spending—nonresidential fixed investment—coincided with the low in the economy as a whole. In the latest cycle, however, the low in capital spending came two quarters after the economy had begun to improve.

Real capital spending finally did advance beginning with the fourth quarter of 1975, but not vigorously. The annual rate of growth in the five quarters following the third quarter of 1975 was 5.6 percent, about equal to that in the first five quarters of recovery following the 1970 recession. In contrast, in the four other recoveries between 1950 and 1970, the growth rate of capital spending in the first five quarters was considerably larger—9.0 percent or more (Table 2).

All in all, in the current expansion only 33 percent of the drop in real capital spending during the recession was recouped within five quarters of the upturn in such spending. In all previous postwar expansions, 74 percent or more of the loss had been regained within five quarters (Table 2).

The latest Department of Commerce survey of planned expenditures for plant and equipment suggests an increase of roughly 7 percent in real spending for 1977, compared with 1976. At this rate, the level of real investment will still not have surpassed its previous peak at the end of this year. It is sometimes claimed that the Commerce survey understates future expenditures when capital outlays are increasing during a recovery and that such an understatement is taking place now. But there is no clear historical evidence for this presumption.

### Determinants of capital spending

Apart from all the general uncertainties holding back capital spending, there are a number of more quantifiable reasons that help account for the lack of robustness. Certainly one such reason is the rate at which presently existing production facilities are being utilized. Although plant and equipment expenditures by manufacturing industries comprise less than half of all nonresidential fixed investment, capacity utilization in manufacturing is useful as a rough indicator of demand pressures on the economy's total capacity. It is rough in any case because the figures on capacity utilization in manufacturing are, at best, only approximations of the actual rate of utilization.

There are several different estimates of capacity utilization in manufacturing, and perhaps the most widely used is the series published by the Federal Reserve Board.<sup>1</sup> As one would expect, the Board's—and other—measures of the ratio of actual output to the capacity for output go down during recessions. The most recent decline was particularly severe; the drop, according to the Board's estimate, came to 16.9 percentage points from the previous quarterly peak, and capacity utilization hit a new postwar low of 70.9 percent during the first quarter of 1975 (Table 3). As a result, there is more excess capacity left now after eight quarters of expansion than at comparable stages of other recoveries (Table 3), even though the increase in the manufacturing utilization rate during the 1975-76 upswing has been equal to the average pace during the past five recoveries. This fact alone, however—the large amount of excess capacity—is not

<sup>1</sup> For a full description of the four most widely used measures of capacity utilization in manufacturing, and further details on the recent capacity situation, see "Measuring Capacity Utilization in Manufacturing" in the Winter 1976 issue of this *Review*

Table 1

### Declines in Real Capital Spending\*

Recessions	Declines in real capital spending (percent)	Number of quarters of decline
1948-49 .....	16.0	4
1953-54 .....	3.9	3
1957-58 .....	14.8	4
1960-61 .....	4.5	3
1970 .....	8.0	5
1973-75 .....	17.5	6

\* Capital spending is nonresidential fixed investment. The declines are measured from the peaks to the troughs of capital spending itself

Source: Calculated from Department of Commerce data

Table 2

### Recoveries in Real Capital Spending\*

Recoveries	Annual percentage rate of growth during first five quarters	Percentage of decline regained within first five quarters
1949-50 .....	15.0	100
1954-55 .....	11.9	over 100
1958-59 .....	10.1	74
1961-62 .....	9.0	over 100
1970-71 .....	5.5	79
1975-76 .....	5.6	33

\* Capital spending is nonresidential fixed investment. The gains are measured from the troughs of capital spending itself.

Source: Calculated from Department of Commerce data

Table 3

### Cyclical Comparisons of Capacity Utilization in Manufacturing<sup>†</sup>

In percent

Recession	Quarterly level at trough*	Quarterly level after eight quarters of expansion*
1948-49 .....	72.4	83.5
1953-54 .....	79.1	86.5
1957-58 .....	72.4	81.3
1960-61 .....	73.8	82.3
1970 .....	76.3	85.8
1973-75 .....	70.9	80.2

\* The troughs referred to in the first column are those of capacity utilization in manufacturing. The quarterly levels in the second column are those for the eighth quarter after a trough in the economy as a whole

† Estimated

Source: Board of Governors of the Federal Reserve System.

enough<sup>2</sup> to explain the sluggishness of capital spending last year. In previous recoveries, when utilization reached about 79 percent, real capital spending rose by annual rates of 8.5 percent to 12.5 percent in the next three quarters. In the first quarter of 1976 the utilization rate stood at 79 percent of capacity, yet in the next three quarters capital spending rose at an annual rate of only 6.3 percent. The more modest increase in spending in the present recovery confirms that excess capacity only partially accounts for the lack of dynamism in capital spending.

A substantial recovery of corporate profits would normally be expected to facilitate capital spending. Profits, of course, fell precipitously in the recent recession. The domestically earned aftertax profits of nonfinancial corporations plummeted 73 percent. They went from a seasonally adjusted annual rate of \$36.3 billion in the third quarter of 1973 to \$9.6 billion in the third quarter of 1974. (Profits, as used here, are corrected for the higher replacement costs of inventory and of plant and equipment.<sup>2</sup>) Profits began climbing thereafter. They came to \$42 billion for all of 1976, about equal to the profit highs of 1966. However, since corporate output is a good deal larger than a decade ago, profit margins, by any measure, are substantially lower now than in the mid-1960's.

#### **A look at cash flow**

Businessmen, of course, don't only look at the size of their profits when they plan investment spending. They also look at their internal cash flow, *i.e.*, their retained earnings plus their set-asides for depreciation (or capital consumption). Capital spending has been modest when measured against this figure, quite possibly because of the changed attitude of businessmen to the state of corporate balance sheets. During the last recession, corporations suffered from a severe liquidity squeeze. Consequently, they took steps to strengthen their financial positions by paying off bank loans and by floating more bonds. As a result, corporate balance sheets have improved considerably, laying the groundwork for a faster growth of capital spending.

<sup>2</sup> These aftertax profits include inventory valuation and capital consumption adjustments. The inventory valuation adjustment is the difference between the original cost of inventory and the cost of replacing it. When replacement cost is greater than original cost, as it has been for a number of years, this adjustment lowers profits. If replacement costs should be declining, this adjustment would raise profits. The same effects apply to the capital consumption adjustment, which converts the depreciation based on tax returns to a measure reflecting uniform depreciation formulas as well as the present cost of replacement.

Another significant factor that also determines how much businessmen are willing to spend for more capacity is the movement of the prices of plant and equipment relative to the prices of the products those same capital goods produce. Each company has the data to make such a comparison for itself and thus can ascertain whether additional capacity would produce sufficient earnings. In fact, some have emphasized that the increase in capital replacement costs has been relatively so rapid as to become a major impediment to capital spending. For business as a whole, there is no measure of this relationship, but there is a proxy: how the index of capital goods prices moves in relation to the price of corporate output.<sup>3</sup>

#### **The problem of prices**

From 1958 through 1974 the price of capital goods rose only a little faster than the advance in the price of corporate output. In 1975, however, the gap between the rate of increase in the prices of capital goods and those of final products widened substantially and was twice as large as in any of the preceding sixteen years. This widening indicates a further significant decrease in the expected rate of return on new investment. In 1976, the prices of capital goods and of their products rose about equally.

Of course, there are other factors related to the cost of new plant and equipment apart from the prices of the goods themselves. Clearly, the energy costs associated with operating both old and new equipment have risen greatly. At the same time, expenditures for antipollution equipment, while helping to improve the quality of life, have significantly increased the effective costs of capital goods.

The factors explored here—the business climate and inflation, excess capacity, new caution about balance sheets, the flow of profits and retained earnings, and the uncertainty about whether future product prices will justify the present costs of installing new capacity—do much to explain why capital spending has come along rather slowly. As these factors become more conducive to higher capital spending, and some of them, such as profits and capacity utilization rates, have already begun to do so, capital spending should begin to gather momentum.

<sup>3</sup> The price of corporate output referred to here is the implicit price deflator for the gross domestic product of nonfinancial corporations, the index of capital goods prices used is the implicit price deflator for business fixed investment. Both deflators are drawn from the national income accounts.

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