

Business insights

Capital spending in broad uptrend

Consumer spending on autos and other durables and residential construction have led the expansion that began in the spring of 1975. Business investments in inventories and capital goods have also increased, but not at a pace that compares with the boom of 1973-74.

Business profits and funds from depreciation have risen substantially in the past two years, balance sheet liquidity has improved, and credit has been generally available, both long and short term. Such conditions might be expected to foster a more rapid rise in capital spending. However, most industries have margins of unused capacity, and general expansion of productive facilities is not, therefore, a pressing need. Moreover, confidence of many business executives in future growth and prosperity has not been fully reestablished. This attitude is reflected in, and is reinforced by, the feeble performance of the stock market in the spring and summer. Business leaders are increasingly concerned with inflation, energy resources, government regulations, and foreign competition.

Further gains in capital spending are probable in 1978 if the general economy continues to expand as most forecasters expect. Strength in this sector is of vital importance to the Seventh District states of Illinois, Indiana, Iowa, Michigan, and Wisconsin, which manufacture about one-third of the nation's producer equipment.

Second year of revival

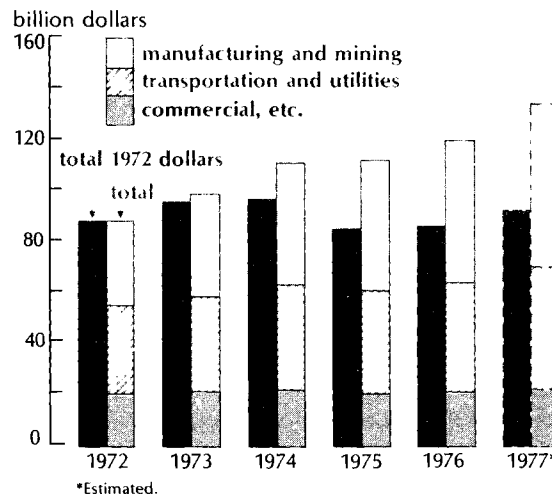
Each quarter the Bureau of Economic Analysis surveys business firms on their plans for outlays on new plant and equipment. Its September estimates of total capital spending have proved to be quite accurate in recent

years. The survey includes plant and equipment to be located in the United States. It excludes outlays by farmers, foreign investments by U.S. firms, and domestic outlays charged to current expense.

In 1977 plant and equipment spending is expected to total \$136 billion, up 13 percent in current dollars and perhaps 8 percent in real terms after adjustment for inflation. Last year capital spending rose about 2 percent in real terms, following a decline of about 15 percent in 1975. After adjustment for inflation, capital spending this year probably will not regain the all-time peak reached in 1973-74.

Virtually all industry groups are participating in the expansion of capital spending. Exceptions are the steel companies, who expect a small decline, and operators of ocean vessels, whose outlays will drop sharply.

Gains in capital spending partly reflect inflation



Various steel companies have recently announced curtailments in previously announced capital spending programs for 1977 and future years. Demand for steel has failed to match forecasts, and imports have captured a larger share of the domestic market. In the case of merchant shipping, the world tanker fleet, which represents the lion's share of all shipping, is believed to be operating at less than 75 percent of capacity.

The motor vehicle industry plans a 50 percent boost in capital spending to \$3.7 billion this year, the largest proportional rise for any group. Much of this total represents retooling to produce the smaller, more efficient cars mandated by the government. In addition, capacity to produce trucks has been strained and is being enlarged. The airlines expect to increase spending 34 percent, mainly for more efficient models of aircraft, following four years of declining outlays. Electric utilities, always the largest category in total outlays, expect to invest \$22 billion, up 16 percent. Other large gains, 15 percent or more, are seen for the oil, machinery, rubber, telephone, and gas utility industries.

Investment and GNP

In addition to the data on new plant and equipment expenditures, the Bureau of Economic Analysis prepares a broader measure of business investment, "Non-residential Fixed Investment" (NRFI), which is a component of the gross national product (GNP). This measure includes the farm sector and outlays by the nonfarm sector that are not capitalized, but excludes investments abroad as does the survey of plant and equipment spending. The total is broken down by structures and equipment.

NRFI totaled \$162 billion in 1976 and may exceed \$185 billion this year. It will probably account for 9.8 percent of GNP. This proportion is up from 9.5 percent last year, but well below the 10.7 percent level reached in 1974, and a modern peak of 10.8 percent established in 1966. In the 10-year span 1965-74, the ratio was 10 percent or more each year except 1971, when the economy was in the first year

of recovery from a recession. It averaged somewhat below 9.5 percent in the late 1950s and early 1960s, but then, as in the recent period, there were widespread complaints that the economy was operating below its potential.

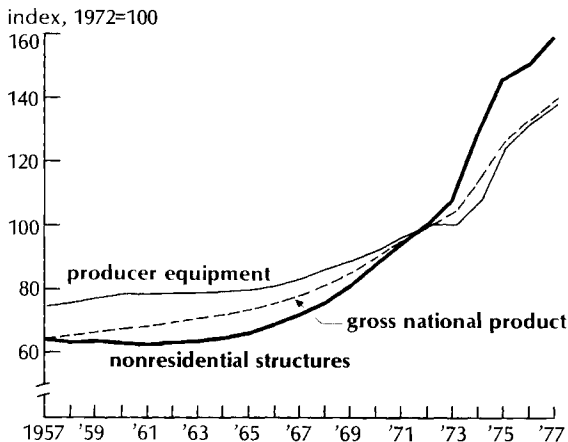
Those who argue that capital spending is lagging desirable levels point to the rapid rise in costs of new construction and prices of some types of equipment in recent years. Also, a large share of outlays in recent years has been made to reduce air and water pollution, to improve health and safety, to conform to more restrictive regulations relating to the use of undeveloped land, and to economize in the use of energy. All of these purposes are characterized as "unproductive," no matter how desirable they may be from a social standpoint. In the aggregate they may account for 9 or 10 percent of all capital spending.

Inflation and capital spending

In the past 10 years the general price level, measured by the GNP deflator, rose 79 percent. During the same period average prices of equipment rose 65 percent, somewhat less than the average for all prices. Construction costs, however, increased 122 percent! From 1957 to 1967 the picture was quite different. Then the general price level increased 22 percent, while prices of both equipment and construction rose only 12 percent. Relative "bargains" in capital investment purchases doubtless encouraged the long capital spending boom that began in 1965.

An accelerated rise in construction costs was noticeable in the late 1960s, and increases in the double-digit range prevailed in 1974 and 1975. Wage and benefit increases negotiated by the construction trade unions in this period far exceeded the increases obtained in other industries. Prices of materials and costs of land development also surged. Delays were caused frequently by regulatory requirements. Heavy interest charges were incurred during construction. All of these factors contributed to substantial cost overruns

Construction cost increases have outstripped other prices



on many projects. Fixed price contracts frequently had to be renegotiated. More and more contractors protected themselves with escalator clauses.

Rising construction costs and other uncertainties have made boards of directors more reluctant to appropriate funds for large construction projects that take years to complete. Major "grass roots" expansions may take three, four, or more years.

Since 1975 the rise in construction costs has moderated. High unemployment in the construction industry has slowed the rise in worker compensation. Intense competition for available work has caused builders to bid more closely on new jobs, and many bids have been *below* estimates, in contrast to the experience of earlier years. In 1976 and 1977 the rise in construction costs has about matched the increase in the general price level. The slower rise in construction costs should encourage approval of additional structures.

Capital spending and the recovery

The second quarter of 1977 marked the ninth successive quarter of expanding business activity since the "trough" of the recession in the first quarter of 1975. Through this period the recovery in total activity measured by real GNP compared favorably with earlier expansions. The relative perfor-

mance of business fixed investment appears much less favorable.

From the first quarter of 1975 through the second quarter of 1977 real GNP rose 14 percent. This exceeds the 12 percent average rise in real GNP in four previous recoveries since the Korean War ended in 1954. In contrast, real NRFI has increased only 8 percent in the current recovery, well below the average rise of 15 percent in four previous recoveries.

The speed of an expansion may be influenced by the sharpness of the preceding recession. Nine quarters after the trough in four previous business cycles real GNP averaged 9.5 percent higher than at the peak of the previous cycle. In the second quarter of 1977, real GNP was up 7 percent from the peak of the fourth quarter of 1973, less than the four-cycle average, but not seriously so. Putting real NRFI to the same test shows a significant shortfall. In four previous cycles real NRFI averaged 9 percent above the previous cycle peak at this stage, almost as much as real GNP. However, in the second quarter of 1977 real NRFI was still 5 percent below its level at the previous cyclical peak.

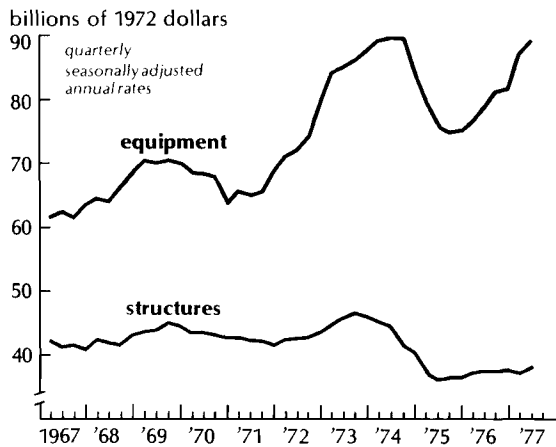
Structures vs. equipment

This year structures will account for about one-third of nonresidential fixed investment with the other two-thirds going for producer equipment. Structures had accounted for 38 percent of the total in 1970 and 1971, and as much as 40 percent in the late 1950s. When adjusted for inflation the decline in structures relative to equipment is even more striking—30 percent this year compared to a peak of 45 percent.

The smaller proportion of investment in structures partly reflects a shift toward modernization and renovation as opposed to expansion of capacity, especially in manufacturing. In the auto industry, for example, relatively little is being spent on "brick and mortar," in contrast to large outlays on metalworking machine tools and presses.

The slow pace of total nonresidential construction also reflects widespread overbuilding of office buildings, shopping

Spending on equipment in constant dollars has outperformed nonresidential construction



centers, and industrial parks in the early 1970s. Office building construction is reviving to a degree in certain large cities, including Chicago, but no new buildings of giant size (e.g., Sears Tower) are planned. Contracts for new stores and most other nonresidential groupings are still very slow.

Although equipment output in total has risen sharply and fairly steadily in the past two years, the degree of improvement has varied greatly. Among the strongest sectors are heavy trucks and trailers with output up 50 percent this year. Orders for railroad freight cars began to revive in the late spring from a depressed plateau. Farm equipment sales have been down in 1977 after a string of very good years. Smaller construction equipment associated with residential construction has done well, while demand for heavier units has lagged. A similar picture, relatively less strength in heavy units, is reported for most classes of industrial equipment. Production of equipment and instruments to regulate the use of energy and to provide fuel storage capacity have increased steadily.

In the second quarter outlays on producer equipment in real terms had virtually regained the peak rate of the second and third quarters of 1974. Probably this level was surpassed after midyear. The business equipment component of the industrial production

index, a measure of physical output, reached a new high last spring.

While equipment outlays have performed fairly well in the aggregate, non-residential construction activity in real terms has increased only moderately from the recession low. In the second quarter it was still 19 percent below the peak reached in the third quarter of 1973. Outlays on structures probably will increase further, as suggested by F.W. Dodge data on new contracts, but they probably will not approach a record level either this year or early in 1978.

EPA and OSHA

Starting in 1973 the Bureau of Economic Analysis has conducted special surveys to determine the cost of outlays made by business firms to meet environmental standards set by the Environmental Protection Agency and other agencies. Pollution abatement outlays appear to have been surprisingly stable relative to total plant and equipment spending in the past five years. These data do not reflect costs of operating the facilities, which may be substantial.

In 1977 business plans to spend \$7.5 billion to improve the quality of air and water and to treat solid waste. This would be 5.6 percent of total plant and equipment spending. The ratio was about the same in 1975 and 1976 and about a half percentage point less in 1973 and 1974. Doubtless, a large portion of this spending would have occurred without new regulatory decrees.

Six industry groups account for 80 percent of all pollution abatement outlays. The ratio to total plant and equipment spending is 11 percent for electric utilities, 10 percent for the petroleum and chemical industries, 14 percent for paper, 17 percent for nonferrous metals, and 19 percent for steel.

A McGraw-Hill survey indicates that industry will spend \$2.9 billion on employee health and safety facilities in part to comply with regulations of the Occupational Safety and Health Administration (OSHA). This would be up 21 percent from last year and would account for 2 percent of all capital

spending. Increases in OSHA-type outlays are expected to moderate in future years.

Financing available

Whatever may be hampering business capital spending, it is not a shortage of buying power. Internally generated funds have increased sharply, holdings of liquid assets are relatively ample, and substantial additional cash could be obtained by borrowing.

Business profits have a dual relationship to capital spending. First, rising profits signal that new investments may produce additional profits. Second, rising profits provide additional funds for investment, both directly through retained earnings, and, indirectly, by increasing the ability of business to obtain outside funds, both debt and equity.

Profits after taxes rose 25 percent in 1976, and are expected to be up 10 to 12 percent in 1977. Undistributed profits available for investment were up 40 percent last year, as dividends increased less rapidly than profits and rose further in 1977.

Depreciation of existing facilities is a noncash expense and, therefore, part of internally generated funds. In recent years book depreciation taken by corporations has been more than twice as large as undistributed profits. Total internally generated funds probably will exceed \$140 billion in 1977, up 10 percent from last year's record total.

Corporate security issues, at \$24 billion in the first half of 1977, were off \$4 billion from the year-ago period, which, in turn, was \$3 billion below the first half of 1975. Partly, this reflects a less receptive market for common stocks. Yields on high-grade bonds drifted down in the first half to about 8 percent, the lowest in over three years. The bond market clearly could absorb additional issues.

Most large corporations have reduced short-term debt since the recession and many have paid off long-term debt as well. Balance sheets generally show a significant improvement in liquidity. Commercial banks have

been able and willing to accommodate additional business loan demand this year.

More investment ahead

Few business analysts would welcome a return to the extreme boom conditions of 1973-74. Until late 1974, virtually every type of capital equipment was back ordered, in most cases because of shortages of components. Orders were duplicated causing delivery times to lengthen further. Excessive exuberance led inevitably to a painful reaction in 1975.

Currently, very few equipment components are in short supply, partly because capacity to produce such items as engines and controls has been expanded. Although supplies of basic materials appear ample, a surge in orders could change the picture rapidly. Expansion of major industries in the next few years is essential if the return of shortages and an even heavier dependence on foreign suppliers are to be avoided.

Capital spending would rise more rapidly if some of the regulatory barriers were modified. Large new projects planned by the mining, gas, electric, oil, and chemical industries have been delayed or canceled because of problems in obtaining required permits, a much more complicated process than in the past. Methods to accelerate resolution of these problems would help assure future supplies of energy and other goods and services.

Some analysts have argued that the general economy will stagnate or slip back into a recession unless the capital spending sector gathers new momentum. This emphasis tends to ignore the fact that a faster rise in investment usually occurs only when final demand is sufficiently vigorous to reduce unused capacity. Clearly, consumer and business spending are complementary. Hopes for stable growth and moderation of inflation must depend on a coordinated advance in both consumption and investment.

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