Capital spending—the national need

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Solutions for the nation's major economic problems—inflation, lagging productivity, competitiveness in world markets, energy stringencies, and unemployment—rely heavily on hopes for a high and rising rate of business investment in new plant and equipment. Large investment outlays are needed to expand capacity, increase productive efficiency, improve quality of existing goods and services, and introduce new products.

Unfortunately, a four-year uptrend in business investment was reversed early in 1980, and the slide appears to be continuing into the new year. Spending has continued to rise in dollars, but inflation has more than offset these gains.

Focus on the Midwest

The states of the Seventh Federal Reserve District have a special stake in developments in business investment. Illinois, Indiana, Iowa, Michigan, and Wisconsin, with 15 percent of the nation's population, manufacture about a third of its producer equipment. This region is dominant in motor vehicles, farm equipment, and construction equipment, but it is also a major supplier of machine tools, engines, mechanical and electrical components, conveyors, and equipment for the railroad, mining, oil and gas, and food processing industries. An important share of the shipments of Midwest capital goods production goes abroad and helps minimize the nation's chronic balance-of-trade deficit.

Except for trucks and farm and construction equipment, hurt by lagging demand and strikes in 1979, output of most types of capital goods continued at high levels until last spring. Since then, order backlogs of most firms have been eroding. Layoffs have occurred and hours have been cut back. Capital goods, overall, are no longer acting as a buffer to weakness in consumer goods industries prominent in the Midwest, including autos, light trucks, recreational equipment, and household appliances.

Capital spending trends

Total spending on new business structures and equipment, as measured in the gross national product (GNP) accounts, will probably exceed $290 billion in 1980. About two-thirds of this total will be for equipment, and one-third for structures. The total will be up about 6 percent from 1979, but down 3 percent to 4 percent after adjustment for inflation. Total GNP will be up almost 10 percent in 1980, but only about even after inflation. This year's decline in real investment followed a three-year period when dollar spending rose about 17 percent annually and real gains averaged about 9 percent.

Despite the lag in capital spending in 1980, the total will be about 11.2 percent of

Four-year boom in business capital spending peaked in the first quarter

billions of 1972 dollars

Federa lReserve Bank of Chicago
Business investment remains at high level relative to GNP
percent of GNP in current dollars

Petroleum companies are investing virtually all of their huge cash flow in finding, processing, refining, and distributing oil and natural gas. Because of the rapid advance of oil prices, and the uncertainty of Middle East supplies, exploration is at a fever pitch. Activity is limited by availability of engineers and other technicians, specialized equipment, and supplies such as line pipe. In no other major industry are capital spending programs proceeding with comparable urgency.

Oil outlays lead

The Department of Commerce (DOC) conducts a quarterly survey of business capital spending plans. Nonfarm businesses are asked to report expected outlays on new plant and equipment to be located in the United States that will be charged to fixed asset accounts. The survey excludes agriculture and all items charged to current account, both of which are included in the structures and equipment component of GNP. Intangibles and raw land, which are substantial in outlays of some industries, are excluded from both measures.

The capital spending survey published in December projected an increase of 9 percent in 1980. This is about the same as the rate of inflation, indicating no real gain. In March an increase of 11 percent had been expected. Apparently, the sharp dip in activity in the second quarter did not drastically affect the implementation of plans already under way.

Recent capital spending trends vary greatly in strength from industry to industry. Variations depend principally on requirements to make new products, pressures to expand capacity, opportunities to improve quality and/or efficiency, and outlays mandated by government regulations. Limitations imposed by financial capacity set ceilings on outlays in many cases.

Petroleum industry capital spending, as tabulated in the DOC survey, will total $20 billion in 1980, up 25 percent from 1979, and four times as much as in 1973, the year the Arab oil embargo was imposed. Total investment spending of the petroleum industry will approximate $40 billion in 1980, including overseas programs and domestic outlays charged to current account such as purchases of leaseholds and a large proportion of exploration expense.

Economic Perspectives
Investment must rise

Despite a sluggish pattern recently, business capital spending remains at a high level in proportion to GNP. Even assuming a further decline in real outlays in 1981, spending on structures and equipment would still approach 11 percent of GNP, which would exceed the long-term average. Nevertheless, many observers believe that a much higher level of capital spending is necessary if the economy is to grow and the nation is to improve its competitive position in world markets. The reasons are complex, but basically the problem is that a much larger share of investments nowadays goes for nonproductive purposes or merely to maintain the existing capital stock.

The most important factor eroding the investment dollar is inflation. Costs of capital goods have increased even faster than prices generally. From 1972 to 1980 the price level, as measured by the GNP deflator, rose 80 percent, while prices of structures and equipment combined rose 89 percent. The main culprit has been construction, where costs have been boosted by soaring wages and prices of materials. Costs of acquiring and developing land, moreover, have risen even faster than construction costs, because of the growing scarcity of suitable sites and restrictions on development imposed by regulation and litigation.

About 5 percent of capital outlays in recent years has been allocated to facilities to control air and water pollution. Substantial investments also have been necessary to improve safety. Outlays in factories and mines mandated by the Occupational Safety and Health Administration have been significant, but no quantification is available. Far more important have been design changes required to improve safety in nuclear power plants following the Three Mile Island accident in March 1979. As a result of new requirements, the estimated cost of completing certain plants doubled, with no change in their planned output of electric power.

A huge volume of current capital outlays is now directed toward improving energy efficiency. Such outlays relate both to the operation of building and equipment and to the nature of products. Most new aircraft being purchased by the airlines reflect a need to cut fuel costs, rather than a desire to boost capacity. In the auto industry, the great bulk of current and planned capital outlays is for the purpose of improving gas mileage on new cars and trucks.

In the extractive industries, especially gas and oil, much larger expenditures are now required to provide a given volume of product. Newly discovered deposits of minerals are usually of smaller size and contain lower grade ores. Oil and gas deposits are sought in the Arctic and in the waters of the continental shelf under adverse conditions that entail enormous expense for exploration, development, and production. To transport oil and gas from new fields, pipelines are built for long distances over difficult terrain.

By far the strongest element in the commercial construction sector in 1980 is office buildings planned for the downtown areas of large cities. Much of this space will be occupied by lawyers, accountants, publicity firms, government departments, and other groups engaging in "social overhead" activities that do not contribute directly to the production of privately consumed goods and services. Many of these activities are mandated by legislation, and, while some clearly satisfy legitimate needs, the social utility of others is open to serious question.

Finally, and perhaps most important, a growing volume of capital goods is being retired from active use each year. The total man-made capital stock may be declining, contrary to published U.S. government data showing continued growth of the capital stock. These data have not been fully adjusted to reflect the effects of rising wages, higher fuel costs, foreign competition, and population shifts, which have accelerated obsolescence and abandonments of structures and equipment. Usually these facilities stand idle until they are scrapped. This trend is most evident in the Midwest and Northeast, and
particularly in the auto, rubber, and steel industries.

**Financing problems**

Corporations obtain funds from a variety of external sources, including sales of stock and bonds, short-term borrowings, and trade credit. Historically, however, they have relied primarily on funds generated internally through retained earnings and depreciation allowances. On average, internal funds, or "cash flow," account for about two-thirds of all funds raised by corporations.

Many companies limit capital expenditures to projections of cash flow so that they will not have to raise funds in the long-term credit markets. Cash flow of nonfinancial corporations exceeded plant and equipment expenditures every year from 1961 to 1967 and by 10 percent for the entire period. Since 1967, cash flow has averaged 12 percent less than capital spending. Last year it was 19 percent less, and in the first nine months of 1980 the shortfall was 25 percent. (These aggregative comparisons are necessarily rough, because cash flow and capital spending do not always mesh industry by industry or company by company.) Despite a huge level of cash flow by historical standards, therefore, corporations have had to rely more and more heavily on outside sources of funds for capital spending and other purposes. Record high interest rates and low market values for stocks of major companies have aggravated the problem.

In the first nine months of 1980, corporations raised funds in the credit markets at an annual rate of $97 billion, down from a record $114 billion in all of 1979. Corporate bond sales in the first half of 1980 were up about 50 percent from last year, but the rate of new issues slowed in the late spring and summer as financial managers deferred scheduled bond issues because of unfavorable market conditions. Bank loans, which had dropped sharply in the second quarter, surged back after midyear, mainly because of the drop in bond financing.

Clearly, financial stringencies are placing a lid on business capital spending. Earnings in most industries have been depressed by economic conditions. In the credit markets, federal, state, and local governments and the residential construction industry have competed for funds. Financial limitations would be even more severe in 1980 were it not for reduced needs for funds to carry inventories and receivables.

**Raising the ante**

In 1980, unlike 1974-75, there have been relatively few cancellations of orders already placed for equipment. There is little evidence, moreover, that established spending programs have been shelved or curtailed. However, corporate managements have become increasingly cautious in approving new programs essential to maintaining a high level of investment in future years. In the recent election campaign, leaders of both political parties expressed their desire to bolster investment to improve productivity, meet foreign competition, and moderate energy stringencies.

In its coming session, the Congress will consider measures to stimulate business investment. Pressures are building to modify legislation and regulations that prevent or delay construction of new facilities and development of new mineral sources. Support is growing for changes in depreciation rules to permit faster write-offs in the direction of the "10-5-3" rule—10 years for buildings, five for equipment, and three for vehicles. Reductions in tax rates for both corporations and individuals are urged to provide additional funds for investment.

Changes in tax rates and depreciation rules doubtless would increase the pool of funds available for business investment. But money is only part of the problem. Major capital spending programs pay off only after a period of 10 years or more. Decisions taken today depend on confidence in a prosperous general economy and a suitable political and social environment for many years to come.