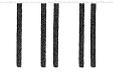


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R&D Expenditures Growing at Lowest Rate Since 1977

The expected 1987 national R&D expenditure of \$125 billion constitutes an increase of 6.5 percent over that of 1986 and is more than three times the current-dollar expenditure of 1977. Measured in constant 1982 dollars, however, this represents a 3 percent increase, the lowest rate of growth after adjustment for inflation since 1977. This is primarily a result of a slowing in the annual rate of increase in R&D expenditures by industry. The nation increased its R&D expenditures at an annual average rate of 4.2 percent from 1976 to 1982. Since 1982, this rate has accelerated to 5.8 percent. The ratio of R&D expenditures to the GNP should remain at the 1986 level, 2.8 percent, the highest level since 1967.

The federal government is expected to be the

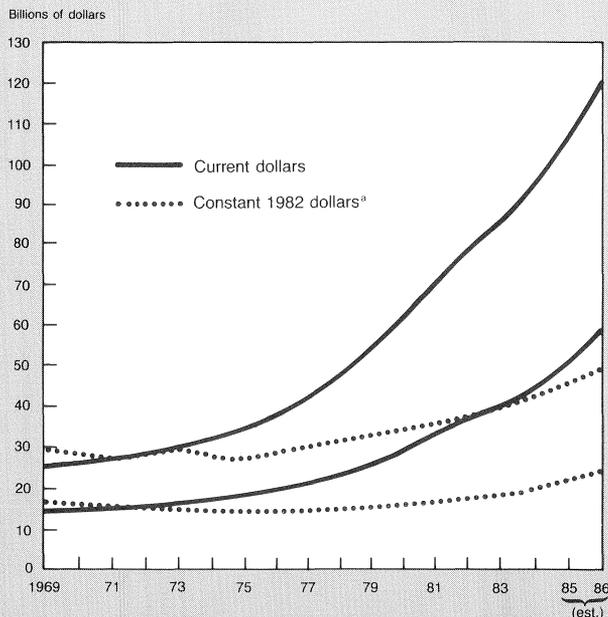
source of 48 percent of the national R&D expenditure total in 1987, the highest level of federal support since 1979. Expected 1987 federal R&D spending of more than \$60 billion will exceed the estimated 1986 level by 8 percent, or 5 percent in constant dollars. Primarily because of increases in defense-related expenditures, federal R&D outlays have grown at an average annual constant-dollar rate of 7 percent since 1982, as compared to just over 2 percent during the 1976-82 period.

Nonfederal R&D support is expected to reach almost \$65 billion in 1987, an increase of 5 percent over the 1986 level. This amount continues a trend over the 1982-87 period during which annual increases in federal R&D expenditures exceeded annual increases in non-

federal R&D expenditures in all but one year, both in current and in constant dollars. Industry, the source for about 94 percent of non-federal R&D expenditures, is expected to increase its R&D outlays by just over 5 percent in 1987. This increase is considerably smaller than both the average annual industrial rate of increase of 8.6 percent since 1982, and the 6.7 percent increase in 1985-86.

Of the total \$125 billion national R&D outlay in 1987, it is expected that \$15 billion will be spent for basic research, \$27 billion for applied research, and \$83 billion for development. These expenditures represent increases over 1986 levels of 6.5 percent for each stage of the R&D process, or 3 percent in constant-dollar terms.

Expenditures



Percent change from previous year
(Constant 1982 dollars)

