R&D Lobby Anxiously Awaits Budget Action

The science and academic communities ponder austerity, as Congress struggles to rein in rising interest payments

FEDERAL support for research has been strong for the past 5 years, especially for basic science. And in spite of its drive to cut annual budget deficits, the Reagan Administration is proposing healthy spending increases for the National Science Foundation and other key federal research programs in 1987. But brutal budgetary winds that threaten to flatten many other federal programs, also will challenge Congress's penchant for protecting and nurturing science and technology.

For weeks, tension has been growing in segments of the science and academic communities as they have sought to cope with the first round of budget cuts—some 4.3 to 5 percent in FY 1986. Under the Gramm-Rudman-Hollings law, which seeks to lower annual budget deficits to zero by 1991, future spending reductions will be deeper. Academic research and technology development programs that can not draw on defense funds already are being squeezed by rising defense expenditures and interest costs on the national debt. Even if the Supreme Court sustains the Court of Appeals 7 February ruling knocking down the law's provision for making automatic spending cuts, the pressure to reduce future deficits will not go away.

"There is no light at the end of that tunnel, Gramm-Rudman or not," says Roland Schmitt, chairman of the National Science Board and senior vice president for R&D at General Electric Company. He sees a period of austerity lasting through the decade. And while Congress previously has supported science and academia in tight times, the current budget crisis is perceived as being more serious. Says William H. Gray III (D–PA), chairman of the House Budget Committee, "science and technology are going to take their cuts along with everybody else." Proposed new starts, such as the President's vaunted space plane, he says, will be scrutinized closely.

Affected by the soaring defense expenditures and mounting interest charges, which are eroding the amount of money available for so-called nondefense discretionary spending, are a host of federal programs besides science and technology. Entitlements such as Social Security, Medicare, farm subsidies, and federal pensions are largely sheltered. "The major problem posed by deficit spending is not the deficit per se," says Barry Bluestone, an economics professor at Boston College. "It is the growing interest payments on the accumulated debt that now absorbs such a high proportion of present and future tax revenues."

At the end of 1980 the national debt stood at $908.7 billion, but by the fifth year of the Reagan Administration it had climbed to $1.82 trillion. This run-up in deficit spending, along with a period of high interest rates, has pushed interest payments from $52.5 billion, or 10.1 percent of revenues, to $143 billion, or 17.7 percent of revenues in 1985. The Administration predicts that interest charges on the debt will peak in 1987 at $149.9 billion and fall thereafter.

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This assumes, however, that the Gramm-Rudman deficit-reduction schedule is met. And it also hinges on: the economy growing at a rate of 4 percent after inflation, hefty growth in federal revenues, interest rates falling below 7 percent in 1986, and low inflation that will allow interest rates to decline to 4.3 percent by 1991. Even then, the national debt will rise by $1.16 trillion to $2.98 trillion by 1991. But interest payments on the debt, as a share of federal revenues, would shrink to 10.2 percent under the Adminstration's plan.

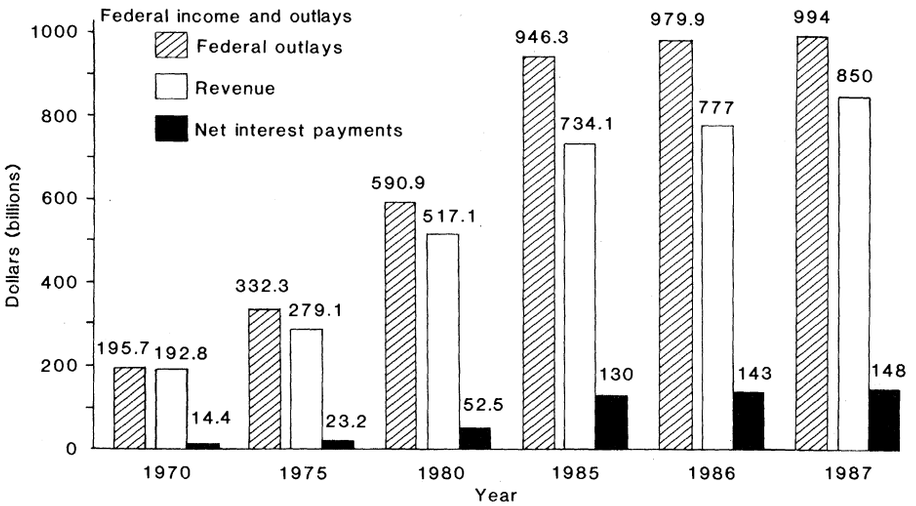
Few economists though believe that economic performance can be forecast with great accuracy over time. The Administration in its budget proposal sketches the implications of erring. For every 1 percent hike in interest rates, the Office of Management and Budget estimates interest payments on the debt would rise by $4.8 billion. A 1 percent drop in gross national product would drop receipts in FY 1987 by $6.2 billion. In subsequent years, Office of Management and Budget documents reveal that changes in GNP and interest rates would impose much steeper penalties.

In fact, the President's budget projections already are in doubt. Data Resource Inc. of Lexington, MA, an economic consulting service, sees interest costs continuing to climb at least through 1988, when they will exceed $150 billion. This occurs in part, says Roger E. Brenner, DRI's chief economist, because the Administration's revenue projections fall short and the 1987 deficit exceeds the $144-billion Gramm-Rudman target by $21 billion. The House and Senate budget committees also say expenditures for defense and revenue estimates are flawed.

Members of Congress, recognizing the potential effect an upward swing in interest rates could have on future interest payments, are serious about curtailing deficits. Says Manuel Lujan, Jr. (R–NM), ranking minority member of the House Science and Technology Committee, "Taking 20 percent of your total income and paying it out for interest is wrong." Indeed, the burden of encroaching debt service falls hardest on nondefense discretionary spending. Representing 12 percent of the budget in 1987, this funding pool supports a broad spectrum of federal activities, including: the functions of the Securities and Exchange Commission, Occupational Health and Safety Administration, and the Federal Aviation Administration; management of vast federal natural resources; Amtrak and public transportation assistance; and education.

This is the same spending category—totaling some $120 billion in FY 1987—that funds scientific research. Competition for funds will be fierce and it is possible that Congress will allow some programs to be eliminated. In fact, GE's Schmitt concedes that increases in spending for basic research in many instances must come from the budgets of technology development programs.

President Reagan has proposed a $994 billion budget that meets the prescribed deficit of $144 billion. Defense outlays account for 28 percent of spending—rising from $265.8 billion this year to $284.9 billion in FY 1987, an increase of 9.3 percent. The Gramm-Rudman benchmark is met by taking savings chiefly from nondefense programs, eliminating cost-of-living allowances on federal pensions, and disposing of $6.8 billion in assorted federal physi-



cal assets such as electric generating systems and the Naval Petroleum Reserve.

The Congress is certain to reject much of the President's budget. Still, hammering out an alternative package will be difficult, partly because the Administration's expenditures for defense may be understated by as much as $15 billion, according to the House Budget Committee. Revenue estimates also may be overstated. The net result is that deeper cuts in defense expenditures and/or other federal programs will be needed, if Congress chooses to meet the 1987 target under Gramm-Rudman.

At this point, segments of the science and academic communities are coming to recognize that there may be no painless way to reduce the deficit—with or without Gramm-Rudman. In fact, Robert M. Rosenzweig, president of the Association of American Universities, says that the scramble for funds will deepen divisions within the scientific and academic arenas. "I think there is a conflict looming," he says, noting that reductions proposed for the life sciences and technology development will not be easily swallowed.

"There are scientists who think they will just brush these other guys away," observes Rosenzweig, who expects big science and NSF will find they have a fight on their hands. Biomedical research is slated to be chopped $245 million to $4.94 billion and then frozen in future years. Similarly, funding for acquired immune deficiency syndrome (AIDS) research would be held at $213 million; student aid would be slashed $2.5 billion to $4.9 billion by 1991; and universities' administrative overhead charges on research grants would be capped at 20 percent.

Not only will these reductions be opposed, but funding levels for core science programs are likely to be contested as being excessive. Says Philip W. Hamilton, a lobbyist for the American Society of Mechanical Engineers, about the prospect of NSF's budget passing as proposed: "That will be difficult to get through Congress. I have been wagering that a freeze is just about the best you can expect." In stark contrast to the 8.6 percent hike in NSF's $1.46-billion 1986 budget, fossil fuel and nuclear power research and development budgets are being slashed almost $400 million.

"The gutting of the advanced reactor program is inappropriate even in this budget crisis," says Thomas J. Price, vice president of the American Nuclear Energy Council. "The R&D program has been disproportionately cut (from $129 million to $50 million) compared to other energy research programs," he says, noting that the industry will fight such a reduction.

The competing needs of science will be debated on 26 and 27 February at a National Academy of Sciences symposium. Involving a cross section of 300 members of science, academia, and industry, the aim is twofold: to develop a strategy for maintaining research programs and to assess the budget outlook for science in the next few years. Just what the gathering will achieve is uncertain, but the purpose is clear, says Schmitt, who will participate in the proceedings. "What we are saying is that it is in the interest of the U.S. to have a very strong underpinning of academic research." In the near term, he says, the scientific and academic communities must lower their expectations. Programs will have to be stretched out, some projects delayed, and still others dropped.

While applauding efforts to bring rising interest payments under control, lobbyists for academia and science are sure to challenge the Administration's zero deficit strategy and timetable. "To us this kind of approach to budgeting is appalling," says Robert L. Clodius, executive director of the National Association of State Universities and Land Grant Colleges. Seeking to reduce the deficits to zero in 5 years "makes no god damn sense," he says, noting that it will inflict unnecessary damage on science and academic programs.

Economists testifying before the Joint Economic Committee in mid-January generally supported Clodius's contention that Gramm-Rudman goes too far. John H. Makin, director of fiscal policy studies with the American Enterprise Institute, favors "an intermediate path" for reducing the annual deficit, one that lowers it to $90 billion by 1991. Makin believes that government deficits since 1981 have been "extraordinarily large by historical standards"—running at about 5.5 percent of GNP. Annual deficits, he says, ought to be reduced to about 2 percent of GNP. To cut deeper during this time frame, Makin cautions, risks doing damage to economic performance, thereby lessening federal tax receipts.

"A budget balanced by current federal rules of accounting is an invitation to the worst economic downturn in half a century," observes Robert Eisner, professor of economics at Northwestern University at Evanston, IL. Continued deficits of this magnitude could spur inflation, says Eisner. But as Makin and Bluestone suggest, he thinks annual deficits should be reduced moderately. Noting that deficits are a tool to stimulate the economy, he says, the issue has become a forum for "scoring political points." Congress must revise the way it measures deficits, says Eisner, to account for inflation.

Ultimately, how well the science and academic communities fare in the next few years will hinge on Congress's approach to the deficit. Besides taking a slower path, the funding squeeze on segments of the community could be dampened by new tax measures. Although the White House is generally opposed to new taxes, Senators Pete Domenici (R–NM), chairman of the Budget Committee, and Bob Packwood (R–OR), chairman of the Senate Finance Committee, contend that additional revenues are needed. Both chairmen and other Senate members are pursuing gasoline taxes and an oil import fee as new revenue raisers.

With oil prices currently plunging, imposition of a combination import fee and gas tax, says DRI's Brenner, would be perhaps the least intrusive revenue measure. An import fee alone could raise $12 billion to $20 billion, says Ray Bragg, executive director of the American Independent Refiners Association. Couched in terms of an energy policy and/or trade action meant to protect faltering domestic producers and to sustain domestic exploration, Senate GOP members believe the White House could find the notion palatable. ■ MARK CRAWFORD