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Uneven Effects of Cuts in Science Funding

During the current fiscal year, federal support of academic science will be at a level a few percent below that of the preceding year. On the surface, it might appear that such a reduction could be accomplished with merely some "belt-tightening." However, the cut is greater than it seems because inflation and increasing costs have made the conduct of research more costly. In practice, the effects of cuts have been uneven, and considerable hardship has been experienced.

Among universities, two types have been particularly affected—the top private institutions and those that were striving hard to move toward excellence. Less affected have been some universities that derived part of their support from the state or from industrial sources. Other universities that never tried very hard to obtain federal funds had little to lose or to worry about.

The full extent of damage to top private institutions is difficult to assess. During 1967 and, especially, 1968, many of them incurred deficits. Having long enjoyed excellence, they had been among the first to attract substantial federal support and had become accustomed to it. Some had derived more than 80 percent of their funds from Washington. They had made financial commitments for supporting functions, such as computers and shops, on the basis of an expectation of continued support. However, Congress seems determined to distribute fewer dollars more widely. If this policy continues, a major consequence must be the destruction of much of the excellence that had been built up in major private institutions.

One of the objectives voiced by some congressmen was to spread excellence across the land. The National Science Foundation grants designed to facilitate this development stimulated healthy soul-searching and imaginative programs, both among successful institutional applicants and others. The momentum lost as a consequence of the budget cuts will not be easily recovered.

Within the universities the departments hardest hit have been those in the physical sciences. The space program has been pruned severely. The Department of Defense has cut sharply its support of academic physical science. The National Science Foundation was expected to take over responsibility for fields abandoned by NASA and the Defense Department, but NSF suffered the biggest cut of any major agency. As a result, large segments of physics departments at leading universities were suddenly without federal support. The current cutbacks in physics have been superimposed on earlier contraction. In February 1968, the American Institute of Physics reported that as many as 16 percent of qualified academic physicists had lost all federal support.

Another casualty of the budget cuts is support for chemistry. For many years, federal funding of this science has lagged. Following issuance of the Westheimer report in 1965, only modest progress was made before NSF came under budgetary pressure. For instance, to ease a serious deficiency in equipment at chemistry departments, this year's budget called for a miserly $3.7 million for equipment grants. No final figure has been named, but it will probably be much below the budgeted amount.

One cost of the overall cutbacks that is real but not readily measurable is loss of confidence on the part of many scientists in the wisdom and integrity of the government. When agencies are forced to renege on moral commitments, who can fully trust them thereafter?

—PHILIP H. ABELSON