the Budget of the U.S. Government • 1974

The President's first peacetime budget is significant not only for the stamp it sets on priorities in the next fiscal year, but also as a guide to the general shape of spending in his second term. The message seems to be that many domestic programs will be cut, but science, with some qualifications, is to continue at steady state. The overall picture for federal investment in research and development is one of standstill, with a few new ventures made at the expense of fairly careful cuts in existing projects. The cost-cutters in the President's Office of Management and Budget (OMB) have gone over the science budget with a scalpel, not a hatchet.

Technology reached its apotheosis with the Apollo program, its nadir, some say, in Vietnam. Both adventures are now over, but the new budget unveiled last week seems to contain no backlash against either technology or pure science. Within the general standstill of science spending there is an evident, but limited, trend toward the focusing of research on specific objectives such as cancer and heart research and the prevention of natural disasters. What is notable is that basic research seems to have remained more or less inviolate, at least as judged by gross figures in the budgets of the leading science agencies. The National Science Foundation (NSF) will spend 5 percent more on research grants. The Atomic Energy Commission (AEC) supports physical and biomedical research at the same rate as before. And the National Institutes of Health appear to have more money available for research grants in fiscal 1974, although less for training and fellowships.

Conduct of research and development (in millions of dollars).

Department or agency	Expenditures		
	1972 actual	1973 estimate	1974 estimate
Defense—military functions	8,117	7,873	8,333
National Aeronautics and Space Administration	3,373	3,008	3,066
Health, Education, and Welfare	1,513	1,670	1,873
Atomic Energy Commission	1,298	1,359	1,411
National Science Foundation	418	423	446
Transportation	274	290	359
Agriculture	349	360	343
Interior	210	262	255
Commerce	165	179	187
Environmental Protection Agency	133	146	164
Veterans Administration	66	71	75
Housing and Urban Development	47	43	61
Justice	13	30	46
All other	127	173	171
Total, conduct of research and development	16,103	15,886	16,790
Total, conduct of research	6,169	6,300	6,555
Total conduct of development	9,934	9,586	10,235

The "News and Comment" section this week is given over to an analysis of the budget as it affects science. Unlike other political statements, the budget message lays out the measures the President intends to support with hard cash as well as lip service. At the same time, the budget writers are not given to making things appear worse than they really are, and it is frequently hard to be sure just what is meant by a particular category of funds. The budget is explained in a set of four documents (the chief of which is known in the OMB as the "novel-sized" budget), but none defines exactly what is meant by research and development. The following articles attempt to sketch out the implications of the budget message for health, energy, defense, and the principal agencies responsible for federal support of science.

The President's budget is subject to change both by Congress and second thoughts in the OMB. Some of the programs slated for extinction have strong support in Congress or from constituencies outside government. And what the President seems now to be giving with one hand he may later take away by having the OMB impound the funds that Congress has appropriated, as has happened to the NSF's technology incentives program (see the article on page 548). But the general outline of the science budget is unlikely to change much, despite the departure from the White House of the Office of Science and Technology.

The federal budget for fiscal 1974 (which runs from July 1973 to June 1974) totals $268.7 billion, of which 6.25 percent is earmarked for R & D. In terms of obligations, the budget's $17.4 billion for R & D breaks down into $9.4 billion for military R & D, $2.5 billion for space research, and $5.5 billion for civilian R & D. Civilian R & D is up $0.3 billion over the current year. But scientists may feel the draught from the budgeteers' heavy retrenchment in categorical programs, particularly in the areas of health and education).

That civilian R & D would escape the budget makers' knives is something that few would have predicted prior to last week. Science lies in the small category of budget items which are "controllable," or not already committed. The $12.7 billion deficit expected for 1974 and the President's determination to control inflation and avoid a tax increase all pointed toward a savage slash in all of the controllables. As it turns out, the cutbacks in science-based activities amount to less than 4 percent of the $17 billion the OMB hacked away from federal programs, even though civilian science represented a considerably greater fraction of the controllable expenditures. Science may not have done well but it could have done far worse.

—NICHOLAS WADE