

US budget

Winners and losers worry about Gramm–Rudman

Washington

CLEAR signs emerged last week that the US Congress may be unwilling to support some of the increases in research funds proposed in President Reagan's budget for the next financial year, beginning in October. Faced with strong political pressure to reduce the federal budget deficit, the Appropriations Committee of the House of Representatives recommended providing the National Science Foundation (NSF) with \$136 million less than the \$1,686 million sought by the President, giving only a slight real increase over this year's level. A small cut of \$44 million from the President's request was also proposed for the National Aeronautics and Space Administration (NASA).

The still uncertain effect of last year's Gramm–Rudman deficit control act makes prediction of agencies' budgets difficult. But academic and scientific bodies did not hide their dismay last week that Congress had failed to support the 8 per cent increase sought by the President for NSF, the main federal source of support for non-military basic research. Jack Crowley of the Association of American Universities was disappointed that a key committee of Congress saw increased support for basic research as "an expendable priority". Others pointed out, however, that the committee had in the same legislation approved significant reductions for other agencies and that it had gone as far as it could to protect NSF.

The National Institutes of Health (NIH) are, however, another story. The House of Representatives excelled even its own customary generosity to NIH by voting to provide \$6,153 million for the institutes, \$1,073 million more than the President's budget request and \$893 million more than the 1986 figure. The House specifically noted that it wanted to see 6,200 new extramural research grants next fiscal year, about 700 more than the administration wanted. While the Senate might temper the House's enthusiasm, there seems little doubt that Congress's strong support for NIH is unchanged from previous years.

During the House debate that preceded the vote, much was made of the growing death toll due to AIDS (acquired immune deficiency syndrome), and \$336 million was voted for efforts to combat the disease, \$133 million more than the President had requested.

Other appropriations bills on which the House has taken action include a bill providing funds for the Department of

Energy. Here the House has also followed the pattern of previous years by voting to restore some of the large cuts proposed by the President in solar power and magnetic fusion research. But at the same time it cut \$536 million from the \$8,330 million budget request for the department's defence programmes, to take account of limits placed by Congress on growth of the Strategic Defense Initiative.

The House has, however, alarmed academic groups by allowing to pass in the same bill \$69.7 million for research and construction projects at eight named institutions that have not been through the usual process of authorization by Congress and have not been subject to peer review. Most scientific and academic bodies are opposed to Congress's growing tendency to provide funds for specific unreviewed construction projects from research budgets. But Congress seems in no mood to compromise. An amendment to delete funds for the unreviewed projects was defeated by 315 to 106. The Senate has yet to consider the matter, but recently defeated a move to delete funds in a Department of Defense emergency money bill for unreviewed projects at nine universities (see *Nature* 322, 4; 1986).

Most of the appropriations now at various stages of approval in the House have not reached the Senate. But the exact amounts specified by both houses could become largely irrelevant if, as some expect, a legislative formula is found to allow automatic cuts to be made to agencies' budgets to make them comply with the \$144,000 million budget deficit target specified by Gramm–Rudman.

Although the mechanism specified in Gramm–Rudman for making the automatic cuts was ruled unconstitutional by the Supreme Court in July, efforts are under way to modify it. The court's objection was over the pivotal role played by the General Accounting Office in determining the size of the cuts: one proposal now under consideration would meet that difficulty by substituting the executive branch's Office of Management and Budget.

A preliminary estimate of the likely budget deficit next year will be made on 15 August and, if the target is exceeded by more than \$10,000 million, the necessary across-the-board cuts would then be calculated. If Congress has not by then completed appropriations for the next fiscal year, the 1986 levels will be used in the calculation, a prospect particularly alarming for agencies such as NSF that had been

in line for large increases. Even if the automatic cuts are not made, however, there will be strong pressure on Congress to meet the targets in the Gramm–Rudman law.

Many congressional staff now consider it inevitable that the cuts will be triggered: slow economic growth has reduced expected revenues and a deficit of around \$220,000 million seems likely, if Congress sticks to the budget guidelines agreed earlier. The cuts would probably be much bigger than the 4.3 per cent made this year. But congressional elections in November could prove to be the wild card. Some observers think that Congress will yet devise some way of getting itself off the Gramm–Rudman hook before November.

Tim Beardsley

Inventors' rewards

THIRTY-three British universities and colleges have gained permission to exploit financially inventions arising from research funded by the research councils. Until now the British Technology Group (BTG) has had right of first refusal for the commercial development of government-funded research, a process that its just released annual report shows is not without its dangers.

Last year, BTG, a state-owned management company formed to assist the commercialization of innovative ideas, had to spend more than a million pounds defending its patent rights. Most of the money went on fighting for the hovercraft — a great British invention back in 1959 now being put into use by the US Armed Forces. The trouble is they are not paying the royalties and "American lawyers are very expensive" as a BTG spokesperson put it. But BTG still managed an income of nearly £20 million from licensing and industrial projects.

Before being granted permission to try for similar profits on their own, the universities had to assure a scrutiny committee that they knew what they were about. The chief aim, in line with government policy, is to provide new incentives for individual researchers as well as their universities. That aim can be satisfied only by arrangements in which inventions with a potential for commercial exploitation can be spotted early; flexible routes for their exploitation, including setting up new companies and forming partnerships with industry, can be quickly set up; and inventors properly rewarded. That may mean the inventor will get all the proceeds if the invention has a low level of return, and the university gets a cut when bigger profits can be made.

Universities that have not yet received permission to exploit their inventions are likely to do so in the near future. Some, though, will continue to use existing arrangements with BTG. Alun Anderson