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Deciding where the money goes

The US Congress is locked in its annual struggle over the budget. Although the outcome is not yet clear, there are good reasons why researchers should take a closer interest.

THE annual muddle in the United States over who gets what piece of the budget pie is reaching its final few frantic weeks. That the 1988 fiscal year has started without a single appropriation bill signed into law has caused virtually no stir in Washington. Indeed, many seem unaware that the 1 October starting date has come and gone. The Congress, some nine months after it received the 1988 budget blueprint from the White House, has managed only to give itself an additional 45 days to decide what to do about it. The perennial difficulty of Congress failing to decide in good time how the government's coffers should be emptied is one thing. The uncertainty this causes for agency planners in Washington is another, almost an invitation to maladministration, which this year is exacerbated by the prospect that the revised Gramm-Rudman deficit reduction process may be invoked. Nobody seems to know what that will do to budgets, except reduce them.

What makes the US budget process so complex? Mostly it is the number of players involved. The agencies within the Reagan Administration devise budget plans that are reviewed by the White House Office of Management and Budget. After an intense but generally well hidden internal debate, the president delivers a budget blueprint to Congress. Once this arrives on Capitol Hill, the budget is fair game. Congressmen with political, economic and social axes to grind are let loose on the government spending plans, prodded by lobbyists from every imaginable interest group. The Washington telephone directory is a reminder that bituminous contractors as well as biotechnology companies feel the need for associations near the seat of government. A plethora of hearings held by a dizzying array of committees and subcommittees is designed to elicit the opinion of the entire spectrum of the American public on how their tax dollars should be spent. Outside the hearing rooms, congressmen hear informally and often more persuasively about the needs of their constituents and other interested parties.

It is little wonder, given the diversity of interests that must be reconciled, that the process is tortuous. In past years, Congress has found it impossible to resolve its budgetary dilemmas until the absolute last moment, with the government actually going through the absurd process of closing the buildings and sending its employees home because Congress has not provided more spending money in time. This has prompted a search for some mechanism that would cut through this budgetary logjam. One, so far not adopted, would amend the constitution to require Congress and the president to agree on a balanced budget. The expectation that constitutional fiat could accomplish what legislation has failed to do is touching evidence of the power people attach to that document, but supporters of the amendment have failed to anticipate the shattering crisis there would be if even an amended constitution failed to produce a spending plan on schedule. As yet, the idea is a long way from reality.

Another attack on business as usual has come from the Gramm-Rudman deficit reduction act. This law sets deadlines for Congress and the president in proceeding through the budget maze. If deadlines are missed, budgets are cut automatically and across the board — although even here there are exceptions for some programmes with sacrosanct spending

authority. The automatic cuts prescribed by the Gramm-Rudman act represent the ultimate abdication of responsibility by the government, an admission that the rational approach to setting a budget has failed, leaving the governing process to unsophisticated computer programs that need only to do simple multiplication. It is easy to blame Congress alone for having arrived at this unfortunate state, but responsibility also falls on the White House for refusing to compromise on spending, and threatening to veto a budget with which it is not happy.

The temptation for researchers sitting comfortably in university laboratories who read about these goings on is either to shake their heads sadly or to congratulate themselves for not having to be involved in such a mess. It is not inconsistent to do both. But this temptation must be resisted, for the shenanigans in Washington are not just part of some droll revue. The hearings, meetings and political dealings will ultimately decide the fate of all those comfortable laboratories and universities. The steps required to arrive at a budget may seem ludicrous when viewed from the outside, as indeed they do for many on the inside, but that is how the game is played. To ignore the process, to wait for the dust to clear, is a certain formula for being left out when the resources grow smaller and the number of people seeking a share grows larger.

Congressmen have already shown a tendency to grow impatient with experts appearing before them who act aloof or uninterested; that impatience could easily turn into hostility. This is not to say that part of becoming a scientist should include practising obeisances and learning to kowtow. Rather, researchers and others involved in spending the government's money must inject themselves into the decision making process with vigour and enthusiasm. This can mean letter writing, attending public forums, visiting congressmen or other welltrodden routes for participating in the process of government.

In addition to making a case for strong support of science to elected officials, there is also a need to reach the electors. Scientists have an obligation, as they are spending the public's money, to explain just what they are doing with it. At times, explanation will be difficult; there is a lot of new vocabulary that must be presented to a lay audience before the concept of a restriction fragment length polymorphism can be understood. But it is a mistake to look on the job as impossible. Clarity and simplicity are not incompatible, even if detail must suffer. For an author accustomed to writing for a scientific journal such as *Nature*, it is often difficult to see clearly what caveats and controls are required only by a professional audience and which are necessary for a balanced public presentation of a topic.

Confusion on this issue can easily result in obscurity or overinflated claims. Even if a particular topic may remain obscure, it is possible and useful to communicate whenever possible the enthusiasm and excitement that science engenders. What the research profession has forgotten is that enthusiasm can be infectious, and in such a way that everyone benefits. The alternative to exposing the scientific process is to make it appear mystical and beyond reproach. But people are inclined to expect miracles from those beyond reproach, and delivering on that expectation will often be a hopeless endeavour.