



Science should be ready to jump off 'the cliff'

Researchers can find plenty to like in a US budget scenario that scientific societies are comparing to the apocalypse, says Colin Macilwain.

There's another warning note in my in-box this week. It is the latest in a long line of messages from US biologists' main lobby group, the US Federation of American Societies for Experimental Biology (FASEB), about the "devastating" implications if the country careers off the 'fiscal cliff' in January.

The fiscal cliff is a set of sharp budget cuts (called sequestration) and tax increases that will take effect in January if Congress and the White House fail to agree before then on other ways to balance the budget.

Now, what I want to know is why science lobbyists in Washington DC have spent all summer panicking publicly about a budget plan that many of the people they represent would consider the least-bad outcome — for both US society and US science — of those on the menu.

The United States, most observers agree, faces an outlandish deficit. This year, US\$3.6 trillion (24% of gross domestic product) will be spent by the government, but only \$2.2 trillion will be raised in taxes. Scientists know as well as anyone that this is unsustainable.

Wrangling over how to tame the deficit ended a year ago, when a congressional 'super-committee' failed to reach agreement. That left what is now known as the fiscal cliff — a fall-back arrangement agreed in August 2011 to force a better deal. It mandates that unless alternative plans are agreed, taxes will rise and across-the-board spending cuts will take effect.

For those of a progressive bent, the fiscal cliff has many attractions. First, it spreads cuts evenly across all 'discretionary' spending — including the half that goes to the Pentagon. Second, it protects Social Security, Medicare and Medicaid — the linchpins of the United States' threadbare welfare state — from any cuts whatsoever. In so doing, it refuses to balance the budget on the backs of the poor.

Finally, and most importantly, it closes 80% of the deficit through higher taxation, and only 20% through spending cuts. That's a sensible approach in a country where income tax rates — on the middle class as well as on the rich — have grown unfeasibly low.

The fiscal cliff, then, is a tough budget package that leans firmly to the left. How did a right-leaning Congress get there? Well, lawmakers never thought it would get enacted. Now they are trying to unravel it. And every special interest in Washington DC, from FASEB to the National Association of Manufacturers, is keen to lend a hand.

The scientific societies have been warning all summer that sequestration would be a disaster for science, imposing cuts of up to 8% in the budgets for 2013. Under this scenario, the National Institutes of Health would, if past is prelude, reduce its average annual grant from about \$450,000 to \$400,000 — not pretty, but not exactly penury.

At this juncture in US history, however, there are worse things that could happen than a one-off,

8% drop in grant funding. The nation might, for example, continue to slip and fudge into inexorable debt and decline — a bad thing for scientists as well as the public. Going over the cliff would avert that: even the new apparatchiks on the Central Committee of the Chinese Communist Party might wake up on 1 January, blink and think: good God, perhaps America isn't finished, after all.

As FASEB and other science supporters know, research and development spending has not and will never veer far from its historical level of one-seventh of US discretionary spending. If taxes were raised and defence spending cut, the long-term outlook for non-defence discretionary spending would brighten considerably.

After all, the 'cliff' isn't a cliff at all. It is simply a new baseline, with proper taxes paid, spending reduced and the poor protected. Once it is set, the path may be open for selective spending boosts — including,

perhaps, in research — as well as tax reductions. That's why people such as Peter Orszag, a member of the Institute of Medicine and President Barack Obama's first budget director, and anti-austerity economist Paul Krugman say that going over the cliff may be the best path to a reasonable budget settlement.

Concern that the cold bath of spending cuts and tax rises will send the economy into recession is legitimate. But economists do not actually know how fiscal tightening affects economic growth. Just last month, the International Monetary Fund revised its estimate of the fiscal multiplier — the dollars of economic activity generated by each dollar of government spending — from

0.5 to "in the range of 0.9 to 1.7", admitting, really, that it can't read the complex relationship between fiscal tightening and economic growth.

Sure, Obama and his lieutenants need to say publicly that the nation must avoid going over the cliff. In conducting negotiations for a deficit reduction that does not savage public spending, however, his willingness to take the drop is his single most powerful weapon.

Democratic politicians such as Obama increasingly see scientists as part of their constituency (in the final tracking poll by the *Washington Post* and the ABC, Obama beat Romney 60% to 38% among voters with a postgraduate degree). So the bleating about the cliff from scientific societies merely serves to lessen that resolve. The science lobby, in other words, is pushing the president to fold.

But the president shouldn't give an inch, and, if need be, he should be ready to jump off that cliff. As he smiles for the television cameras and joshes with House Speaker John Boehner, I hope that Obama will quote an old enemy to his new friend. "Go ahead," should be his whispered message, "make my day." ■

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