



The Fiscal Cliff: Implications of the Federal Budget Sequestration for Scientific Research

*Updated 19 September 2012
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The United States is rapidly approaching a financial crossroads. By the end of this year, Congress and the President must make major decisions about the nation's fiscal future. Will lawmakers decide to further contribute to the deficit through the extension of tax breaks and the reversal of impending budget cuts, or will they trigger another economic recession by allowing tax cuts to expire and harsh spending reduction measures to go into effect?

Without action by lawmakers, \$6.8 trillion in deficit reduction will occur over the next decade through increased taxes and spending cuts. The increasingly discussed 'fiscal cliff' refers to this abrupt and significant change to the federal budget that will occur in January 2013. If Congress and the President fail to reach an agreement to forestall the fiscal cliff, government spending will automatically be cut in January, and tax rates will rise for many Americans. If these actions occur, some estimates suggest a loss of two million jobs. Most economists warn that such a confluence of events would have dangerous and disruptive impacts on the nation's fragile economy.

One aspect of the fiscal cliff that is of particular concern is \$1.2 trillion in defense and non-defense spending reductions set to occur over the next decade. This budget sequestration will start in 2013. Non-defense agencies, including the National Science Foundation, National Institutes of Health, Department of the Interior, and others, will lose 8.2 percent of their funding next year. Defense programs, including various medical and environmental research and development programs, will be subject to a 9.4 percent reduction.

The impact of sequestration could be devastating, especially when considered with the spending caps enacted by Congress that will further reduce the amount of funding available for federal programs. These cuts will likely cause layoffs of federal employees, cuts to external grants and contracts, and reduced government services. Given the cost of firing employees, it is likely that grant programs will be logical targets for budget cuts.

Although many policymakers agree that sequestration is bad public policy that will harm the U.S. economy, lawmakers have thus far failed to take steps to fix the problem. The President and members of Congress have several options for reducing the harmful impacts of sequestration, but need to act before January 2013.

The Fiscal Cliff

Highlights: \$6.8 trillion in deficit reduction will occur over the next decade through increased taxes and spending reductions. These fiscal changes will occur automatically under current law unless Congress and the President enact changes.

At the end of 2012 and the beginning of 2013, major changes in tax policy and government spending are set to happen. Referred to as the 'fiscal cliff', the impending debate will impact nearly every aspect of the federal government and will directly affect the lives of every American.

The Congressional Budget Office predicts that allowing the fiscal cliff to occur would reduce the size of the U.S. economy by as much as 3.9 percent in 2013 and cost two million jobs.²

Among the impending policy changes are:¹

- **Expiration of the 2001/2003/2010 tax cuts.** Tax rates will increase for most income brackets. The estate tax will increase, as will taxes on capital gains. Certain tax credits, such as the child tax credit, will be reduced. The 'marriage penalty' will increase. If Congress renewed these tax breaks, the cost would be \$110 billion in fiscal year (FY) 2013 and \$2.8 trillion over a decade.
- **End patches for the Alternative Minimum Tax.** This tax is designed to ensure that all taxpayers pay at least a minimum amount of taxes, even if they take advantage of tax deductions and credits. Congress "patches" the tax to help it keep pace with inflation. The cost of continuing to patch the Alternative Minimum Tax would be \$125 billion in FY 2013 and \$1.7 trillion over a decade.
- **Drastic spending cuts across the federal government.** In January, \$1.2 trillion in automatic, across-the-board budget cuts (i.e. 'the sequester') will start. The result will be a 9.4 percent reduction in defense spending and an 8.2 percent reduction in non-defense spending.³ It would cost \$65 billion to prevent sequestration next year and \$980 billion over a decade.

¹ Cost projections provided by the bipartisan The Committee for a Responsible Federal Budget, "Between a Mountain of Debt and a Fiscal Cliff: Finding a Smart Path Forward"

² Congressional Budget Office, "Economic Effects of Reducing the Fiscal Restraint That Is Scheduled to Occur in 2013"

³ Office of Management and Budget, "OMB Report Pursuant to the Sequestration Transparency Act of 2012 (P.L. 112-155)"

- **End of tax extenders for research and state and local sales tax deduction.** Extending these tax credits and others would cost \$30 billion in FY 2013 and \$455 billion over a decade.
- **Implementation of new health care taxes.** New taxes on high income tax filers will go into effect under the Affordable Care Act. It would cost \$25 billion in lost revenue to delay this policy for one year and \$420 billion over 10 years.
- **Reduction in Medicare physician payments.** Payments to doctors who treat patients covered by Medicare will be cut by nearly 30 percent. It would cost \$10 billion to delay these scheduled reductions for one year and \$270 billion to delay them for a decade.
- **Winding down of certain job measures.** Employee payroll taxes will increase by two percent. Unemployed individuals will be eligible for fewer weeks of unemployment insurance. The cost to extend these jobs measures would be \$115 billion in FY 2013 and \$150 billion over a decade.

Collectively, allowing these policies to go into effect would reduce the nation's deficit by more than \$6.8 trillion over a decade, with most of the savings stemming from changes to tax policy.¹ Alternatively, avoiding the fiscal cliff by continuing current policies would cost about \$500 billion in the first year.¹

Importantly, these changes will automatically happen unless Congress and the President act to prevent any or all of these policy changes by amending current law.

Although many experts and policymakers see the need for deficit reduction, allowing the government to fall off the fiscal cliff could be extremely disruptive to the nation's fragile economic recovery. The non-partisan Congressional Budget Office predicts that allowing the fiscal cliff to occur would reduce the size of the U.S. economy by as much as 3.9 percent in 2013 and cost two million jobs.² Therefore, a gradual phasing in of tax reforms and changes to federal spending is preferable to many policymakers.

Impending Budget Cuts

Highlights: Federal spending will shrink by \$2.1 trillion over the next decade. The cuts will start in FY 2013. Budgets for non-defense agencies and programs, including research and science education, will be cut by at least 8.2 percent.

In August 2011, the United States was approaching its debt limit. In the face of partisan divide over whether or not to increase the nation's borrowing limit, Congress agreed to a set of measures to reduce spending by at least \$2.1 trillion over the coming decade in exchange for increasing the debt ceiling.⁴

⁴ Congressional Research Service, "The Budget Control Act of 2011: Effects on Spending Levels and the Budget Deficit"

The Budget Control Act of 2011 aims to limit the federal deficit in two main ways: 1) set annual spending caps for discretionary spending, and 2) require across-the-board spending reductions if Congress failed to enact \$1.2 trillion in savings by January 2012.

Spending Caps

The law set caps for discretionary spending that will result in \$917 billion in savings over ten years.⁴ The law does not specify how spending will be allocated across budget accounts, but rather allows Congress to make this decision on an annual basis as part of the regular appropriations process. In other words, it is not possible to tell at this time how the spending caps will impact future budgets for science agencies and programs.

Discretionary spending would decrease by \$71 billion between FY 2012 and FY 2013 because of the spending caps.⁴ In subsequent years, discretionary spending will be allowed to rise at a modest 1.5 percent on average.

In real dollars, the spending caps will prevent discretionary spending from regaining its FY 2011 level in the next decade.⁴

Notably, the law did not place caps on mandatory spending, which was more than half of total government spending in FY 2010.

Sequestration

The Budget Control Act also created a special congressional committee (the ‘Supercommittee’) to devise a plan that would cut the deficit by an additional \$1.2 trillion over the next ten years. When the Supercommittee was unable to produce bipartisan legislation to meet this mandate, the law required automatic cuts (‘sequestration’) to take effect over the next decade beginning in January 2013.

Sequestration will result in drastic spending reductions to both defense and non-defense discretionary spending every year from 2013 to 2021. In FY 2013, \$109 billion in across-the-board spending reductions are scheduled to take effect.⁵ The cuts would be equally divided between defense and non-defense spending.

By 2021, non-defense discretionary spending will be just 2.8 percent of U.S. GDP—the lowest level in 50 years.⁶

What is non-defense discretionary spending? It is all of the non-military government programs that Congress funds annually through the appropriations process. It includes scientific research, education, infrastructure, weather monitoring, environmental protection, housing, and international relations.

Many mandatory entitlement programs, such as Social

⁵ Congressional Research Service, “Major Issues Before Congress in FY 2013”

⁶ Senator Tom Harkin, Chair of the Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education, and Related Agencies, “Under Threat: Sequestration’s Impact on Nondefense Jobs and Services”

Security benefits and child nutrition assistance, are excluded from sequestration. Medicare payments to providers and insurance plans would be cut by 2 percent a year. This means that discretionary spending, which represents a smaller share of the total budget than mandatory spending, will be subject to a disproportionate share of the reductions.

Impact of Sequestration on Science

Highlights: All non-defense science programs will be subject to an 8.2 percent reduction in FY 2013 because of sequestration. This may cause layoffs of federal employees, cuts to external grants and contracts, and reduced government services.

“Sequestration is a blunt, indiscriminate instrument designed to force congressional action on achieving a balanced deficit reduction plan,” acting Office of Management and Budget Director Jeff Zients told Congress. “It is not the responsible way for our nation to achieve deficit reduction.”

If sequestration happens as outlined in the Budget Control Act, non-defense discretionary spending will decrease by 8.2 percent in FY 2013 and by a lesser percentage in subsequent years.³ This cut would be applied evenly to all federal agencies and programs, including the National Science Foundation, National Institutes of Health, and the Departments of Agriculture, Energy, and Interior.

Because sequestration is in addition to the reductions mandated by the spending caps, the impacts to federal agencies will be dire. Agencies may be required to furlough and/or lay off employees, cut external grants and contracts, reduce the services they provide, and start fewer new initiatives.

What would an 8.2 percent spending reduction mean to research and science education programs?

- About 31,000 jobs in the life, physical, and social sciences would be lost next year if sequestration occurs.⁷
- The National Science Foundation could lose \$586 million, an amount comparable to three-quarters of the budget for the Biological Sciences Directorate.³ The proposal success rate could drop from 22 percent to 16 percent.⁸
- The National Institutes of Health would likely fund 700 fewer grants⁶ as a result of a \$2.5 billion cut.³ The proposal success rate could drop from 19 percent to 14 percent.⁸
- The United States Geological Survey would likely be required to layoff employees as a result of an \$88 million cut,³ as most of the agency’s budget is spent on personnel.

⁷ Dr. Stephen S. Fuller, George Mason University, “The Economic Impact of the Budget Control Act of 2011 on DOD and non-DOD Agencies”

⁸ ResearchAmerica!, “Sequestration: Health Research at the Breaking Point”

- The Department of Energy Office of Science could lose \$400 million;³ this is more than the department spent on climate and environmental sciences in FY 2012.
- Agricultural research and education at the Department of Agriculture could be cut by \$150 million; this represents more than half of the budget for competitive, extramural research grants.³
- The National Oceanic and Atmospheric Administration could lose \$414 million; this is more than twice the amount the agency proposes to spend on extramural research in FY 2013.³
- Forest and rangeland research at the U.S. Forest Service could be cut by \$24 million;³ the agency spent roughly the same amount on fish and wildlife research in FY 2012.
- Science and technology at the Environmental Protection Agency could be reduced by \$65 million;³ this is about as much as the agency spends on ecosystem research.
- Research expenditures on health and infectious disease at the Department of Defense would decline by 9.4 percent.³

How to Avoid the Impacts of Sequestration

Highlights: Sequestration can only be averted through a change to current law. Thus, Congress and the President must act. Lawmakers have several options for lessening the harmful impacts of sequestration, but need to act before January 2013.

Sequestration is on autopilot to go into effect in January 2013. Lawmakers have several options, including:

- Enact \$1.2 trillion in targeted deficit reductions.
- Exempt certain programs or spending areas from sequestration.
- Repeal the sequestration provision of the Budget Control Act.

It is important to note that the annual appropriations process for FY 2013 is separate from the deficit reduction provisions of the Budget Control Act. The decisions that Congress makes about annual spending for FY 2013, including current discussions of a stopgap spending measure, do not impact the requirement for sequestration.

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Several proposals to alter or avoid sequestration have been introduced in Congress. Many of these measures, however, focus on avoiding cuts to defense spending. This would result in an even heavier burden being borne by non-defense programs. Given that funding for many non-defense discretionary programs has already been cut in recent years, the impact would be devastating. The President has also vowed to veto any legislation that does not offer a balanced and comprehensive response.

What Can Individuals Do?

You can let your members of Congress and the President know that you would like them to responsibly manage the federal government and the federal budget. Consider sending a letter to your federal lawmakers asking that they take the necessary actions to avert sequestration and to reduce the federal deficit. Individuals can contact their members of Congress and the President through the AIBS Legislative Action Center at <http://capwiz.com/aibs/home/>.