The Sequestration Crisis for Federal Science Funding: An Introductory Webinar on Alumni Advocacy

John Gavenonis, MIT Alumni Association

MIT Washington Office: Bill Bonvillian, Amanda Arnold, Philip Lippel

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The Four Topics in this Webinar:

- Overall federal R&D trends
- Trends in MIT R&D funding
- The “Sequestration” Challenge and the status of the federal budget and appropriations process
- The Budget Deficit backdrop for this problem – long and short term
Research Spending by Federal R&D Agencies

in billions of constant FY 2010 dollars

FY 2009 figures include Recovery Act appropriations. Research includes basic research and applied research.
FEB. '10 OSTP
Historic Bipartisan Support for strong R&D funding

Non-Defense U.S. R&D Funding, 1981-2012

COMPETES to Double NSF, DOE-OS, NIST 2008-2014 (reauthorization stretched out to 2017)
Research at MIT – From Federal and Non-Federal Sources

Research Expenditures by Primary Sponsor
Excluding the Broad Institute
(Millions)

- Internal
- State Local Foreign Govts
- Non Profits
- Industry
- Other Federal
- NSF
- NASA
- Health and Human Services
- Department of Energy
- Department of Defense
MIT Fed/Non-Fed Research by Percent from Sources

- **Department of Defense**: 16%
- **Department of Energy**: 14%
- **Health and Human Services**: 23%
- **NASA**: 4%
- **NSF**: 11%
- **Industry**: 15%
- **Other Federal**: 3%
- **Non Profits**: 7%
- **State Local Foreign Govts**: 5%
- **Internal**: 2%

FY2011
# The Congressional Budget Process

## Table 1: Federal Budget Process Timeline

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Action</th>
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<tbody>
<tr>
<td>First Monday in February</td>
<td>President submits budget to Congress</td>
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<tr>
<td>February 15</td>
<td>Congressional Budget Office submits report on economic and budget outlook to House and Senate Budget Committees</td>
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<td>6 weeks after president submits budget</td>
<td>House and Senate committees submit their budget analyses to respective budget committees</td>
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<tr>
<td>April 1</td>
<td>Senate Budget Committee reports budget resolution</td>
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<tr>
<td>April 15</td>
<td>Congress completes action on budget resolution</td>
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<tr>
<td>May 15</td>
<td>House begins action on annual appropriations bills</td>
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<tr>
<td>June 10</td>
<td>House Appropriations Committee reports last appropriations bill</td>
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<tr>
<td>June 30</td>
<td>House completes action on appropriations bills</td>
</tr>
<tr>
<td>July 15</td>
<td>President submits midsession review of his budget to Congress</td>
</tr>
<tr>
<td>October 1</td>
<td>Fiscal year begins</td>
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</tbody>
</table>

Congress’ Budget Deficit Legislation in 2011

- **Budget Control Act**: Congress last year already cut $1 Trillion over 10 years from federal budget.

- The “**Supercommittee**” had until 11/23/11 send Congress a spending cut compromise cutting additional $1.2 Trillion over a decade; taxes, entitlements and discretionary spending on the table;

- But: the “Supercommittee” failed to develop a compromise, so Budget Control Act went into effect:
Now we face Sequestration:

- Because the “Supercommittee” failed, we now face:
  - **Automatic “sequestration”** (ie, a cut) of $1.2 Trillion – split evenly between defense and domestic spending –
    - $500B cut from domestic discretionary
    - $500B cut from defense discretionary
  - This means an 8% across the board Domestic Discretionary spending cut and a 9-10% Defense Discretionary spending cut.
  - Cuts to take effect on Jan 2, 2013 – affect FY13; then a decade of cuts/stagnation from 2013-2023
Congress faces an Appropriations, Tax, Sequestration Crisis After the November Election:

So far this year:

- **No Appropriations bills** have yet passed both Houses of Congress and won’t until after the November election – without them, gov’t shuts down

- The **Bush era tax cuts expire** this year – will be considered after the November election

- **Sequestration automatically goes into effect** unless Congress changes the law after the November election

- The Prospect: “**The Lame Duck Session From Hell!**”
R&D Funding in the President’s Proposed FY 2013 Budget

R&D in the FY 2013 Budget
percent change from FY 2012

- NIST: 18.1%
- DHS: 31.7%
- DOT: 17.0%
- DOE Energy: 16.2%
- NOAA: 12.1%
- DOE Defense: 9.6%
- Other HHS: 9.3%
- USGS: 7.6%
- NSF: 4.6%
- DOE Science: 2.4%
- NASA: 2.2%
- EPA: 1.4%
- VA: 0.2%
- NIH: 0.0%
- USDA: -1.5%
- DOD Other: -1.5%
- DOD S&T: 4%
- TOTAL: 1.2%

Source: OMB R&D data, agency budget justifications, and other agency documents.
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Proposed Budget MINUS Sequestration – this unglues the bipartisan agreement on R&D support of the past 5 years

R&D in the FY 2013 Budget + Sequester?
percent change from FY 2012

Source: AAAS estimates based on OMB R&D data, agency budget justifications, and the Budget Control Act.
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University research faces a **short-term** budget problem under the above process, and a **longer term** budget problem.
Re: Shorter Term Effects:

FIGURE 1

Most of Budget Goes Toward Defense, Social Security, and Major Health Programs

- Social Security: 21%
- Defense and security: 22%
- Everything else: 18%
- Medicare, Medicaid, and SCHIP: 21%
- Safety net programs: 9%
- Interest on the debt: 9%

Source: Office of Management and Budget data.
Re: Shorter Term - Deficit Causes: Debt as % of GDP, 2001-2019
Re: Shorter Term – Federal Outlays to Revenues as Percent of GDP

Percentage of GDP

Outlays

Revenues

Actual

→ Historical level of Federal Revenue

Projected Federal Spending Over the Longer Term – Role of Entitlements
Longer Term - Elements of Fed Spending:

Federal Revenues 1971-2010 Average 18 Percent

1971-2010 Average 2007 2021 Projection Under Current Law

- Interest
- Social Security and Major Health Programs
- Defense
- Other Mandatory Spending and Nondefense Discretionary Spending

Percent of GDP

- 1971-2010 Average
- 2007
- 2021 Projection Under Current Law

- 6.7
- 5.3
- 4.6

- 4.8
- 3.9
- 3.6

- 7.2
- 8.7
- 12.2

- 2.2
- 1.7
- 3.4
Sequestration and Other Budget Cuts In a Competitive Context

National R&D Investment

percent of GDP

South Korea  Japan  U.S.  Taiwan  EU-27  China

Source: OECD, Main Science and Technology Indicators, April 2011.
2009 data for South Korea is not yet available.
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Thanks for the upbeat overview! Now, what can I do?

Join the MIT Legislative Advocacy Network!
MIT Legislative Advocacy Network (LAN)

A policy advocacy network that empowers and educates interested MIT alumni ("information army") to contact their United States federal legislators, with guidance from MIT, in support of public policy of importance to MIT, the science and technology community, and the broader society.
MIT Legislative Advocacy Network (LAN)

- MIT regularly contacts federal legislators to express opinions on a variety of topics.
- Policy advocacy network is a voluntary, opt-in network for alumni interested in science policy.
- Network participants will be contacted approximately quarterly by the Washington Office to advocate for specific policies.
- Network volunteers are not obligated to advocate for any specific policy positions.
What should I do next?

- Join the LAN → https://alum.mit.edu/lansignup

- What do I get from the Network?
  - Network Toolkit
  - NEWScience Policy weekly updates
  - Quarterly “Calls to Advocacy”
  - Policy webinars
LEGISLATIVE ADVOCACY NETWORK TOOLKIT

Resources for US Federal Policy Advocacy

The Alumni Legislative Advocacy Network is an initiative of the MIT Alumni Association in partnership with the MIT Washington DC Office. Our goal is to keep graduates informed of legislative issues that impact funding for research, financial aid, and STEM Education.

You can [signup to join the network](#).

**NEWScience Policy**
Written by the Assistant Director of MIT'S DC Office, NEWScience Policy provides a weekly summary of activities and events in Washington, DC affecting science, technology, and innovation policy. While not meant to be exhaustive, it highlights items related to the funding for and execution of basic research across disciplines, and the translation of discoveries into the marketplace.

**Science and Policy Technology Institute**
STPI is a federally funded research and development center (FFRDC) chartered by Congress. It provides rigorous and objective analysis of science and technology (S&T) policy issues for the White House Office of Science and Technology Policy (OSTP) and other offices and councils within the executive branch of the U.S. government and federal agencies.

**President's Council of Advisors on Science and Technology**
PCAST is an advisory group of the nation’s leading scientists and engineers who directly advise the President and the Executive Office of the President. PCAST makes policy recommendations in the many areas where understanding of science, technology, and innovation is key to strengthening our economy and forming policy that works for the American people. PCAST is administered by the Office of Science and Technology Policy (OSTP).

**MIT Washington, DC Office**
The mission of the MIT Washington Office, an organization of MIT faculty, students, and alumni, is to enhance the visibility of MIT and its role in the development of science and technology policy.

**STEM Education Coalition**
The Science, Technology, Engineering, and Mathematics (STEM) Education Coalition is a non-partisan coalition of organizations and companies that support and advocate for policies that enhance the STEM education and workforce development of American students and workers.
Week in Review, or No More Excuses

With the Budget Control Act agreement finally in place, the Senate hit the ground running last week on FY 2012. The Appropriations Committee officially adopted the top-line spending level agreed to in the bill, and doled out spending allocations to its various subcommittees. The full Appropriations Committee then approved three of its FY 2012 spending bills, Energy and Water, Homeland Security, and Agriculture. The Senate also passed the America Invents Act, a patent reform measure that has been years in the making (more on all that below).

Meanwhile, the House Appropriations Committee was supposed to mark up its much anticipated FY 2012 Labor-Health and Human Services (HHS) – Education spending bill on Friday, which includes funding for the National Institutes of Health (NIH), but announced on Thursday that the markup had been postponed. What might have been at issue is disagreement between members as to which top-line funding level to use, that passed by the House back in April, or the newer level included in the Budget Control Act (which is about $18 billion higher). The House Appropriations Transportation and Housing Subcommittee marked up its FY 2012 bill using the higher allocation, but CQ reports that a similar disagreement may hold it up at the full Committee level.

With the clock running out on FY 2011, both chambers are working to draft a continuing resolution (CR)
What Else Can I Do? The MIT DC Office and Your Science Advocacy Tool Belt

- The Alumni Group and MIT’s Washington Office Are teaming up to offer you “Calls to Advocacy”
- Sign up to be included by the MIT DC office in semi-quarterly calls for advocacy, which may include the following tools:
  - Prepared text you can send as is or edit as a letter to your Congressional representative
  - Prepared text you can send as is or edit as a “Letter to the Editor” to your local newspaper;
  - Prepared text you can send as is or edit as tweets and other tools of social media!
“[Congress] would be much aided hearing from the MIT alumni in a single voice to articulate the important role for federal funding of basic research and development as the foundation of America’s economy.”

President Susan Hockfield
Technology Day Address
June 4, 2011
Join the LAN

https://alum.mit.edu/lansignup
Lobbying Disclosure Act

- **Lobbying Disclosure Act** - effective January 1, 2008 and revised June 15, 2010

- Any individual...
  - who is either employed or retained by a client for financial or other compensation
  - whose services include more than one lobbying contact, **AND**
  - whose lobbying activities constitute 20% or more of his or her services’ time on behalf of that client during any 3-month period

- MIT policy advocacy volunteers are not required to register as lobbyists (if they do not meet the criteria described).

- More information can be found at...