The Federal Budget is Kind Of a Big Deal

- “Politics is who gets what, when, and how.”
  - Put another way: budgeting is a manifestation of politics
- The primary way Congress directs U.S. policy
  - Power of the purse + Oversight
  - Decisions drive the budget, and the budget drives decisions
- It’s BIG: >20% of the economy
- Major impact for R&D: most basic research, and most university research, is federally funded
Composition of the Proposed FY 2014 Budget

Total Outlays = $3.8 trillion

- Social Security $860
- Medicare $524
- Medicaid $304
- Other Mandatory $621
- [Nondefense R&D] $70
- [Defense R&D] $74
- Net Interest $223
- Defense Discretionary $544
- Other Mandatory $621

Source: Budget of the United States Government FY 2014.
Projected unified deficit is $744 billion.
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Two Spending Categories: Discretionary vs. Mandatory

- Mandatory Spending (aka Direct Spending)
  - Mostly entitlements
  - Potential for high political sensitivity = “third rail”
  - Changed only by act of Congress: essentially “on autopilot” for years at a time

- Discretionary Spending:
  - Adjusted annually
  - Easy (nondefense) targets?
    - i.e. Sequestration
  - Vast majority of federal R&D is discretionary
Federal R&D in the Budget and the Economy
Outlays as share of total, 1962 - 2014

Source: Budget of the United States Government, FY 2014. FY 2013 data do not reflect sequestration. FY 2014 is the President's request.
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A (Very) Short Process History

- **1789 - 1921:** Budget Process driven by Congress
  - Mid-19th century: Congress requires appropriations to receive authorizations **first**
- **1921:** Budget and Accounting Act
  - Introduced the modern process with a formal executive role
  - Created OMB
- **1974:** Congressional Budget Act
  - Established modern Congressional process as it stands today

The budget process evolution is an attempt at control
Authorizations vs. Appropriations

- **Authorization**
  - Creates and modifies programs
  - Sets funding ceilings
  - Under the jurisdiction of the topical legislative committees

- **Appropriations**
  - Permits funding (power to incur obligations)
  - Under jurisdiction of Appropriations Committees
  - Can be multiyear or advance appropriations (i.e. Veterans)
  - >$250 million in unauthorized appropriations in 2012 (per CBO)
The Federal Budget Process

FY 2013

----- Spend Fiscal Year Budget -----

FY 2014

Negotiate and finalize budget proposal with OMB via passbacks

Budget Release

• Budget Resolution
• 302(a) and (b)
• Hearings

Write, pass, and conference twelve appropriation bills

FY 2015

Planning within Agency

Agencies receive strategic guidance from OMB

Agencies submit budget proposals

Negotiate and finalize budget proposal with OMB via passbacks

Budget Release

• Budget Resolution
• 302(a) and (b)
• Hearings

Write, pass, and conference twelve appropriation bills

Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

(new calendar year)

(new calendar year)

(where we are now)
The Federal Budget Cycle

- Internal agency discussions and planning
  - I.e. Staff retreats, meetings with stakeholders, program assessments
- Joint guidance memorandum from OMB / OSTP (midsummer)
  - Defines focus areas, methods, strategy for boosts or cuts
- Agencies deliver budget justifications to OMB (early fall)
What Drives Presidential R&D Budget Formulation?

- Top-down and bottom-up priorities and politics
- OMB oversight, OSTP input
- Expert and community input
- Academies, societies, individuals, OTA
- Congressional legislation
- Also big (fiscal) picture
- Incrementalism
Science and Politics Mingle: Examples

- Human Genome Project
  - Science community takes first interest in mapping/sequencing
  - DOE labs take early govt lead, convinces OMB and appropriators (with help from OTA, NRC, etc)
  - NIH rivalry becomes collaboration

- Advanced Photon Source (Argonne)
  - LBL sought, failed to get next-gen synchrotron radiation facility...
  - ...which led to a DOE advisory group reexamination and new proposal...
  - ...and Argonne swoops in to claim facility in four-lab deal, ends up in good shape after Super Collider is canceled
### The Federal Budget Cycle

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- OMB performs multi-stage reviews, responds to agencies (“passbacks”)
  - Agencies can and do negotiate
- Budget proposals are finalized in January
- President presents the proposed budget to Congress early February
Total R&D by Agency, FY 2014

budget authority in billions of dollars

- DOD, $69.5
- HHS (NIH), $32.0
- DOE, $12.7
- NASA, $11.6
- NSF, $6.2
- USDA, $2.5
- Commerce, $2.7
- All Other, $6.7

Total R&D = $144.1 billion

Source: OMB R&D data, agency budget justifications, and other agency documents.
R&D includes conduct of R&D and R&D facilities.
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Recent Admin R&D Priorities

- Innovation / Science
  - Nondefense, use-oriented research
  - COMPETES agencies
- Advanced manufacturing
- Low-carbon energy + Climate
- National Nuclear Security Administration (New START)
- This year:
  - Homeland Security (Biodefense facility)
  - Rolling back sequestration
The Federal Budget Cycle

- Congress gets involved, holds budget hearings
- **IN THEORY** - Approves budget resolution (simple majority)
  - 302(b) allocations to the 12 appropriations subcommittees
The Budget Resolution

- Overall spending framework
  - Draws on “views and estimates” from other committees

- Discretionary spending figure divvied up by appropriations committees

- Budget resolution is a political document
  - (which is why they can’t seem to pass one)

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**House approves Ryan budget plan to cut spending, taxes**

*By Rosalind S. Helderman*

The House of Representatives on Thursday approved a $3.5 trillion budget plan proposed by Rep. Paul Ryan (R-Wis.) on a 228 to 191 vote, largely along party lines.

The plan aims to curb exploding deficits through deep cuts in domestic programs, while lowering tax rates for individuals and businesses.

The plan will be rejected by the Democratic-majority Senate. But the House vote is significant for the opportunity it presented both parties to lay down a marker on the nation’s key fiscal issues heading into the November election campaign.

*The House vote breakdown was 228 Republicans in favor, 181 Democrats and 10 Republicans opposed.*

Republicans said the budget represented an honest attempt to tackle the nation’s growing trouble with debt.
### The Federal Budget Cycle

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- Approps committees write/approve 12 appropriations bills
- Bills have to pass both chambers (can be filibustered); Differences are resolved in conference committee
- Continuing resolutions? Omnibus? Reconciliation? Supplemental appropriations?
What Drives Congressional Budget Decisions?

- “All politics is local”
- Concerns over balance, duplication, competitiveness
  - STEM workforce issues
- Expert and community input
  - Academies, societies, individuals
- Ideas about role of government
- Incrementalism
- The Big Fiscal Context, of course
  - “Annual Miracle”
More examples...

- Dept of Agriculture research grants
  - Long-term Congressional pork (earmarks)
  - Competitive programs phased in slowly over 30 years

- Health Research and Congress
  - DOD health program: breast cancer advocacy
  - NIH doubling was a Congress-led initiative

- Human Genome revisited
  - Congress and parochial interests
  - DOE and NIH avoid Congressional intervention
  - Authorizing legislation a few years late (force of law)
The Federal Budget Cycle

- Gov’t is working on 3 budgets at any given time. Right now:
  - Wrapping up FY 13
  - Congress dealing with FY14 (one hopes)
  - Agencies / OMB planning for FY15
Current State of Play

- Two discretionary budget caps:
  - President and Senate would return spending to pre-sequester levels ($1.06 trillion)...
  - Versus House budget resolution (and current law: $967 billion)

- R&D appropriations decisions so far (mostly) reflect these differences
  - But does any of it matter?
FY 2014 R&D Appropriations by Spending Bill

Estimated funding as a percent of FY 2012, in constant dollars

CJS = Commerce, Justice, Science bill (includes NSF, NASA, Dept. of Commerce). FY 2012 = 100%. Source: AAAS analyses of agency budget documents and appropriations bills and reports. FY 2013 figures are current estimates. R&D includes conduct of R&D and R&D facilities.

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Looking Ahead

- The clock is ticking
- Big question still remains: how to fit a $1.06 trillion budget into a $967 billion dollar hole?
  - Veto threat? Game of Chicken?
- Almost certainly heading for a continuing resolution
  - FY13 funding minus ~2%
  - Agencies tend to spend conservatively under conditions of uncertainty
- FY 2015 planning also murky
For more info...

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Budget Exercise

- **YOUR MISSION:** Come up with CJS approps bill figures that can pass BOTH chambers and avoid a Presidential veto
  - Adopt roles: D or R? Conservative, Liberal, Moderate? Region?
- **THE CHALLENGE:** Different figures and priorities
- **Things to think about:**
  - Process?
  - Key constraints:
    - **Informational:** Might not have the clearest idea what each program does or how effective it is
    - **Budgetary:** Have to stay within spending caps
    - **Political:** Your priorities will vary!