The Federal Budget and Science and Technology

Kei Koizumi
October 9, 2008
for the NC State Park Scholarships Seminar

AAAS R&D Budget and Policy Program
http://www.aaas.org/spp/rd

See the “What’s New” section for the latest updates; see the “Seminars and Presentations” section for copies of this presentation.
WHY THE BUDGET?

- The federal budget determines the health of U.S. science and engineering research and education.
- “The U.S. doesn’t have a science policy, it has a budget policy for science.” – Rep. George Brown
- Policy decisions and authorization bills may not be completed, but every year budget decisions are (eventually) made.
- The budget process determines priorities for the federal R&D investment.
- The federal budget funds 1/3 of all U.S. R&D and 60 percent of all university R&D.
THE FY 2009 BUDGET

FY 2009 started on October 1, but only 3 departments (DOD, DHS, VA) have their final 2009 budgets.

The remaining federal agencies are operating under a CR (continuing resolution) at or below 2008 levels through March 6.

Because President Bush threatened to veto any appropriations bills that exceed his request, Congress has delayed the bills, which would collectively add $21 billion to the request for domestic programs.

The next Congress plans to send the remaining 9 (of 12) appropriations bills to a new President.

Congress may still approve 2009 supplementals for some science agencies as part of an economic stimulus package, but hopes are fading.
Composition of the Proposed FY 2009 Budget
Total Outlays = $3.1 trillion

Note: Projected Unified deficit is $407 billion.
Figures exclude most Iraq and Afghanistan military costs.
Source: AAAS, based on Budget of the United States Government FY 2009.
FEB. '08 © 2008 AAAS
Composition of the Proposed FY 2009 Budget by Source of Funds
Total Outlays = $3.1 trillion

- Income taxes
- Corporate taxes
- Social insurance and retirement (SS + Medicare payroll taxes)
- Other taxes (excise, gas, estate, etc.)
- Borrowing

Total Receipts (without borrowing): $2.7 trillion

Source: AAAS, based on Budget of the United States Government FY 2009.
FEB. '08 © 2008 AAAS
Federal Spending and Revenues as % of GDP
1962-2013


FEB. '08 © 2008 AAAS
Federal Budget Deficit (or Surplus), FY 1960-2013
in billions of CONSTANT FY 2008 dollars

Data in fiscal years. Source: Budget of the United States Government, FY 2009. FY 2008 data are estimates. FY 2009-2013 data are President's budget proposals. FY 2009 - 2013 figures exclude Iraq and Afghanistan military costs.
FEB. '08 © 2008 AAAS
Federal Shortfall To Double This Year

Next President To Inherit Deficit Of $500 Billion

By Lori Montgomery
Washington Post Staff Writer
Wednesday, September 10, 2008; Page A01

A weak economy and a sharp increase in government spending will drive the federal budget deficit to a near-record $407 billion when the budget year ends later this month, and the next president is likely to face a shortfall in January of well over $500 billion, congressional budget analysts said yesterday.

A deficit of that magnitude could severely constrain the next administration's agenda, regardless of whether Sen. John McCain (Ariz.), the Republican candidate, or Sen. Barack Obama (Ill.), his Democratic opponent, wins in November. Each has promised billions in new tax cuts or new spending. The expanding deficit also will increase the national debt and could impair future economic growth, particularly if lawmakers are forced to pay down that debt by raising taxes.

This year's deficit will be more than double last year's $161 billion, and it will rise from 1.2 percent of the gross domestic product to nearly 3 percent. If the next
The National Debt, 1960-2013
in billions of dollars (President's proposals)


FEB. '08 © 2008 AAAS
Congress Sends Housing Relief Bill to President

By DAVID M. HERSZENHORN

WASHINGTON — Hoping to stretch a safety net under the nation’s tumbling housing market, the Senate on Saturday overwhelmingly approved a huge package of legislation that includes a program to save hundreds of thousands of families from losing their homes to foreclosure.

The legislation is the latest in a series of extraordinary interventions this year by the Bush administration, Congress and the Federal Reserve as they seek to limit shockwaves in the housing sector from rippling across the American economy and the world financial system. In the process, the central bank and taxpayers have taken on what critics warn are incalculable liabilities and risk.

The bill grants the Treasury Department broad authority to safeguard the nation’s two mortgage finance giants, Fannie Mae and Freddie Mac, potentially by spending tens of billions of dollars in federal money to prevent the collapse of the companies, which own or guarantee nearly half of the nation’s $12 trillion in mortgages.

To accommodate the rescue plan for the mortgage companies, the bill raises the national debt ceiling to $10.6 trillion, an increase of $800 billion and the first time that the limit on the government’s credit card has grown to 14 digits.

The Senate, convening for a rare Saturday session as it neared summer recess, approved the bill by a vote of 72 to 13, with 27 Republicans joining all the Democrats in attendance to support it.

The measure now goes to President Bush, who has said he will sign it, perhaps early this week, to send a reassuring message to the credit markets.

The White House quickly issued a statement praising the vote, but also affirming opposition to nearly $4 billion in grants to local governments to buy and refurbish foreclosed properties, which Mr. Bush views as a giveaway to lenders.

“It’s good that the Democratic Congress has finally acted,” said Tony Fratto, the deputy White House press secretary.

Lawmakers in both parties hailed the bill, saying it was crucially needed. “It will make a difference not only in the housing market but in the entire economy,” the majority leader, Senator Harry Reid of Nevada, said.
AND THEN JUST LAST WEEK… $11.3 Trillion

contract issued under section 102.

SEC. 122. INCREASE IN STATUTORY LIMIT ON THE PUBLIC DEBT.

Subsection (b) of section 3101 of title 31, United States Code, is amended by striking out the dollar limitation contained in such subsection and inserting “$11,315,000,000,000”.
How the Budget Becomes Law
FY 2009 Proposal = $3.1 Trillion

Net interest - automatic

Discretionary Spending -
12 appropriations bills,
plus war supplemental bill(s)
from Appropriations
Committees

Entitlements -
Reconciliation bill,
other bills from
various committees
(such as Medicare drug
bill) (optional)

Revenues -
Reconciliation bill,
other bills from various
committees (such as the
energy bill) (optional)

Source: AAAS, based on Budget of the United States Government FY 2009.
FEB. '08 © 2008 AAAS
THE FY 2009 BUDGET PROCESS (1)

SUMMER 2007 – Agencies submit their FY 2009 proposals to OMB (Office of Management and Budget) based on broad strategic guidance from OMB in spring 2007.

FALL 2007 – Agencies negotiate with OMB over their FY 2009 proposals.

January 2008 – Agencies finalize their requests.

February 2008 – President Bush releases his proposed FY 2009 budget and transmits it to Congress.
A Science Budget of Choices and Chances

In his final year, President George W. Bush has submitted a request for 2009 funding with few new wrinkles—and with probably little chance of being adopted.

Budgets are about choices, U.S. presidential science adviser John Marburger told reporters this week as he explained what his boss is asking Congress to support in 2009. And what President George W. Bush has chosen for science funding is exactly what he has requested for the past few years: Give a big boost to agencies that support the physical sciences, flat-line basic biomedical research, and put NASA between a rock and a hard place.

The betting in Washington is that the Democratic Congress won’t grant a lame-duck Republican president his wish, and that it is likely to delay approving any part of the Administration’s overall $3.1 trillion budget request for the fiscal year that begins on 1 October until after the November election.

The big winners are the three agencies that are part of what the Bush Administration has labeled the American Competitiveness Initiative (ACI). The $6 billion National Science Foundation (NSF) would receive a 13.6% jump, the Department of Energy’s $4 billion Office of Science would get a 17.5% hike, and the $500 million core research programs at the National Institute of Standards and Technology (NIST) would get a 22% bump. The large boosts compensate for double-digit increases that were in the cards for all three agencies in 2008 until a last-minute budget deal erased most of their gains (Science, 4 January, p. 18), prompting the early termination of some experiments and scheduled layoffs at two DOE national laboratories.

There is bipartisan agreement about the value of a healthy science budget. “The president is right that basic research included in his American Competitiveness Initiative (ACI) is important to our economy and our future,” says Representative Bart Gordon (D–TN), chair of the House Science Committee. But Gordon is very unhappy with some of the choices made along the way, including what he sees as miserly increases in several education programs at NSF, the lack of proposed funding for a new high-risk research agency at DOE that he championed, and the Administration’s repeated attempts to eliminate technology and manufacturing programs at NIST.

Biomedical organizations lament not just the lost research opportunities but also the impact on the next generation of scientists. “This is a real deterrent for any young investigators who were holding out hope that biomedical research was a viable career path,” says Robert Palazzo, president of the Federation of American Societies for Experimental Biology in Bethesda, Maryland. “They have their answer today.”

Marburger disagrees that a flat budget means a gloomy future for biomedical researchers. “Frankly, I think that an argument can be made that better management [of NIH] can bring about much better productivity even with flat resources,” he says. “The private sector does it all the time.” And he says that those who advocate 6% annual growth for NIH to capitalize on its 5-year doubling that ended in 2003 will have to wait their turn. “It will be necessary to increase biomedical research in the future, but it’s important that we first fix this problem in the physical sciences.”
THE FY 2009 BUDGET PROCESS (2)

Feb. – May 2008 – Agency officials, public witnesses, and others testify at congressional budget and oversight hearings; authorizing committees try to write and pass authorization bills.

Spring 2008 – Congress approves its FY 2009 budget resolution.

Various committees receive instructions from the budget resolution to draft reconciliation bills.

Appropriations committees receive 302(a) allocations: total $1.013 trillion, $21 billion more than the President’s budget.

Appropriations committees determine 302(b) allocations dividing total discretionary spending among 12 bills.

Some entitlement programs need to be reauthorized: in June, Congress completed action on a 5-year farm bill.
Senate passes fiscal 2009 budget resolution along party lines

By Humberto Sanchez  CongressDaily  June 4, 2008

The Senate by a 48-45 vote approved a compromise fiscal 2009 budget resolution Wednesday that would cap discretionary spending at $1.013 trillion, $21 billion more than President Bush requested. The House is expected to take up the measure Thursday.

If approved by both houses, it would be the first time since 2000 that Congress has approved a budget resolution in an election year. Senate approval of the budget included the vote of Sen. Barack Obama, D-Ill., who is expected to be the Democratic nominee. His rival for the Democratic nomination, Sen. Hillary Rodham Clinton of New York, did not show up for the vote. Presumptive Republican nominee Sen. John McCain of Arizona also did not vote.

Sens. John Warner, R-Va., and Pete Domenici, R-N.M., who oppose the budget, agreed to withhold their votes, also known as pairing, so that the absence of two ill Democratic senators who support the budget would not affect the outcome. Warner agreed to pair his vote with Sen. Edward Kennedy, D-Mass, who is recovering from surgery on a brain tumor and preparing to undergo chemotherapy, while Domenici paired his vote with Sen. Robert Byrd, D-W.Va., who was hospitalized this week after feeling febrile. He is expected to remain in the hospital for several days for monitoring and treatment for a mild infection. Sens. Olympia Snowe and Susan Collins, both of Maine, were the only Republicans to vote in favor of the resolution. Sen. Evan Bayh of Indiana was the only Democrat to vote against measure.

After the vote, Senate Budget Chairman Kent Conrad, D-N.D., praised the action. "We have passed a fiscally responsible budget today," he said. "This plan provides tax relief for the middle class. It makes critical investments in energy, education and infrastructure. And it returns the budget to surplus in 2012 and 2013. Passing this budget represents a major accomplishment." The budget, which includes a five-year horizon, is intended to achieve a surplus of $22 billion in 2012 and $10 billion in 2013. The proposal also calls for $340 billion in tax cuts, including permanent extension of the 10 percent income tax bracket, increased childcare tax credit, elimination of the marriage penalty and fixing the estate tax at 2009 levels. A number of so-called reserve funds have been included in the budget for energy and infrastructure spending. But this funding must be offset if enacted.

Republicans lambasted the budget in part because they contend it includes a record tax increase since it assumes some of the tax cuts enacted in 2001 and 2003 would expire. "For the second year in a row, the Democratic majority has crafted and passed a tax-and-spend budget -- one that most Americans can't afford as they struggle with a slowing economy and rising food and fuel costs," Senate Budget ranking member Judd Gregg, R-N.H., said during debate.

Gregg and OMB Director Jim Nussle were also critical because the budget's $1.013 trillion discretionary figure would be the first time it has ever surpassed $1 trillion. They pointed out that
Trends in Discretionary Spending, FY 1976-2013
in billions of constant FY 2008 dollars

FY 2008 data are estimates. FY 2009-2013 data are budget projections. FY
2009-2013 figures exclude Iraq and Afghanistan military costs.
FEB. '08 © 2008 AAAS
Discretionary Spending by Appropriations Bill
FY 2009 Request = $992 billion

Source: Congressional Budget Office. Excludes bridge fund for Iraq and Afghanistan military operations.
FEB. '08 © 2008 AAAS
THE FY 2009 BUDGET PROCESS (3)

Summer 2008 – Appropriations subcommittees write appropriations bills. The full committees try to get the bills through the legislative process.

September 2008 – The House and Senate try to conference appropriations bills and send them to the President.

October 1, 2008 – FY 2009 begins. Discretionary programs must have a signed appropriations bill, or shut down. To allow more time, lawmakers pass continuing resolutions (CR’s). (For FY 2008, 4 CR’s were needed.)

Winter 2008-09 (?) – Congress will probably pass an omnibus appropriations bill. (For FY 2008, an 11-bill omnibus was enacted Dec. 26).
DETOUR: EARMARKS, OR “PORK”

- No standard definition. I use “congressionally designated, performer-specific projects” in the federal budget.
- Most earmarks are in appropriations, but many are in authorizations (like that “Bridge to Nowhere” in a transportation authorization bill).
- Bills have two parts: the bill text (legally binding) and the committee report (detailed, advisory explanations). Nearly all earmarks are in lists contained in committee reports, so technically they aren’t legally binding on agencies.
- Nearly all earmarks are portions of larger budget accounts.
by law.

BUILDINGS AND FACILITIES

For acquisition of land, construction, repair, improvement, extension, alteration, and purchase of fixed equipment or facilities as necessary to carry out the agricultural research programs of the Department of Agriculture, where not otherwise provided, $30,995,000, to remain available until expended.

The following table summarizes the Committee's recommendations for Agricultural Research Service Buildings and Facilities:

**AGRICULTURAL RESEARCH SERVICE BUILDINGS AND FACILITIES**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Committee Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Research Center, Pullman, WA</td>
<td>1.870</td>
</tr>
<tr>
<td>Alcorn State University Biotechnology Laboratory, Alcorn State, MS</td>
<td>1.780</td>
</tr>
<tr>
<td>Animal Biotechnology Facility, Athens, GA</td>
<td>1.600</td>
</tr>
<tr>
<td>Animal Waste Management Research Laboratory, Reading, PA</td>
<td>1.390</td>
</tr>
<tr>
<td>Appalachian State University, Asheville, NC</td>
<td>1.000</td>
</tr>
<tr>
<td>ARS Agricultural Research Center, Logan, WV</td>
<td>5.563</td>
</tr>
<tr>
<td>Dairy Forage Agricultural Research Center, Prairie du Sac, WI</td>
<td>2.558</td>
</tr>
<tr>
<td>Forage-Animal Production Research Laboratory, Lexington, KY</td>
<td>2.085</td>
</tr>
<tr>
<td>Hagerman Fish Culture Experiment Station, Hagerman, ID</td>
<td>0.350</td>
</tr>
<tr>
<td>Jim H. Duffey Delta States Research Center, Stoneville, MS</td>
<td>2.000</td>
</tr>
<tr>
<td>National Plant and Genetics Security Center, Columbia, MO</td>
<td>2.000</td>
</tr>
<tr>
<td>Pacific Basin Agricultural Research Center, Bly, HI</td>
<td>2.000</td>
</tr>
<tr>
<td>Poultry Science Research Facility, St. Paul, MN</td>
<td>1.789</td>
</tr>
<tr>
<td>Sugarcane Research Laboratory, Houma, LA</td>
<td>3.290</td>
</tr>
<tr>
<td>Systems Biology Research Facility, Lincoln, NE</td>
<td>1.390</td>
</tr>
<tr>
<td>Total</td>
<td>30,995</td>
</tr>
</tbody>
</table>

National Plant and Genetics Security Center.—The Committee directs ARS, when planning and designing the National Plant and Genetics Security Center, to include plans for expanded vivarium capacity.
DETOUR: WHAT IS A CR?

A continuing resolution (CR) is a temporary appropriations bill allowing federal programs to keep spending money in the new fiscal year without an enacted appropriations bill.

- For FY 2009, a CR may cover all 12 appropriations bills until November (?), January (?) or later.
- In most CRs, programs are allowed to keep spending at the previous year’s rate.
- There could be a different formula, or a different formula for specific programs. For example, there’s a push to give NIH an increase in the CR.
- A CR can be as short as 1 page, BUT it can also be a vehicle for other legislation (this year: offshore oil drilling? Loans to Big 3 automakers? Second stimulus package?) and that could create problems. And bank bailout legislation could also be attached.
FEDERAL R&D IN THE BUDGET

- There is no “R&D budget.” Federal R&D spending comes from 24 federal departments and independent agencies scattered throughout the budget.
- R&D funding trends have closely mirrored trends in the overall discretionary budget.
Total R&D by Agency: FY 2009 Proposed

Budget Authority in billions of dollars

DOD, $80.7
HHS (NIH), $30.0
NASA, $12.8
DOE, $10.5
All Other, $5.2
NSF, $5.2
USDA, $2.0
DHS, $1.0

Total R&D = $147.4 billion (revised)

Source: AAAS, based on OMB R&D Budget Data and agency estimates for FY 2009.
MARCH '08 REVISED © 2008 AAAS
Trends in Federal R&D, FY 1976-2009 *

in billions of constant FY 2008 dollars

Source: AAAS analyses of R&D in AAAS Reports VIII-XXXIII. * FY 2009 figures are latest AAAS estimates of FY 2009 request.
R&D includes conduct of R&D and R&D facilities.
MARCH '08 REVISED © 2008 AAAS
R&D and Discretionary Outlays (Nondefense), 1962-2013
in billions of constant FY 2008 dollars

Source: AAAS, based on Budget of the U.S. Government FY 2009 Historical Tables. FY 2008 data are estimates. FY 2009-2013 data are budget projections.
FEB. '08 © 2008 AAAS
Trends in Defense R&D, FY 1976-2009 *

in billions of constant FY 2008 dollars

Source: AAAS analyses of R&D in annual R&D reports. * - FY 2009 figures are latest AAAS estimates of FY 2009 request. FY 2008 figures exclude pending supplementals. R&D includes conduct of R&D and R&D facilities. DOD S&T figures are not comparable for all years because of changing definitions.

MARCH ’08 REVISED © 2008 AAAS
Selected Trends in Nondefense R&D, FY 1976-2009*

in billions of constant FY 2008 dollars

Source: AAAS analyses of R&D in AAAS Reports VIII-XXXIII. * FY 2009 figures are latest AAAS estimates of FY 2009 request. R&D includes conduct of R&D and R&D facilities.

MARCH '08 REVISED © 2008 AAAS
THE 2009 BUDGET FOR R&D

- The ACI continues for a third year, with large increases for NSF, DOE Science, and the NIST labs to catch up to a 10-year doubling track.
- Again, there would be large increases for DOD weapons and NASA spacecraft development, but also increases for most R&D programs.
- The NIH budget would be flat, agricultural and environmental R&D agencies would decline.
FY 2009 R&D Request
Percent Change from FY 2008

DOE Science +21%
NSF +16%
DOT
DOD weapons
NASA
NIST
DHS
DOE defense
DOE energy
NIH
VA
NOAA
EPA
USGS
DOD "S&T"
USDA

Source: AAAS, based on OMB R&D data and agency estimates for FY 2009.  
DOD "S&T" = DOD R&D in "6.1" through "6.3" categories plus medical research.  
DOD weapons = DOD R&D in "6.4" and higher categories.  
MARCH ’08 REVISED © 2008 AAAS
FY 2009 R&D Appropriations in the 2009 CR
Percent Change from FY 2008 (as of SEPT. '08)

DHS
VA
DOD "S&T"
DOD weapons
USDA
DOE defense
DOE energy
DOT
EPA
NIST
NOAA
USGS
NSF
NASA
NIH
DOE Science

Source: AAAS estimates of R&D in the FY 2009 omnibus / continuing resolution.
Only DOD, VA, and DHS have final FY 2009 appropriations. The remaining agencies are funded temporarily through March 6 under the continuing resolution.
DOD "S&T" = DOD R&D in "6.1" through "6.3" categories plus medical research.
SEPT. '08 REVISED © 2008 AAAS
National Institutes of Health Budget by Institute, 1998-2009 *
(budget authority in billions of constant FY 2008 dollars)

FEB. ’08 © 2008 AAAS
In the absence of explicit priorities and policies, scattered agency budget decisions make a *de facto* U.S. S&T policy:

- Over time, R&D investments change to reflect changes in national goals.
- Until recently, there was increasing funding for the biomedical sciences, stagnant funding for most other disciplines.
- Because the university-oriented NIH and NSF budgets have done well, there have been dramatic increases in support of university R&D.
- Over time, industry has come to play a greater role in U.S. R&D; industry spending determines the R&D intensity of the U.S. economy but the federal government remains the most important for RESEARCH. (There are very few policy tools for the federal government to affect industry spending.)
Trends in Research by Agency, FY 1976-2009 *
in billions of constant FY 2008 dollars

Source: AAAS analyses of R&D in annual AAAS R&D reports.
* FY 2009 figures are latest AAAS estimates of FY 2009 request. Research includes basic research and applied research. 1976-1994 figures are NSF data on obligations in the Federal Funds survey.
MARCH '08 REVISED © 2008 AAAS
Federal Research by Discipline at Selected Agencies, FY 2007 (preliminary obligations in billions of dollars)

* NIH research - $27.7 billion. Shown as two bars.


obligations in billions of constant FY 2008 dollars

Life sciences - split into NIH support for biomedical research and all other agencies' support for life sciences.
FEB '08 © 2008 AAAS
Federal R&D by Performer at Selected Agencies
billions of FY 2007 obligations (preliminary)

* NIH R&D - $27.8 billion.
Shown as two bars.

FEB. '08 © 2008 AAAS
Federal R&D Funding to Colleges and Universities FY 1963-2005

Obligations by agency in billions of constant FY 2008 $


R&D includes research, development, and R&D facilities support. Constant-dollar conversions based on OMB's GDP deflators.

FEB. '08 © 2008 AAAS
U.S. R&D Funding by Source, 1953-2007

expenditures in billions of constant 2007 dollars

Source: NSF, Division of Science Resources Statistics. (Data for 2007 are preliminary.)
AUGUST '08 © 2008 AAAS
HOW DOES THE U.S. COMPARE?

- The U.S. is still the leading science and technology superpower in R&D investments, but the lead is shrinking.
- The U.S. R&D / GDP ratio compares favorably with other nations, but defense development is a big factor in the U.S.
- Other nations:
  - EU – A plan to reach 3% of EU GDP by 2010, but it won’t happen.
  - Korea – R&D growing by 10%+ a year, R&D/GDP ratio surpasses U.S. ratio in 2004 and hits 3%.
  - China – R&D spending grew 20% in 2004 and 25% in 2005; basic research still small, but expanding rapidly.
  - India – Not big in R&D spending yet, but there are plans to boost its R&D capabilities to compete in high-tech industries.
Shares of Total World R&D, 2007*

Total World R&D = U.S. $962 billion**

* World = OECD members plus Argentina, China, Romania, Israel, Russia, Singapore, Slovenia, South Africa, Taiwan. 2007 or most recent year available.

**- calculated using purchasing power parities.

Source: OECD, Main Science and Technology Indicators, 2008.
2007 data or latest year available.
* *- calculated using purchasing power parities.

AUGUST '08 © 2008 AAAS
Total National R&D as % of GDP, 1991-2006

Source: National Science Foundation, National Patterns of R&D Resources and OECD, Main Science and Technology Indicators. Data not available for all nations for all years. AUGUST '08 © 2008 AAAS
WHAT’S NEXT?

- It is now far less likely that Congress will return for a post-election session, because the Senate attached extensions of expiring tax cuts to the financial rescue bill.
- The rescue package includes a retroactive extension of the R&E tax credit, which expired December 2007, through Dec. ’09.
- Federal agencies must plan on living with flat budgets for at least 5 months into the new fiscal year.
- Finishing 2009 appropriations just became more difficult: by early next year, we will know the initial impacts of the financial rescue on the deficit and national debt. The additional debt could make lawmakers wary of increasing other federal spending.
- The full FY 2010 budget proposal be released in April 2009; it will contain sharply higher deficit and debt estimates.
FOR MORE INFORMATION…

The AAAS R&D web site is
www.aaas.org/spp/rd