

So the message I got from my constituents was, "Thank you for the vote on the balanced budget that went through the Senate." But they are a little nervous about us. They say, "You are on second base. Keep going." So that is the message I bring back from my constituents. I think it is an important one to our Nation, because it is our No. 1 domestic problem, the unbalanced budget.

Mr. President, I yield the floor. I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. BINGAMAN. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

MEASURE PLACED ON THE CALENDAR—H.R. 1045

The PRESIDING OFFICER. The clerk will read H.R. 1045 for a second time.

The legislative clerk read as follows:

A bill (H.R. 1045) to amend the Goals 2000 Educate America Act, to eliminate the National Education Standards and Improvement Council, and for other purposes.

Mr. BINGAMAN. Mr. President, I object to proceeding at this time to the bill.

The PRESIDING OFFICER. The bill will be placed on the calendar.

The Senator from New Mexico.

Mr. BINGAMAN. Mr. President, I ask unanimous consent that I be allowed to speak for up to 20 minutes as if in morning business.

The PRESIDING OFFICER. Without objection, it is so ordered.

CUTS IN CIVILIAN RESEARCH AND DEVELOPMENT

Mr. BINGAMAN. Mr. President, 2 weeks ago the Senate passed a budget resolution designed to eliminate the Federal deficit over the next 7 years. The House passed its version of that budget the week before.

While there are some major differences in those budgets, particularly on tax cuts and defense spending and domestic discretionary spending, there is one common feature, and that is a proposed drastic cut in Federal support for civilian research and development. That is across Government.

There has been very little attention paid to this part of the budget balancing effort so far. The public attention has been concentrated on Medicare, Medicaid, education, and tax cuts for the wealthy. But this issue, these drastic cuts in Federal support for civilian research and development, may be the place where the Republican budgets that have been passed through the two Houses will do the most damage to our Nation's future well-being and prosperity.

Overall, civilian research and development spending will be cut 30 to 40

percent by the year 2002 to a four-decade low as a percentage of our economy. Some agencies, such as the National Science Foundation, perhaps the National Institutes of Health, may be cut only at the inflation rate during the next 7 years, but all others—that is, NASA, the Department of Energy, the Department of Commerce, EPA—all appear to be slated for much deeper reductions.

For those who are not familiar with the budget process here—I am sure there are some who are watching who may not be—let me explain why we cannot be more specific about the effect of these budgets at this point. The budget resolutions that are still being considered in conference make many assumptions about Federal programs. The only binding assumption which came out of what we did here in the Senate and in the House is the assumption that affects civilian-applied research with regard to the domestic discretionary spending cap. In fiscal year 1995, this current year, that cap is \$257 billion for total domestic discretionary spending. Under the Senate version of the budget in 2002, it will be \$234 billion, or a 10-percent reduction. That is a 10-percent reduction coupled with 7 years of no inflationary adjustment. Under the House version, the domestic discretionary spending total in 2002 is even lower. In the House version, it will be \$229 billion.

If civilian research is treated on average like all other programs in this larger category, this domestic discretionary spending category, which I would assume is really the best case that we could hope for, if that were to be the case, then that research and development funding would be cut 30 percent in real terms. If other programs, such as highway funding, law enforcement, and veterans programs are protected from cuts when funding is finally allocated by the Appropriations Committees, the cuts in research and development could reach 40 percent in real terms.

Mr. President, I am tempted to ask what the research community in this country has done or failed to do to deserve this type of treatment at this stage in our Nation's history. The research community won the cold war for us. They put men on the moon, they revolutionized medicine, they invented computers, they pioneered electronics and semiconductor devices. They invented a myriad of new materials that have fundamentally changed our lives.

This is just as Vannevar Bush, who was one of the giants in the post-World War II generation in science, predicted in his report, "Science: The Endless Frontier," about half a century ago. Bush had the wisdom to know nearly 50 years ago that new scientific and technological fields would emerge that he could not yet imagine—semiconductor electronics, for example, or molecular biology and the material sciences, just to name three. Bush had the vision to see that Federal investments in science

and technology could transform our lives and contribute to our health and the standard of living and the security of all Americans.

Federal investment in civilian research and development did not cause the Federal deficit. In fact, it is quite the opposite.

Mr. President, here is a chart that I want to direct my colleagues' attention to. It shows civilian research and development as a percentage of gross domestic product during the 40-year period from 1961 through the year 2001 or 2002. In 1969, which is the last Federal budget that we had that was in balance, Federal civilian research spending was .76 percent of gross domestic product, about in this range. With the sole exception of the Bush administration, it has trended lower for the last quarter of a century. In 1995, it is estimated at about .46 percent of gross domestic product, the same as it was in 1992.

In the year 2002, under this budget resolution that passed both the House and now a different one in the Senate, but the same in this regard, in the year 2002, it will be about .27 percent under these Republican budgets. That assumes the best case, as I mentioned earlier; that is, that research is treated on averages the same as other domestic discretionary programs.

It is not just that our civilian research investments have not caused our current deficit. More importantly, there is almost universal recognition that these investments have paid for themselves many times over by the growth that they have contributed to our economy. It is not an accident that American industries, from aerospace to agriculture to electronics to pharmaceuticals, enjoy world leadership. Federal civilian research investments are truly investments in the Nation's future. Mr. President, in my view, it is folly to be cutting them to this extent over the next 7 years as we enter this new century.

The cuts in Federal support for civilian research will almost surely not be made up in the private sector. The Wall Street Journal on May 22 reported on deep cuts being made by AT&T, by General Electric, by IBM, Kodak, Texaco, and Xerox in their research budgets. The reason: Private-sector firms have an ever narrower focus and an ever greater unwillingness to invest in long-term research projects, the benefits of which are uncertain, and usually the benefits of which are not capturable by any single firm alone.

The governments of our major economic rivals, Japan and Germany, recognize the importance of civilian research investments. Let me show you another chart, Mr. President. This chart compares the three countries in 1992. It shows that in 1992, the German Government invested .9 percent of gross domestic product that year in civilian research, over in the right. The Japanese Government invested .5 percent, directly and indirectly. Neither

country shows any sign that it is joining us in planning to slash investment in research spending. It is quite the opposite. They and the other industrial countries around the world are seeking to emulate the successful American model of the last half century in science and technology, just as we seem bent on abandoning that model.

Our research universities, our Federal laboratories, and our investments in small business research and innovation are the envy of the world. Under the Republican budgets, we risk losing a generation of research and of young researchers, since the best students will be diverted to other professions by the grim job prospects awaiting them in research careers.

Mr. President, it is worthwhile to ask how we got ourselves into this fix, and how we can get out of it. That is something I believe will be discussed here in the coming months as we talk about these budgets.

What we have seen over the last 2 years is the almost complete fracturing of bipartisan consensus which was forged during the Reagan and Bush administrations on the appropriate Federal role in civilian research and development. The consensus was that the Federal role should stop at precompetitive development activity, which should be conducted on a cost-shared basis, with industry putting up at least half the money. One test of the precompetitive nature of the research was whether some of our industry's intense rivals, such as Intel and Motorola, in the case of Sematech, which most of us are familiar with, could collaborate in a single effort. Everyone agreed that the Federal role should not include helping individual firms to get specific products to the commercial marketplace.

Indeed, the very term, "precompetitive development," was first coined by President Bush in a speech that he gave to the American Electronics Association in February of 1990. He was seeking to distinguish the technology policy that he was pursuing in his administration from the industrial policies of his predecessors in the 1970's—for example, the Clinch River Breeder Reactor, supersonic transport, and the Synfuels Corporation.

President Bush spoke proudly during the 1992 campaign of his efforts to expand civilian applied research through a series of new, high payoff investments in critical technologies:

A high performance computing and communications initiative; an initiative to improve the manufacturing and performance of materials; an expanded program in biotechnology research; the establishment of the U.S. advanced battery consortium, which was to be funded for 4 years; a significant increase in our aeronautics research budgets; and the establishment of seven regional manufacturing technology centers for the distribution of modern manufacture of tools and know-how.

This notion of what the appropriate role of the Federal Government in research is and is not was supported in numerous pieces of legislation passed since 1980 with bipartisan sponsorship and with the blessing of the Reagan and the Bush administrations. The vast majority of that legislation passed this body unanimously.

Indeed, the American bipartisan consensus of 1992 on the appropriate role of Government in civilian research and development was incorporated in late 1993 into the Uruguay round subsidies code, and it is now the world norm that governments can fund the full cost of basic research, they can fund up to 75 percent of the cost of applied research that is relevant to industry and up to 50 percent of the cost of precompetitive development. They can do all of that without risking trade sanctions. Any development subsidies beyond that precompetitive stage are fully sanctionable, as they should be.

Unfortunately, by late 1993, this bipartisan consensus that I have referred to had been fractured. As President Clinton and Vice President GORE pursued a science and technology policy almost identical to President Bush's and did so with real commitment, which I commend them for, our debate suddenly reverted to the sort of bumper sticker level which we had mistakenly thought was behind us. Charges of industrial policy, charges of picking winners and losers were affixed to a broad range of civilian research programs.

By early this year, the bumper sticker pejorative had become corporate welfare. That is a phrase which, unfortunately, was popularized earlier this year when Secretary of Labor Bob Reich used it to refer to tax incentives, tax subsidies of various kinds.

Republican leaders argued, mistakenly, that Federal support for research in areas from aeronautics to computers to health to energy to agriculture and the environment was somehow illegitimate, either because it was corporate welfare or it represented some type of industrial policy. It was merely seen as a duplication of private sector efforts.

As David Sanger, who has reported on these issues for many years, pointed out in an article in the business section of the New York Times on May 23—this is a quote from his article:

Such arguments underscore the sharp difference in the way technology and trade policy is dealt with in Washington and in the capitals of its major economic competitors, where trade is considered national security and "picking winners and losers" is a phrase with no political resonance.

Mr. President, the overall budget prospects facing civilian research in this country in the years ahead demonstrate just how high a political resonance this issue seems to have taken on today, at least in some parts of the political spectrum.

I do not believe this course we have charted for ourselves in these budget resolutions makes sense for the Nation,

and as my colleagues know I led an effort during the debate on the budget to make spending on research, technology and related trade promotion and trade law enforcement programs a high priority in the allocation of funds for the next 7 years. The amendment would have put the Senate on record in favor of maintaining the overall fiscal year 1995 level for these programs. It would have conceded that there would be no inflationary adjustment during that period. But it would at least have tried to keep in place existing funding. It would have put the Senate on record against any net tax cuts unless we could first achieve that goal.

The amendment did not seek to allocate funds within any of the various civilian research agencies. That would have been left, as it should be, to the authorizing and appropriating committees.

By the year 2002, even under the amendment I offered, Federal civilian research and development investments would be at a four-decade low as a percentage either of Federal spending or of gross domestic product.

Mr. President, this first chart I put up before makes that point very dramatically. It shows that we would have the lowest level of spending, the lowest percentage of spending of our gross domestic product on civilian research we have had in four decades.

It would not have fixed the problem of sustaining our investments at the level that our economic competitors will be investing. Even if the amendment had been adopted, in 2002 we would still be spending slightly more than half of what the Japanese Government spends and about a third of what the German Government spends as a percentage of gross domestic product.

Unfortunately, this very modest effort was defeated here on the Senate floor by a vote of 53 to 47, with all Republicans except Senator JEFFORDS voting in opposition and all Democrats voting in favor.

I also supported a comprehensive fair-share budget, which was a substitute offered by my colleague, Senator CONRAD, that would have balanced the budget while preserving funds for domestic discretionary programs. The fair-share budget provided \$36 billion in additional discretionary funds in 2002 for research, education, and other priorities by limiting the growth of tax loopholes for wealthy corporations and individuals. That also failed on a 60-to-39 vote, largely along party lines.

Almost a century ago, in 1899, the head of the Patent Office, Charles Duell, is purported to have proposed to close up shop at the Patent Office because, in his opinion, "everything that can be invented has been invented." A half century later, Vannevar Bush laid out his starkly different vision for the Federal role in science and technology.

Now, as we prepare to enter the 21st century, we face a choice between those two competing visions. Because I believe that the scientific and the technological frontier is still endless, just

as it was 50 years ago, and because I do not want to risk condemning our children and grandchildren to a less prosperous and less healthy and less secure future, I intend to continue fighting for Federal research investments even as we continue working toward a budget resolution.

I hope we can restore the bipartisan support for these programs that was there until very recently, and I hope we can do so before serious damage is done to the programs. I am afraid this is going to take not just months but perhaps even years.

Mr. President, I appreciate the chance to speak. I yield the floor, and I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

Mr. DOLE. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

TRIBUTE TO THE LATE JAMES C. SELF

Mr. THURMOND. Mr. President, this month in Greenwood, SC, a terrible, sudden loss has been suffered by the entire community. On May 4, James C. "Jim" Self—successful businessman, committed public servant, concerned community leader, and dedicated family man—was tragically killed in a traffic accident which no one could have anticipated.

Respected for his position as chairman of the board of Greenwood Mills Inc., Mr. Self was born and raised in Greenwood and went on to earn a bachelor of arts degree from Clemson University and a masters of business administration from the University of South Carolina. Throughout his life, Mr. Self established a well deserved reputation as a civic leader whose activities included service on the Greenwood board of Bankers Trust, the State board of NCNB, and the boards of Benedict College, Junior Achievement, and the Greenwood YMCA. In addition, Mr. Self served on the Governor's Review Board under John West, for which he was awarded the South Carolina Order of the Palmetto. He was also a member of the First Baptist Church of Greenwood.

Let us make certain that we remember with respect and admiration the substantial contributions this outstanding citizen made to his family, his community, and the State of South Carolina.

Mr. President, I know I speak for all those who knew Jim Self when I say that he will be missed greatly. My deepest sympathies go out to his wife—Linda Coleman Self—and children—Linda Elizabeth Self, James C. Self III, and Furman Coleman Self—and the entire Self family, including his distinguished father—Mr. James C. Self—for the tremendous loss they have suffered.

TRIBUTE TO FORMER SENATOR MARGARET CHASE SMITH

Mr. THURMOND. Mr. President, during my tenure as a Member of this distinguished body, I have had the pleasure of serving with many individuals of impressive character and ability. Few, however, possessed the unwavering commitment to principle and public service demonstrated by Senator Margaret Chase Smith, who passed away this week at her home in Skowhegan. I would like to offer her family and friends my deepest condolences for their loss, a loss suffered by our entire Nation.

After an accomplished career of 8 years in the House of Representatives, Mrs. Smith was first elected to the Senate in 1948 and served four consecutive terms. A political leader of national stature, her substantial talents earned her a prominent role in Republican Presidential contests.

Mrs. Smith brought grace and wisdom to this Chamber as a dedicated representative of the people. An intrepid spirit characterized her work as a member of the Senate Armed Services Committee, on which I had the pleasure of serving with her. At all times, the safety and prosperity of the Nation were her sole objectives, and she worked to ensure that the United States was always prepared to defend liberty against any enemy.

When our Nation was gripped in turmoil, Mrs. Smith was quick to supply raging debates with needed perspective and calming insights. She personified the very best qualities that define the American character and applied those commendable attributes to all of her work as a Member of this institution.

Mr. President, I am confident I speak for all of us who knew Margaret Chase Smith when I say that she will be greatly missed. Her legacy is a standard of public service toward which every Member of the U.S. Senate should strive, and my sympathies go out to all those touched by her warmth and intelligence.

TRIBUTE TO THE LATE JAMES BOYD "JIM" KLUTTZ

Mr. THURMOND. Mr. President, James Boyd "Jim" Kluttz passed away last month at his home in Laurens, SC, and I would like to offer his family and many friends my deepest condolences for their heavy loss.

A dedicated reporter, Mr. Kluttz served as editor emeritus of the Laurens County Advertiser following his retirement from the paper in 1981. His tenure with the paper began in 1966, and Mr. Kluttz photographed and reported upon the people and places of Laurens County for the next 15 years. His colleagues described his love and commitment to the people of Laurens as follows: "(Mr. Kluttz) was the kind of journalism that reflects the heart and soul of a community and all that is good in it * * * and, in many ways, he

was the soul and conscience of our community." Clearly, Mr. Kluttz practiced the kind of journalism that, unfortunately, is now all too rare.

Mr. President, I know I speak for all those who knew Jim Kluttz when I say that he will be missed greatly. My heartfelt condolences go out to his wife, Alma Wyatt Kluttz, his two sons, James Thomas Kluttz and John Boyd Kluttz, his daughter, Laura Anne K. Smith, and their families for the loss they have suffered.

WAS CONGRESS IRRESPONSIBLE? THE VOTERS HAVE SAID YES!

Mr. HELMS. Mr. President, more than 3 years ago, I began daily reports to the Senate to make a matter of record the exact Federal debt as of close of business the previous day.

As of the close of business Friday, June 2, the exact Federal debt stood at \$4,902,882,032,835.06, meaning that on a per capita basis, every man, woman, and child in America owes \$18,611.42 as his or her share of the Federal debt.

It is important to note, Mr. President, that the Senate had an opportunity to implement a balanced budget amendment to the Constitution. The Senate failed by one vote in its first opportunity to bring the Federal debt under control.

There will be another opportunity in the months ahead.

Mr. DOLE. What is the pending business?

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER. Morning business is now closed.

COMPREHENSIVE TERRORISM PREVENTION ACT

The PRESIDING OFFICER. The clerk will report the pending business.

The bill clerk read as follows:

A bill (S. 735) to prevent and punish acts of terrorism, and for other purposes.

The Senate resumed consideration of the bill.

Pending:

Hatch Amendment No. 1199, in the nature of a substitute.

AMENDMENT NO. 1199

Mr. DOLE. Mr. President, let me say to my colleagues that we hope to complete action on this bill very quickly, and I am asking my colleagues on each side—I think there are 67 amendments on the Democratic side, 30-some on the Republican side—to see if we cannot limit the number of amendments. We will also file cloture today and try to get consent to vote on that cloture motion tomorrow in an effort to expedite this bill.

Immediately after the tragic events in Oklahoma City, I wrote to President Clinton expressing my hope that we could put aside partisanship and develop an antiterrorism plan all Americans could support. Just as partisan