

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 President, I ask unanimous consent that the order for the quorum call be rescinded.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