

## Increasing Defense Spending

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Thank you very much, Colonel Belknap. I'm delighted to be here at West Point and to have a chance to talk with all of you. When Major John Cogbill was at Harvard a few years ago, he suggested that I come to West Point to give a lecture. He promised that I could do so when there would be a good football game here at West Point. I'm looking forward to tomorrow night's game. Good luck!

I have been interested for several years now in trying to increase the current very small number of academic economists working on issues of national security. To fill this serious gap in the economics profession and in our nation's analytic capability, I organized a graduate seminar at Harvard devoted to the economics of national security – that's where I met John Cogbill, Adam Albrich and others here. I also started a working group at the National Bureau of Economic Research on national security to which some of the West Point faculty have come. And I've organized and chaired sessions at the annual American Economic Association meetings on the subject of national security.

On each occasion I say to the assembled group that I think that the economics of national security is the most neglected important subject in economics and the most important neglected subject in economics. I think we're beginning to make some progress in getting more academic economists around the country interested in the subject. I think that's a very good thing.

Today I want to talk about a central question: the outlook for the defense budget in the context of our longer term macroeconomic environment and about the implications of that for national security.

I am, frankly, very concerned about the size of the defense budget and its implications for our nation's ability to protect our security at home and to deal with our enemies abroad. As you know, defense outlays in the current fiscal year will be about \$525 billion. This is far more than any other nation. It's more than the next 40 nations put together.

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But is it really adequate for the task that faces the U.S. defense establishment today and that it's going to face in the years ahead? I think the answer to that question is probably no. With something as critical as national security, even a "probably yes" wouldn't be good enough. I think we have to have a good margin of safety in our defense capability.

It's useful to put our current spending in historic perspective and to see how it has evolved. Right now, defense spending is almost exactly 4 percent of GDP, but that includes the funds for the operation in Afghanistan and Iraq. Without that, defense outlays now would be just about 3 percent of GDP. How does that compare to where we've been in the past?

Back in 1962, before the Vietnam War, defense spending was 9.3 percent of GDP. So it was more than three times today's spending outside of the Afghanistan and Iraq operations. By 1979, that 9.3 percent had been cut in half – to just 4.7 percent of GDP – to make room for the growth of the social programs that hadn't existed in 1962. Then President Reagan, whom I had the privilege of serving as the Chairman of the Council of Economic Advisors, increased defense spending very rapidly. Total defense spending doubled between 1980 and 1986. The share of GDP spent on defense rose to more than 6 percent of GDP by 1986. All of that in just five years. I think that resulting new military strength helped us to bring about the collapse of the Soviet Union.

That led, though, in the 1990s to the so-called "peace dividend" in which defense spending fell to just 3 percent of GDP by the year 2000. And that's where we are today: 3 percent of GDP, except for the spending on Afghanistan and Iraq.

So the big question is: Is that enough for defense in this post-Soviet Union age? I don't think so.

It's certainly true that modern weapons have much greater accuracy, much greater lethality than the weapons of 1960 or 1980. But the enemies we face today and the circumstances in which we fight are also very different.

It's worth remembering that President Eisenhower decided on a strategy of giving a major role to nuclear weapons as a deterrent because he concluded that a large enough conventional Army to deter the Soviet Union would simply be too expensive. That strategy worked. It kept the Soviet Union out of western Europe and away from the United States. But nuclear weapons can be only a very small part of our current military strategy. Similarly, the traditional weapons that have become so much better in recent years do have a role to play, but they are certainly not sufficient for the current environment.

This is especially true of the urban warfare of the type we're facing in Iraq and that Israel recently faced in Lebanon. That warfare requires more men and a different type of sophisticated equipment.

We've also learned that NATO may not be much more than a symbolic hope. The other countries in NATO don't feel the sense of commitment or responsibility that they did when the Soviet Union was a military threat on their doorsteps. Their spending on social programs has increased non-defense Government outlays to nearly 50 percent of GDP in many of those countries, making greater spending on defense very difficult for them to finance.

Much of the European defense programs seem to be much more focused on creating jobs in the local economy than on contributing to national defense or global security. So the U.S. now has to bear the burden of a new kind of conflict without significant help from others.

Indeed, we face not just a new type of conflict, but three new and different challenges. First, an increasing number of relatively small regional powers that can or soon will be able to deliver nuclear weapons and other weapons of mass destruction. Second, the non-state terrorist networks. And, third, the independent terrorists.

The terrorists networks -- the al-Qaeda jihadists -- have a dream, a vision, a goal of world expansion that is probably intellectually and emotionally more powerful than the Communist ideology of the old Soviet Union. Some at least of the independent terrorists -- like those who struck the subways of Madrid and London -- seem more motivated by hate and by anti-Americanism than by any such global vision. Dealing with these diverse enemies requires an enormous increase in intelligence activity, much of which is funded as part of the Defense budget.

In addition to these new threats, there remains the risk that in the longer run we may again face major states with substantial armies, navies, and air forces that can fight both conventional and nuclear wars. Russia still has a very large number of nuclear intercontinental ballistic missiles, and China is now beginning to produce similar weapons that could reach the United States.

Today's tasks require more manpower and a different mix of manpower than we have in our armed services. The major role of the Reserves and the National Guard that was appropriate for the military task of a Cold War is in my judgment no longer appropriate when we face long

periods of active combat. The regular Army is not getting the rotations that they need. The National Guard and the Reserve forces have been called on to serve for long periods in Iraq, indeed, in some cases, to serve for more than one tour of duty. It's not going to be possible to attract civilians to the National Guard when they face the prospects of that kind of service in the future. Nor is it appropriate in my judgment to disrupt the civilian economy in this way going forward.

The manpower of the future will, therefore, require larger numbers of active armed forces while the National Guard is trained to play a significant domestic role in homeland security incidents. A substantial increase in the size of the regular armed forces, an expansion of the National Guard to deal with domestic terrorism and a much larger intelligence community to collect and analyze information will require a substantial increase in compensation levels and in the overall budget for personnel. It's very worrying, therefore, that the Navy and Air Force are instead planning major manpower reductions in order to free up funds for equipment and maintenance.

An increased budget will also be needed to modernize military equipment and to make them more suitable to the rapid deployment and other requirements of the new challenges. I've been shocked and dismayed to learn about the age of our weapon systems and about their inappropriateness for many of the tasks at hand. The difficulty in modernizing these weapon systems is an indication, I think, of the inadequacy of the equipment budgets.

The experience with the Army's Future Combat System is a good illustration. The basic idea of an integrated system of modern high-tech weapons that can be rapidly deployed is generally accepted as an appropriate shift for the Army, even if there are disagreements about technical details of that strategy. . I take the Army's decision to make this its major modernization strategy as evidence of its importance. I, therefore, find the delays and uncertainties in implementing this strategy a source of great concern.

The idea for the Future Combat System was first proposed by General Eric Shinseki back in 1999 with the notion that this system of eighteen integrated weapons would begin production in 2006 and begin fielding in 2008. Well, here we are in 2006, and production has yet to begin. Moreover, according to the Congressional Budget Office it's now estimated that the first such brigade won't be deployed until 2014 and the full transition of the Army's combat units won't be completed until 2035.

I cannot understand a decision to wait 30 years to implement fully today's best technology. I wonder how many better ideas will come along during those 30 years and how

different our military challenges will be by then. Will we miss out on what we need over the next decade and then have the wrong equipment for the more distant future -- equipment designed in the beginning of this decade that is the wrong equipment for the military challenge of the mid-twenty-first century?

I'm amazed that it can take so long to produce a weapon system. I'm struck by the fact that the time between now and the first deployment is more than the entire duration of World War II. Why were we then able to mobilize vastly more resources in such a shorter time?

As an economist, I'm also amazed that there is concern among various analysts that this modernization is projected to cost \$10 billion a year in today's dollars, so much concern that the focus of a recent study by the Congressional Budget Office of the Future Combat System focuses on alternative lower cost options. Recall that \$10 billion is less than 2 percent of today's defense budget, and since that budget is only 4 percent of GDP, we're talking about modernizing the Army at an annual cost of less than 1/10th of 1 percent of GDP.

I would have expected to read an analysis of how additional spending could accelerate the deployment. Perhaps \$10 billion for the major thrust of Army modernization doesn't seem like that much to me because I have spent much of my time in recent years thinking about the Social Security and Medicare programs that now cost more than \$900 billion a year. So I find it hard to think of \$10 billion a year for Army modernization as a big price tag.

In a broader context, there seems to be general agreement that the United States has absorbed so much of our warfighting capacity in Iraq and Afghanistan that we could not fight in Iran or North Korea or elsewhere if that were judged to be appropriate on national security grounds. That limit on our capacity encourages our adversaries to behave in ways that are contrary to American interests. They would not do that if we had the extra manpower and equipment to that were once assumed to be a goal, and perhaps a reality, of our military structure.

In short, I think that an important goal of defense policy should be to increase the fraction of GDP going to our national security needs. In saying that, I don't underestimate the political difficulty of getting that increase. It will take political leadership from a President who recognizes the importance of national security and the role of defense resources in achieving that goal. It will take strong political leadership indeed to overcome the economic headwinds that will otherwise limit and depress defense spending.

There are three such forces impeding the rise in defense spending: first, a slower growth of GDP; second, the consequences of shrinking our trade deficit; and, third, the effect of population aging on the Government budget. I'll comment on each of these to indicate the magnitude of the problem, its duration, and what, if anything, can be done.

The size of the GDP and the percentage of GDP devoted to defense together determine the total available defense resources. I traced the decline of the GDP share and argue it should be increased. If it isn't increased, defense spending will be limited by the rise in GDP. That isn't very fast and it will get slower in the future.

The growth rate of GDP can usefully be analyzed as the sum of the growth rate of the labor force and the growth rate of productivity of the labor force, that is of GDP per employee. Over the past decade the labor force has grown at about 1 percent per year while productivity has increased at about 2 percent per year, giving us real GDP growth of 3 percent per year. Looking ahead, labor force growth is expected to slow as a result of the past decline in the birth rate. Government forecasts put the labor force growth over the next 25 years at only about half a percent per year, although the exact number will depend very much on our immigration policy.

Productivity growth was only about 1 percent a year from 1970 to 1995 but has increased to double that, about 2 percent per year, since then. There's considerable debate among economists about just what caused that increase in productivity and, therefore, about the outlook for the future. I think the key driver of the productivity increase has been the Internet and the changes in management and in production processes that the Internet made possible.

The U.S. has been better able to take advantage of that technology than the Europeans because of the flexibility of our labor market, the ease with which new businesses can be established in this country, and the incentive culture of American management. In my judgment, the new technology will continue to bring above-trend productivity gains for at least the coming decade. The more distant future is too hard to predict, but combining the likely slowdown in labor force growth and return of productivity growth to its long-term trend of about 1.5 percent per year suggests that GDP growth may decline from current 3 to 3.5 percent to between 2 and 2.5 percent.

Small differences like that don't seem to be all that important but the cumulative effect is really very large. With a 3 percent growth rate, GDP will increase 100 percent over the next 25 years. With a 2 percent growth rate, the rise will be only 65 percent. So it implies a big difference in the potential size of GDP and therefore in the potential growth of defense

spending . Increasing defense spending at a faster rate than the rate of GDP growth requires raising the share of GDP devoted to defense.

I think this is going to be made more difficult during the next decade by the likely adjustment of the trade deficit —I'll explain why in a minute—and more difficult after that by the aging of the population.

The U.S. now has a trade deficit of more than \$800 billion a year, about 7 percent of our GDP. That means that we import about \$800 billion more than we export to the rest of the world. Those net imports add to the volume of goods and services that we can consume or invest or devote to national defense. That volume of net imports won't continue forever. Indeed, some day we as a nation will reverse this process and we will export more than we import.

Why? Because if we just import more than we export forever, our net imports will simply be a gift from the rest of the world. This year's gift will exceed \$800 billion. Over the past decade alone, these potential "gifts" totaled nearly \$5 trillion. Of course, we give IOUs in exchange for these net imports, that is, we borrow to pay for them. So they don't look like gifts. But as long as the rest of the world only gets pieces of paper in exchange for their goods -- and when the interest is due on those pieces of paper they just get more pieces of paper—and not more goods from us than we get from them, it will turn out to have been a gift.

I don't think the world is going to work that way. At some point, the rest of the world is not going to want to give us this multi-billion dollar gift. At some point, the pendulum will swing the other way. The dollar will fall, making U.S. products cheaper and therefore more attractive to foreign buyers and foreign products more expensive and therefore less attractive to American buyers. No one knows just when that will happen but it will happen. When it does happen, we will be poorer as a nation in two ways.

First, we won't have the extra goods and services from the rest of the world to consume or invest or spend on national defense in the United States. If the trade deficit falls from 7 percent of GDP to, say, 3 percent of GDP over the next 5 years, a not implausible assumption, that will shrink the cumulative growth of resources available in the United States by 4 percent of GDP. If this does happen over 5 years, during that period the available resources in the US will rise by 8/10ths of a percent less each year than the rise in GDP. So a 2.5 percent annual rise in GDP will mean only a 1.7 percent rise in available resources. Americans will feel poorer or at least they will not be getting rich as fast, and that is likely to make the American public less likely to devote more of its income to national security.

The adjustment of the trade deficit also reduces Americans' real incomes in another way. We now import an amount equal to about 17 percent of our GDP. When the dollar falls relative to other currencies ( the Euro, the yen, the Chinese RMB) , it will take more dollars to pay for those existing imports. For example, if the dollar falls by 30 percent, also not an implausible assumption, and foreign producers maintain prices in their own currencies, the cost of buying the existing volume of imports would rise by 30 percent of that 17 percent of GDP or about 5 percent of GDP. If that happens over 5 years, the real income of Americans will fall relative to what it would otherwise be by an additional 5 percent or 1 percent a year.

If we put these pieces together, we see how the recent growth rate of GDP could fall from 3 percent per year to 2.5 percent, and the rate of growth of the real resources available to Americans could fall to less than 1 percent per year. On a per capita basis, there would be no rise in real incomes.

This is, of course, just a transition problem, reflecting a smaller trade deficit with the rest of the world and a change in the exchange rate. It will last as long as it takes to shrink the trade deficit to a sustainable level or to transform our trade deficit eventually into a trade surplus. Once that has happened, the real incomes of American can grow at the same rate as total production, i.e., as the growth rate of GDP. But during that transition period, it will be more difficult to get political support for increased defense budgets.

The final hurdle to increased defense spending will be the effect of the population aging on the cost of Social Security and Medicare. These programs now take 7 percent of GDP, 8.5 percent if you include the Medicaid program. By 2016, this will rise to 11 percent, and that share will continue to rise as a result of the continued aging of the population and the higher cost of medical care. It won't be long before the increase in spending on these three programs from today's 8.5 percent of GDP will be as large as today's entire defense budget.

The extra tax to pay for that increase in these programs would then be equivalent to raising the payroll tax from 15 percent today to more than 25 percent. If the increased cost were financed by raising the personal income tax that would mean an increase of all tax rates by about 50 percent; in other words, taking the 25 percent rate to 37 percent and the 35 percent rate to over 50 percent. Such higher taxes would hurt the economy and would be a major impediment to increased resources for defense.

That's one more good reason, in my judgment, to focus on transforming the current pure tax-financed, pay-as-you-go systems for financing Social Security and Medicare to a mixed system that combines a tax-financed basic program with individual investment-based accounts in



a way that can avoid that tax increase. I think that is the major fiscal challenge facing the United States for the decade ahead.

The picture that I've been painting today is a difficult one for national security. The challenges to our nation's security are growing and becoming increasingly complex. The manpower and the equipment that will be needed to deal with these challenges will be more expensive and yet the budget resources available will grow more slowly and will have to compete with the increased cost of the social programs for the aging population. This will force defense planners to make painful and difficult choices about the force size and structure, about the mix of equipment, about the nature of the Navy and of the Air Force. These choices are complicated by the evolving technology, the changing character of the enemies we face, and the long delivery lags.

But I believe that the American public really does care about its security and would respond to explicit discussions of the choices that we face.

I was struck, for example, by a recent RAND study that homeland security could be significantly increased and a serious gap in our preparedness could be closed by creating a rapid-reaction homeland security brigade of about 3,600 members rotating between active Army and National Guard for an annual cost of only \$200 million, or less than \$1 per person per year.

Making better use of any available defense budget is obviously extremely important, but it's impossible, in my judgment, to achieve the level of national security with a budget of only 4 percent of GDP that could be achieved by returning to the relatively higher defense budgets of previous years. Getting the American public to understand that, and the Congress to act accordingly, is the major economic challenge for national security and for our future political leaders.

Thank you.