[H.A.S.C. No. 112–81]

ECONOMIC CONSEQUENCES OF DEFENSE SEQUESTRATION

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

HEARING HELD
OCTOBER 26, 2011

U.S. GOVERNMENT PRINTING OFFICE

71–452 WASHINGTON : 2012

For sale by the Superintendent of Documents, U.S. Government Printing Office,
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ECONOMIC CONSEQUENCES OF DEFENSE SEQUESTRATION

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Wednesday, October 26, 2011.

The committee met, pursuant to call, at 10:03 a.m. in room 2118, Rayburn House Office Building, Hon. Howard P. "Buck" McKeon (chairman of the committee) presiding.

OPENING STATEMENT OF HON. HOWARD P. "BUCK" MCKEON, A REPRESENTATIVE FROM CALIFORNIA, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. The committee will come to order. Good morning.

The House Armed Services Committee meets to receive testimony on economic consequences of defense sequestration. We are joined by a panel of top economists, who will share three distinctive perspectives with the committee, the macroeconomic impacts within the United States of further cuts to defense, the regional economic effects, which may vary from state to state, and the global dynamics of further cuts to our military.

The committee has held a series of five hearings to evaluate lessons learned since 9/11 and to apply those lessons to decisions we will soon be making about the future of our force. These hearings also focus on the national security risks posed by sequestration. We received perspectives of former military leaders from each of the Services and the Joint Staff, former chairmen of the Armed Services Committees, outside experts, and Secretary Panetta and Chairman of the Joint Chiefs of Staff, General Dempsey.

Today we will change direction and focus on the other side of the coin, the relationship between the U.S. military and the economy. As a fiscal conservative, I tend to oppose increasing Government spending for the purpose of job creation. But I think we must understand that the defense industry is unique, in that it relies entirely on Federal Government dollars. We don't spend money on defense to create jobs.

But defense cuts are certainly a path to job loss, especially among our high-skilled workforces. There is no private sector alternative to compensate for the Government's investment. Secretary of Defense Panetta has said the cuts on the scale of sequestration will result in a 1-percent hike to unemployment and 1.5 million jobs lost.

The Aerospace Industries Association released a report yesterday based on the analysis of Dr. Fuller, one of our witnesses today, that estimated just over one million industry jobs would be lost based on cuts to procurement and R&D [Research and Development] alone. When one factors in the separation of Active Duty service members and DOD [Department of Defense] civilians, the number is quite close to the DOD's.

The impact is not proportional across all 50 states. Dr. Fuller's testimony suggests that nearly 60 percent of the jobs lost would come from just 10 states. One-third of the jobs lost would fall in three states: California, Texas and Virginia. How does this translate to the larger economy? In 2013 alone, growth in GDP [Gross Domestic Product] would fall by 25 percent.

But the economy could be affected further, as the U.S. military might no longer be seen as the modern era's pillar of American strength and values. There is risk that some within the international community would try to take advantage of the fragile American economy and the perceived limitations on our military's ability to promote global stability.

In these difficult economic times we recognize the struggle to bring fiscal discipline to our nation. But it is imperative that we focus our fiscal restraint on the driver of the debt, instead of the protector of our prosperity. With that in mind, I look forward to hearing from our witnesses today.

Ranking Member Smith.

[The prepared statement of Mr. McKeon can be found in the Appendix on page 39.]

STATEMENT OF HON. ADAM SMITH, A REPRESENTATIVE FROM WASHINGTON, RANKING MEMBER, COMMITTEE ON ARMED SERVICES

Mr. SMITH. Thank you, Mr. Chairman. I appreciate you holding this hearing and this series of hearings that we have had to discuss the impact of defense cuts, and I think it is particularly appropriate that we have a hearing today that will focus on the economic impact of these cuts. I think there are critical issues to consider in that regard. The industrial base of this country is critical to our economy and obviously defense spending is part of maintaining that industrial base.

So any cuts could potentially impact that. There is also the challenge going forward to our national security of losing key capabilities. There are certain things that the defense budget requires in terms of technological and business capabilities that, if we are not doing it, those capabilities go away. We have already seen that to a large degree in the satellite industry.

We were I think roughly 70 percent of the international market for satellites. We are now down to about 25 percent and there are certain key capabilities in developing satellites where simply in the United States, you cannot find that. And that has a national security implication. We can always, as a country, rely more on domestic U.S. production than we can rely on foreign partners producing us those key capabilities for our defense.

So I think those are key issues. I also believe that the innovation that is generated from much of the manufacturing that comes as a result of our defense industrial base has impacts on the broader commercial economy. I certainly see that in my own district. There are a lot of businesses that grew out of Boeing engineers, folks who were working on defense industry who had ideas that then spread out to the larger economy.

The improvements that we have made in manufacturing to meet defense needs have implications for the private sector economy. But at the same time, the debt and the deficit are also key limitations on our economy. I don't think anyone can argue that. The size of our debt now and the size of our deficit and its projections out into the future are a definite threat to our economic health.

And we have seen that. Investors are nervous about investing in our economy, unsure how we are going to handle our debt and deficit problems going forward. And we need to be mindful of that. And we need to be mindful of the fact that defense is 20 percent of the overall budget. You cannot look at a budget that is almost 40 percent out of whack in terms of our deficit and say that 20 percent of the budget has absolutely nothing to do with that. It does.

You also have to look at other parts of the budget that are important to our economy; infrastructure is the one that leaps to mind; education, workforce development. These are all things that are also key to our economic development, and devastating cuts in those areas I believe would have just as big an impact to our economy as devastating cuts in our defense budget. So we have to be aware of that.

Personally, as this committee knows, I believe that increasing the amount of revenue that we have available is critical to this effort. If you are concerned about the size of the impacts of the defense cuts, then you have to be prepared to make sure that there is enough money available to make sure that you don't do that. So I believe that balance needs to be struck.

I also believe that it is a very, very difficult balance to strike. Let us face it, we are in a deep hole. None of these options are palatable. These are things that none of us would like to have to do, but when you are running a deficit of nearly 40 percent of what you spend, you have to face some very difficult choices. So I hope that the gentlemen before us will analyze those choices.

Honestly, look at the budget deficit that we are in and not simply look at one piece of it and say, "Well we can't do that." Okay, well if we can't do that, what do we do in order to deal both our national security needs and with the deficit and debt challenges that threaten our economy as well? So I look forward to the testimony.

Again I thank the Chairman for holding this hearing, and I yield back.

[The prepared statement of Mr. Smith can be found in the Appendix on page 41.]

The CHAIRMAN. Thank you. Now please let me welcome our witnesses this morning. We have Mr. Martin Feldstein from the George F. Baker Professor of Economics, Howard University, President Emeritus, the National Bureau of Economic Research.

What did I say? Howard? That is different than Harvard isn't it? Thank you. They both start with an H.

And we have Dr. Stephen Fuller, Faculty Chair and University Professor at George Mason University; Director, Center for Regional Analysis at the School of Public Policy. Actually all three of these gentlemen have very long bios—they are all very influential people. We are happy to have them here. Dr. Peter Morici, Professor of International Business, the Robert H. Smith School of Business, University of Maryland, former Director of Economics at the United States International Trade Commission.

Welcome gentlemen. We are happy that you have found the time to be with us today and we look forward to your testimonies. We will begin with Dr. Feldstein.

STATEMENT OF DR. MARTIN FELDSTEIN, GEORGE F. BAKER PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY, PRESIDENT EMERITUS, NATIONAL BUREAU OF ECONOMIC RESEARCH

Dr. FELDSTEIN. Well thank you very much, Mr. Chairman. I am very pleased to be here. I have been testifying to congressional committees for more than 30 years, but this is the first time I have had the opportunity to appear before this very important committee, so I welcome it very much. I have a longer statement that I would like to submit for the record while reading just parts of that to the committee.

The CHAIRMAN. Without objection all three of your written testimonies will be included in the record, and you can speak as you desire.

Dr. FELDSTEIN. Thank you.

In your invitation, you asked me to comment on the effect that reductions in defense outlays will have on total economic activity that is on the GDP of the United States. I am happy to do that, but I want to comment first on the larger subject of the national security consequences of reductions in defense spending, and then I would also be happy in response to questions to deal with some of the broader issues that Mr. Smith raised in his opening remarks.

In considering the appropriate size of the defense budget, it is of course important to recognize the immediate threats to the United States and to our allies from Iran, from North Korea, from the rogue states and from various terrorists groups along with the current and growing challenge in cyberspace.

But defense spending today must relate to the more distant risk from China's future military policy. Since China has more than four times the U.S. population, China's total GDP will equal that of the United States when its per capita income reaches only one-fourth of the U.S. level.

Even if China's growth rate slows significantly from its current level, its total GDP will exceed ours in less than 15 years. And it is a country's total GDP that determines its potential military budget.

Fortunately, the current Chinese political leadership is concentrating on promoting economic growth to raise the standard of living of its people.

But China is also developing every aspect of its military capability. China's defense budget will grow with its GDP. It is important, therefore for us to recognize that future generations of Chinese leaders may use its larger GDP to pursue more aggressive policies.

America's defense policy and our defense budget should therefore focus on these future generations of Chinese leaders and should recognize the virtual certainty of China's growing economic power.

China's future military spending and its weapons development will depend on China's perception of what the United States is doing now and what we will do in the future.

The United States, I believe should maintain a military capability such that no future generation of Chinese leaders will consider a military challenge to the United States or consider using military force to intimidate the United States or our allies.

China is a resource-poor country so it is now buying oil in the ground around the world and land in Africa to feed its people. Some countries in the past have used military force to gain secure access to such materials. China's future leaders should not be tempted to follow that path.

It is important also that our allies and friends like Japan and Korea, Singapore and Australia see the commitment of the United States to remain strong and to remain present in Asia. Their relations with China and with us depend on what they can expect of America's future military strength.

We can't postpone implementing a policy of future military superiority until some future year. We have to work now to develop the weapon systems of the future. We have to maintain the industrial and technological capacity to produce those weapon systems. While reducing fiscal deficits is very important the task should not prevent the Federal Government from achieving its primary responsibility of defending this country and our global interests both now and in the future.

Let me turn now to the narrower economic question of how cuts in defense spending affect U.S. GDP.

Since Government spending on defense is a component of GDP, the immediate direct effect of a $1 billion reduction in domestic defense spending is to reduce our GDP by $1 billion, one for one. The resulting reduction in pay to military personnel and in compensation to the employees of defense suppliers then causes their spending as consumers to decline. And if defense suppliers expect the reduced level of the spending to be sustained, they will also cut their investment and equipment.

The total effect of a $1 billion reduction in defense spending is to reduce GDP by more than a billion dollars, perhaps about $2 billion.

Under current conditions, reductions in future budget deficits and in the resulting future national debt, will also raise the confidence of businesses and households needing to increase business investment and increase consumer spending, and that in turn will raise current GDP.

But a similar confidence effect would result from legislated reductions in any form of Government spending so we can ignore this confidence effect in comparing the impact of reductions in defense spending with the effect of other spending cuts of equal size.

The effect on GDP of changes in defense spending is larger than the corresponding effect of most other potential changes in Government outlays.

For example, outlays for unemployment benefits are not in themselves a component of GDP. They lead to increased GDP only by raising the consumer spending of the individuals who received those benefits. While a high percentage of those cash benefits will be spent, it will certainly be less than a dollar of spending for every dollar of unemployment benefits.

In some of the consumption purchased with the unemployment benefits would otherwise have been paid for out of reductions in household saving. A change in unemployment benefits also affects GDP by altering the incentive to remain unemployed. Reducing the maximum number of unemployment weeks will induce some individuals to find work sooner, thereby raising GDP.

The overall effect on GDP of reducing U.I. [unemployment insurance] benefits will be the net effect of the reduction in consumer spending and of the increase in weeks worked.

So the adverse impact on GDP of a $1 billion reduction in unemployment benefits would certainly be less than the direct effect of a $1.0 billion reduction in defense outlays.

I will stop there and just say that I hope that these remarks are helpful to you as you consider the important tasks of deficit reduction in protecting our national security.

I look forward to your questions.

Thank you very much.

[The prepared statement of Dr. Feldstein can be found in the Appendix on page 43.]

The CHAIRMAN. Thank you.

Dr. Fuller.

STATEMENT OF DR. STEPHEN FULLER, DWIGHT SCHAR FACULTY CHAIR AND UNIVERSITY PROFESSOR, DIRECTOR, CENTER FOR REGIONAL ANALYSIS, SCHOOL OF PUBLIC POLICY, GEORGE MASON UNIVERSITY

Dr. FULLER. Thank you very much, pleased to be with the committee this morning. I have submitted a prepared statement but also two reports.

I undertook a report for an analysis for the Commonwealth of Virginia several years ago regarding the economic impact of DOD spending in the state. It covered all types of DOD spending; personnel as well as contracting and retirement benefits.

[The information referred to can be found in the Appendix on page 77.]

It was undertaken because the state was beginning to be concerned about changes in defense procurement policies and spending policies within the state and it is a very important part of the economy. So it provides some insight about what would happen if you take that spending away.

I also, just as you mentioned Mr. Chairman, released a report, it was released yesterday on the impacts of reduced spending for aerospace and military equipment acquisition.

[The information referred to can be found in the Appendix on page 97.]

Dr. FULLER. So I would just summarize some of those impacts. They follow in character the same kinds that you would see at the national level, changes in GDP, but in this case, state and local economic activity would be affected, changes in unemployment, changes in personal earnings.

Summarizing what I found at the state level, and this would be just for Virginia, but it would be characterized of other states that have some dependency in their economy on defense spending, and this would be for fiscal year 2008.

The GDP effect or gross state product effect in Virginia, DOD accounts for 15.6 percent of total economic activity in that state. It also supported almost 903,000 jobs within the state, that is, roughly 19 percent of total employment in the Commonwealth of Virginia was related directly or indirectly to DOD spending, supported about $44 billion in taxable personal earnings. And we also looked at the fiscal impact. DOD businesses and military bases and personnel do demand some services from the state, but they also generate taxes. And the net effect in the state was $1.1 billion.

So as we look at the Commonwealth of Virginia, even, you know, just several years back—but it certainly hasn't changed dramatically, maybe become even more important as the rest of the economy has retracted over the recession.

DOD clearly is a very important source of economic activity, personal earnings, jobs and fiscal benefits if in the absence of that spending, the state's economy would have been 15.6 percent smaller. It would have had almost 19 percent fewer jobs and it would have faced a budget gap of $1.1 billion in fiscal year 2008.

That gives it some perspective—I think, perhaps, more relevant as you drill down in the analysis that I have just completed for the Aerospace Industries Association. I was asked to examine the impact of reduced spending in fiscal year 2013 for the acquisition of aerospace and military equipment, just a segment of the DOD budget.

The number that I examined includes some reductions that have already been approved and some that could possibly evolve totaling $45.01 billion. The effect of this is this rolls through the economy. It starts with a decrease in sales of about $164 billion. So for every $1 decrease in the purchase of military equipment by DOD, it would generate an additional $2.64 in sales losses in other businesses. I will explain that a little bit further.

If you take those sales losses as they roll through the economy, it would cost the economy. And by my calculations 1,006,000 jobs; these are full-time, year-round equivalent jobs. Only about 35 percent of those are in the aerospace and military equipment manufacturing sectors. In fact, only 125,000 of those are manufacturing jobs specifically to the production of these products, these military hardware.

The other 65 percent are jobs on Main Street. They are jobs that are supported by the payroll spending of workers in the aerospace and military manufacturing industry. Their payroll and the payrolls of the other companies that work for those industries, so it is the primes and their entire supply chain, their spending supports jobs everywhere. Just like your spending and my spending for coffee or for water or for a mortgage or for our automobiles.

And by taking their payroll out of the economy, the payroll losses would total something on the order of $60 billion. Taking that out of the economy would cost the economy over a million jobs. That would add a 0.6 percent to the unemployment rate. Current unemployment rate is 9.1 percent right now; it would raise that to 9.7 percent if this happened this year as opposed to in fiscal year 2013.

There are also non-wage income reductions. So, sales of products and services to the aerospace and military equipment manufacturing sector would decline; also sales within the remainder of the economy. There would be less lettuce being purchased. It just rolls right on through the economy. Another $27 billion lost there.

If you roll these up into one number, GDP, it would result, at least just from that $45 billion decrease in 1 year, would generate $86.5 billion in lost GDP, so, roughly 2 to 1 as we just heard. Given the state of the economy as projected for 2013, that would constitute about 25 percent of the anticipated growth. So, without that cutback we would have 25 percent more GDP growth than without it. Slow the GDP growth rate that is now projected for 2013 from 2.3 percent to 1.7 percent.

Now, these numbers could change. But it has a measurable effect. These numbers and these losses affect every state in the country because the suppliers of goods and services span all of the states, not just the actual prime or their immediate supply chain.

Ten states would represent roughly 6 percent of these losses. Ten states being led by California, Texas and Virginia. But these 10 states would lose 600,000 jobs, or could lose, if that reduction occurs as I have analyzed it.

So, the economic impacts can be measured. There is one other type of impact that I can't measure, but we know takes place. Many of the companies that supply goods and services to DOD contractors are quite small.

They are specialized. And when they lose part of their work they go out of business. They just can't downsize 25 percent and still stay in business. They can't shift their market to a different consumer. Their base is quite narrow. And so the impact on business failure is just one of those kinds of corollary effects that we know happens.

We have seen it around military bases that have closed or changed or downsized, sort of the BRAC [Base Closure and Realignment] effects. We see it here in D.C. on Georgia Avenue where businesses have lost some of their consumer market, and they have just had to close down because they couldn't stay in business at that scale of work. So, there are some collateral effects, I think, that need to be considered.

I ran over my time. I am glad to answer questions. Thank you.

[The prepared statement of Dr. Fuller can be found in the Appendix on page 52.]

The CHAIRMAN. Thank you.

Dr. Morici.

STATEMENT OF DR. PETER MORICI, PROFESSOR OF INTERNATIONAL BUSINESS, ROBERT H. SMITH SCHOOL OF BUSINESS, UNIVERSITY OF MARYLAND, FORMER DIRECTOR OF ECONOMICS AT THE UNITED STATES INTERNATIONAL TRADE COMMISSION

Dr. MORICI. Thank you, sir. Like Professor Feldstein I have been coming up here for—is it working?

The CHAIRMAN. Yes.

Dr. MORICI. Like Professor Feldstein I have been coming up here for several decades. But this is the first time that I have been to this committee. And I am honored to have this opportunity to speak to you.

The United States faces, after the wars in Iraq and Afghanistan are concluded, much broader security challenges than it faced a decade ago. The most significant of these is the whole issue of cyber defense and China.

We now have on the global stage a country that does not share our values and institutions, that is much more capable of growing, and growing in ways that are attractive to other nations in the world. And we need to consider that in evaluating what kind of defense capabilities we will need going forward.

It is important to recognize that after World War II the United States gave the world a clear prescription for prosperity and peace, and that was free markets and democracy. And we were quite successful in constructing a system that defines globalization, the rules of the road, that strongly supports the notion of free markets.

For example, the World Trade Organization dramatically constrains, at least in theory, the behavior of governments as they treat participants in global commerce. It constrains Government policies from tariffs to Government procurement to conditions imposed on foreign investors to import and export. And you know, we now have to ask ourselves the question: Can the United States survive in a world of its own creation?

This body of law that we have created that defines the rules of the road is quite sympathetic to American institutions, the way we raise our children, the way we play the game. So, we are very comfortable competing under those terms.

China offers a very different model. They have an autocratic government that is very efficient. We are mindful of governments in the 1930s for directing industrial development. And it just simply doesn't share our democratic values, let us not kid ourselves. And China has ambitions in the Pacific, which it has outlined, and probably ambitions more globally owing to its need for natural resources that it has not yet admitted to.

So, it is very important to recognize the interplay between the security challenge and the economic challenge. China offers the world a different model for economic development, and if we don't meet the China challenge both economically and from a security perspective, then we can expect the rules of the game to change because more nations in the world will find what China does attractive.

The WTO [World Trade Organization] and other international institutions are a consensual system. That is there is no overarching authority that says they have to abide by these rules. They can change them as they go along. And frankly, China has said someday China will make the rules. Those rules will be very different in a world where more countries, you know, think that China's model of economic development is attractive and effective.

China has effectively exploited the system that we have created. There has been much testimony in many committees to that effect. It is a subject of national debate. For example, China's exchange rate policy and so forth.

The failure of the United States to address that forthrightly and with substantive actions has two important consequences. One is that it reduces our credibility with nations around the world. We are increasingly violated. Whether it is exchange rates or rare earth minerals, the United States is violated.

And it is not one administration or the other. This has been an ongoing process for many years. But also it increases China's influence and it makes it easier for China to project power in the future and to project its values.

Now, certainly it is important to recognize the reason we are having these discussions today is because we don't have enough money. And one of the reasons we don't have enough money is we simply haven't been growing. Each successive recovery for many years now has not been as strong as the previous one. And over time we have developed a very large trade deficit.

Economists will tell you that one of the reasons we can't get out of this funk is because we have got this big trade deficit. Well, the trade deficit really just adds up to two forces: The big deficit with China, which is the result of its unanswered mercantilist policies; and the deficit we have on oil, which we have imposed on ourselves.

If we had chosen to address these problems, we simply wouldn't be in the funk we are in, we would have more GDP, we would have more tax revenues. And the problems that we face, while still large, would not be nearly as large as they are today.

There are a lot of myths about the budget problem and about the defense challenge from China, which I think bears some attention. One is that defense is the problem. Defense is only a very small part of the problem.

Over the last 4 years Congress has decided to expand spending by $847 billion, of which defense was you know only a small portion. And of that $847 billion, only $62 billion was needed to account for inflation, according to the budget deflators published by the President in his annual budget report.

So, clearly we are spending a lot more money; 11 percent of it was for defense. The rest of it is other purposes. Why, I don't know. The myth persists that somehow or other there is going to be a big peace dividend.

I know that Congress has allocated monies for the wars, and that is not part of this discussion. But apparently one of the ways we have paid for the wars is by not paying attention to the aging of our force structure, the quality of our fighters, their age, their bombers—things of this nature. You are all familiar with those things; the size of our fleet. We simply have less capability other than ground troops, and the capability is much older and it needs to be modernized.

I ask you, how can we ask sons to fly the planes their fathers flew? That is going on today. How well would we fight a war against a cyber-attack with 15-year-old computers? But yet we are going to defend our country with 25-year-old jet planes. I find it preposterous.

The myths persist that China will not be able to challenge the United States any time soon in terms of the size of its defense spending, because at current exchange rates, that only comes to, you know, about 17 percent of the U.S. budget.

But China's currency is dramatically undervalued. If we use purchasing power exchange rates, then its defense spending is 27 percent. At the pace at which it has grown over the last couple of years, and given the projections that we have for the base budget without sequestration, China could easily be at about 60 percent of our spending in 10 years.

Now 60 percent is still less, but it doesn't have to maintain a fleet in the Mediterranean. It doesn't have to maintain a fleet in the North Atlantic. It is not watching the Persian Gulf. It doesn't have troops stationed in Korea. All it has to worry about is securing the resources that it needs and projecting power in the Pacific, which is its stated goal.

It is going to be very difficult for the United States at current spending levels to match China if they can devote all of their 60 percent to those purposes and we are so spread out. Our needs are growing, and it is silly to think that there is some sort of peace dividend out there that is going to permit us to spend significantly less.

Another problem that we have is this misperception that American technology is so superior that we can rely on that, that somehow or other we are going to think our way out of this problem.

I don't see that happening simply because the pace at which industry is moving from the United States to China and becoming much more sophisticated there, I mean, Boeing is operating there, General Electric is operating there.

They are becoming participants in the Chinese economy in two very troubling ways—and I don't mean to single out those two companies; they are just nice examples—and that is they are becoming clients of Chinese mercantilism.

So whenever we talking about doing something about it, there is an army of lobbyists up here. I don't know why China has litigation in this town. Caterpillar does a perfectly good job for them when it comes to the currency. Likewise, they want to participate in the Chinese economy. They want to prosper.

So it serves their interests to help the Chinese develop their technology. And, you know, there are limits to the extent to which we can avoid technology transfer of a vital national security nature. The Chinese will be able to develop it on their own quite soon.

Look at my engineering school, or the engineering school at any university in the country. Look who goes to school there. The Chinese will have the resources they need to do this.

If we permit Chinese mercantilism to go unchallenged and we permit the projection of Chinese power in the Pacific to dwarf American naval and other capabilities, then what choices will countries like Malaysia, Indonesia, the Philippines and India have to make about the economic development models they choose?

And what will that mean for the character of consensual institutions like the World Trade Organization? Remember, that organization will evolve over time, and the rules will change. The United States will be isolated or more isolated, especially when you consider the state of our allies in Europe and their economic condition.

It will be more—the world as we know it is a very comfortable world for U.S. commerce and that will change. I agree with all these numbers. Basically, if you cut defense spending by $1 billion, you are going to get a multiplier effect of one-and-a-half to two.

One hundred thousand dollars per job, it is very easy to figure out how many jobs you are going to lose. But more fundamentally, we are going to live in a world that is more hostile to our economic and democratic values.

It is going to be more difficult for us to succeed economically in that climate. We are just not attuned to it. So unless we defend these values now, we will live in a world that is just not suitable to American success. And that is not a world I choose for my grandchildren to live in.

[The prepared statement of Dr. Morici can be found in the Appendix on page 63.]

The CHAIRMAN. Thank you very much.

After the last election, Congress received a clear message. The primary concern of the American public is the economy. Americans want their government to get spending under control, reduce the Federal deficit and adopt policies to stimulate job growth, particularly in the private sector.

We got that message. But we can't ignore the fact that while cuts to the military might reduce Federal spending, they harm national security and they definitely don't lead to job growth.

You have outlined a variety of economic consequences of further defense cuts, yet this is something we seldom hear about in the news. It has kind of been left up to our committee to explain these facts to other Members of Congress and to the members of the public.

At least two estimates, Secretary Panetta's and Dr. Fuller's, put job losses at over $1 million should sequestration occur. In arriving at those numbers, did you use the cuts that the chiefs are already working on?

I had a meeting with Admiral Mullen shortly before he retired. And he said they had given instruction to the Joint Chiefs to cut $465 billion over the next 10 years. That is already in motion. That is already happening. That is already part of the equation. The sequestration of $500–$600 billion would be on top of that.

Did you take those numbers, Dr. Fuller, into account in your study?

Dr. FULLER. My analysis included the first tranche of that for fiscal year 2013 that was specified in the Budget Control Act. That portion is about $19 billion in reduced acquisition outlays for aerospace and military equipment, just that $19 billion is included in the number that I use.

And I added another $25.5 billion to it, which would be the amount if sequestration that the proposed or possible sequestration continued. But it was just for that 1 year.

The CHAIRMAN. Just for the 1 year, the 2013. The number that is out there in the public from that deficit reduction is $350 billion. But based on what happened in the C.R. [Continuing Resolution], and the starting point that you choose, and the budget request of the President and our budget passed last year, there are a lot of different starting points.

But I am using that $465 billion, which takes into account the $78 billion that Secretary Gates talked about cutting, and the $100 billion that he asked for from the chiefs earlier, to inefficiencies, when he said they could still keep it to use for other things. But when he came back, he said, well, they couldn't keep $24 billion of it. That had to be used for other expenses.

So if you add those numbers to the possible sequestration, you are talking, over the next 10 years, almost $100 billion a year. So it is a big, big number, and I appreciate your comments on that.

And it seems like you have addressed those and how it is going to affect our job loss, how it is going to affect our economy, and then how it will affect us in our defense posture and our economic posture going forward throughout the world.

I recently visited with the ambassadors from Vietnam and Singapore, and they were very concerned. The Vietnam Ambassador said China is claiming the China Sea, which would make us landlocked, and that would tie in with what you talked about, Dr. Morici, about the China Sea and that area.

Yes?

Dr. MORICI. Well, consider this: If China can project several hundred miles into the Pacific, Japan is within its sphere of influence, and it is the third largest economy in the world. We are supposed to guarantee Japan's security.

The CHAIRMAN. And Taiwan and other countries in the area.

Dr. MORICI. The thing about it is—what I hate to think about is Japan's industrial establishment—consider the situation we are in right now, because of the threat of another recession in Korea. Korea's shipbuilding industry is extraordinarily important to that economy.

And it is facing, because of the slowdown in global commerce, a very short order book going forward. It has got to figure out what to do with those shipyards.

Now it might be beyond the control of the United States in a similar situation, 6, 7, 8 years from now, from those churning out ships for the Chinese Navy, or just merchant marine ships for China. And then they can turn their shipyards to other less useful purposes. But more than that, we are in a little bit of the Greek problem here.

Whether we talk about cutting health care or education or defense, unless we find some other way to stimulate the domestic economy, it is going to have multiplier effects and make the pie smaller and the tax revenues available to us less. So we will be back here again after the next election, and 2 years after that.

And we will be—we are kind of in a slow-motion version of Greece. They do it every 3 months; we are going to do it every 2 or 3 years. We have to cut, then there is less, then we cut again. Unless we find a way to stimulate the domestic economy, the only way out of this box is to deal with the largest drain on domestic demand, and that is the trade deficit with China and the deficit on oil.

There was a time when we had to have the deficit we have on oil. We no longer have to have that. And it will not be resolved by whiz-bang electric trains from nowhere to no place in Illinois or by electric cars. It will be resolved by developing the oil and gas we have, because those other technologies are only going to come online so quickly.

Now we can either develop them or not, but we can get no environmental benefit. But with regard to China, there is the whole issue of if we do not address the currency problem and its other mercantilist activities, we are making our defense problem impossible, because we simply won't be able to afford to deal with it.

The CHAIRMAN. Thank you very much.

Mr. Smith.

Mr. SMITH. Thank you, Mr. Chairman.

In terms of confronting the broader deficit problem—and there is a bunch of different ways to go at this—and, certainly, I agree; some of you have commented about things that were done in the past that, you know, led us to where we are at, and we can all have a robust debate about what all of those were. But we are where we are.

Dr. MORICI. Yes, right.

Mr. SMITH. So, you know, if we could skip that for the moment, what would you recommend going forward in terms of confronting the deficit? How much do we have to reduce it by, because that is certainly a legitimate point of debate, whether or not we should, you know, be focusing on reducing the deficit by, I don't know, $4 or $5 trillion, or whether or not a lesser amount makes sense?

And then once you pick your figure by how important it is to reduce the deficit by how much, given that what I gather from your testimony, you don't even think that the $460 billion in defense cuts that are currently proposed should happen. So that is off the table.

What would you propose at that point—and if we could be specific on the spending, because then I like to say everyone is sort of, you know, is against the Federal Government spending in the abstract. It is in the concrete that people tend to get a little mealy-mouthed about it.

So if we could lay out the specifics of what we should cut in the budget, or what you think should happen with revenue and where the deficit is at going forward, because that is what the "super committee" [Joint Select Committee on Deficit Reduction] is wrestling with.

Dr. Feldstein, do you want to start?

Dr. FELDSTEIN. Well, I will take a crack at that. We are heading according to the CBO [Congressional Budget Office], as you know, to a debt-to-GDP ratio that will be about 80 percent and rising more or less without limit if we don't do something.

The key driver of that is, of course, the entitlement spending. Since I don't run for office, I have the luxury of saying we have to do what the Bowles-Simpson Commission said, we have to bring under control the growth of Social Security and of the Government-financed health programs—Medicare and Medicaid.

What is the target? The target ought to be to stabilize the debt-to-GDP ratio at the kind of levels that we have had for decades in the past, about 50 percent. And that means getting the deficit down to about 2 to 3 percent of GDP.

We don't have to balance the budget, but we do have to get the deficit down to about 2 or 3 percent of GDP. So we need large enough cuts in spending and/or increases in revenue to get us to that goal.

Mr. SMITH. Do you believe that we need the increases in revenue as part of that equation?

Dr. FELDSTEIN. I do. I think we can get increases in revenue without raising marginal tax rates——

Mr. SMITH. By reforming the code?

Dr. FELDSTEIN [continuing]. By reforming the code. And I think the directions for doing that, there are various options, but I think putting a cap on the maximum amount that each individual can get in tax benefits by various so-called tax expenditures, putting a cap on that, letting people continue to have all of the deductions and exclusions that are in the code, but putting a dollar cap relevant to their adjusted gross income on that would produce a lot of revenue and allow us to reduce marginal tax rates at the same time.

Mr. SMITH. That makes a great deal of sense.

Gentlemen, do you want to weigh in?

Dr. MORICI. Yes, I agree with Professor Feldstein, I have to say, about the deficit-GDP ratio, and the need for tax reform. There are a lot of different ways we can go about it. But he is basically talking about flattening—not a flat—but flattening the tax rate. So it makes sense to me; makes a lot of sense.

In terms of where we can cut spending, one of the things I have recently written—and as you know, I publish widely in op-eds and all this sort of thing—is that if you look at what the United States Government is proposing to do for its people, it is not outrageous as compared to successful countries in Europe, namely Germany, Holland and, say, what Japan does in terms of the amount of health care and so forth.

The real problem is we are terribly bad at it. We spend 18 to 19 percent of GDP on health care. The Germans spend 12. But, you know, let us not fool ourselves. This is not a public versus private issue.

You know, whenever you talk about really reforming health care, as opposed to doing what happened last year, and that is just vote for more benefits and spend more money, when you really talk about reforming it, it is always cast in terms of, well, are we going to continue to have a private system, a good old American system? Or are we going to have one of those socialistic government-run systems?

Well, the fact is, the Germans finance 80 percent of health care through a private system, through reimbursement. There is a wide variety and many dimensions to health care systems that are used, and some are successful and some are not. Ours is private, and it is unsuccessful. It just simply does not deliver the benefits.

If we started to look seriously at, for example, how the Germans manage the pricing process for drugs and patenting, we could save a lot of money on drugs. They spend $400 a year. We spend $800 a year. They are healthier than us. Something is wrong.

They also don't have commercials of ladies jogging to sell Boniva®, and guys running to the bathroom. They don't spend all that money. We do. And that is silly.

But we need to start looking at that, and we need to stop fooling ourselves among conservatives—and I am a conservative—that we can do this without government intervention, because we simply don't have a private system when we have 55 percent of it funded by the Government. It is setting prices.

Likewise, let me not say that hospitals should be put on a diet, without saying that universities should be put on a diet.

If we look at how we educate people today, the amount of time that it takes to produce a doctor or a Ph.D., it is silly. The Europeans just do it better.

Also, if we look at the amount of research that is going on in American universities, and what it generates—I mean, you know, things of that nature. We could spend a lot less on education, but you are going to have to make people who are constituents of Members of Congress on both sides unhappy.

Mr. SMITH. Absolutely.

I want to let some other folks—some of my other colleagues get in here. I would like to have a further conversation with you about China at some point, and, you know, what our realistic options are for confronting their rise; because they are going to rise.

Dr. MORICI. But we want to get on a better set of rules.

Mr. SMITH. Right. Right.

I yield back. Thank you.

The CHAIRMAN. Thank you.

Mr. Bartlett.

Mr. BARTLETT. Thank you.

If every afternoon when we left here we broke all the windows, which would then be placed overnight in preparation for the next day's work, this could create a lot of jobs. For those who provide the energy, to turn the sand into glass, for those who haul the glass here, for those that installed it, and then all those secondary industries, the dry cleaners, the grocery store and so forth.

Would this have a long-term positive economic benefit?

Dr. MORICI. I could think of better ways of spending your money that smacking windows and replacing them. If you improved your roads, you wouldn't be destroying something in the process to replace it. You know, that is like saying let us knock down the George Washington Bridge and rebuild it to create jobs. Why not repair all the broken bridges and make the traffic move better?

Mr. BARTLETT. Your answer indicates, then, that there is a fundamental economic difference between jobs in the sectors of our society which consume wealth and the sectors of our society which create wealth.

Dr. MORICI. I don't think I said that, sir. I said there is a difference between destroying something to create a job and improving something that is broken.

Mr. BARTLETT. Okay. We could also create a lot of jobs if we simply had people dig ditches and then fill them up again.

Dr. MORICI. Same principle.

Mr. BARTLETT. Or haul stones from——

Dr. MORICI. Same principle.

Mr. BARTLETT [continuing]. Site A to site B. Yes, sir.

Dr. MORICI. Same principle.

Mr. BARTLETT. Okay. I think your answer is implying that you believe that there is a fundamental difference in the sectors of our society that consume wealth and those that create wealth, from a purely economic perspective.

Dr. MORICI. I think if——

Mr. BARTLETT. If we ignore the fact that we have got to have a military and it is going to be too small, I think, with these cuts, if we totally ignore that, and we just look at jobs, aren't jobs in our military in the sector that consumes wealth?

Dr. MORICI. All jobs consume wealth. All jobs consume resources. We have judges. Judges consume wealth, but they provide a framework for commerce—contract law.

A safe world provides highways for commerce; places for boats to go unimpeded. And the projection of American power for the last 75 years has been responsible from democracy almost being extinct in 1939 to prospering in the world, and for the spread of market institutions which has created great wealth—that has a certain overhead.

Mr. BARTLETT. So then there is no——

Dr. MORICI. The foreign services—the same thing, sir. We could say the same thing about diplomats.

I don't know where we are going with this.

Mr. BARTLETT. We are making the point that we may continue on this committee that national security is enormously important; that a military—adequate—is enormously important. But, today, I thought we were talking simply about economic effects.

Dr. MORICI. Well, the point is that if you denigrate the economic system, so it is hostile to American economic institutions, the United States will not be able to compete competitively, and our GDP will be decidedly smaller 25 years from now than it would be in a more favorable environment.

Mr. BARTLETT. I have no argument with what you are saying.

Dr. MORICI. Okay.

Mr. BARTLETT. But I thought today we were simply talking about economic effects——

Dr. MORICI. Well, the economic effects of cutting——

Mr. BARTLETT. And I must confess that although I am not an economist, I am concerned that about every 12 hours we have another $1 billion trade deficit. That is more than a $1 million-a-minute trade deficit.

You know, if we could increase our economic growth by simply increasing the activity in a service-based economy, then if we all took in each other's laundry for $100 a load and cut each other's hair for $100 a haircut, we would have an enormously increased economy, would we not?

Dr. MORICI. Well, no, eventually you will run out of money, because you have to import oil to generate the electricity to run the restaurant.

Mr. BARTLETT. So you are making my point that unless you have people in that sector that is creating wealth——

Dr. MORICI. I share your concern about——

Mr. BARTLETT [continuing]. Forever spend wealth.

Dr. MORICI. Exactly, and I share your concern about the trade deficit. That is why I say that we cannot afford the defense that we need unless we resolve that problem, because the economy will grow too slowly.

If we could cut the trade deficit in half, using the same multipliers, if we could cut it in half, we could increase U.S. GDP by a very sizable amount, and create about 5 million jobs over the next several years. It would have a preponderant effect on unemployment, and the economy would grow much more rapidly. But that requires addressing China and having a favorable set of rules in the global economy.

Mr. BARTLETT. And if we don't, disaster awaits us. Thanks very——

Dr. MORICI. Exactly. I think it is in the last paragraph of what I submitted. And I was trying not to be too emotive, but basically I say that if we do not move in the direction that we need to move in, you know, America will become isolated and dramatically weakened.

Marginalized, it will resemble Italy or Greece—charming and quaint, but hardly able to independently sustain its standard of living or ensure its own security, or worse bankrupt and at China's doorstep for a bailout.

We are on the path to becoming Greece. Greece did the very same thing. It borrowed from foreigners to sustain its standard of living. Right now, we are borrowing from foreigners to finance our military and our health care.

Thank you.

The CHAIRMAN. Thank you.

Ms. Sanchez.

Ms. SANCHEZ. Thank you, Mr. Chairman and thank you gentlemen for being before us today, although this has got to be one of the strangest hearings that I have had to endure on this committee, to tell you the truth.

You know, I always look at sitting on this committee as something from a strategic standpoint. I mean we have to look forward into the future and try to figure out with our military experts what the world will look like and what we need to address issues that may come up.

And we have been working on that for the last 15 years that I have been on this committee. We have not only done that type of planning but we have done things like transformation, where we decided we would get a lot of our troops out of Germany and bring them back home. I know that when we did that and we increased the size of Fort Bliss and my colleague Mr. Reyes's area and over these last few years, he has had about a $6 billion infusion and building more base and constructing—they are about to start constructing a hospital and housing and bringing our troops and their families home here.

And I think the multiplier effect, which I know we just got a lecture from one of you on, it is pretty big on construction, and so I think that his economy has gotten better because we moved out our troops, a large majority from Germany and brought them here.

You know when I looking at my operating area, one of you guys talked about the small contractors I have in my area. You know, they have not had business for the last few years because those monies for real systems have been cannibalized by the Afghanistan and Iraq operating costs of being over halfway around the world fighting a battle we just really don't seem to get anywhere with.

And they have had to remix their customer base. So those that have survived so far know how to do that. They are just not in defense anymore.

And then I think about the day maybe a couple years ago when I heard on the news that a gallon in Afghanistan costs me $400 to move my troops, and I couldn't believe it, and I went to the head of the appropriations defense committee and he looked at me and he said that is absolutely true.

Now in California we scream when it is $4 a gallon. So I ask myself if we weren't in Afghanistan or we weren't in Iraq and I only had to spend $4 for a gallon of gas in California, where would that other $396 go? So I think it would be invested right here in the United States.

I think Roscoe Bartlett was correct when he said when we are at war and we are not getting anything for it, we are really not getting anything for it, we need to figure out, it is not that difficult to figure out where to get the money to bring some of this defense spending down.

I think the monies come from getting out of Iraq and Afghanistan. I think what we did before when I talked to the former Comptroller for George Bush, Mr. Walker, he said 70 percent of the deficit we created during those 8 years, 6 of them under total Republican control up here, the White House, the House, the Senate was because we didn't raise revenues.

So you can't have it both ways. You know, you just can't. We have to decide what military we need for the future. We have to decide that we are not winning in places, and we need to get our troops home and there is some fat to be cut.

But I would agree with you, Mr. Chairman, $465 billion is a lot to put on the table. I am not too thrilled about putting much more on there. But I think we are much better capable here on this committee to figure out how to make those cuts than to have a macroeconomic impact come and tell me what I already know. The more money I keep here in the United States, the better off I am going to be at seeing people go back to work.

So I don't know what this hearing really was called for, but I agree with you. We have put a lot on the table. We don't want to put much more on. But I think the sooner we get out of those wars, the better off we are.

Thank you, Mr. Chairman.

The CHAIRMAN. The purpose of this hearing is to find the economic impact of these cuts that we are seeing from defense from economic experts.

I am going to yield a couple of seconds to Mr. Bartlett to respond to what you said he said.

Mr. BARTLETT. Perhaps because I am a scientist, I have a penchant for wanting all facets of an issue to be on the table. So I frequently end up the devil's advocate. It may be sometimes difficult to differentiate my personal positions and my devil's advocacy positions.

Thank you.

The CHAIRMAN. Thank you.

Mr. Forbes.

Mr. FORBES. Thank you, Mr. Chairman. Thank you, gentlemen, for your expertise and for being here.

I just want to kind of bring us back to the jurisdiction of the committee. We have the rules of the committee and they are basically on defense policy, ongoing military operations, the organization and reform, the Department of Defense and it is not just this hearing.

Over and over again, we have folks on this committee that don't want to talk about those aspects. They don't want to talk about them unless they can talk about increased revenue, which is the kinder and gentler way of saying increased taxes or entitlements, kinder and gentler way of talking about Social Security or Medicare of spending, which is our stimulus programs, but the purpose of this hearing is because when we make defense decisions, it comes down to two things: Is this a strategic benefit and secondly, what is the economic cost of doing it?

On the strategic benefit, it comes down to risk and as one general told me yesterday, the number of people who come back from a particular mission.

And I just take issue, I don't think that is breaking windows and replacing them by digging ditches. When I am talking about trying to fight to reduce the risk, I am talking about fighting to make sure I have more people come back than otherwise would come back. And that is important for this committee to do, and it is a big difference, and I disassociate myself with that line of discussions.

But the second thing is we should be looking at the economic cost of making any kind of decisions we are making.

So on the one hand we are told we are told you are going to save all these dollars and what you gentlemen are here for today and I thank the chairman for doing this, is to say are we really saving all those dollars or is there going to be a cost on the other side that is going to offset some of those dollars?

And Professor Fuller, when I look at your studies, you looked at R&D costs and procurement costs, that is what you have, but I don't think you even took into consideration O&M [Operations and Maintenance] and reduction of active duty forces and reduction of civilians.

But just based on your study, you look at a state like California on the one hand we are saying we can save all these monies, but if we do this, we are talking about cuts that are going to equal three times the largest employer in California.

When you look at Virginia, it is six times the largest employer in Virginia; Texas, it is over one time the largest employer in Texas; Florida, larger than the largest employer in Florida; in Massachusetts, over two times the larger employer in Massachusetts; in Maryland, the largest employer in Maryland, gone; in Pennsylvania—the largest employer in Pennsylvania almost; in Connecticut, three times the largest employer in Connecticut; in Arizona, three-and-a-half times the largest employer in Arizona; and in Missouri, you are talking about roughly three times the largest employer in Missouri.

We need to put those costs on the table when we are saying okay over here you are going save all this, we need to let all these states and people know we are not saving it, we are just passing it on to you because basically you are going to lose a lot of jobs in making this decision so you just need to say does it make economic sense to try to save a dollar here if you are going to lose two dollars over here. And I thank you guys for your study that helped us at least evaluate that.

Now Professor Fuller, have I misrepresented anything your study has said?

Dr. FULLER. No, not at all. I think it is important to recognize, as you pointed out, that this is just a part of the budget. It is just equipment and so it doesn't include personnel, it doesn't include gasoline, it doesn't include the purchases of goods and services needed to operate.

Mr. FORBES. Which is going to make a much greater impact.

Dr. FULLER. This is roughly 45 percent of the $100 billion a year that it could be sequestered.

But I think the important issue with this paper and the kind of work that I do is just to identify that there is an economic consequence.

Somebody has to evaluate better——

Mr. FORBES. And that is what the Chairman has been kind enough to let us do before we make a decision in the (?).

And Dr. Feldstein, one of the things that you have correctly pointed out is as we reduce our spending, doesn't that have an impact on the reduction in defense spending with our allies around the world and it encourages China, I think by your testimony to spend more, which means if we try to come back later, we are going to have to spend more money to have a lower capability *vis-à-vis* China.

Can you just elaborate on that just a bit?

Dr. FELDSTEIN. Yes, I——

Mr. FORBES. Your microphone.

Dr. FELDSTEIN. The point that I wanted to emphasize in the first half of my testimony was the fact that China inevitably is going to have a larger GDP than ours, will have a larger capability of spending on defense, and that we have to be prepared in advance to stop them from taking advantage of that to try to intimidate the United States and our allies.

So I think that is very important, and it is not something we can postpone.

Can I make another related point?

We are talking about cuts in defense spending, but we are talking about it in an environment in which the economy already has a 9 percent unemployment rate and many others who are on part-time work, so we are making worse the weakness of the American economy by cutting spending in the short run.

In the long run there are different issues. But in the short run we are making it worse and what I have advocated in the past in writing was that we ought to ask the military services if they can move forward in time some of the replacement and repairs and inventory rebuilding that is going to happen anyway in the future.

Mr. FORBES. And my time is up. Mr. Chairman, I just want to thank you for having this hearing so we make these decisions with the information and not blindly making them and thank you gentlemen for your expertise.

The CHAIRMAN. Can you be very brief?

Dr. MORICI. Very brief.

Going forward, when we talk about what our allies can do, I think that realistically speaking what is going on in Europe, the only places we can look for real significant assistance in meeting security challenges—and this is going to be very difficult for you to deal with—is Germany and Japan, because everybody else is pretty flat out.

The CHAIRMAN. Thank you.

Mrs. Davis.

Mrs. DAVIS. Thank you Mr. Chairman. Thank you all for being here. I agree. I think part of the difficulty is here that there are a lot of different perspectives on this issue, and it doesn't feel as we are getting all of that. What I was interested in hearing is that I think that there are a number of things that you have mentioned which tend to go along the line of stimulus spending.

I agree. I mean in some ways it would make a lot of sense if the military would identify those machineries, equipment, carriers, et cetera, that really could be put on a fast track, and that we could spend in those areas. But at the same time we are talking about that, it almost appears as if, you know—if we just tripled or quadrupled the defense budget, all of a sudden we would have a lot of stimulus spending.

And I don't think we would agree that that makes any sense. So we need to think more in—we try to do that in this committee—think in terms of a whole-government approach from time to time, and in what areas we can actually find greater growth or development that really mitigates the defense budget; and whether we could be helping ourselves along if we spent more in some areas.

That means we don't have to spend quite so much on defense. Can you comment on that? Would you like to?

Dr. FELDSTEIN. Yes, I think you hit the right word—"fast track." That is the idea that I was suggesting is not to increase total defense spending over the next decade, but to take some things that might be done in 2014 or 2015 and tell the military to hurry up and do it now when we have got a lot of unemployed resources.

Hopefully a few years from now the economy will be back at full employment and we won't be able to do that. But now when we have got so many unused industrial resources, would be the right time to do some of the replacement and some of the repairs and some of the inventory rebuilding that will have to be done later.

So it doesn't add to the total debt over the next 5 years; doesn't add to total defense spending over the next 5 years. It just pulls it forward to a time when we have a lot of slack in the economy and would give a boost to aggregate spending.

Mrs. DAVIS. Yes, sir. Do you want to comment?

Dr. MORICI. And I am not a defense expert, which I freely acknowledge. I mean my background is in international economics; international relations; international agreements. But it seems to me that in the post-Afghanistan era the nature of American force structure is going to have to change dramatically because we are going to be largely facing a naval challenge and a cyber challenge with China.

And that doesn't mean we don't need any ground forces at all, but I don't know that we are going to need 100 maneuver battalions any longer. We may need less. I don't know how that all works out, but within even the same pie, I mean the fact that our fleet is shrinking is very troubling to me when China is launching aircraft carriers.

Mrs. DAVIS. I think what is difficult is sometimes setting those priorities. We try and do that. We use the QDR [Quadrennial Defense Review]. We use a whole number of other factors, but trying to set those priorities of what we truly need to plan for the next war, which is obviously a difficult one to do.

Dr. MORICI. I don't know that there is a next war as much as there are going to be interesting confrontations about who gets to sail where.

Mrs. DAVIS. Yes. Yes. One of the other things that you have brought up along stimulus spending, I think is roads, bridges. We know Simpson-Bowles of course dealt with infrastructure as well as it dealt with decreases in defense spending. You have mentioned Simpson-Bowles and that being not necessarily a model, but at least a jumping-off point for talking about the situation that we are in today.

Do you feel that they went overboard when it came to defense spending within their recommendations?

Dr. FELDSTEIN. I do. They said $100 billion of domestic and $100 billion of defense. So that was not the kind of carefully thought-through analytics of how much we need for defense. It was just saying, "Here is a way of doing something that appears on the surface to be fair." But that isn't what our defense planning ought to be about. It ought to be thinking through what our needs are.

And again I just keep emphasizing your words about "fast track." Doing something sooner in spending in defense that has to be done eventually makes, to me, an enormous amount of sense in an economy that has so much slack, so much unused resources, and won't forever. We are going to get back to full employment.

Mrs. DAVIS. Thank you. Thank you Mr. Chairman. I——

Dr. MORICI. Just 10 seconds? The context of thinking about China and the Pacific has changed dramatically in just a few years. The notion was we didn't really have to worry about them because their defense spending was small just a few years ago. So I think that you need to look at the context in which recommendations were given and the context that we are in now.

The CHAIRMAN. Thank you.

Mr. Wilson.

Mr. WILSON. Thank you, Mr. Chairman, and thank all of you for being here today. And I appreciate that what you are focusing on is facts. And I want to commend one of our colleagues, Congressman Randy Forbes, who has produced a memorandum that I hope the American people have the opportunity to see. It is "Strong Defense, Strong America" and, Dr. Morici, it hits right on point about Army Brigades since 1990—they have decreased from 76 to 45; Navy ships from 546 to 288; bombers from 360 to 154.

There has been an extraordinary reduction in our capability, and the American people need to know this. This is at forbes.house.gov/strongamerica. And in dealing with facts, Dr. Morici, in your statement that you provided, there were some startling facts I believe the American people need to know.

And that is, in 2007, there were two wars. We had the tax cuts in place. The deficit was $161 billion. But in 2011, the deficit was $1.3 trillion and you further explain there was an $847 billion increase, but people need to know that the increase of the defense budget was 11 percent of the $847 billion. These facts, really the American people are not aware.

Then we get to a myth, and I would like for you to explain this myth. You say that there is a belief that the United States spends too much money on defense and winding down the wars in Iraq and Afghanistan will create a peace dividend. And you indicate that is a myth. Can you explain that to us?

Dr. MORICI. We have been through this before. We went through it with Vietnam. You did appropriate monies over and above your base of about—what is it, $573 billion—$575 billion to fight the wars? And you look at defense spending. It is seven-something, not five-something and that is the war budget.

However, those extra appropriations were monies that could have been spent in other ways. And one of the things that has happened over the last several years, as you have pointed out, is our ability to project power has shrunk. We have fewer planes, fewer boats, things of that nature. But also that things have gotten old and we are going to have to make sizable investments as we reconfigure what we have to address the challenges we will have that are different.

But we are going to have to do an awful lot of modernization. I simply don't think you would like to be operating with 15- or 20-year-old computers. I don't know why we should be flying 25- and 30-year-old fighters? They do get old after a while.

Mr. WILSON. Additionally, you indicate that it is very important that we stimulate the domestic economy. Well, we are all quite interested in that. And I appreciate that you raise the issue of domestic energy production. I would also like to point out last week I was in Alberta, Canada. That every dollar spent by the United States, and Canada is our leading importer of oil to us, every dollar or 90 cents is spent back in the United States, including in the District, buying tires—Michelin.

So it is positive. Can you explain again about stimulating the domestic economy?

Dr. MORICI. There is a little bit of difference between financing energy development in Alberta and funding it in Nigeria, okay? But, essentially, if we could free up domestic oil and gas development that will provide the same kind of stimulus as road construction, but it would be private money. It wouldn't increase the deficit; it would reduce it because it would generate tax revenues.

It is the same stuff. It is steel. It is cement. It is all the good stuff that people like, you know, when they do those things. Likewise if we did something substantive about the trade deficit, it would create manufacturing jobs. It would create tax revenue and it would reduce the deficit. You know, there are things we can do to stimulate the private sector right now. And that would not cost you any money. And they would have the same kind of effect as stimulus spending and make your life easier.

Mr. WILSON. And more jobs in Alberta, more jobs in America. Mr. Feldstein, the multiplier effect from military spending, can you explain the difference between military spending as opposed to other public spending?

Dr. FELDSTEIN. Military spending is a direct component of GDP. So every dollar that is spent on military procurement or military salaries is another dollar of GDP directly. In contrast, if you spend money on, say, transfers to state and local governments, that is not immediately or directly a component of GDP, so it doesn't add to GDP directly, only when those states and localities spend that money.

Now if they spend every dollar of the transfer, well then it would be like defense. But typically they will use some of that money to replace money that would be funded out of rainy day funds or by raising taxes and so you get less than a dollar to start the process. And so that is why defense spending has a bigger multiplier, has a bigger impact on GDP then spending on other things.

Mr. WILSON. Thank you all very much.

The CHAIRMAN. Thank you.

Mr. Johnson.

Mr. JOHNSON. Thank you.

Defense spending has a bigger multiplier than spending, say, on grants to state and local governments, with a specific purpose to retain the employment of teachers and police officers, firefighters and other public service workers?

Dr. FELDSTEIN. If every dollar that gets transferred to a state is used for that purpose——

Mr. JOHNSON [continuing]. For that purpose?

Dr. FELDSTEIN [continuing]. Then it is the same as defense.

Mr. JOHNSON. And——

Dr. FELDSTEIN. If they would have paid out of——

Mr. JOHNSON. And I understand that. You are assuming that the money would be spent for purposes other than what the Federal grant or the Federal allocation to the state would require.

But let me move on because I think we have heard talk of Government stimulus of the economy; Government spending on defense. And, of course, the purpose of defense spending is to secure the nation, as opposed to stimulate the economy. But it does have that incidental impact, and that is undeniable.

Isn't it a fact that when you spend money for infrastructure; when the country invests dollars in infrastructure—roads, schools, and the like—broadband extension—those things create jobs as well? Is that correct?

Dr. FELDSTEIN. Absolutely, yes.

Mr. JOHNSON. And so it has the same impact—domestic spending for infrastructure has the same impact as defense spending?

Dr. FULLER. I would like to disagree a little bit——

Mr. JOHNSON. Hold on. I will let you all come in. But what we are talking about here, basically, is a philosophy of Government spending. If you are going to spend on defense and it has a purpose of—or it has an incidental effect——

Dr. MORICI. There is a difference, sir——

Mr. JOHNSON [continuing]. Of stimulating the economy——

Dr. MORICI. No, there is a difference——

Mr. JOHNSON. Hold now.

Dr. MORICI. No, no, no, it is not a philosophical difference. It is a technical difference.

Mr. JOHNSON. I have got the mike.

Dr. MORICI. Okay.

Mr. JOHNSON. And I am entitled to my view of things, and I am entitled to ask questions based on those views. You may disagree, and I think that there is room for disagreement. We just simply need to, in this Congress, have more of a will to discuss the issues instead of just say, "No."

You know, I don't think there is anybody who wants to just say no to defense spending. We can't ride around in 30- and 40-year-old planes and operating on DOS operating systems on our computers with 20-year-old hardware. No, we can't do that. We have to continue to invest in our military. But since we have, kind of, bordered upon, here, talk of economic stimulus, if you will, I think that this is an appropriate philosophical issue for us to address.

And you apparently disagree with me as far as the effect of domestic spending, domestic spending for infrastructure.

Dr. MORICI. Yes, sir, I do. And can I explain why?

Mr. JOHNSON. Okay, please.

Dr. MORICI. I understand there is a genuine philosophical difference in this room, in this Congress, in this country, between the desirability or the positive systemic effects of defense spending versus the positive systemic effects of education spending or to keep firefighters on the job and so forth. I acknowledge that.

However, there are technical differences that are not ideological or philosophical in nature. When you spend a dollar of Government money on widgets—let us keep this neutral—if the widget manufacturer gets all of his materials in the United States and employs entirely U.S. labor, it will have a higher multiplier effect than if the widget manufacturer uses imported steel.

And there is a difference in that defense spending tends to have a greater domestic content than does a construction project. We use a lot of imported materials in construction. So there is that kind of measurement issue.

Mr. JOHNSON. I mean, what is the difference between the materials that we would use in domestic spending as opposed to——

Dr. MORICI. Well, for example, suppose——

Mr. JOHNSON. We would use the same steel from the same source——

Dr. MORICI. No, actually, there are 700 different kinds of steel made in the United States. Construction steel tends to be more commodity steel, basically folded cold-rolled steel that you see in two-by-fours. You can import bridges.

The kind of steel——

Mr. JOHNSON. And is it American companies that are the ones that have moved those operations——

The CHAIRMAN. The gentleman's time has expired.

Mr. JOHNSON. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman. And, Dr. Fuller, I represent the Eighth District in Georgia. Specifically, Robins Air Force Base is the largest industrial complex in Georgia, and a lot of good men and women are working there, taking care of the warfighter.

Where would Georgia fall in that list of job losses, in the top ten? Are we in the top ten?

Dr. FULLER. It is not in the top ten. But, in this case, these top ten are just in the manufacturing and production of aerospace and equipment, so it didn't include personnel.

Mr. SCOTT. Okay.

Dr. FULLER. And that would change that list, if we were talking about military personnel or civilian contracting by DOD.

Mr. SCOTT. If you have those numbers, I would like to see those numbers.

First of all, I voted against the sequestration and the potential for it. And I think, maybe, the point that I would like to again make is that, when we spend money through the Department of Defense and we are purchasing equipment, that, by definition, creates manufacturing jobs, doesn't it?

Dr. FULLER. Enormous job impact. I mean, and that is one of the differences with this kind of spending and some of the other kinds, when you are talking about that the employment multipliers are higher because some of those employment multipliers are driven by payroll.

Mr. SCOTT. Yes, sir.

Dr. FULLER. And that just spreads out across the economy. But the supply chain is very broad and very long in military-equipment manufacturing.

Mr. SCOTT. And so is it a fair statement to say that our challenge as America is that our GDP is not growing anywhere close to as fast as our competitors, both in industry and our potential military competitors in the future?

Is it fair to say that that is our real problem right here and why we are having all of these discussions?

Dr. FELDSTEIN. Well, there is a short-run problem and a long-run problem. And in the short run, we are growing at about 2 percent, and that is not enough to begin to absorb all the excess unemployment.

Mr. SCOTT. Yes, sir.

Dr. FELDSTEIN. So that is a serious problem.

In the long run, we are not going to grow as fast for the next decade or two decades as China or India or other countries that are still very poor on a per capita basis and will be catching up with us.

But as I emphasized in my testimony, in both of those cases, their populations are much larger.

Mr. SCOTT. Yes, sir.

Dr. FELDSTEIN. And therefore, long before their per capita income even comes close to ours, their total GDP and therefore their ability to support a defense budget will be much larger than ours.

Dr. MORICI. Yes, may I? It is important to recognize a distinction between the quantity and quality of growth. With China growing at 9 percent a year and the United States growing at 2 percent, the U.S. position is being fundamentally degraded. And the two lines cross sometime in the next decade, and the best defense posture—that is just not a good situation to be in.

However, if we address the trade deficit with China; if we balance trade with China and develop their own oil and gas, then not only would we be growing more rapidly, but we would be doing it by manufacturing more, by undertaking more R&D, so the quality of U.S. growth would be very good, and we would be able to maintain for a very long time our technological edge.

We have a lot of assets in the United States that are underutilized, and are on the verge of atrophy. For example, Congress, in its wisdom, created the land grant universities. So we have a plethora of engineering schools in the United States.

Mr. SCOTT. I am getting very short on my time——

Dr. MORICI. Okay, but you see what I am—it is the quality of growth as well. If we grow at 4 percent, we are not just going to grow double; we are going to grow better.

Mr. SCOTT. Absolutely. But 4 percent GDP growth, I think, is a very reasonable and good goal that we should have for this country. This country can, and Americans can, grow at 4 percent GDP.

My point is that the cuts that the military is being asked to take is going to further reduce our starting point in getting back to that 4 percent GDP, which I think is the point that you have tried to make as well.

Dr. MORICI. Yes.

Mr. SCOTT. One of the things I would ask each of you to take a look at, and then I will yield back the remainder of my time—one of my primary concerns is the President's budget revenue estimates. I hope that you will each take a look at that—for 2010 he is saying the revenue from corporate taxes, $191 billion; 2011, $198 billion; 2012, $327 billion; 2013, $397 billion; 2014, $478 billion.

Those are pretty strong growth projections that he has built into his budget. And I would appreciate it—certainly, I respect each of you—if you would take a look into the tables where he has put some, I think, pretty robust assumptions.

Dr. MORICI. Well, I have looked at the—by the way, this Administration is not novel, but the President, in his February budget, assumed about 4—it is in my testimony—about 4 years or 5 years of 4-percent growth. And since we are not growing at that pace, it just means the revenues aren't going to be there.

Mr. SCOTT. And it means the deficits will be larger?

Dr. MORICI. That is why we will be back at this in 2013, after the election.

The CHAIRMAN. Mrs. Hanabusa.

Ms. HANABUSA. Thank you. Thank you, Mr. Chairman.

Thank you, Professors.

Dr. Fuller, beginning with you, I just have a clarification question. In your testimony on the top ten states, you said that they are manufacturing only.

Can you tell me why you selected the manufacturing component in arriving at the ten states that would lose the most in terms of jobs in thousands, as well as the funding in terms of gross state product?

Dr. FULLER. Well, if I left the impression it is only manufacturing I misspoke. What we do with DOD spending for equipment, which starts with manufacturing, but it also supports a very, very large—almost eight jobs in non-manufacturing for every one job in manufacturing. So, the job numbers that I have here include manufacturing and all of the corollary jobs or support jobs that go with those industries.

Ms. HANABUSA. So, it would be like a multiplier impact of loss of one job in manufacturing and DOD related situation, and then how it affects the other ancillary——

Dr. FULLER. Yes. It is only 12 percent of the total are the——

Ms. HANABUSA. Right. Right.

Dr. FULLER [continuing]. Direct aerospace manufacturing jobs.

Ms. HANABUSA. Okay. And you said that if you were to translate that to personnel, just loss of personnel, you would have a different ranking of the states.

Dr. FULLER. It could very well have included the purchase of oil and other kinds of support commodities that the military consumes. I don't know what the answer is, but I suspect—Virginia gets more DOD spending of all kinds on a per capita basis than Texas and California. But Texas was number one last year in total. So, there might be some rearrangement of the ordering in this.

Ms. HANABUSA. And is that readily available, so you could give it to us? Or is that something you would have to calculate?

Dr. FULLER. No, it is published every year. It would be easy to get it for you.

Ms. HANABUSA. Thank you very much.

Both Dr. Feldstein, as well as Dr. Morici, gave a strong testimony on China. And I represent Hawaii, so you can imagine my interest in the Pacific.

Dr. Feldstein, first beginning with you, you said something in your testimony that I was interested in. And you said that you know we have to define the debt and GDP ratio. And you said about 50 percent. Did I hear you correctly? And then you said to get deficit down to 2 percent to 3 percent of GDP. Was that something——

Dr. FELDSTEIN. Historically, our debt ratio has been 50 percent or a bit less for decades now. But it is getting way out of control. And to get it back to that it would take bringing the annual deficits down to the 2 percent to 3 percent range.

Ms. HANABUSA. Of GDP.

Dr. FELDSTEIN. Of GDP.

Ms. HANABUSA. So, so that I am clear, for example if we agree GDP is almost $15 trillion, $14.7 trillion, somewhere around there, and the debt that you are speaking to that we would have to get down to would be about 7 point whatever. Are we talking about the same thing?

Dr. FELDSTEIN. If it were to be true today, yes.

Ms. HANABUSA. Right.

Dr. FELDSTEIN. Exactly.

Ms. HANABUSA. Thank you.

Dr. Morici, you said in your testimony something that caught my eye. You say without a strong economy and military capable of meeting the emerging challenge posed by China in the Pacific, American values in the U.S. economy cannot succeed. And then you said something else, which was—and I am going to ask you how you relate the two or what you think we should do.

You said large American multinationals, which have invested in China to serve the market, have been clients of Beijing's protectionism, and invest in the middle kingdom mercantilism. I haven't heard middle kingdom used in a while.

And so I guess what I am looking at is as you say that we have this definite need in terms of a military power to look at China. And yet we have our own in China. And I think the end result of this was the transfer of technology.

And I think that is how you are drawing it together, that we think China doesn't have the technology that we have, but China's taking care of our great, big manufacturing. And you are assuming that the technology will transfer. So, can you tell me how you are putting these two statements in, and what you think the ultimate result is going to be if we let this continue?

Dr. MORICI. Well, essentially, in order to manufacture, to sell in China, you have to manufacture in China. That is why their exports to us exceed their imports from us 3.5 to 1. That is a huge spread. I mean, one of the best-selling vehicles in China are Buicks. But we can't export them.

Now, in a recent example, to benefit from the subsidies that they have, like we do, for electric vehicles they want to require General Motors to transfer its EV [electric vehicle] technology, its Volt technology. We are establishing labs in China that have the effect of people gaining experience, developing backgrounds and so forth, which is transferrable, whether it is software or the design of computers or the development of aircraft.

By having design facilities in China people work there. They learn. They quit their jobs. They go someplace else and they can do the same thing. I mean, the same sort of thing happens in the United States, but we are developing this for them.

Ms. HANABUSA. Thank you, Mr. Chair.

The CHAIRMAN. Dr. Fuller, the study that you put out yesterday for the AIA [Aerospace Industries Association], you have the top ten states. But I understand you have that for all the states?

Dr. FULLER. I do.

The CHAIRMAN. Could you make that available to us, please?

Dr. FULLER. I will.

The CHAIRMAN. Thank you very much.

Mr. Young.

Mr. YOUNG. Thank you, Mr. Chairman. Appreciate all of our panelists being with us today. It has been an interesting hearing, and I really appreciate the chairman holding this hearing; first a comment, then a question.

The comment is, as we make defense spending decisions here in this country I think it is important to clarify our greatest consideration should not be the multiplier effect of any given Government spending. It should not be, you know, other considerations. First and foremost, it is military strategy.

None of you pretend to be military strategists, and so we defer to them. First and foremost is these different tradeoffs are made, assessments of risk and proposals to mitigate the risk. And so I just want to make sure that is clear. That is not the purpose, as I understand it, of this hearing.

Dr. Morici, a question about the trade deficit with China, something you brought up a number of times, probably a little outside the scope of this hearing. But since we have heard it so many times, I am going to give you an opportunity to fill in some concrete policy suggestions as to what could be done here at the Federal level since it does in fact have implications for employment in the defense sector, our country's growth and whatnot.

Dr. MORICI. I am not alone in making this suggestion. While I am known as a conservative economist, and sometimes referenced to a political party of which I am not affiliated, economists, shall we say on the other side of the aisle, have made the same suggestion. And that is that one way or another we could put a tax on Dollar-Yuan conversion so as to raise the value or raise the price of buying in China and investing in China to what it would be if China revalued its currency.

We could determine the tax by dividing the value of its foreign exchange purchases, its currency intervention, which are quite transparent, published by the Bank of International Settlements and the IMF [International Monetary Fund] by the value of its exports. That would dramatically change the price of Chinese goods in the United States, and change buying habits and sourcing habits.

It would also affect investments into China, and it would be in China's hands because China could reduce that tax by reducing its intervention and letting the value of its currency rise.

Mr. YOUNG. Thank you. I suspect you have published on this topic, and could direct me towards at least an article you have written?

Dr. MORICI. I am sure I could do that.

Mr. YOUNG. Are there articles critical of your position that you could also direct me to, perhaps?

Dr. MORICI. I suggest you find them on your own, but some people would say that that is a protectionist position. And my position is that what China is doing is protectionist——

Mr. YOUNG. All right. All right.

Dr. MORICI [continuing]. That we are in a trade war and they are shooting and we are, you know, using a pea shooter.

Mr. YOUNG. And if you could restate your earlier point about the quality of GDP growth as opposed to the number there—I lost that point.

Dr. MORICI. If the United States were to resolve its trade problems by dealing with China and oil, we would be manufacturing a lot more in the United States, which would finance a great deal more R&D. And that would create a lot more employment, for example, for American engineers, which would raise their wage rates and encourage young people to register in engineering programs.

You know, one of the reasons that students major in finance instead of electrical engineering is because it pays better and there are more jobs. And one of the reasons there are more jobs is simply because we have this trade deficit.

So, my feeling is it would improve the quality of human capital in the United States. And it would also result in us having a greater treasure trove of patents and knowledge and things that we could sell to the world.

Mr. YOUNG. So this would translate into more sustainable GDP growth into the future. That is the benefit in terms of quality.

Dr. MORICI. Right. And on top of that——

Mr. YOUNG [continuing]. Would be broader as well.

Dr. MORICI. That is right. The income issues are very different. By encouraging finance in this country, we encourage the problem that we have.

But on top of that, we are going to have to acknowledge Professor Feldstein's point. China is a very big place. And until the Chinese grow old from the One China policy, which is not until the next century, we have got a problem.

So, we are going to have to have a technological edge if we are going to survive. We are going to have to be smarter. And we are going to have to have a better industrial capability to do that. And right now, on the path we are on at 2 percent growth, we are mining out and denigrating our industrial and R&D capability.

Mr. YOUNG. I yield back. Thank you.

The CHAIRMAN. Thank you very much.

Excuse me. When I went to the Steering Committee to try to get the job as chairman of this committee, I told them that I saw the job as chairman of the committee to lookout for the defense of this Nation. And specifically to make sure that all of our people in uniform that are out on point defending our freedoms, wherever they may be around the world, have all the equipment, the training, the leadership, all of the things they need to carry out their missions and protect us, and return home safely.

I am very concerned about the cuts that are in place, and those that we can see coming down the line on defense. We have held five hearings now to hear from specific experts on military and former Members of Congress who have chaired this committee to find out what their feeling was about the impacts of these defense cuts on our defense and on carrying out that mission with regard to those who defend us.

I also think, though, that it is important that the Nation understand that these cuts will have significant economic impacts. And without a hearing such as this, they are not hearing that. In fact, most of the Members of Congress don't even understand or know of the significance of the cuts that we have already made.

That is, again, why the hearing.

So I appreciate you being here. I understand that you haven't testified before this committee before, and maybe we haven't ever looked into the economics before, because that does fall under the purview of other committees.

But in this particular case, it does have significant impact on our job as members of the Armed Services Committee, and I appreciate you being here today, and I appreciate your testimonies. And Mr. Smith, do you——

Mr. SMITH. Well, I thank you for the hearing as well, and I think the last conversation from Mr. Young there is very important.

The industrial base really matters here, and I think going back to Mr. Bartlett's, you know, digging holes and refilling them, I think there is certain types of spending that make a bigger difference, and I think defense, because of the manufacturing base that it has developed, and the workers' skill set that it develops, that what I hear a lot from our defense contractors, is if you say, well, we are going to take a pause.

We are not going to build submarines for a couple of years; you can't come back a couple years later and have the subcontractors and the skilled workforce that is necessary to build that submarine or aircraft carrier or bomber. You need to maintain that industrial base and also the manufacturing skills that are developed in doing that; have private-sector applications as well.

And you can begin to develop products, whether it is in energy or health care or any other number of different other sectors, where you begin to manufacture and produce things in a way that help your broader economy.

Now I happen to think this line of argument also applies to broad infrastructure building, that if you are talking about bridges and energy and roads and maybe even trains, even—not specific train, if you don't like it, but some sort of infrastructure product—go ahead. Sorry.

Understood. That is fine.

You know, that type of infrastructure also has those same benefits, that you—you are manufacturing; you are employing the workforce that will grow wealth and move you forward in a more positive direction.

So it doesn't just apply to the defense area, but I think I really do think that is the biggest argument folks don't understand out there—the importance of defense spending to our industrial base and our manufacturing economy. So I think this hearing has been very helpful, and I appreciate all of your gentlemen's testimony. I appreciate the chairman for having this hearing. I yield back.

The CHAIRMAN. Thank you very much.

This hearing stands adjourned. Thank you.

[Whereupon, at 11:51 a.m., the committee was adjourned.]

APPENDIX

OCTOBER 26, 2011

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

OCTOBER 26, 2011

Statement of Hon. Howard P. "Buck" McKeon

Chairman, House Committee on Armed Services

Hearing on

Economic Consequences of Defense Sequestration

October 26, 2011

The House Armed Services Committee meets to receive testimony on Economic Consequences of Defense Sequestration. We are joined by a panel of top economists who will share three distinctive perspectives with the Committee—the macroeconomic impacts within the United States of further cuts to defense, the regional economic effects which may vary from state to state, and the global dynamics of further cuts to our military.

The committee has held a series of five hearings to evaluate lessons learned since 9/11 and to apply those lessons to decisions we will soon be making about the future of our force. These hearings also focused on the national security risks posed by sequestration. We received perspectives of former military leaders from each of the Services and the Joint Staff, former chairmen of the Armed Services Committees, outside experts, and Secretary Panetta and Chairman of the Joint Chiefs, General Dempsey. Today, we will change direction and focus on the other side of the coin—the relationship between the U.S. military and the economy.

As a fiscal conservative, I tend to oppose increasing Government spending for the purpose of job creation. But I think we must understand that the defense industry is unique in that it relies entirely on Federal Government dollars. We don't spend money on defense to create jobs. But defense cuts are certainly a path to job loss, especially among our high skilled workforces. There is no private sector alternative to compensate for the Government's investment.

Secretary of Defense Panetta has said that cuts on the scale of sequestration will result in a 1-percent hike to unemployment and 1.5 million jobs lost. The Aerospace Industries Association released a report yesterday, based on the analysis of Dr. Fuller, one of our witnesses today, that estimated just over one million industry jobs would be lost—based on cuts to procurement and R&D alone. When one factors in the separation of Active Duty service members and DOD civilians, the number is quite close to DOD's. The impact is not proportional across all 50 states. Dr. Fuller's testimony suggests that nearly 60 percent of the jobs lost would come from just 10 states. One-third of the lost jobs would fall in three states—California, Texas, and Virginia. How does this translate to the larger economy? In 2013 alone, growth in GDP would fall by 25 percent.

But the economy could be affected further, as the U.S. military might no longer be seen as the modern era's pillar of American strength and values. There is risk that some within the international community would try to take advantage of the fragile American economy and the perceived limitations on our military's ability to promote global stability.

In these difficult economic times, we recognize the struggle to bring fiscal discipline to our Nation. But it is imperative that we focus our fiscal restraint on the driver of the debt, instead of the protector of our prosperity. With that in mind, I look forward to hearing from our witnesses today.

Now please let me welcome our witnesses this morning. We have:

- Mr. Martin Feldstein, George F. Baker Professor of Economics, Harvard University, President Emeritus, National Bureau of Economic Research;
- Dr. Stephen Fuller, Faculty Chair and University Professor, George Mason University, Director, Center for Regional Analysis at the School of Public Policy; and
- Dr. Peter Morici, Professor of International Business, Robert H. Smith School of Business, University of Maryland, Director of Economics at the United States International Trade Commission.

Gentlemen, welcome to the House Armed Services Committee. We know this may be an unusual venue for you and this is a first for us. Thank you again for being here. I'm sure there is much we can learn from you.

Statement of Hon. Adam Smith

Ranking Member, House Committee on Armed Services

Hearing on

Economic Consequences of Defense Sequestration

October 26, 2011

I would like to thank the witnesses for appearing here today. We are in a time of significant uncertainty concerning the budget, and the advice provided by the witnesses will be extremely helpful in understanding the impact of potential defense sequestration.

Our country faces a long-term, systemic budget dilemma—we don't collect enough revenue to cover our expenditures. According to the House Budget Committee, we currently must borrow about 40 cents for every dollar the Federal Government spends. If we're going to fix this problem in the long run and avoid sequestration in the short run, I believe that we must address this from both ends—spending will have to come down, and we're going to have to generate new revenues.

Like many, if not most, of our members here, I share the view that large, immediate cuts to the defense budget caused by sequestration would have dangerous impacts on the ability of the U.S. military to carry out their missions. I am also deeply concerned about cuts to all non-entitlement spending, which bore the brunt of the recent deficit deal, and which also directly or indirectly support the jobs of thousands of American workers. This committee is properly focused today on the impact of the defense budget on jobs, but we also serve a larger body—the American people—and we owe it to them to approach the budget and jobs debates carefully and comprehensively.

If we can avoid sequestration, I believe that we can rationally evaluate our national security strategy, our defense expenditures, and the current set of missions we ask the military to undertake and come up with a strategy that requires less funding; indeed the Department of Defense is currently focused on just such an evaluation. Sequestration would make that rational evaluation impossible, which is why it must be avoided. But it is also important that we address the revenue side of our budget problem. Recently, some of my colleagues on this committee issued dire warnings about the potential impacts of additional defense budget cuts. I share their concerns, and that is why we must consider raising additional revenue. In order to avoid drastic job losses caused by cuts to our military and other important programs, revenue must be on the table.

It is my hope that this hearing will help remind everyone here that we have to make some serious choices. Our budget problems must be looked at in a comprehensive manner. If we are serious about not cutting large amounts of funding from the defense budget, something else has to give. Large, immediate, across-the-board cuts to the defense budget, which would occur under sequestration, could do serious damage to our national security. They would also likely result in thousands, if not tens of thousands, of Americans losing their jobs. Sequestration would have a similar impact on

American workers in cutting other non-entitlement spending. In order to avoid these large cuts and the resulting job losses, we're going to have to stop repeating ideological talking points and address our budget problems comprehensively, through smarter spending and enhanced revenue.

Thank you again, Mr. Chairman, for holding this hearing. And thank you to our witnesses for appearing here today.

The Effect on the U.S. Economy of Changes in Defense Spending

Testimony to the

Committee on Armed Services of the U.S. House of Representatives

October 26, 2011

Martin Feldstein*

Thank you, Mr. Chairman. I am very pleased to have the opportunity to testify to this Committee. Although I have testified to Congressional committees for more than 30 years, this is the first time that I have appeared before this important committee.

In your invitation you asked me to comment on the effect that reductions in defense outlays will have on total economic activity, i.e., on the GDP of the United States. I am happy to do that but I want to begin with a few words about the larger subject of the national security consequences of reductions in defense spending.

Defense Spending and National Security

In considering the appropriate size of the defense budget, it is of course important to recognize the immediate threats to the United States and to our allies from Iran, from North Korea, from rogue states and from various terrorist groups. There is also the current challenge in cyberspace from espionage directed at industrial and national security targets and from the risk of cyber attacks on our basic infrastructure.

But defense spending today must also relate to the more distant risk from China's future military policy. China is now a poor country with per capita income less than one-fifth of our own. But since China has more than four times the U.S. population, China's total GDP will equal that of the United States when its per capita income reaches only one-fourth of the U.S. level. Even if China's growth rate slows significantly from its current level, its total GDP will exceed ours in less than 15 years.

A country's total GDP determines its potential military budget. The current Chinese political leadership is concentrating on promoting economic growth to raise the standard of living of its people and to deal with the very large inequality that

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* Professor of Economics, Harvard University. A full curriculum vitae as required by House Rules is presented in the appendix.

exists between different groups within China. But China is also developing every aspect of its military capability.

The quality of China's military force is not currently up to U.S. standards. But China's defense budget will grow with its GDP. It is important for the United States to recognize that future generations of Chinese leaders could use its larger GDP to pursue more aggressive policies.

America's defense policy and our defense budget should therefore focus on the future generations of Chinese civilian and military leaders and should recognize the virtual certainty of China's growing economic power. The United States should maintain a military capability such that no future generation of Chinese leaders will consider a military challenge to the United States or consider using military force to intimidate the United States or our allies.

China's future military spending and its weapons development will depend on China's perception of what the United States is doing now and what we will do in the future. If we show a determination to remain invincible, China will not waste resources on trying to challenge us in an arms race. But if we keep cutting defense budgets, the Chinese will see this as an indication of U.S. weakness now and in the future.

China is in many ways a resource-poor country that depends on imports of oil, iron, and other raw materials as well as on imports of food to feed its people. That is not likely to change. China is therefore now buying oil in the ground around the world and arable land in Africa to grow food for the Chinese people. Some countries in the past have used military force to gain secure access to such materials. China's future leaders should not be tempted to follow that path.

It is important that our allies and friends like Japan and Korea and Singapore and Australia see the commitment of the United States to remain strong and to remain present in Asia. Their relations with China and with us depend on what they can expect of America's future military strength.

The Navy has a particularly important role to play in this, including the Navy's presence in international waters to enforce freedom of the seas, naval visits to Asian ports, and joint exercises with the navies of other governments.

We cannot postpone implementing a policy of future military superiority until some future year. We have to work now to develop the weapon systems of the future. We have to maintain the industrial and technological capacity to produce those weapon systems. We have to make it clear by our budgets and by our actions that we are the global force now and will continue to be that in the future.

While reducing fiscal deficits is very important, that task should not prevent the federal government from achieving its primary responsibility of defending this country and our global interests, both now and in the future.

Defense Spending and GDP

I will turn now to the narrower economic question of how cuts in defense spending affect U.S. GDP.

Since government spending on defense is a component of GDP, the immediate direct effect of a one billion dollar reduction in domestic defense spending is to reduce our GDP by one billion dollars. The resulting reduction in pay to military personnel and in compensation to the employees of defense suppliers then cause their spending as consumers to decline. If defense suppliers expect the reduced level of defense spending to be sustained, the defense suppliers will also cut their demand for equipment. The total effect of the one billion dollar reduction in defense spending is to reduce GDP by more than a billion dollars, perhaps about two billion dollars.

I based this calculation on a reduction in domestic defense spending. To the extent that some of the reduced defense spending is overseas and on locally purchased goods and services, the impact on U.S. GDP will be proportionately less. But since about 90 percent of defense spending is domestic, the calculation of a two dollar reduction in U.S. GDP for every dollar reduction in defense spending is probably a good estimate.

Any reduction in future budget deficits and in the resulting level of the national debt will also raise the confidence of businesses and households, leading to increased consumer spending and business investment, thus raising current GDP. Since a similar effect would result from legislated reductions in future deficits achieved by cutting any form of government spending or by raising revenue, we can ignore this "confidence effect" in comparing the impact of reductions in defense spending with the effect of other spending cuts or tax increases that have the same effect on future deficits.

The direct effect on GDP of changes in defense spending is larger than the corresponding effect of most other potential changes in government outlays. For example, outlays for unemployment benefits are not in themselves a component of GDP. They lead to increased GDP only by raising the consumer spending of the individuals who receive those benefits. While a high percentage of those cash benefits will be spent, it will certainly be less than a dollar of spending for every extra dollar of unemployment benefits. Some of the consumption purchased with the unemployment benefits would otherwise have been paid for out of reductions in household savings. And of course some of the consumer spending would be on imports, further reducing its effect on GDP.

A change in unemployment benefits also affects GDP by altering the incentive to remain unemployed. Reducing the maximum number of weeks of unemployment benefits will induce some individuals to find work sooner, thereby raising GDP. The resulting increase in total employment is difficult to estimate at a time when total employment is limited by the weakness of aggregate demand. Some of those who are induced to find work because of reduced UI benefits may just prevent others from finding work. The overall effect on GDP of reducing UI benefits will be the net effect of the reduction in consumer spending and the increase in weeks worked. The direct impact on GDP of a one billion dollar reduction in unemployment benefits will certainly be less than the direct effect of a one billion dollar reduction in defense outlays.

Transfers from the federal government to state and local governments are also not a component of GDP. Reducing such transfers only alters GDP to the extent that doing so causes those governments to reduce their spending or raise their taxes. If cutting a billion dollars in transfers to state governments causes them to cut their domestic spending by one billion dollars, the immediate effect on GDP would be the same as cutting one billion dollars of defense spending. But if the state governments offset some of the reduction in funds from Washington by using their "rainy day" funds or temporarily running a deficit, the effect on GDP would be less. Similarly, if the states raise taxes to pay for some of the outlays that had previously been financed by transfers from Washington, the effect on GDP would be smaller.

My comments this morning about the effect on GDP of changes in defense spending and other forms of government outlays focus on the direct effects on <u>demand</u> for U.S. goods and services as measured by GDP. That is the appropriate focus in the short run at a time when unemployment rates are high and we are far from full employment. Over time, the American economy will return to full employment, or, more technically, to the level of unemployment that can persist without causing a higher rate of inflation. Changes in defense spending in the context of full employment must be balanced by changes in other components of GDP.

I hope that these remarks are helpful to you and your colleagues as you consider the important tasks of deficit reduction and of protecting our national security.

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The following curriculum vitae is provided in response to the House rule for non-governmental witnesses. I have had no government grant or contract in the past three years.

MARTIN FELDSTEIN

Professor of Economics, Harvard University, 1969- George F. Baker Professor of Economics, 1984-

President Emeritus, National Bureau of Economic Research

Degrees:
Harvard College, A.B., summa cum laude (1961)
Oxford University, B. Litt. (1963), M.A. (1964), D. Phil. (1967)

Previous Positions:
Chairman, Council of Economic Advisers, 1982-84
Harvard University: Assistant Professor, 1967-68; Associate Professor, 1968-69
President and CEO, National Bureau of Economic Research, 1977-82, 1984-2008
Oxford University:
  Lecturer in Public Finance, 1965-67
  Nuffield College: Research Fellow, 1964-65; Official Fellow, 1965-67

Professional Activities and Honors:
- President, American Economic Association, 2004
- John Bates Clark Medal of the American Economic Association, 1977
- Member, President's Foreign Intelligence Advisory Board 2006 - 2009
- Member, President's Economic Recovery Advisory Board, 2009 - 2011
- Honorary Degrees: University of Rochester, (1984); Marquette University, (1985); Bentley College, (1988); Adelphi University, (1991); Dartmouth College, (2008).
- Fellow, Econometric Society, 1970-
- National Bureau of Economic Research, Research Associate, 1977 -
- Member, American Philosophical Society, 1989-
- Member, Institute of Medicine, National Academy of Sciences, 1971-
- Fellow, American Academy of Arts and Sciences, 1977-
- Fellow, National Association of Business Economists, 1980-
- Honorary Fellow, Nuffield College, Oxford, 1998-
- Corresponding Fellow, British Academy, 1998-
- Foreign Member, Austrian Academy of Sciences, 1996-
- Fellow, European Economic Association, 2004-
- Member, Council on Foreign Relations, 1986-, Trustee 1999-2007, 2009-
- Member, American Economic Association. Executive Committee, 1980-82; Vice President 1988-89; President Elect 2003; President 2004.
- Distinguished Fellow, American Economic Association, 2005
- Member, The Trilateral Commission, 1984- ; Executive Committee, 1990 -
- Member, Group of 30, 2002-;Executive Committee, 2007 -

- Member, National Committee on United States-China Relations, Director, 2001- ;Executive Committee, 2007 -
- Member, Academic Advisory Council, American Enterprise Institute, 2008 -
- Kiel Institute of World Economics, Scientific Advisory Board, 1991-2003; International Research Fellow.
- Member of the Editorial Board, *Review of Economic Studies* (1965-67), *Journal of Public Economics* (co-editor, 1972-86), *American Economic Review*, (1974-79), *The Public Interest*, *The National Interest*.
- Board of Contributors, *The Wall Street Journal*
- Contributing Writer, *The Syndicate Group*
- Director, Eli Lilly; Past Director, American International Group, HCA, JPMorgan, Phoenix Life, TRW
- Member, International Advisory Council: Daimler-Chrysler, 1990-2006; Robeco, 1988-2006; JP Morgan International Council, 1984-93, 2001-
- Economic Adviser to Brevan Howard, John Paulson Company, and Reliance Industries (India)
- Member, Panel of Economic Advisers, Federal Reserve Bank of New York
- Associated with Robeco and Citadel
- Economics Studies, Inc., Principal
- Member, Panel of Academic Advisers, Federal Reserve Bank of Boston
- Consultant, Department of Defense
- Member, Board of Govenors, Smith-Richardson Foundation, 2007-
- Member, Council of Academic Advisors, American Enterprise Institute, 2008-
- Member of the Corporation, Massachusetts General Hospital
- Member, New York Economic Club
- Chairman, Publications Committee, Foreign Affairs, 2001
- Distinguished Fellow, Center for Naval Analysis, 2009 -
- Elizabeth Morgan Prize, University of Chicago, 1976
- Fisher-Shultz Lecture, Econometric Society, 1980
- Joseph Schumpeter Professor, University of Vienna, March 1981
- Distinguished Public Service Award, The Tax Foundation, 1983 & 1999
- John R. Commons Prize, Omichron Delta Epsilon, 1989
- Jan Tinbergen Lecture, Netherlands Royal Economic Society, 1992
- Adam Smith Lecture, National Association for Business Economics, 1993
- Bernhard Harms Prize, Weltwirtschafts Institut, Germany, 1994
- Schumpeter Lecture, European Economic Association, 1994
- Richard Ely Lecture, American Economic Association, 1996
- Irving Kristol Award, American Enterprise Institute, 2011
- National Tax Association, Daniel M. Holland Award, 2003

Personal Information:
Born: November 25, 1939, New York
Married: Two children

Mr. Martin Feldstein
George F. Baker Professor of Economics, Harvard University
President Emeritus, National Bureau of Economic Research

Martin Feldstein is the George F. Baker Professor of Economics at Harvard University and President Emeritus of the National Bureau of Economic Research. He served as President and CEO of the NBER from 1977-82 and 1984-2008. He continues as a Research Associate of the NBER. The NBER is a private, nonprofit research organization that has specialized for more than 80 years in producing nonpartisan studies of the American economy.

From 1982 through 1984, Martin Feldstein was Chairman of the Council of Economic Advisers and President Reagan's chief economic adviser. He served as President of the American Economic Association in 2004. In 2006, President Bush appointed him to be a member of the President's Foreign Intelligence Advisory Board. In 2009, President Obama appointed him to be a member of the President's Economic Recovery Advisory Board.

Dr. Feldstein is a member of the American Philosophical Society, a Corresponding Fellow of the British Academy, a Fellow of the Econometric Society and a Fellow of the National Association of Business Economics. He is a Trustee of the Council on Foreign Relations and a member of the Trilateral Commission, the Group of 30, the American Academy of Arts and Sciences, and the Council of Academic Advisors of the American Enterprise Institute.

Dr. Feldstein has received honorary doctorates from several universities and is an Honorary Fellow of Nuffield College, Oxford. In 1977, he received the John Bates Clark Medal of the American Economic Association, a prize awarded every two years to the economist under the age of 40 who is judged to have made the greatest contribution to economic science. He is the author of more than 300 research articles in economics.

Dr. Feldstein has been a director of several public corporations and is currently a director of Eli Lilly. He is also an economic adviser to several businesses and government organizations in the United States and abroad. He is a regular contributor to the Wall Street Journal and other publications.

Martin Feldstein is a graduate of Harvard College and Oxford University. He was born in New York City in 1939. His wife, Kathleen, is also an economist. The Feldsteins have two married daughters.

DISCLOSURE FORM FOR WITNESSES
CONCERNING FEDERAL CONTRACT AND GRANT INFORMATION

INSTRUCTION TO WITNESSES: Rule 11, clause 2(g)(4), of the Rules of the U.S. House of Representatives for the 112th Congress requires nongovernmental witnesses appearing before House committees to include in their written statements a curriculum vitae and a disclosure of the amount and source of any federal contracts or grants (including subcontracts and subgrants) received during the current and two previous fiscal years either by the witness or by an entity represented by the witness. This form is intended to assist witnesses appearing before the House Armed Services Committee in complying with the House rule.

Witness name: MARTIN FELDSTEIN

Capacity in which appearing: (check one)

✓ Individual

___Representative

If appearing in a representative capacity, name of the company, association or other entity being represented:_______________

FISCAL YEAR 2011

federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
NONE			

FISCAL YEAR 2010

federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
NONE			

FISCAL YEAR 2009

Federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
None			

Federal Contract Information: If you or the entity you represent before the Committee on Armed Services has contracts (including subcontracts) with the federal government, please provide the following information:

Number of contracts (including subcontracts) with the federal government:

Current fiscal year (2011):________________________;
Fiscal year 2010:________________________;
Fiscal year 2009:________________________.

Federal agencies with which federal contracts are held:

Current fiscal year (2011):________________________;
Fiscal year 2010:________________________;
Fiscal year 2009:________________________.

List of subjects of federal contract(s) (for example, ship construction, aircraft parts manufacturing, software design, force structure consultant, architecture & engineering services, etc.):

Current fiscal year (2011):________________________;
Fiscal year 2010:________________________;
Fiscal year 2009:________________________.

Aggregate dollar value of federal contracts held:

Current fiscal year (2011):________________________;
Fiscal year 2010:________________________;
Fiscal year 2009:________________________.

Testimony of

Stephen S. Fuller, Ph.D.,
Dwight Schar Faculty Chair, University Professor
and Director of the Center for Regional Analysis
George Mason University

Before the House Armed Services Committee on the
Economic Consequences of Defense Sequestration

October 26, 2011

The Regional Economic Impact of Proposed Reductions in Defense Spending

Chairman McKeon, Ranking Member Smith, members of the Committee, thank you for the opportunity to testify on the potential economic consequences of reductions in Department of Defense spending as these impacts would affect the economies of states and regions across the United States. I have conducted research relating to this issue for the Commonwealth of Virginia that examined the economic and fiscal impacts of DOD spending. This research was undertaken in 2009 in response to early concerns regarding the Commonwealth's economic vulnerability to changing DOD spending policies. More recently, I was asked by the Aerospace Industries Association to calculate the economic impacts of reductions in DOD outlays for military equipment on the U.S. economy and the states that represent the home base for major aerospace and military equipment manufacturers and suppliers. I am submitting both reports for the record as they contain findings relevant to your deliberations on this important topic.

The economic impacts that occur at the state and regional levels are similar to those that have been reported at the national level and are evident in changes in economic activity—gross regional product (GRP), changes in employment, and changes in personal earnings. Collateral impacts also will occur in the local business base as the loss of sales for single-market businesses could result in the failure of these business establishments—the nature of their business (size and product line) may make these firms more vulnerable to changes in sales due to DOD spending reductions or reductions in civilian or uniform personnel. These latter effects are particularly evident around military installations as witnessed recently here in the District of Columbia among the retail and other commercial businesses having previous served the staff of and visitors to Walter Reed prior to its closing in September. These "BRAC effects," where installations have closed or substantially downsized, provide a good measure of the potential ranges of economic impacts that may result from reductions in DOD spending. All too often these local effects are lost in the impersonal numbers that are used to measure the economic impacts of changes in public spending patterns.

State-Level Economic Impacts of DOD Spending

One approach to understanding the potential impacts of DOD spending reductions is to examine the importance of DOD spending to a local economy. An examination of DOD spending on the Commonwealth of Virginia economy provides a good measure of what could be the impact of reductions in these spending levels.

Spending by the Department of Defense in support of its activities—defense installations, uniform and civilian personnel, retirees, and federal contractors—represents a major source of jobs and income within the Commonwealth of Virginia and generates significant direct and indirect economic activities throughout all sectors of the State's economy. Additionally, DOD spending and the jobs and payroll this spending supports generate a significant surplus of state-level revenues relative to the demands placed on state-funded services. These economic and fiscal impacts are summarized as follows.

- In FY 2008 DOD spending in the Commonwealth of Virginia contributed $57.4 billion to the State's economy accounting for 15.6 percent of the total value of the goods and services produced in the State—its gross state product;

- DOD spending and its re-spending within the State's economy supported a total of 902,985 jobs (both directly funded and supported indirectly by the re-spending of DOD funds within the State) representing 18.9 percent of the state's total job base;

- DOD spending generated $44.4 billion in personal earnings accounting for 17.4 percent of the total personal earnings of all workers residing within the State;

- The fiscal impacts of DOD spending and the workers it supported generated a significant net revenue benefit for the State in FY 2008. On average, for each job associated with DOD spending, the revenues generated exceeded the expenditure demand placed on the State's budget by $1,848.52; that is, for each $1 in expenditure demand, $2.85 in state revenues were collected for each employee (including military retirees) and these employees related business spending.

- The total fiscal benefit accruing to the State from DOD-supported economic activities in the State in FY 2008 was $1.1 billion.

- DOD spending in the Commonwealth totaled $54.5 billion in FY 2008 and ranked first among all states on a per capita basis ($6,713.06) representing a funding advantage of $4.26 to $1.00 compared to the U.S. average.

This DOD spending is an important source of economic activities, personal earnings, jobs and fiscal benefits for the State. In the absence of this spending, the economy would be 15.6 percent smaller, support 18.9 percent fewer jobs and face a budget gap of $1.1 billion.

Summary of Economic and Fiscal Impacts
DOD Spending in the Commonwealth of Virginia, FY 2008
(in billions of 2008 $s)

Source	GSP(1)	Personal Earnings(2)	Jobs(3)
Economic Impacts			
Direct Payroll	$22.4	$19.3	339,941
Contracting	33.6	23.9	537,258
Construction	1.4	1.1	25,786
Totals*	$57.4	$44.4	902,985

Sources: EMSI, GMU Center for Regional Analysis
*sum of the individual values may not add to the totals due to rounding; $118 million in DOD grants were not included in this analysis.
(1) Contribution to gross state product; (2) income accruing to workers residing in Virginia; (3) total direct and indirect jobs supported by type of DOD spending in the State;

Fiscal Impact	Revenues	Expenditures	Net Benefit
Per Job (Actual $s)	$2,849.22	$1,000.70	$1,848.52
Totals ($s in millions)	$1,689.38	$593.34	$1,096.04

Sources: Urban Analytics, Inc.; GMU Center for Regional Analysis

Economic Impacts of DOD Spending Reductions
For Military Equipment Acquisition

An analysis of DOD spending reductions for the acquisition of military equipment that has already been approved (BCA 1) totaling $19.324 billion for FY 2013 and the potential additional reduction of $25.686 billion in procurement of military equipment, also impacting FY 2013, illustrate the breadth of these effects on jobs, payroll and GDP as these effects cycle through the economy at the local level. This total reduction of $45.01 in DOD spending for the acquisition of military equipment in FY 2013 would have the following economic impacts:

- Lost sales throughout the supply chain and induce sales losses through the broader economy would total $164,059,027,945; that is, for each $1 in DOD spending reductions for military equipment, an additional $2.64 in sales losses will be experienced by other businesses;

- 71% of these lost sales would occur as a result of decreased consumer spending by workers directly and indirectly affected by these DOD spending reductions—workers having lost their jobs and/or experienced salary reductions—affecting local businesses serving local demand;

- The loss of 1,006,315 full-time, year-round equivalent jobs with only 124,428 of these jobs being lost directly or indirectly from the prime DOD contractors for this equipment and their suppliers while 881,887 jobs or 87.6% of all job losses would come from the induced spending effects across all sectors of the economy as a result of changes in payroll spending within the aerospace and military equipment industry;

- This total job loss would add 0.6 percentage points to the current U.S. unemployment rate (raising today's 9.1% rate to 9.7%);

- Wage and salary would decrease by a total of $59.4 billion with $48.4 billion of these losses occurring among workers working in businesses outside of the military equipment manufacturing supply chain—retail, construction, professional and business services, health and education, leisure and hospitality construction, financial services and others;

- Lost non-wage income—spending for operations, capital investment, retained earnings, profits—would decline by $27.05 billion with 63.4% of this lost income being experienced by non-DOD prime contractors and their suppliers; and,

- Reduced U.S. gross domestic product (GDP) growth of $86.456 billion representing an amount equal to 25% of the projected annual increase in GDP for 2013; this loss would reduce currently projected growth for 2013 from 2.3% to 1.7% (IHS Global Insight September 2011 forecast).

The State Level Impacts of DOD spending Reductions

While the economic impacts of DOD spending reductions would affect all 50 states, ten states would account for 58.5 percent of the job and income losses projected to occur in 2013 as a result from a $45.01 billion reduction in military equipment acquisitions. In total, these spending reductions would result in employment decreases of 588,700 jobs in these ten states and generate losses of $34.7 billion in personal income. These decreases in economic activity would reduce these states' gross state product by a total of $50.6 billion in 2013. One-third of these impacts would occur in California, Virginia and Texas.

Economic Impacts of DOD Spending Reductions
for Military Equipment in FY 2013: Top Ten States
(jobs in thousands, GSP in billions of 2013 $s)

State	Job Losses	Lost Earnings	Decrease GSP*
California	125.8	$7.4	$10.8
Virginia	122.8	$7.3	$10.5
Texas	91.6	$5.4	$7.9
Florida	39.2	$2.3	$3.4
Massachusetts	38.2	$2.3	$3.3
Maryland	36.2	$2.1	$3.1
Pennsylvania	36.2	$2.1	$3.1
Connecticut	34.2	$2.0	$2.9
Arizona	33.2	$2.0	$2.9
Missouri	31.2	$1.8	$2.7
Totals-Top Ten	588.7	$34.7	$50.6

Sources: GMU Center for Regional Analysis, EMSI
*gross state product

Summary of Findings

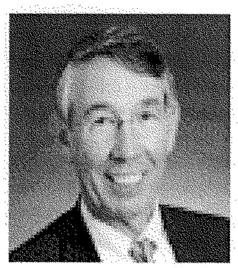
Reductions in DOD spending, whether it involving uniform or civilian personnel, the operations of military installations, the maintenance or acquisition of military equipment or goods and services provided by private contractors, will have wide spread impacts extending well beyond prime contractors and their direct and indirect suppliers. Each of these prime contractors and their suppliers (direct or indirect) employ large numbers of workers and also make substantial purchases of goods and services from suppliers to support their business operations and the loss of this payroll and business purchases (largely non-manufacturing suppliers) will spread the economic pain of these cutbacks to a far larger population and business base than generally appreciated.

Each $1 decrease in DOD equipment purchases will generate an additional $2.64 in lost sales elsewhere in the economy with 71 percent of these losses resulting from decreased spending by workers having lost their jobs. The employment effect is even greater, with job losses associated with only a $45.01 billion reduction in DOD spending for military equipment acquisition generating a total loss of 1 million jobs of which 88 percent would be on "Main Street" and only 12 percent directly within the aerospace and military equipment industry. This job loss would add 0.6 percentage points to the U.S. unemployment rate. Beyond the loss of jobs there is the loss of earnings and spending that further would undermine state and local tax bases.

Spending reductions have consequences and these consequences disproportionally impact workers and businesses that appear to have little connection to the target of the spending reduction. The breadth and reach of this collateral economic damage should be fully measured and assessed as decisions to reduce DOD spending are debated. Besides the impacts on the nation's military readiness and ability to respond to international crises, the impacts of any proposed DOD spending reductions on local economies, their workers, their incomes, and on local businesses need to be fully assessed and their consequences understood and minimized or mitigated.

Thank you.

Dr. Stephen Fuller
Dwight Schar Faculty Chair and University Professor
Director, Center for Regional Analysis



Stephen Fuller joined the faculty at George Mason University in 1994 as Professor of Public Policy and Regional Development. He served as Director of the Ph.D. Program in Public Policy from July 1998 to June 2000 and from July 2001 to July 2002. He also serves as Director of the Center for Regional Analysis. In September 2001, the GMU Board of Visitors appointed him University Professor and in July 2002 he was named to the Dwight Schar Faculty Chair.

Prior to joining the Mason faculty, he served on the faculty at George Washington University for twenty-five years, including nine as Chairman of the Department of Urban Planning and Real Estate Development and one as Director of Doctoral Programs for the School of Business and Public Management.

Professor Fuller has authored more than 500 articles, papers, and reports in the field of urban and regional economic development including monthly reports on the Washington metropolitan area and Fairfax County economies.

His research focuses on the changing structure of metropolitan area economies and measuring their current and near-term performance. In 1990 he developed a monthly series of indicators to track the current and near-term performance of the Washington area economy. He also developed leading and coincident indices for Fairfax County in 1997. These monthly reports are available on the Center for Regional Analysis website. His research includes studies on the impacts of federal spending, the hospitality industry, international business and the building industry on the Washington area economy. His international assignments include Kazakhstan, Georgia, Hungary and China as well as on-going projects in Portugal.

In August 2006, Governor Kaine appointed Professor Fuller to the Governor's Advisory Board of Economists. He had previously served on this Board under Governors Warner, Allen and Wilder. In 2003, he was a member of Governor Warner's Tax Reform Working Group. He also is a member of the CFO Advisory Group of the District of Columbia. Additionally, he serves on the Board of Directors of the Global Environment and Technology Foundation and Tompkins Builders Inc. He has been economic advisor to Fairfax County, VA since 1995 and has been appointed by the Board of Supervisors to serve on the Board of Directors of the Fairfax County Convention and Visitors Authority. In 2007, he was appointed by Cardinal Bank as its Chief Economist.

In 1996, he was honored by the Economic Club of Washington as Educator of the Year and in 1997 was selected for the Richard T. Ely Distinguished Educator Award by Lambda Alpha International, an honorary society of land economists. He served as President of the Washington Chapter of Lambda Alpha from 1998 to 2000 and is a member of the Urban Land Institute's Washington District Council. In 2001, he was selected by NAIOP as a Distinguished Fellow, an appointment that extends through 2007.

DISCLOSURE FORM FOR WITNESSES
CONCERNING FEDERAL CONTRACT AND GRANT INFORMATION

INSTRUCTION TO WITNESSES: Rule 11, clause 2(g)(4), of the Rules of the U.S. House of Representatives for the 112th Congress requires nongovernmental witnesses appearing before House committees to include in their written statements a curriculum vitae and a disclosure of the amount and source of any federal contracts or grants (including subcontracts and subgrants) received during the current and two previous fiscal years either by the witness or by an entity represented by the witness. This form is intended to assist witnesses appearing before the House Armed Services Committee in complying with the House rule.

Witness name: Stephen S. Fuller

Capacity in which appearing: (check one)

✓ Individual

___Representative

If appearing in a representative capacity, name of the company, association or other entity being represented:______________________

FISCAL YEAR 2011

federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
N.A.			

FISCAL YEAR 2010

federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
N.A.			

FISCAL YEAR 2009

Federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
N/A			

Federal Contract Information: If you or the entity you represent before the Committee on Armed Services has contracts (including subcontracts) with the federal government, please provide the following information: N/A

Number of contracts (including subcontracts) with the federal government:

Current fiscal year (2011):__________;
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List of subjects of federal contract(s) (for example, ship construction, aircraft parts manufacturing, software design, force structure consultant, architecture & engineering services, etc.):

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Number of grants (including subgrants) with the federal government:

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Fiscal year 2009:______________________.

Aggregate dollar value of federal grants held:

Current fiscal year (2011):______________________;
Fiscal year 2010:______________________;
Fiscal year 2009:______________________.

Testimony
House Arm Services Committee
Hearings on Economic Consequences of Defense Sequestration
October 26, 2011

Peter Morici
University of Maryland

My name is Peter Morici, and I am an economist and professor of international business at the University of Maryland. Prior, I served as Director of Economics at the United States International Trade Commission. I thank you for this opportunity to testify on Economic Consequences of Defense Sequestration.

Today, I would like to discuss with you the broader economic consequences of further cuts in U.S. defense spending, as opposed to specific industry or regional impacts. These are largely systemic.

Should the United States fail to maintain military strength necessary to meet its international security responsibilities, as well as those that may be posed by a surging Chinese presence in the Pacific, the international economic institutions that define the rules of the game very likely will change in ways more hostile to American economic institutions, political culture and values, diminishing prospects for U.S. economic success and independence.

The United States offers the world a clear prescription for economic prosperity and the protection of human rights—free markets and democracy. Yet, with the U.S. economy withering and the U.S. ability to project power prospectively diminished, U.S. prescriptions appear increasingly less efficacious abroad.

China offers the world a very different model for economic development and personal security. Its autocratic government intervenes considerably in economic decisions to promote wide ranging development goals, and it limits personal freedoms to ensure domestic order and stability. "Occupy Wall Street" would almost certainly not be tolerated in China and would likely not be permitted to emerge with Beijing's tight censorship of internal communications. Suppression of such movements supports its strategy for tight economic management, quite in addition to maintaining the Communist Party's grip on political power.

China openly flaunts the letter and spirit of international economic rules intended to foster free and open markets, and severely limits intellectual dissent. With its state-directed economy growing at breakneck speed and America struggling, a U.S. failure to maintain a military adequate to meet China in the Pacific will almost assuredly result in other emerging nations embracing, albeit reluctantly or enthusiastically and in varying measure, China's model for economic development and governance.

International institutions—like the WTO—are consensual, and interpret and make new rules by consensus. Perforce, those rules will follow the tide of sentiment among more successful nations, and the United States and its Atlantic allies will become more isolated and somewhat marginalized. History teaches power balances do change, and often losers are preoccupied with internal squabbling and chaotic dysfunction, and ultimately surprised.

Without a strong economy and military capable of meeting the emerging challenge posed by China in the Pacific, American values and the U.S. economy cannot succeed.

Origins of Budget Challenges

During the closing days of World War II the United States—in partnership with Britain, Canada and others—crafted an international economic system intended to promote democracy and economic globalization. The premise was clear—democracies, integrated by trade and investment, would be much less inclined to war. Military competition would be replaced by economic competition.

On the economic side, the United States encouraged the formation of the European Community, which grew into the European Union, and promoted globalization through the WTO, IMF, World Bank, and regional and bilateral trade and investment agreements. The West—as defined by the OECD economies—is so intensely integrated today that the notion of armed conflict among those nations is absolutely absurd.

On the political/security side, the United States became the *de facto* global defender of free markets and democracy by forcing the permanent disarmament of the third and fourth largest economies—Japan and Germany—leaving only stalwart foes—China and Russia--as potential challengers on the global stage.

Victory in the Cold War—without comparable contributions from the Japanese and German economies—came at a heavy price. And now, dealing with global terrorism and a more muscular China poses new perils and costs that Americans, weary of leadership, seem unwilling and perhaps unable to bear.

Successive rounds of GATT/WTO negotiations substantially liberalized trade among the OECD nations, and granted preferential market access in advanced industrialized countries to developing regions. Through special and differential treatment the latter economies have generally obtained open access to the United States, Canada and EU but are permitted to maintain high tariffs and administrative barriers to western exports, and subsidize domestic industries in endlessly imaginative ways.

Through the 1990s, the North American and European economies were so much larger and stronger that they could afford to give away industrial activities and jobs, even when the dictates of sound economics and comparative advantage would indicate wiser choices, to promote development in less fortunate areas of the world. However, the emergence of China, and to a lesser extent India, Russia and Brazil, has changed all that.

By virtue of China's size and ambitions to exert greater influence in the Pacific and to change the rules of international competition, this calculation about the relationship between western and developing nations becomes patently false and foolish.

China abuses the WTO system and flaunts free-market principles with high tariffs and domestic institutions that systematically block U.S. and EU exports, aggressive subsidizes for domestic industries, intervention in currency market to ensure an undervalued yuan and artificial cost advantages for its goods, and unfair rules for foreign firms that establish production in China to sell there.

All of this has imposed a large and growing bilateral trade imbalance that destroys millions of U.S. manufacturing jobs, transfers valuable U.S. technology cheaply to China, greatly diminishes U.S. R&D, educational attainment and potential growth, and makes the United States less capable of maintaining defense capabilities necessary to meeting its security obligations and accomplishes its legitimate security goals.

Successive Administrations have tried diplomacy to open Chinese markets and end currency manipulation and mercantilism more generally, but when rebuffed, they have cautioned Congress against concrete action, and pursued more ill-fated diplomacy.

Large American multinationals, which have invested in China to serve the market, have become clients of Beijing's protectionism. Invested in Middle Kingdom mercantilism, they council Presidents and Congressional leaders against taking concrete measures to counter China's unfair practices—to the point of even denying members of Congress the opportunity to vote on such measures. Those actions of self-directed capitalism have broad consequences for the health and vitality of the U.S. economy and ultimately national security.

On the global stage, failure to meaningfully confront Chinese mercantilism, after diplomacy has failed over and over again, makes the United States appear foolish, weak and inept, a civilization overtaken by one with a better economic model and a more competent government.

Domestically, the United States has needlessly increased its dependence on expensive foreign oil by failing to develop abundant domestic resources and implement more effective conservation measures. Failure to develop domestic energy creates ***no*** environmental benefits. It merely shifts the drilling to the Persian Gulf and other unfriendly venues where environmental risks are no better managed, and helps finance global terrorism. It is a fool's journey into the darkness.

Economists agree: the U.S. economy can't get out of its funk and grow robustly, not because Americans can't make things cost effectively and well, but because demand for what they make is inadequate.

There is no mystery about it. The trade deficit with China and on oil account for the nearly the entire $550 billion U.S. trade deficit, this deficit poses a significant drain on the demand for U.S. products and is the single the largest barrier to economic recovery.

President Obama has said on more than one occasion China's currency policy hurts the U.S. economy and slows its recovery. The reasoning is simple. Every dollar that goes abroad to purchase Chinese consumer goods that does not return here is lost purchasing power that could be creating jobs. The same applies to high priced oil.

Cutting the trade deficit in half would jump start the U.S. economy, create up to 5 million jobs and lower the unemployment rate to about 6 percent. Without confronting Chinese currency manipulation and broader protectionism with concrete actions and without raising domestic oil production from less than 6 million barrels a day to 10, the U.S. economy won't grow fast enough, and taxes will be inadequate to finance an adequate defense and vital domestic services.

Simply, the trade deficit—China and oil—is as much responsible for the U.S. budget crisis—through slow growth—as overspending and other cost issues.

Cost Issues, Overspending and Popular Myths

The U.S. economy and government faces cost issues too. The U.S. health care system is more expensive and provides less favorable outcomes than more cost effective private systems abroad, for example in Holland and Germany. Much the same may be said for U.S. education.

Health care and education are hugely uncompetitive by global standards, and account for huge portions of combined U.S. federal, state and local spending. Most recently rising health care costs, coupled with a shrinking private sector and tax base, is now crowding out education spending.

Together with rising Social Security outlays, mandated by an unrealistic retirement age fixed at 66, the outsized cost of health care and education have required curtailing basic government activities and targeting for cuts spending categories the United States simply must undertake to compete.

Funds are lacking to adequately maintain roads, bridges and waterways, and to replace National Weather Service satellites essential to monitoring and forecasting severe weather. And, the United States has ceded manned space flight to China and Russia.

Advocates of the burdensomely inefficient health care and educations systems have perpetuated the ***myth*** that too much defense spending is the problem—that is simply not the case.

In 2007, with two wars raging and the Bush tax cuts in place, the deficit stood at $161 billion, while in 2011, it will be about 1.3 trillion. Total government outlays are up about

$847 billion, when no more than $62 billion are necessary to accommodate inflation. How can defense spending—with a baseline budget of $553 billion in 2011—be responsible? It only accounted for about 11 percent of the $847 billion increase.

Moreover, if Congress would simply cut by half the additional spending since 2007, it would accomplish a total of more than $4 trillion in budget reductions over ten years.

The ***myth*** also persists that the United States spends too much on defense and winding down the wars in Iraq and Afghanistan will create great dividends. It won't. Congress may have appropriated funds for those wars, but it is clear those wars, as well as other conflicts, have been even more expensive that those budget outlays indicated.

U.S. defense systems are aging and becoming less functional and effective. Examples have been cited of sons manning fighters once flown by their fathers. Ask yourself how effective your staffs would be with 15 year old computers and if you would want to fight a cyber attack with such antiquated hardware.

And defense capabilities are thinner. The number of USAF fighters is down form 3602 in 2000 to 1990 today, and will be reduced to 1739 at current funding levels. Navy ships are down from 316 to 288, and will have to be reduced to 263 at current funding levels. Sequestration would require cutting these figures even further and reducing the number of Army maneuver battalions by 30 or 40 percent.

Changes in the nature of threats and the global economic power balance—who will have economic power—will require more not fewer resources to protect U.S. strategic interests and preserve the influence of U.S. values—democracy and free markets—in the world.

Cyber warfare and arming China, which is building a blue water navy to challenge the United States in the Pacific, do not shift U.S. security challenges from one venue to another but rather add to those challenges. For example, U.S. and allied dependence on Middle East oil will continue for at least another generation—even with best efforts to develop domestic fossil fuels and alternative energy resources—and U.S. naval assets cannot be depleted in the Gulf Region to counter a Chinese buildup in the Pacific. Moreover, economic and political upheavals in Europe and North Africa will make the U.S. naval presence in the Mediterranean and North Atlantic even more vital.

The ***myth*** persists that China will not be able to challenge the United States anytime soon. After all China's ***reported*** military expenditures—at current exchange rates—is only about 17 percent of U.S. baseline outlays, but China does not have troops, aircraft and naval assets tied up around the world with established commitments. Moreover, China's currency is widely acknowledged to be undervalued, making comparisons of spending at current exchange rates deceptive.

Using IMF Purchasing Power Parity exchange rates, China's ***reported*** military spending in 2011 becomes $148 billion or 27 percent of the U.S. base budget. Based on the growth of spending over the past two years, with sequestration, China's military spending would be 37 and 43 percent of U.S. levels in 2013 and 2015, and 66 percent in 2021. Without sequestration, it would still be 60 percent of U.S. levels in 2021 and could effectively match U.S. spending in the late 2020s.

Also U.S. budget problems are much worse than Congress anticipates. The President's February budget assumed economic growth in the range of 4 percent for 2011 to 2016. Even in the more euphoric days of 2010, private sector economists were not assuming those kinds of figures.

Even if the Joint Select Committee reaches a consensus on budget cuts acceptable to both chambers, slow growth will compel another budget crisis after the 2012 election and then others further down the road.

Hard Realities

America must address the world as it finds it, not as intellectuals and advocates tell us it should be.

Hard reality number one is the interactions between the health of the U.S. economy and these budget discussions are disquieting.

The United States is not in a Greek spiral—at least not yet—but cuts in defense and nondefense spending will slow growth at a time when demand for what the private economy produces is weak and a second recession that could thrust unemployment into the teens threatens. Most certainly, budget cuts will breed slower growth, lower tax revenues and the need for more cuts, until Washington finds ways to get the private economy growing.

If Washington can't find a way to instigate private sector growth—specifically, if it can't muster to challenge Chinese mercantilism and unleash development of domestic energy resources—and the nation continues on the assumption that budget deficits can be tamed with large contributions from defense, real effective Chinese defense spending will surpass U.S. defense spending in the next decade.

The United States has many established assets—ships, planes and such built in the past—that will continue numerical superiority in the ability to project power, but those will be increasingly old assets or the numerical superiority will decline more rapidly from retirements of assets. China's assets will be newer and growing in number.

The ***myth*** persists that China's military will be technologically inferior for a long time. Don't bet on that if the U.S. industry and R&D keeps moving to China through investments by GE and others, and the U.S. hollows out its defense industrial base through program cuts to meet unrealistic budget targets.

Slashing defense spending because the Congress can't agree to confront Chinese mercantilism and develop domestic energy to rekindle economic growth, and to cut and reform the domestic spending that has built up over the last four years, and the tables will turn in the Pacific sooner than you think.

Then, China's violation of the norms and rules of the economic system put in place by the United States and western powers after World War II will spread like an epidemic through the developing world, troubled places in Southern Europe, and so forth.

China's mercantilism, anti-democratic values and soft approach to civil and human rights making will be seen an attractive comprehensive package, necessary for ensuring economic prosperity and personal security. The rules of the game, as defined by international institutions, will follow those broader sentiments, and Americans and their values and institutions will become isolated and unable to compete.

America will be more isolated and dramatically weakened. Marginalized, it will resemble Italy ***or*** Greece. Charming and quaint but hardly able to independently sustain its standard of living or ensure its own security, ***or*** worse bankrupt and at China's doorstep for a bail out.

Dr. Peter Morici
Professor, of International Business Robert H. Smith School of Business, University of Maryland
Former Director of Economics at the United States International Trade Commission

Professor Peter Morici is a recognized expert on economic policy and international economics. Prior to joining the university, he served as director of the Office of Economics at the U.S. International Trade Commission. He is the author of 18 books and monographs and has published widely in leading public policy and business journals including the *Harvard Business Review* and *Foreign Policy*. Morici has lectured and offered executive programs at more than 100 institutions including Columbia University, the Harvard Business School and Oxford University. His views are frequently featured on *CNN, CBS, BBC, FOX, ABC, CNBC, NPR, NPB* and national broadcast networks around the world.

Research Interests: International economic policy and commercial agreements, World Trade Organization.

DISCLOSURE FORM FOR WITNESSES
CONCERNING FEDERAL CONTRACT AND GRANT INFORMATION

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Witness name: Peter Morici

Capacity in which appearing: (check one)

✓ Individual

___Representative

If appearing in a representative capacity, name of the company, association or other entity being represented: NONE

FISCAL YEAR 2011

federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
	NONE		

FISCAL YEAR 2010

federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
	NONE		

FISCAL YEAR 2009

Federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
	NONE		

Federal Contract Information: If you or the entity you represent before the Committee on Armed Services has contracts (including subcontracts) with the federal government, please provide the following information:

Number of contracts (including subcontracts) with the federal government:

Current fiscal year (2011): NONE;
Fiscal year 2010:________;
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List of subjects of federal contract(s) (for example, ship construction, aircraft parts manufacturing, software design, force structure consultant, architecture & engineering services, etc.):

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Fiscal year 2009: .

Aggregate dollar value of federal grants held:

Current fiscal year (2011): NONE;
Fiscal year 2010: ;
Fiscal year 2009: .

Peter Ursic

Oct 21, 2011

DOCUMENTS SUBMITTED FOR THE RECORD

October 26, 2011

The Economic and Fiscal Impacts of DoD Spending on the Commonwealth of Virginia in FY 2008

Prepared for

The Virginia National Defense Industrial Authority
Richmond, Virginia

By

Stephen S. Fuller, Ph.D.
Dwight Schar Faculty Chair and University Professor
Director, Center for Regional Analysis
George Mason University
Fairfax, Virginia

November 2009

The Economic and Fiscal Impact of DoD Spending On the Commonwealth of Virginia in FY 2008

Executive Summary

Spending by the Department of Defense in support of its activities—defense installations, uniform and civilian personnel, retirees, and federal contractors—represents a major source of jobs and income within the Commonwealth of Virginia and generates significant direct and indirect economic activities throughout all sectors of the State's economy. Additionally, DoD spending and the jobs and payroll this spending supported generate a significant surplus of state-level revenues relative to the demands placed on state-funded services. These economic and fiscal impacts are summarized in the following table.

In FY 2008 DoD spending in the Commonwealth of Virginia contributed $57.4 billion to the State's economy accounting for 15.6 percent of the total value of the goods and services produced in the State. This DoD spending and its re-spending within the State's economy supported a total of 902,985 jobs (both directly funded and supported indirectly by the re-spending of DoD funds within the State) representing 18.9 percent of the state's total job base and generated $44.4 billion in personal earnings accounting for 17.4 percent of the total personal earnings of al workers residing within the State.

Summary of Economic and Fiscal Impacts
DoD Spending in the Commonwealth of Virginia, FY 2008
(in billions of 2008 $s)

Source	GSP(1)	Personal Earnings(2)	Jobs(3)
Economic Impacts			
Direct Payroll	$22.4	$19.3	339,941
Contracting	33.6	23.9	537,258
Construction	1.4	1.1	25,786
Totals*	$57.4	$44.4	902,985

Sources: EMSI, GMU Center for Regional Analysis
*sum of the individual values may not add to the totals due to rounding; $118 million in DoD grants were not included in this analysis.
(1) Contribution to gross state product; (2) income accruing to workers residing in Virginia; (3) total direct and indirect jobs supported by type of DoD spending in the State;

Fiscal Impact	Revenues	Expenditures	Net Benefit
Per Job (Actual $s)	$2,849.22	$1,000.70	$1,848.52
Totals ($s in millions)	$1,689.38	$593.34	$1,096.04

Sources: Urban Analytics, Inc.; GMU Center for Regional Analysis

The fiscal impacts of DoD spending and the workers it supported generated a significant net revenue benefit for the State in FY 2008. On average, for each job associated with DoD spending inclusive of all taxable expenditures associated with DoD-funded activities within the State, the revenues generated exceeded the expenditure demand placed on the State's budget by $1,848.52; that is, for each $1 in expenditure demand, $2.85 in state revenues were collected for each employee (including military retirees) associated with DoD spending inclusive of related business spending. The total fiscal benefit accruing to the State from DoD-supported economic activities in the State in FY 2008 was $1.1 billion.

DoD spending in the Commonwealth totaled $54.5 billion in FY 2008 and ranked first among all states on a per capita basis ($6,713.06) representing a funding advantage of $4.26 to $1.00 compared to the U.S. average. This DoD spending is an important source of economic activities, personal earnings, jobs and fiscal benefits for the State. In the absence of this spending, the economy would be 15.6 percent smaller, support 18.9 percent fewer jobs and face a budget gap of $1.1 billion.

Introduction

Spending by the Department of Defense in support of its activities—defense installations, uniform and civilian personnel, retirees, and federal contractors—represents a major source of jobs and income within the Commonwealth of Virginia and generates significant direct and indirect economic activities throughout all sectors of the State's economy. These indirect effects result from the re-spending of DoD payroll and the payroll and business purchases of DoD contractors that support other businesses and generate additional jobs and payroll within the State spanning all sectors of the economy. These direct outlays and the indirect and induced economic activities they generate are a major source of net fiscal benefits at the State level. It is the broad objective of the research reported herein to quantify these economic and fiscal benefits that were generated in FY 2008 (all data are on a fiscal year basis) as a result of Department of Defense spending within the Commonwealth of Virginia.

More specifically, the objectives of this research are three fold:

(1) to document the magnitudes of DoD spending in the Commonwealth of Virginia including outlays to operate its 31 military installations in the State, payroll disbursements to DoD military and civilian personnel working in the State, payments made to military retirees, and procurement outlays for the purchases of goods and services from vendors located within the state;

(2) to measure the impacts of this spending on the economy of the Commonwealth including its impact on total output value (the State's gross state product), the generation of personal earnings that accrue to workers residing within the State, and the support of jobs within the State; and

(3) to calculate the fiscal impact on the State budget from hosting the 31 military installations and other DoD activities including contractors; that is, to calculate the revenues generated to the benefit of the State as a result of DoD functions and activities within the State and the expenditure demand these functions and activities impose on the State's budget to determine their net fiscal benefit.

A fundamental objective of this research is to provide data, analysis and interpretative support to the Virginia National Defense Industrial Authority and its Board of Directors in order that they can achieve their mission and have the best economic and fiscal impact information available by which to guide the Authority's decision making and to inform Virginia's leadership.

The Scope and Magnitude of DoD Spending in the Commonwealth of Virginia

The economic impacts that result from DoD activities located within the Commonwealth of Virginia are generated by the spending of DoD monies within the Commonwealth that would not have been spent in the absence of the DoD's presence—its installations, its personnel, its contracting from private sector suppliers. The magnitude of this spending and its purposes—payroll disbursements, capital construction, operations, contracting including its service and product mix—determine the total contribution of DoD's direct spending as it cycles through the Commonwealth's economy affecting its total impact on the State's Gross State Product, job creation and generation of personal earnings. The broad categories of DoD spending within the Commonwealth in 2008 are presented in Table 1.

Table 1

DoD Spending in the Commonwealth of Virginia, FY 2008
(in thousands of 2008 Dollars)

Source	Value of Outlay	Percent of Total
Payroll	$15,023,666	27.6
Active Duty	4,525,046	8.3
Civilian Personnel	6,479,499	11.9
Reserve and Guard	330,950	0.6
Retired Military	3,688,171	6.8
Contracting*	$39,384,200	72.2
Supply and Equipment	11,536,897	21.2
R & D	3,330,567	6.1
Services	22,927,974	42.0
Construction**	1,588,762	2.9
Grants	$118,496	0.2
Total Outlays	$54,526,362	100.0

Source: Defense Spending Atlas, FY 2008
*The total annual value of DoD contracting varies from U.S. Census Federal Funds reports due to adjustments for rescissions (unspent funds); **includes BRAC Outlays in FY 2008

This spending supports the operation of the 31 bases/installations within the Commonwealth (see Appendix A for listing) and an estimated 186,794 active duty, reserve and guard personnel and DoD civilian employees. Based on this directly funded DoD workforce, the Department of Defense was ranked as the State's number one employer in FY 2008 (all data are on a fiscal year basis).

In addition to these workers, DoD spending directly supported other jobs in the State as a result of its $39.4 billion in 2008 contracting for the procurement of goods and services to support its operations within the State and worldwide. While there is no official accounting for the number of direct contractor jobs supported in the State by the $39.4 billion in DoD spending, an estimate can be developed based on federal contracting audit data on labor and non-labor costs.

Based on these analyses, DoD's services, construction and R&D contracts in the Commonwealth that totaled $27.85 billion are estimated to have supported 235,000 full-time equivalent jobs within the State in 2008. The direct jobs supported by DoD contracts for supplies and equipment are more difficult to estimate as these vary considerably based on wage and salary and benefits differentials, the type of goods being supplied and the cost of materials included in these contracts. By applying industry standards, however, an order of magnitude number of direct jobs can be estimated. The $11.5 billion spent by DoD on the procurement of supplies and equipment in 2008 supported an estimated 33,200 full-time equivalent workers in the State.

In total, these federal contractors supported an estimated 268,187 jobs in Virginia in 2008. The directly supported DoD contractor and civilian DoD personnel combined accounted for 9.5% of the State's civilian work force (full-time) in 2008. In addition to these directly supported DoD civilian and uniform military employees and there were 137,947 military retirees (DoD supported in 9/2008) residing in the State of which one-third were 65 years old or older.

The relative magnitude and importance of DoD contract spending within the Commonwealth is presented in Table 2. Of all federal procurement spending in the State totaling $53.9 billion, DoD procurement spending (reported by place of performance) accounting for 72.4 percent and totaled $39.0 billion in FY 2008. This percentage compares to 69.0 percent nationwide.

In addition to being disproportionally important to the State's economy as a source of export income in comparative terms, the magnitude of DoD's contract spending in Virginia ranked second among all other states exceeded only by Texas and followed by California in third place. For each dollar in total DoD contracting worldwide in 2008, businesses located in the Commonwealth captured 10.5 cents.

Even more impressive, on a per capita basis, Virginia ranked number one for DoD contracting with $5,022.40 in DoD contracting for each resident of the State. This compares to $1,167.50 per capita nationwide. For all categories of DoD spending in FY 2008, Virginia ranked first in the US on a per capita basis: Virginia @ $6,713.06 vs. U.S. @ $1,574.13. This large comparative funding advantage--$4.26 to $1.00—underscores the importance of DoD spending to the State's economy.

Table 2

Federal Spending in the US and Virginia, FY 2008
(totals in billions of dollars, p.c. in actual $s)

Location	Total Federal Spending	Total Federal Procurement	DoD Procurement $s	DoD Procurement % Total
U.S.	$2,792.6	$514.1	$355.0	69.0
Per Capita	$9,041.5	$1,619.9	$1,167.5	
Virginia	$118.5	$53.9	$39.0	72.5
Per Capita	$15,256.2	$6,933.7	$5,022.4	

Source: US Census, Consolidated Federal Funds Report, 2008
Note: The population of the U.S .in 2008 was 304.06 million and the population for Virginia in 2008 was 7.77 million.

The Impact of DoD Spending on the Commonwealth's Economy

In order to calculate the full economic impacts of these direct DoD payroll and procurement outlays in the Commonwealth in 2008, these data have been inputted by type into an Input-Output model (I-O Model) for the State economy that was developed by Economic Modeling Specialists, Inc. (EMSI). This I-O Model was used to calculate: (1) the contribution to the state's gross state product (GSP), (2) the generation of personal earnings for workers residing in the State, and (3) the jobs supported by DoD spending in Virginia. And, finally, to establish the relative importance of these direct and indirect economic benefits, they were compared to the State's historically important sectors: agriculture and manufacturing.

The direct DoD spending inputs into the Virginia economy are shown in Table 3. These direct payroll, contractor and construction outlays in FY 2008 generated indirect and induced economic activity within the State's economy that can be quantified by using an I-O Model. This Model is designed to calculate the inter-industry transactions that result from the direct spending for payroll and purchases of goods and services provided by the State's resident workers and businesses. The ability of the State's economy to furnish the labor requirements and products being demanded determines the economic impact of these direct spending outlays. The I-O Model incorporates these interdependencies among State-based businesses and their non-state based suppliers as well as adjustments for non-local spending by state resident workers, out-of-state workers, and other leakages from the payroll dispersements such as taxes and savings.

Economic Impacts of DoD Spending

The economic impacts of DoD spending in the Commonwealth of Virginia in FY 2008 totaled $52.2 billion as summarized in Table 3. This total reflects reductions for contract rescissions and $118 million in DoD-funded grants, 0.2% of all DoD funds have been excluded in this impact analysis. Adjusting for leakages from the State's economy to account for non-resident workers, out-of-state subcontractors and suppliers of intermediate goods and services, and non-local spending of payroll income including local, state and federal taxes, this direct spending contributed a total of $57.4 billion to the State's $367.9 billion economy in 2008 representing 15.6 percent of the value of all goods and services produced within the State.

This direct spending and its indirect effects (including induced effects) on the State's economy, as these monies were re-spent for other goods and services across all sectors, supported or created 902,985 jobs within the State inclusive of DoD civilian and military personnel and federal contract workers, accounting for 18.9 percent of the State's job base. These directly and indirectly supported jobs generated $44.4 billion in personal earnings for the State's economy representing 17.4 percent of the total personal earnings of workers residing within the State. In the absence of this DoD spending in FY 2008, these jobs and the personal earnings they generated would not have been realized.

Table 3

The Economic Impact of DoD Spending on the Commonwealth of Virginia, FY 2008 (in billions of 2008 $s)

Type of Spending	Direct Spending(1)	Total Output(2)	Personal Earnings(3)	Jobs Supported(4)
DoD Payroll	$15.02	$22.4	$19.3	339,941
Contracting	35.62	33.6	23.9	537,258
Construction	1.57	1.4	1.1	25,786
Totals*	$52.22	$57.4	$44.4	902,985

Sources: EMSI, GMU Center for Regional Analysis
*sum of the individual values may not add to the totals due to rounding; $118 million in DoD grants were not included in this analysis.
(1) direct DoD spending captured to the benefit of the Virginia economy; (2) contribution to GSP; (3) personal earnings accruing to workers living in the State; (4) jobs created or supported in Virginia

The distribution of these economic impacts by their direct and indirect sources, as presented in Table 4, illustrates how this spending cycles through the State's economy. A comparison of the direct spending values in Table 3 and the direct impact value in Table 4 shows that the State retained two-thirds of DoD spending in 2009. These $35.0 billion are monies that can be re-spent within the State's economy in support of its non-DoD related business base. Additionally, direct DoD spending retained within the State's economy supported 546,398 full-time equivalent jobs inclusive of direct DoD active duty and civilian personnel (11.4% of the State's job base) with personal earnings totaling $29.6 billion.

The re-spending of these direct DoD funds ($35.0 billion) generated an additional $22.4 billion within the State's economy, supported 356,587 additional jobs (7.5% of the State's job base). These additional jobs were all non-DoD jobs and benefitted all sectors in the economy. These indirect and induced jobs generated an additional $14.8 billion in personal earnings to the benefit of workers residing within the State.

Based on this analysis, the total economic multiplier for DoD spending in the Commonwealth of Virginia is 1.64. For each $1 of DoD spending in 2008 that was retained to be re-spent within the State's economy and recycled through its consumer and business services sectors, the State's economy added an additional $0.64 for a total economic benefit of $1.64.

Table 4

The Direct and Indirect Economic Impacts of DoD Spending
on the Commonwealth of Virginia, FY 2008
(in billions of 2008 $s)

Types of Impacts	GSP(1)	Personal Earnings(2)	Jobs(3)
Direct	$35.0	$29.6	546,398
Indirect(4)	22.4	14.8	356,587
Totals	$57.4	$44.4	902,985

Sources: EMSI, GMU Center for Regional Analysis
$118 million in DoD grants were not included in this analysis
(1) contribution to GSP; (2) personal earnings accruing to workers living in the State; (3) jobs created or supported in Virginia
(4) includes induced effects

Similarly, for each $1 million in direct DoD spending in FY 2008 that was retained to be re-spent within the State's economy 25.8 jobs were supported or created reflecting the combination of 15.6 jobs per $1 million in direct impacts and 10.2 jobs per $1 million in indirect impacts. These jobs had an average annual income of $44,715 (the average annual salary of all direct jobs was $54,173 and the average salary for all indirect jobs was $41,505).

The Relative Importance of DoD Spending

The dollar values and employment impacts of DoD spending within the State's economy (gross state product or GSP) have been found to represent significant sources of income and jobs. The contribution of DoD spending to the State's GSP was 15.6 percent in 2008 and DoD directly and indirectly supported jobs in the State accounted for 18.9 percent of its job base. How important is this? If the State's economy had to function in the total absence of the DoD spending it received and retained within the State's economy in 2008, its GSP would have totaled $310.51 billion or would have been 15.6 percent smaller ($310.5B/$367.9B) and would have had 902,984 fewer employed residents with $44.4 billion less personal income. Consumer spending would be down 17.4 percent and the State income tax base would be proportionally smaller.

Comparing DoD spending impacts with other segments of the State's economy provides another frame of reference. In 2008, all agricultural activities in the State contributed a total of $5.04 billion to its GSP accounting for 1.4 percent of the total with its total of 101,081 jobs accounting for 2.1 percent of the State's job base inclusive of 35,772 jobs supported by the re-spending of income generated by agricultural activities within the State. DoD spending in the State supported an estimated 11.4 percent of these agricultural jobs.

Table 5

Comparative Contributions To the Virginia Economy, FY 2008
(in billions of 2008$s)

Source	Total Output(1)	Personal Earnings(2)	Jobs Supported(3) Direct	Indirect	Total
DoD Spending	$57.40	$44.38	454,930	448,054	902,984
Agriculture	5.04	2.63	65,309	35,772	101,081
Manufacturing	59.36	37.00	261,586	418,384	679,970
Total Virginia	$367.91	$254.45			4,786,919

Source: EMSI, GMU Center for Regional Analysis
(1) contribution to State's gross state product; (2) earnings accruing to workers residing in Virginia; (3) jobs generated or supported by the direct, indirect and induced DoD spending in the State.

The State's manufacturing sector is significantly larger than its agricultural sector contributing $59.4 billion to GSP or 16.1 percent thereby exceeding the contribution of DoD spending to GSP by 0.5 percentage points. Excluding DoD purchases of manufacturing goods totaling $11.5 billion, the contribution of manufacturing to the State's economy would have been 13.0 percent. While the manufacturing sector (inclusive of DoD purchases) generates a slightly greater contribution to the State's GSP, the manufacturing sector supports less than two-thirds (62%) the number of workers supported by DoD spending in the State. In comparison, DoD supported employment (directly and indirectly) accounted for 18.9 percent of the State's employment base in 2008 while the agricultural and manufacturing sectors, in the absence of DoD spending, accounted respectively for 2.1 percent and 14.2 percent of the State's employment base.

The Impact of DoD Spending on the Commonwealth's Fiscal Base

The objective of this analysis is to calculate the net fiscal benefit of DoD-funded activities in the Commonwealth of Virginia. This analysis involves estimating the revenues generated at the state level from all DoD outlays for contracting and operations including the taxable earnings and spending of DoD employees and the employees of DoD contractors and comparing these revenues to the expenditure demands associated with DoD employees and facilities and federal contractors located in the State. The results of these analyses will be the net fiscal impact of DoD's presence in the State.

Calculating Fiscal Impact

The GMU/Urban Analytics Fiscal Impact Model was employed for the calculation of these revenue and expenditure values based on audited state expenditures and revenues by source, as reported in the State's FY 2008 Comprehensive Annual Financial Report. The sources of revenues and potential demands for state-provided services by type of DoD activity, personnel, and federal contractors have been estimated reflecting assumptions developed from informal discussions with representatives of the Virginia Department of Taxation, published materials, and fiscal impact analysis experience in other Virginia jurisdictions.

This fiscal analysis differs from previous applications of this Model in that it combines an average cost basis, the normal measurement approach, with a marginal cost basis that reflects calculated revenues and potential expenditure demand based on specific income and consumption assumptions relating to DoD active-duty personnel living and working on military bases/installations that distinguish them from regular civilian employees living off base and benefiting more fully from State-provided services. Similar adjustments for the part-time nature of reserve and guard personnel and for retired military with full-time civilian jobs. See Appendix B for additional methodological explanation.

All of these revenue and expenditure calculations, whether they are calculated on an average or marginal basis, divide all revenues and expenditures between those associated with the State's population (services to households) or its employment base, with the later being expressed on a "per job" basis. This approach assigns all the revenues and expenditures associated with the private sector to jobs by dividing the totals by the corresponding employment base. The result is a revenue or expenditure multiplier that can be factored up to the total by multiplying by the total jobs associated with the respective business or, in this case, DoD activities in the State.

In order to calculate the revenue and potential expenditure demand related to the employees of federal contractors, the contract values were used to estimate the full-time jobs equivalents distinguishing between services and research and development and manufacturing (goods-producing) contractors, as described previously on page 5. This calculation resulted in an estimate of 268,187 jobs (full-time, year round equivalents) in the State being supported by the DoD contracting during FY 2008. The average annual taxable payroll for these contract workers was calculated by reducing the total labor cost estimates to account for deferred earnings, employer contributions to retirement and health insurance benefits, and other employer-paid non-taxable labor costs.

All DoD civilian personnel and contract employees were treated in the fiscal analysis similarly to any other job holder residing in the State in terms of tax burdens and exposure and potential expenditure demands (beneficiaries of state programs are not required to have actually used these programs but rather are beneficiaries of their availability if and when they might require or choose to use them).

In all cases where average costs were calculated (in contrast to marginal costs reflecting specific revenue and expenditure calculations), every state resident and resident worker was considered to have equal tax and revenue exposure and equal access, responsibility, or utilization relative to state programs and expenditures. The distribution of these revenue burdens and expenditure demands was shared by residents and job holders on a proportional basis; that is, in proportion to their respective percentage of the combined state's population and employment base.

It was assumed that DoD civilian employees and reserve and guard personnel and DoD contractor employees were residents of the Commonwealth in calculating their revenue and expenditure values. For the 66,324 active-duty military, it was assumed that these personnel resided largely on base/installations/ships and/or were predominantly serviced by on-base facilities and programs and therefore they placed a significantly smaller potential demand on the State's expenditures for services and programs.

Similarly, it was assumed that only a marginal number of these active-duty military personnel were domiciled in the State for tax purposes (the Department of Taxation cannot determine what percentage of uniform personnel assigned to military bases in the State file state income tax forms). It was also assumed that active-duty personnel made their retail purchases in on-base outlets resulting in a minimal exposure to sales taxes. By excluding any income and sales tax revenue for active-duty personnel from this fiscal analysis, the results will undercount their potential revenue impact with the result that the total net fiscal impact calculated here should be considered conservative.

The Net Fiscal Impact of DoD Spending

The results of this fiscal impact analysis are reported in Table 6. The average revenue generated per worker for all DoD-related activities in the State (DoD military and civilian personnel, base operations and contract outlays including contract workers supported by these outlays) equaled $2,849.22 per DoD-supported job. The average demand for state-funded services (budgeted expenditures) per DoD-supported worker was calculated at $1,000.70 per job for a net per worker fiscal benefit of $1,848.52. Therefore, each DoD-supported worker on average was found to generate $2.85 in State revenues for each $1 in State-funded expenditures "demanded" by this worker.

This "return on investment" varies depending on the type of DoD-supported worker. Based on the income and sales tax assumption for active-duty personnel as well as their marginal demands on State-furnished services, their net fiscal impact on the state was found to be negative by $149.81 per "job." In contrast, DoD civilian ($2,862.26) and reserve and guard personnel ($579.91) were found to generate a significant positive fiscal impact as did retired military personnel ($1,079.83). The magnitudes of these "per worker" fiscal benefits were similarly significant for federal contractors: $2,380.89 for R&D and services contractors and $4,061.89 for suppliers of manufactured products. These fiscal impacts are presented on Table 6.

The total net fiscal impact of DoD spending and the activities this spending support in the State is determined when the "per job" revenue and expenditure values are multiplied by the total number of "worker" in each category of job. In 2008, DoD spending in the State is estimated to have generated $1.689 billion in total revenues. These $1.689 billion in State revenues represented 6.0 percent of the revenue base ($27.9 billion) included in the Fiscal Impact Model.

Off setting these revenues was an estimate for the cost of potential demands placed on the State's budget for the provision of goods and services to support DoD funded personnel (directly employed and contract workers). These estimated State expenditure demands associated with DoD spending totaled $593.3 million in 2008. This $593.3 million in expenditure demand accounted for 1.8 percent of the total expenditures incorporated into the Fiscal Impact Model.

The net of these revenues and expenditures—the fiscal benefit of all DoD-funded activities in the Commonwealth—totaled $1.096 billion. For all DoD supported activities within the Commonwealth of Virginia in 2008, across all major categories of personnel (uniform and civilian, reserve and guard, retiree and related contractors), total revenues of $1.689 billion exceeded their potential expenditure burden on the State budget, totaling $593.3 million, by $1.096 billion representing a net fiscal benefit of 184.7 percent. In summary, for each $1 of state expenditure demand potential represented by DoD-funded employees (direct or contractor), the state collected $2.85 in revenues for a fiscal profit of $1.85.

Table 6
Estimated Fiscal Impact Summary
Defense-Related Jobs and Defense Contractor Spending
Commonwealth of Virginia (Fiscal Year 2008)

Categories	Jobs	FYE June 30, 2008	C.M.[1]	Total[2]	Per Job
Active-Duty Military	66,324	Revenues Generated		$ 2,985,420	$ 45.01
		Expenditures Demanded		$ 12,921,561	$ 194.82
		Revenue Surplus (Deficit)		$ (9,936,141)	$ (149.81)
Civilian	84,492	Revenues Generated		$ 363,674,672	$ 4,304.25
		Expenditures Demanded		$ 121,836,571	$ 1,441.99
		Revenue Surplus (Deficit)		$ 241,838,100	$ 2,862.26
Reserve and Guard	35,978	Revenues Generated		$ 27,084,432	$ 752.81
		Expenditures Demanded		$ 6,220,400	$ 172.89
		Revenue Surplus (Deficit)		$ 20,864,032	$ 579.91
Retired Military	137,947	Revenues Generated		$ 214,602,316	$ 1,555.69
		Expenditures Demanded		$ 65,642,978	$ 475.86
		Revenue Surplus (Deficit)		$ 148,959,337	$ 1,079.83
Contractors: R&D, Services	234,998	Revenues Generated		$ 898,370,777	$ 3,822.88
		Expenditures Demanded		$ 338,864,934	$ 1,441.99
		Revenue Surplus (Deficit)		$ 559,505,843	$ 2,380.89
Contractors: Manufacturing	33,189	Revenues Generated		$ 182,668,292	$ 5,503.88
		Expenditures Demanded		$ 47,858,216	$ 1,441.99
		Revenue Surplus (Deficit)		$ 134,810,076	$ 4,061.89
Grand Total	592,928	Revenues Generated	6.05%	$ 1,689,385,907	$ 2,849.22
		Expenditures Demanded	1.79%	$ 593,344,660	$ 1,000.70
		Revenue Surplus (Deficit)		$ 1,096,041,247	$ 1,848.52

Source:
State of Virginia Comprehensive Annual Financial Report (CAFR) for the FYE June 30, 2008; Center for Regional Analysis, The School of Public Policy, George Mason University; Urban Analytics, Inc.

Note:
[1]This is the contribution margin of revenues and expenditures to total revenues and expenditures in the State in FY2008.
[2]These are the estimated fiscal revenue and expenditure figures generated by all categories as of the end of FY2008. Revenues and expenditures based on the State of Virginia FY2008 CAFR.

Conclusions

DoD spending in the Commonwealth of Virginia is a major source of employment, income and economic activity within the state and this economic activity and the direct payroll and consumer spending it supports generates a significant net fiscal benefit for the State's treasury.

In FY 2008, reported DoD spending totaled $54.5 billion including $15 billion for direct payroll and retirement benefits, $39.4 billion for the purchases of goods and services (federal contracting) from suppliers working within the Commonwealth and $118 million in grants. For this economic and fiscal impact analysis, this total was reduced to $52.2 billion to reflect contract rescissions and other marginal funding adjustments. This DoD spending directly supported 186,794 military (active-duty, reserve and guard) and civilian personnel, provided benefits to 137,947 retirees, and funded an estimated 268,200 full-time equivalent employees of federal contractors.

Of this $52.2 billion in direct DoD spending, $35 billion was retained in the State to be re-spent across the breadth of its economy. The retained DoD direct spending and its re-spending within the Commonwealth added $57.4 billion to the State's total economy during FY 2008 accounting for 15.6 percent of the total value of all goods and services produced—Gross State Product. This direct spending by DoD within the Commonwealth and its re-spending within the State's economy supported a total of 902,985 jobs representing 18.9 percent of the State's employment base and generated annual earnings of $44.4 billion representing 17.4 percent of the total earnings of all workers residing within the State.

These jobs and the new personal earnings they generated were spread across the breadth of the state's economy. DoD spending during FY 2008 and its re-spending were found to support 27.0 percent of the State's manufacturing jobs, 11.4 percent of its agricultural jobs, 10.9 percent of all professional and business services jobs in the Commonwealth, 10.6 percent of the State's accommodations and food services workers, 10.3 percent of retail jobs in Virginia and 10.0 percent of the State's construction jobs.

The fiscal impacts of DoD spending generated a significant surplus of state revenues over state-funded expenditures resulting in a $1.1 billion net fiscal benefit in FY 2008. DoD employees (uniform and civilian) and retirees generated a net of $402 million in State revenues while federal contractors and their employees in the State generated a surplus of $694.3 million in revenues over state-funded expenditures. In total, for each $1 of state expenditure demand potential represented by DoD-funded employees (direct) and its federal contractors (operations and workers), the State collected $2.85 in revenues for a fiscal "profit" of $1.85. In the absence of this fiscal profit, the State's would have had a $1.1 billion revenue gap.

Appendix A

Military Bases and Installations in Virginia

The Pentagon/Fort Myer/Marine Headquarters
Fort Belvoir - Army
Quantico Marine Corps Base
Warrenton Training Center - Army
National Ground Intelligence Center - Army
Fort A P Hill - Army
Dahlgren Complex - Navy
Surface Combat Systems Center - Navy
Camp Peary - Navy
Cheatham Annex - Navy
Yorktown Weapons Station – Navy
Fort Eustis – Army
Langley Air Force Base
Fort Monroe – Army
Norfolk Naval Base
Little Creek Amphibious Base – Navy
Fort Story – Army
Oceana Naval Air Station
Dam Neck Combat Training Center - Navy
Fentress Auxiliary Landing Field - Navy
NSA Northwest Annex – Navy
St. Julian Creek Annex – Navy
Norfolk Naval Shipyard
Regional Medical Center – Navy
Fort Norfolk – Army Corp of Engineers
United States Joint Forces - Joint
Craney Island Fuel Depot - Navy
Fort Lee - Army
Defense Supply Center Richmond - Army
Fort Pickett – Army
Radford Ammunition Plant – Army

Appendix B

Fiscal Analysis Methodological Notes

Analysis Scope and Methodology

In addition to General Fund revenues and expenditures, the Fiscal Impact Model also incorporates other governmental activities including Non-general Funds. Revenues from Federal Grants and Contracts as well as other intergovernmental transfers from the federal government to the Commonwealth were considered and distributed across fund categories. Of the $6.57 billion in Federal Grants and Contracts to the Commonwealth of Virginia in FY2008, for example, $879.9 million were included in the Commonwealth Transportation Fund, $5.68 billion were included in the Federal Trust Fund, and $14.25 million were included in the Health and Social Services Fund.

Likewise, offsetting expenditures for public services associated with federal governmental revenues were included in the Model. An allocation analysis was then conducted, allocating federal intergovernmental transfers between people and households (the "residential component" of the Model) and workers, businesses, government, military, and non-profit entities (the "non-residential component" of the Model). Revenues from Federal Grants and Contracts, for example, were allocated 80 percent to the residential component of the Model and 20 percent to the non-residential component of the Model. This approach was taken for each revenue and expenditure line-item category in the Model. These intergovernmental transfers from the federal government were not isolated and listed separately in Table 6 as the number and type of federal aid would be too cumbersome to be listed individually. Instead, these revenues and expenditures were listed in the aggregate.

The five major categories of taxes assumed to be paid by active-duty military personnel in the Commonwealth of Virginia included in the Model were motor fuel taxes, motor vehicle sales and use taxes, alcoholic beverage sales, taxes on tobacco products, and other taxes. The category "other taxes" is a catchall for miscellaneous taxes paid not just by military personnel but also by civilian DoD and contractors as well. The tax exposure for these categories was set at 25% for active-duty military to reflect off-base purchases. Expenditure demands for State-provided services also assumed a 25% exposure for active-duty military personnel.

Average and Marginal Revenue and Cost Calculations

The process of calculating the revenue and expenditure flows generated in the "residential component" and the "non-residential component" of the Model involved formulating a series of equations that estimate the Commonwealth's operating revenues and expenditures to their direct sources. The basis for this analysis was the State of Virginia Comprehensive Annual Financial Report (CAFR) for fiscal year 2008. The audited revenue and expenditure totals by source, fund type, and agency reported in this document were divided between those generated by (assignable to) residential and non-residential uses according to percent distributions developed from a detailed examination of the State's actual audited financial report as well as from previous experience analyzing various county and city budgets throughout Virginia. These percent distributions of fiscal revenues and expenditures were scaled (calibrated) to the demographic and economic characteristics of the Commonwealth. The residential share of each category of State revenue and expenditures (that is, the portions generated by people and households as opposed to workers and business activities or which provide services to residents as distinguished from workers and businesses) was converted to a per capita equivalent to facilitate the calculation of fiscal flows associated with residential land uses. The non-residential share of each category of State operating expenditures was converted to a per job equivalent to facilitate the calculation of non-residential fiscal flows from workers, businesses, governments, military, and non-profit entities.

This approach assumes that each person living or working in the Commonwealth has access to the Commonwealth's services and therefore potentially shares from the benefits of these services. This cost or expenditure allocation is not based on the actual utilization of Commonwealth services by specific individuals but rather reflects *equal access to* and *availability of* these services to all residents and persons working in the Commonwealth. The findings derived in this study are based on an analysis of both average costs and marginal costs (estimated actual). When using average cost and revenue multipliers (where applicable) in this analysis, the actual revenue forecast is likely to be conservative and the actual demand for State services and programs may be overstated.

Average costing is employed when specific data on residents and workers cannot be disaggregated from the total set of available data or when the marginal impact cannot be imputed with a high degree of certainty. The estimation of motor fuel sales tax is an example of when the average costing approach is the preferred methodological approach over the marginal costing approach. Data on the number of vehicles, average miles per gallon per vehicle, the average number of miles driven, the average retail price of gasoline at the pump, and the allocation between when an active-duty military person uses a personal vehicle for business or for pleasure is an example of when the average costing approach is the preferred approach over the marginal approach. In this example, all the variables required for the Model to estimate the amount of motor fuel sales tax generated (and then to have the Model allocate estimated motor fuel tax between personnel driving their personal vehicle on or off base for military business versus on or off base for personal use) are subject to a high degree of error using the marginal costing approach.

Revenue and Expenditure Multipliers by Type of Job

The per-job multiplier for "expenditures demanded" is $1,441.99 for civilian and federal contractor workers. The per-job multiplier for "expenditures demanded" is $194.82 for active-duty military, $172.89 for reserve and guard personnel and $475.86 for retired military. The per-job multiplier differences for reserve and guard personnel and retired military and their civilian counterparts reflect the Model's objective to *differentiate* and *estimate* the fiscal impact of defense-related jobs from non-defense-related jobs.

The per-job multiplier for reserve and guard personnel is the impact that these workers have on State's public services while they are in uniform or functioning in some other capacity directly related to their reserve and guard service. In other words, the per-job "expenditures demanded" multiplier can be calculated for a full-time regular employee or a less-than-full-time employee: the per-job demand on public services when that person is acting in a civilian capacity and the per-job demand on public services when that person is acting in a reserve and guard capacity.

Similarly, for retired military personnel it was assumed that the 33% who were 65 years old and over were no longer working and therefore their retired status qualified each of them to be counted as a "worker" while the remaining 67% of these retirees were age-eligible to hold a full-time job and, for these retirees, their fiscal impacts resulting from their retired military status established them as less than a full-time "worker."

Thus, of the total per-job "expenditures demanded" multiplier of $1,441.99, the per-job multiplier is $172.89 when that person is acting in a reserve and guard capacity, and $1,269.10 when that person is acting in a civilian capacity ($1,441.99 - $172.89 = $1,269.10). For retired military, the difference between full-time civilian employment expenditure demand multiplier ($1,441.99) and the calculated multiplier of $475.86 reflects the share of these State-supported services that accrue to retired military personnel for whom their retirement benefits supplement a civilian job.

While it might seem logical to presume that the per-job "expenditures demanded" multiplier for active-duty military should be equal to or lower than the multiplier for reservists and guardsmen, the findings of the Model do not support this presumption. It is important to remember that the cost or expenditure allocation estimated in the Model for each type of State-provided public service is not based on the actual utilization of Commonwealth services by specific individuals but rather reflects *equal access to* and *availability of* these services to all residents and persons working in the Commonwealth. Residents and workers (including active-duty military personnel on base in Virginia) benefit from a well-functioning State government. There are some state-provided public services (such as general government administration, transportation, and administration of justice) that are necessary to maintain a well-functioning State government.

An active-duty military person (regardless of whether he or she is stationed on a base in Virginia or on a ship at sea) may never get arrested for speeding on a state highway and a reservist or guardsman, also working in a civilian occupation, in the State may never get arrested for speeding on a state highway. Both active-duty military and reservists and guardsman benefit from the *availability of* state-provided public safety services but the degree of exposure or benefit is greater for the active-duty military personnel (this is their only job) than for the reservist or guardsman as they generally hold another full-time job that has associated state revenue and expenditure impacts.

The per-job multiplier for a reservist or guardsman is divided between the impact for expenditures demanded by that reservist or guardsman in his or her civilian role ($1,269.10) and his or her military role ($172.89). The per-job multiplier for active-duty military personnel is also bifurcated for expenditures demanded in his or her civilian role ($0.00) and his or her military role ($194.82). Thus, the per-job multiplier of $194.82 is substantially lower than $1,441.99. The $21.93 difference in the per-job "expenditures demanded" multiplier ($194.82 for active-duty versus the $172.89 for reservists or guardsmen) is a mathematical function reflecting the differential exposure to revenue and expenditure opportunities; that is, the total number and amount of public services assigned to active-duty (@25%) versus reservists and guardsman (@12%), the number of active-duty personnel versus reservists and guardsmen, and the estimated allocation of these public services to each category results in a difference of $21.93.

On the revenue side, differences between active-duty military and reservists and guardsman reflect similar methodology assumptions; that is, active-duty military personnel do not also have civilian jobs (although this is not always true) and that for reservists and guardsman, their military payroll is a secondary income supplementing a full-time job (although this, too, is not always true). A further assumption about tax burden that differentiates the active-duty military personnel and the reservists and guardsman is income and sales tax. For purposes of this analysis, no state income or sales tax revenues were included in the revenue base associated with active-duty personnel to account for their frequent choice for a state-of-domicile with more favorable income tax treatment than found in Virginia and the availability for PX and Commissary facilities to satisfy their shopping requirements on base. Access to these tax-exempt shopping facilities for reservist and guardsmen was apportioned to their duty times over the annum. For retired military it was assumed that 50% of their retail purchases would take place on base in tax-exempt retail outlets.

The U. S. Economic Impact of Approved and Projected DOD Spending Reductions on Equipment in 2013

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October 19, 2011

Summary of Research Findings

The economic impact of DOD spending deductions for the acquisition of military equipment (e.g., small arms, ordinance, wireless communications, aircraft and aircraft engines, guided missiles, ships and armored vehicles and tanks) will significantly exceed the initial dollar value of these spending reductions as measured by lost jobs and personal income (salary and wages), reduced non-wage expenditures, and a decreased rate of economic growth—gross domestic product, the value of goods and services produced in the U. S.

Additionally, the impacts of these losses will extend across the full breadth of the U.S. economy, as this decreased spending will result in reduced spending for consumer goods and services. For each job (1) lost by DOD's prime contractors and their direct and indirect suppliers within the aerospace and military equipment industry as a result of DOD cutbacks for the acquisition of military equipment, eight (8) jobs would be lost in other sectors across the breadth of the U.S. economy. These job losses in non-military equipment manufacturing would occur in professional and business services, financial, information and administrative services, retail trade, leisure and hospitality services, education and health services, construction. other manufacturing and others.

DOD spending reductions for the acquisition of military equipment totaling $19.324 billion have already been approved (BCA 1) and a second reduction (BCA 2) totaling $25.686 billion may still be occur in the FY 2013 Budget for a total reduction of $45.01 billion. This total reduction of $45.01 in DOD spending for the acquisition of military equipment in FY 2013 would have the following economic impacts.

- An initial reduction of $45.01 billion in DOD spending for the acquisition of military equipment would generate losses in sales throughout the supply chain and induce sales losses through the broader economy totaling $164,059,027,945; that is, for each $1 in DOD spending reductions for military equipment, an additional $2.64 in sales losses will be experienced by other businesses with 71% of these lost sales occurring as a result of decreased consumer spending by workers directly and indirectly affected by these DOD spending reductions—workers having lost their jobs and/or experienced salary reductions.

- The U.S. employment base would lose 1,006,315 full-time, year-round equivalent jobs with 124,428 being lost directly or indirectly from the prime DOD contractors for this equipment and their suppliers while 881,887 jobs or 87.6% of all job losses would come from businesses supported by non-military equipment purchases resulting from non-wage operating outlays by these manufacturers of military equipment and their suppliers and the induced spending effects generated by this industry as a result of changes in payroll spending across all sectors of the economy; this total job loss would add .6 percentage points to the unemployment rate (raising today's 9.1% rate to 9.7%).

- The wage and salary impacts of this $45.01 billion in DOD spending reductions would total $59.4 billion with $48.4 billion in wage and salary losses occurring among workers working in businesses outside of the military equipment manufacturing supply chain—retail, construction, professional and business services, health and education, leisure and hospitality.

- In addition to reductions in wages and salaries associated with lost jobs, the reduction in DOD acquisitions outlays impacts non-wage income of these firms—spending for operations, capital investment, retained earnings, profits—the loss of which would further negatively impact the U.S. economy as these funds are distributed broadly across its non-military sectors; a reduction of $45.01 billion in DOD spending for military equipment would generate a reduction of $27.05 billion in non-wage spending with 63.4% of these occurring in non-DOD prime contractors and their direct and indirect suppliers.

- A $45.01 reduction in DOD spending in 2013 for the acquisition of military equipment would reduce the U.S. gross domestic product (GDP) by $86.456 billion; this one-year GDP decline is equivalent to 25% of the projected annual increase in GDP for 2013 and its loss would reduce currently projected growth for 2013 from 2.3% to 1.7% (IHS Global Insight September 2011 forecast).

The sources and magnitudes of the economic impacts of these potential DOD spending reductions of the acquisition of military equipment in FY 2013 are shown in Table 1 below.

Table 1

Summary of U.S. Economic Impacts of the Approval and Projected DOD Spending Reductions on Equipment, 2013
(in billions of 2013 $s , jobs in thousands)

Sources of Impact*	Initial Impacts(1)	Direct Impacts(2)	Indirect Impacts(3)	Induced Impacts(4)	Total Impacts(5)
Sales	$45.01	$20.52	$13.61	$84.92	$164.06
Jobs	164.15	108.32	80.28	653.57	1,006.32
Personal Income	$15.37	$7.60	$4.82	$31.61	$59.40
Non-Labor Income	$3.83	$3.40	$2.67	$17.15	$27.05
GDP	$19.21	$11.00	$7.50	$48.75	$86.46

Sources: GMU Center for Regional Analysis, EMSI
(1) impacts of initial DOD spending reduction on prime contractors
(2) impacts on suppliers to prime contractors
(3) impacts on suppliers to the suppliers to the prime contractors
(4) impacts of spending reductions on the remainder of the economy due to decreased payroll disbursements and non-wage operating purchases
(5) sum of initial, supply chain and induced impacts as the effects of these reductions are cycled through the U. S. economy

*Note: columns (1), (2) and (3) comprise the aerospace and military equipment manufacturing industry. The jobs losses reported for these sectors, identified herein, include 124,428 jobs that are specific to firms within the aerospace and military equipment manufacturing industry and 228,318 jobs that are in other subsectors, largely non-manufacturing, that supply goods and services in support of the operations of these aerospace and military equipment manufacturing firms (e.g., engineering services, computer systems design services, transportation services, information services, professional, scientific and technical services, administrative services, educational and health care services, travel and accommodations services, retail trade, construction and management services) purchased directly by these firms whereas the induced jobs impacts are a result of changes in the spending patterns of employees of these firms and their suppliers as a result of decreased payroll outlays.

Economic Impacts -Top Ten States

While the economic impacts of DOD spending reductions would affect all 50 states, ten states would account for 58.5 percent of the job and income losses projected to occur in 2013 as a result from these $45.01 billion in reduced military equipment acquisitions. In total, these spending reductions would result in employment decreases of 588,700 jobs in these ten states and generate losses of $34.7 billion in personal income. These decreases in economic activity would reduce these states' gross state product by $50.6 billion in 2013. These ten states and their associated losses in job, earnings and gross state products are shown in Table 2. One-third of these impacts will occur in California, Virginia and Texas.

Table 2

Economic Impacts of DOD Spending Reductions
for Military Equipment in FY 2013: Top Ten States
(jobs in thousands, GSP in billions of 2013 $s)

State	Job Losses	Lost Earnings	Decrease GSP*
California	125.8	$7.4	$10.8
Virginia	122.8	$7.3	$10.5
Texas	91.6	$5.4	$7.9
Florida	39.2	$2.3	$3.4
Massachusetts	38.2	$2.3	$3.3
Maryland	36.2	$2.1	$3.1
Pennsylvania	36.2	$2.1	$3.1
Connecticut	34.2	$2.0	$2.9
Arizona	33.2	$2.0	$2.9
Missouri	31.2	$1.8	$2.7
Totals-Top Ten	588.7	$34.7	$50.6

Sources: GMU Center for Regional Analysis, EMSI
*gross state product

Methodology

This analysis employs the input-output model for the U.S. economy. at the six-digit NAICS Code level. developed by EMSI (www.economicmodeling.com). The actual and projected DOD spending reductions for the acquisition of military equipment for FY 2013 (BCA 1 and BCA 2, independently and in total) were distributed across 14 subsectors encompassing the effected industries (NAICs Codes 332992, 3329903, 332994, 332995, 334220, 334511, 336,411, 336412, 336413, 336414, 336415, 336419, 336611, and 336992). This allocation of actual and potential DOD reductions in equipment outlays was based on these 14 subsectors percentage share of the total industry of which they are a part as measured by sales to DOD.

These DOD spending reduction were subtracted from the projected 2013 economy (inclusive of these DOD equipment outlays) and the impacts calculated on each subsector of the U.S. economy based on its purchases and sales to every other subsector in the U.S. economy. The initial industry impacts reflect the loss of sales to the primary supplier of military equipment to DOD with the direct and indirect impacts reflecting the changes in sales for the suppliers to the aerospace and military equipment industry and changes in sales for their suppliers.

The induced impacts reflect the sales changes that each sector of the economy would experience as a result of deceased personal earnings and personal consumption expenditures by the loss of jobs and personal earnings within the aerospace and military equipment industry, the suppliers to this industry and the businesses that depend on personal consumption outlays.

These changes in sales by subsector of the economy are expressed in terms of jobs, changes in payroll and fringe benefits, changes in non-payroll outlays (operations, investment, retained earnings and profit), and changes in gross domestic product (GDP).