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MANUFACTURING AND THE CREDIT CRISIS

HEARING

BEFORE THE

SUBCOMMITTEE ON
ECONOMIC POLICY

OF THE

COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

ON

EXAMINING THE POLICY OPTIONS CONGRESS SHOULD CONSIDER TO HELP MANUFACTURERS WHO PLAY A PIVOTAL ROLE IN OUR NATION'S ECONOMY

MAY 13, 2009

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C O N T E N T S

WEDNESDAY, MAY 13, 2009

WITNESSES

MANUFACTURING AND THE CREDIT CRISIS

WEDNESDAY, MAY 13, 2009

U.S. SENATE,
SUBCOMMITTEE ON ECONOMIC POLICY,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Subcommittee met at 10:56 a.m., in room SD–538, Dirksen Senate Office Building, Senator Sherrod Brown (Chairman of the Subcommittee) presiding.

OPENING STATEMENT OF SENATOR SHERROD BROWN

Senator BROWN. The Subcommittee on Economic Policy of the Senate Banking Committee will come to order. Thank you for joining us today, the two panels, and I will introduce each in a moment. I will make a brief opening statement, and then we will begin. I apologize for starting late. We had a vote on the Senate floor at about a quarter to.

Manufacturing, as we know, is integrally tied to U.S. prosperity. It accounts for 12 percent, that is, $1.6 trillion, of U.S. gross domestic product. It accounts for nearly three-fourths of the Nation's research and development, yet today we are facing an economic challenge few among us have witnessed, and our manufacturing sector clearly is in crisis.

On Friday, the Labor Department reported the loss of 539,000 jobs in April, including 149,000 in manufacturing. We hear the unemployment statistics overall; we hear what that means especially to manufacturing.

U.S. manufacturing has contracted for 15 consecutive months. According to the Federal Reserve Board, manufacturing output fell 2.7 percent this past January to a level 13 percent below that of only 1 year ago. These numbers only tell part of the story. Today, there are manufacturers in Ohio, in every State in the country, trying to figure out how to remain viable. For these business owners, working families, and communities, the economic situation could not be more urgent.

Today, we are fortunate to have witnesses with us who can better inform us on both the short- and longer-term challenges that American manufacturers are facing and how the financial markets are compounding this crisis. Like other States, Ohio has collateral damage from both manufacturing and the subprime crisis. When banks have addressed declining values in mortgages, there is evidence that they limit credit to other sectors, like manufacturing. I hope today we can learn more about these trends and discuss some of the policy options Congress should consider to help manufacturers who play such a pivotal role in our economy.

I will close with a story, a personal story, from just a few days ago. Chrysler announced the likely closing—not quite certain; we are not accepting that it is certain—of the stamping plant in Twinsburg, Ohio, a community halfway between Cleveland and Akron. Chrysler has three stamping plants in Warren, Michigan; Sterling, Michigan; and Twinsburg, Ohio. I went to meet with some of the 1,500 employees who will lose their jobs if this plant, in fact, closes. Probably 500 of them showed up for a discussion of what to do next, how we fight back, what we do if we lose these jobs, how we help the workers retrain. It was mostly people in their 40s and 50s. One person said, "I have been here 32 years," the next person 28 years, the next person 35 years, the next person 19 years—people who understand that manufacturing is a ticket to the middle class in this country. And if you had sat there for the hour and a half that I sat there—and I wish every American would, and I particularly wish every Member of the Senate and House would—and listened to what manufacturing means to middle-class families in this State, one would understand why we are doing this hearing today.

So we will begin the testimony. We will start with Holly Hart. Holly is the Legislative Director for the United Steelworkers. Holly took this job fairly recently—has been on the job 3 years, maybe?

Ms. HART. About 3 years, yes.

Senator BROWN. About 3 years, and she took it at perhaps the most difficult time to be Legislative Director of the Steelworkers. But she and Leo Gerard, who was going to join us today but his flight was delayed and then canceled out of Pittsburgh this morning—he called me at 8 o'clock this morning to tell me that he was still hoping. The Steelworkers have done very interesting work on everything from manufacturing to climate change.

David Marchick, who is Managing Director of the Carlyle Group, is also on the first panel, the Managing Director for Global Government and Regulatory Affairs. He coordinates Carlyle's policy and regulatory issues on a global basis, provides support to Carlyle's funds and portfolio companies based in Washington. He was a partner prior to joining Carlyle at the law firm of Covington & Burling in Washington. He served for 7 years in the Clinton administration, including positions at the White House, U.S. Trade Representative, and the Department of State. He is co-author of the book *U.S. National Security and Foreign Direct Investment.*

Ms. Hart, thanks.

STATEMENT OF HOLLY HART, LEGISLATIVE DIRECTOR, ON BEHALF OF LEO W. GERARD, PRESIDENT, UNITED STEEL, PAPER AND FORESTRY, RUBBER, MANUFACTURING, ENERGY, ALLIED INDUSTRIAL AND SERVICE WORKERS INTERNATIONAL UNION

Ms. HART. Thank you, Mr. Chairman. My name is Holly Hart, and I am the Legislative Director of the Steelworkers, for the record.

President Gerard, as you said, is very sorry he cannot be here. This topic is of vital concern to the Steelworkers, and he—oh, I am sorry. Thank you. And he really wanted to be here to advocate for the needs of our 1.2 million active and retired members of the union.

Members of our union make products ranging from steel to aluminum to cement to tires to glass to many, many other products. They work in mines, they work in smelters, in oil refineries, and other industrial operations, even in the service industry—nurses, bus drivers, bank workers, and university professors who in no small measure are supported in some way, shape, or form by manufacturing.

Well over 100,000 of our members have either been laid off or face reduced hours as a result of this current economic crisis. Too many of them to count have also been hit by the subprime crisis not only in terms of their mortgages, but also by the cascading effect of the problems that have blown the lid off our economy.

Mr. Chairman, the first question that you raised in your letter of invitation—Why should Congress care about manufacturing?—is really the most important. Regrettably, we may be the only industrial nation on Earth that actually has to ask that question.

Manufacturing is a source of strength—economic strength, community strength, and, indeed, military strength. Manufacturing provides, as you know, millions of jobs in our economy, or did. Prior to the downturn, it directly employed over 14 million people and accounts for 8 million additional jobs in other sectors. Our manufacturing sector is responsible for two-thirds of the investment in research and development in the U.S., and almost 80 percent of all patents that have been filed come from the sector.

Manufacturing is a tremendous engine of growth, and it is also key to community strength. It has created millions of jobs and family- and community-supporting jobs. Manufacturing jobs pay about 40 percent or more, on average, in wages than other jobs in our economy.

Manufacturing is also key to military strength. In the first and second world wars, our ability to supply our troops—and, often, our allies—with the weapons and equipment were the deciding factor in the wars.

All too often, though, our market has been flooded with products resulting from unfair and predatory trade practices. Factory after factory have either downsized or shut completely. The steel crisis of the 1990s and the early part of this decade left the steel sector devastated. And today's auto crisis will potentially lead to dozens of assembly plants and suppliers shutting down.

The Steelworkers have calculated that approximately 7,250,000 jobs depend on domestic automobile production. In addition, more and more companies are setting up R&D facilities overseas, closer to the production operations they have set up abroad. As that happens, the next generation of products and production may never be developed or produced here.

And on top of that, our national strength, our military, is increasingly at risk. We no longer have the domestic capacity to make all the ammunition for our troops or our law enforcement officers. And replacement parts for the military are getting harder and harder to find, as are the skill sets for people to repair older and older equipment.

The military has testified as to the risk of the loss of our industrial base by—we cannot supply the propellant for Hellfire missiles from China. We have to buy our propellant from China because it is no longer available from a domestic supplier.

So manufacturing matters, and it is time we look at the policies to address those challenges confronting this vital sector.

Credit is the lifeblood of manufacturing, and its impact can be felt throughout the economy. Manufacturers face stricter credit terms and have had to tighten their belts. Suppliers then feel the impact.

Remember that auto parts suppliers were looking to guarantee $15 billion in receivables they had with the Big Three to protect their operations. So there is a clear correlation between credit availability and terms and the growth of manufacturing and its employment levels.

There are more steelworkers whose jobs are affected, as I said earlier, by the crisis in the auto industry than the United Auto Workers themselves. Virtually every car has six pieces of glass, five tires, hundreds of pounds of steel.

So some companies, when they cannot find credit, are paying double-digit rates for credit, with some approaching 18 to 20 percent. Thirty of our companies have filed for bankruptcy protection since January; seven have gone directly into Chapter 7; and the dramatic freeze in credit markets has meant that those companies that went directly to Chapter 7 could not find debtor in possession financing.

I have more but I see my time is running short, and I did want to get to some of the policy options that I think we need to look at quickly.

The needs of the manufacturing sector are broad and deep. There is no one silver bullet, and there are few issues confronting you and Congress whose resolutions do not have an important impact on our Nation's manufacturing sector.

Some of the things that need to be done quickly: stabilize the sector and see it begin to grow again; by restoring the growth in manufacturing—yes, I am reading too fast. I apologize. But, basically, I wanted to point out that credit is the oxygen of our manufacturing sector. We have got to provide more reasonable credit—more credit at reasonable rates if we are going to succeed.

We need to restore demand in this country. The stimulus package was a good start. But as you know, this money has not trickled down to the manufacturing sector as yet. You were an author or a supporter of the Buy America provision. There are efforts underway currently that are set to weaken through the regulatory process of how we adequately define manufactured goods as well as procurement transparency.

We also need to make sure that credit is available to more companies and so they do not go straight to liquidation.

We also need a trade policy that works for working Americans. Too many companies and workers have lost faith in their Government's willingness to enforce the laws we have on our books. Imports flood our markets, and the cost of credit is one thing, indeed. It is a function of our trade policies. But without substantial changes in the direction of our Nation's trade policies, we are going to continue to see devastation in our manufacturing sector.

We also need to get our auto policy right. We must not pursue a policy of trying to downsize and outsource the auto industry to prosperity. That is a recipe for disaster. It will only result in the downsizing of the American dream.

Thank you, Mr. Chairman.

Senator BROWN. Thank you, Ms. Hart.

Mr. Marchick.

STATEMENT OF DAVID MARCHICK, MANAGING DIRECTOR, THE CARLYLE GROUP

Mr. MARCHICK. Thank you very much, Mr. Chairman, and I applaud you for holding this hearing. It is an issue which is absolutely critical to the future of our economy, and I have been pleased to work with the Steelworkers and Holly and Mr. Gerard on this issue. So I really appreciate and applaud you for holding this hearing and your leadership on it.

The Carlyle Group is one of the largest private equity firms in the world. We manage about $85.5 billion of assets under management, and for our 22-year history, we have been a very significant investor in the manufacturing sector. Virtually every subcomponent of it, from autos to chemicals to aerospace to general industrial, we have a couple of very good companies that operate in general industrial manufacturing in Ohio, and we have been very pleased to be a significant investor in Ohio, and thank you for your leadership and the work you have done to strengthen manufacturing in Ohio.

Today we have about $9 billion of equity invested in more than two dozen companies with manufacturing operations in the United States.

As you highlighted and as Holly highlighted, manufacturing is the bedrock of the U.S. economy. It supports high-wage jobs, high-skill jobs, and there has been incredible productivity growth in the manufacturing sector for the last dozen years.

Going into the recession, the manufacturing sector was very lean and efficient, which has made the pain in the sector even greater than one would have anticipated. And as Holly said, credit is really the lifeblood to the manufacturing sector. I will give you just one example.

We bought Allison Transmissions from General Motors several years ago. They are a large transmission manufacturer in Indiana that manufactures transmissions for heavy trucks and buses. When they buy parts to make transmissions, they use credit to buy those parts. When they sell a transmission to an original equipment manufacturer, a truck manufacturer, that truck manufacturer uses credit to buy the transmissions for their inventory.

When the OEM sells to a dealer or distributor, that dealer or distributor requires credit to buy the transmission. I am talking about Allison Transmissions, Senator Bayh. And when the ultimate buyer acquires a truck—either a trucker or truck company buys a truck, they require credit.

So credit is critical to the entire life cycle of the manufacturing process, and literally when the credit crisis hit in the fourth quarter of last year, the manufacturing sector fell in free fall. The numbers are actually quite scary. They are Depression-like, not recession-like.

If you look at the steel industry, which is critical in Ohio, steel production between August of last year and January of this year fell by more than 50 percent. Steel production in the United States today is operating at levels not seen since 1939.

The residential construction market, which drives a lot of manufacturing activity, purchases have dropped by 44 percent. And the data is just staggering. Auto suppliers across the country are seeing sales drops of more than 50 percent.

There have been a lot of discussions of glimmers of hope. When you look at the chart I have on page 6, it shows the direct correlation between sales and manufacturing production and unemployment. They are directly correlated. And at the bottom here, you see a slight uptick, which are the glimmers that people are pointing to. But I would point out that that uptick is something that we should be very cautious about and not too sanguine, because the uptick only shows a reduction in rate of contraction, not actual growth. And the rates of contraction are still more than 15 percent year over year.

In other recessions, you saw reductions in sales of 6, 7, maybe 10 percent. Now you have seen reductions of 20, 30, 40, and in the auto sector, 50 percent. These are devastating changes.

Now, what are the policy implications? Well, the actions the Federal Reserve and Treasury have taken to breathe some life into the credit markets have been very important, and I applaud Secretary Geithner and Chairman Bernanke. And I applaud the work that you have done, Mr. Chairman, Senator Bayh, and others, to get the stimulus package through. That is very important for the manufacturing sector. The money has not started to show up yet, and it is critical that money get out quickly and also be targeted toward manufacturing activity that will have the greatest multiplier effect.

The TALF program, which is intended to create securitization—restart the securitization market, which has been moribund, is also an important program. But also that program has not moved as quickly as we would have hoped, and it is limited to AAA-rated securities. And in this economy, it is very hard for companies and securities to get the AAA rating. It is just very difficult. There are only six publicly traded companies that have AAA today.

The corporate loan market is an area where I would encourage you to focus some time. Manufacturing companies, particularly small and medium companies, require loans from banks to operate, and that loan market has contracted, which has caused distress in the manufacturing sector, and there is a huge amount of refinancing risk in 2010, 2011, and 2012, which will cause large bankruptcies unless that market is revived.

And, finally, let me just make a comment on General Motors. If the GM bankruptcy—if, indeed, it goes into bankruptcy—is not handled well, it could be the Lehman Brothers equivalent for the manufacturing sector. It is hard to overestimate the impact of General Motors on the general manufacturing sector. It touches virtually every subsector in the economy.

Usually companies go into bankruptcy to break contracts. But if General Motors goes into bankruptcy and then breaks its contracts with suppliers and its partners, you could see a cascading impact in the supply chain throughout the economy, which would just have a devastating impact on an already devastated sector. And so it is critical, if GM does file, that it uphold its commitments to its suppliers and partners and keep the money flowing to support those companies, because they are already under stress and already at risk.

So I will stop there, and I would be happy to answer any questions.

Senator BROWN. Thank you, Mr. Marchick.

Senator Bayh, would you like to make an opening statement?

Senator BAYH. I will save my comments for questions following you, Mr. Chairman.

Senator BROWN. OK, thanks.

I appreciate Senator Bayh's involvement. While not a Member of the Subcommittee, he is a Member of the full Committee, and he has been a real leader in the Defense Production Act and what we have done and need to do.

Let me start with you, Ms. Hart. There is a story in the *L.A. Times* today about a California businessman, Steve Rachman, who manages an outsourcing company. He says that when manufacturing jobs head elsewhere, increased demand for cheap goods creates a need for more salespeople in the U.S. He said to the *L.A. Times,* in response to U.S. manufacturers who get driven out of business by cheap Chinese imports, he said, "Yes, but now Walmart is selling more socks. They will need people to sell them."

This is a little too easy, but what is your response to that sort of economic strategy, if you will?

Ms. HART. Well, other than laughter, I would say anger. It is clear, I mean, manufacturing provides family supportive jobs. The majority of our members have been able to buy cars, send their children to college, you know, be part of the American middle class because of their jobs in the manufacturing sector. They have health care benefits. They have pension plans and have had family supportive jobs that ripple out throughout the community. They support restaurants, movies, a whole range of products in the service sector. And that is not going to be fulfilled by people selling socks or ringing up socks at a cash register.

You know, frankly it is incredibly frustrating that this is—you know, after the devastation in our manufacturing sector, the loss of all our jobs, the fact that we are teetering on the brink of losing the ability to supply our military and various other economic indicators that should provide a canary in the coal mine, if you would, a response—you know, we are still trying to get people to listen to why manufacturing is important in this country and that it must be saved. It is just unfathomable to me that people——

Senator BROWN. What do we do about that? That brings me to the issue of, you know, why—commentators so often dismiss the importance of manufacturing. In this institution, both in the Senate and in the House, lots of people elected to office, particularly if they do not come from the Midwest, seem sometimes dismissive of manufacturing. Senator Bayh has been a leader, particularly in intellectual property, in manufacturing issues and has that frustration as coming from a manufacturing State, as I do.

Ms. HART. Right.

Senator BROWN. And plenty of States have more manufacturing than House and Senate Members even seem to acknowledge sometimes. But how do we do better at sort of preaching this, singing this tune, preaching this message that manufacturing really matters, as you said, not just to the security of a family but the security of a community and the national security of our country? And as Mr. Marchick talked GM, how it touches—that company touches so much of American industry and America beyond. How do we sell that better to people?

Ms. HART. Well, I am not sure how. I know what the steelworkers are trying to do to sell it. Leo actually was on the road, and part of the reason he is not here, Senator Bayh, is because he had problems with his airplane getting here—not his airplane. USAir's airplane. And the——

Senator BROWN. He is not flying in a private plane.

Ms. HART. No, he is not flying in a private plane. In fact, he was on——

Senator BROWN. We have heard of that in this Committee before.

Ms. HART. Yes, I think you have.

[Laughter.]

Ms. HART. But he has been on a bus for the past 3 days going through the heartland of our country trying to raise the issue of what will happen to manufacturing if we do not make sure that the GM restructuring plan is focused less on the bottom line and more on making sure production is kept here. That has been his focus, our focus. We have been partnering with groups like Carlyle. We have established the Alliance for American Manufacturing to help raise the issue.

As far as policy solutions—I see my time is running out; I guess we can get into that later—that your Committee has jurisdiction over, the Defense Procurement Act, there could be a thorough review of that.

Anyway, I am sort of getting a little off subject, but I think the general theme is that we have to really raise the volume on it, and we are trying all we can, and hopefully giving an opportunity for Members of Congress to show their support as well.

Senator BROWN. Thank you.

Mr. Marchick, before I turn it over to Senator Bayh, let me talk about credit for a moment. You talked about the difficulty for so many companies to access credit at any reasonable interest rate. And I guess lenders' reluctance in large part is manufacturing is—the condition of manufacturing is not—it is not the best we have ever seen, of course. But with defense contracting, there seems to be, particularly defense production, sort of the protection, if you will, of the Defense Production Act, it seems that defense manufacturing should be more stable compared to other manufacturing.

Is that one way that we sort of deal with the credit issue? Because, obviously, these companies that do defense work also do a lot of other—they do a lot of work. They do aerospace work. They do others. Is that sort of a door in, in part, with the Defense Production Act? And how do we use that better so that we can get credit for manufacturing beyond just the DPA companies, but companies generally in our economy?

Mr. MARCHICK. Sure. It is a great question. I am glad you highlighted it. If you look at the defense sector, the top-tier companies are in great shape, the prime contractors. They have a stable supply of work. They have great credit. They do not have a significant amount of debt.

Senator BROWN. And they are having no problems getting credit at reasonable rates.

Mr. MARCHICK. Very little. The top tier, the prime contractors—the Boeings, the General Dynamics, and others, the ones that have direct contracts with the Pentagon.

The problems beneath the surface are great, though, particularly in the Tier 1, Tier 2, and Tier 3 suppliers, particularly where those suppliers are primarily, for example, in the auto supply chain, but they may have 10 percent of their production go toward some defense product or component. And so those companies may have seen a 30-, 40-, 50-percent drop in sales; their banks have pulled their credit lines, and they are in severe distress; but they have one or two critical components of the supply chain that are critical for our national defense.

And that is an area where the Defense Production Act may be able to help. There are authorities in the Defense Production Act which have not been used in years to provide credit guarantees for small and medium-size manufacturers, and that is something I would encourage you and the Committee to take a hard look at and work with DoD to see if they can get a little more flexibility.

Senator BROWN. OK. That is very helpful. Let me ask one other question. You mentioned 2005, 2007 loans coming—facing a tough period in 2010, 2014, when they come due.

Mr. MARCHICK. Yes.

Senator BROWN. What should the Fed do? What should Treasury do? What should we in this Committee do to prepare for that?

Mr. MARCHICK. Well, if you look at the credit markets today, outside of the top companies—the IBMs, the other first-tier companies—those companies have access to credit. But below those companies it is very hard for small, medium, and large companies that are not the names of the U.S. economy to get credit.

The programs of the Federal Reserve and the Treasury have provided some oxygen to the credit markets by basically guaranteeing credit markets or supplying Federal backstops, and that has helped create liquidity. But I would encourage you to work with the Fed and the Treasury to see if they can expand the coverage to other markets, including the corporate loan market, if the corporate loan market does not revive in the intermediate term, because basically most corporate loans have a 5-, 6-, or 7-year cycle, they become due, which means that the large number of loans that were taken out in 2005, 2006, 2007 come due in 2010, 2011, 2012. If they cannot refinance, they file for bankruptcy, it is not a good situation for the economy, particularly in the manufacturing sector.

So I think that some of the Fed and Treasury programs could be expanded to the corporate loan sector, which would be something that the Committee could work on.

Senator BROWN. OK. Thank you.

Senator Bayh.

Senator BAYH. Thank you, Chairman Brown, for your leadership. Our States have in common a substantial manufacturing sector, and you have been out on point on many issues relating to this, fighting for working men and women and manufacturing, manufacturers in Ohio for many years. I have been pleased to collaborate with you on some of these things, and do so again today.

Ms. Hart, please give my best to Leo. We make more steel in the State of Indiana than any State in the United States of America, and we still employ thousands of people in our State in your industry. As was noted, they are good jobs, with good benefits, and you can raise a middle class family around steel production in our State. So we would like to be as competitive as we possibly can. I appreciate your presence here today on behalf of your members.

I have known—Mr. Chairman, I have known Mr. Marchick for many years. He is a very insightful and thoughtful individual and I am delighted that he is here to offer his perspective today.

David, it is good to see you again.

We have already covered a fair amount of territory here, and this is focused upon credit and manufacturing. Senator Brown already asked one of the questions I was going to ask, which is what should we be doing that we are not currently doing? I think you were touching on that.

There are some other issues that are going to be addressed here over the course of the next several months that will have a significant impact on manufacturing, and I know this is something that has been on Senator Brown's mind, as well. I would like to raise the issue of climate change, global warming, the proposals on cap and trade.

By the way, just one aside, I was very pleased about your comments about the automotive sector because I have said from the beginning that the need to help the automotive sector really is not the auto companies. It is the other manufacturers. It is the suppliers. It is the broader economy and the broader—it is the ripple effect, the collateral damage to the economy that would result from just sort of allowing these large enterprises to collapse and all the other harm that would go with it.

So I thought you put it in perspective, I thought, very well.

My question is this: do you have any thoughts—and I know it is not exactly on topic here today, so if you do not, that is acceptable, too. But it has been on my mind. This could, if not done appropriately, have a significant impact on manufacturing. I have heard Senator Brown say, I think very eloquently, on several occasions if, in our attempts—our good attempts—to try and solve the problem of climate change, we basically create a system that incents jobs being relocated to other countries that have lower environmental standards than we do, well the net effect will be we will have fewer manufacturing jobs and there will be more carbon being admitted into the atmosphere. This is not an optimal solution.

So do either of you have any thoughts about this? It is a little bit off-topic today but it is on my mind. I am going to be having to leave as soon as my questioning time is done, Senator Brown, to go to a meeting of the Environmental Committee, where we are dealing on some aspects of these things even today.

So I just wanted to raise it because since manufacturers seem to be a little more CO_2 intensive type activities, this could have a real impact on the manufacturing sector and accelerate some of the longer term trends we have seen—I want to emphasize—if not done appropriately.

Ms. HART. I am glad you brought that up, Senator Bayh. I know, I think yours and Senator Brown's leadership on this issue is going to be key for us in the Senate.

Right now we have been working with the Energy and Commerce Committee on their solution to try to mitigate the effects for energy intensive manufacturers because they, too, understand that if we do not make sure that we control—without a global solution, if we only can put controls on our own industries without looking at ways to mitigate that, we are going to suffer a leakage of carbon, as well as jobs.

The policy options that they looked at is an interesting one. It is an output-based rebate for the manufacturing sector. So a certain pool of allowances are being—15 percent, I believe, on the House side—are being allotted to energy intensive industries based on a sector average rebate.

Senator BAYH. Is that sufficient, in your view?

Ms. HART. Well, it is not. It has got to be in concert with a border mechanism to make sure that products that are imported into our countries that do not have that same cost associated with their production pay for the carbon in their products.

Senator BAYH. You should know, Ms. Hart, that one of our colleagues came up to me all excited at the caucus lunch yesterday informing me very happily that the steelworkers had endorsed the latest proposal. So perhaps that was a bit premature, I do not know.

Ms. HART. Well, we do believe the Committee is moving in the right direction, but they have left the crafting of the border mechanism to the Ways and Means Committee, and that is going to be key to our support in the future.

Senator BAYH. So progress, but still work to be done to get it

Ms. HART. Correct.

Senator BAYH. ——done correctly.

Again, I think all of us want to address climate change. We just want to do it in a way that actually solves the problem.

Ms. HART. Yes, we certainly do.

Senator BAYH. And does not just harm our economy without solving the problem.

Ms. HART. That is true.

Senator BAYH. Mr. Marchick, feel free to say this is off topic, or do you have some thoughts on this?

Mr. MARCHICK. A couple of comments. First, I want to compliment you for the great work you have done over the years using your perch on the Banking Committee to focus on credit and the manufacturing sector. So I really applaud you for that.

I would share the comments that you made and Holly made. I remember I was in the State Department, in the Clinton Administration, at the time of the Kyoto Agreement. We negotiated that agreement, brought it back, and then had a 98–0 resolution in the

Senate basically saying it was not a good agreement. Not exactly a great endorsement of our work.

I would agree with everything you have said. I think it needs to be——

Senator BAYH. It may be an example of the perfect being the enemy of the good, I do not know.

Mr. MARCHICK. It has to be carefully balanced. There have to be mechanisms to enable the manufacturing sector to adjust and survive. And there needs to be a broad level of commitment around the world, from both developed and developing countries, so that everybody has a fair stake and similar obligations.

Senator BAYH. My time has expired. If I could just follow up with one question.

The hardest part of all of this, I think at the end of the day we have to make some internal decisions within our country. They will not be easy, but I think we can probably get there with a thoughtful approach.

My guess is, for a variety of reasons, we may even get most of the rest of the world to agree to some sort of framework. The issue is how do you verify whether they are complying or not? And most importantly, what do you do if they are not?

I have not yet heard a good answer to that. Do you have any thoughts along those—basically, just so you know, Mr. Marchick, I attended a conference on this. They had a euphemism they called border adjustments, which was basically a fancy word, a euphemism for tariffs, that you would basically slap tariffs on high CO_2 products coming from countries that were not abiding. Which struck me as being—it might inaugurate the mother of all trade wars.

And I, frankly, was a little skeptical about whether our Government, even if we legislated such a thing, would ever implement it.

So I mean, if that is the only enforcement mechanism, I kind of wonder whether that is going to work or not. Do you have any thoughts about that?

Mr. MARCHICK. I do not have a good answer, unfortunately. That is good, tough question.

Ms. HART. And I do not either, but certainly global sectoral agreements are going to be key to making sure that our trading partners and other countries are able to reduce their emissions as well and mitigate those effects. But until that time, we are going to have to step up and make sure that how our industries are regulated has a component part of a border adjustment because without that, we can compensate our energy intensive industries all we want and they can—I mean, the steel industry is incredibly efficient right now. We produce steel with three times less carbon than the Chinese do. And they are the most efficient in the world.

So they have done pretty much everything they can. I'm not saying there is not more they can do in the future with better R&D and technology. But at this point, they are—most of our producers are as good as they can get.

So my point is that there is very little efficiency that may be able to be gained by certain industry sectors. In that regard, it is going to be very important to have sectoral agreements. But it is more than just the steel industry. The energy-intensive sector is very large. That includes chemicals. It includes rubber. It includes glass. It includes a whole range of industries. Those all have to be looked at. And there are not talks underway right now in those sectors.

So encouraging that is going to be paramount. But until that happens, there has to be more than just carrots for the world to come to us. There has got to be a few sticks at our border. I am sorry, I believe that.

Senator BAYH. Well, I thank you both for your perspective. I would leave for your consideration, to be continued another time, Ms. Hart, this is the hardest issue, I think, to resolve. I leave for your consideration the likelihood that our Government would ever impose such consequences on countries from either whom we are borrowing large sums of money or we are importing large amounts of oil. Either of those strike me as being unlikely.

It is one of the reasons I tend to be more of a deficit hawk. Can we get our finances in order? It gives us a little more latitude to do other things. But as long as we are so dependent on foreign borrowing, it restricts our field of action a little bit.

But that being said, thank you very much. Mr. Marchick, great to be with you again.

Holly, thank you. I wish Leo the best.

And Mr. Chairman, thank you for your leadership on this.

Senator BROWN. Thank you for your interest.

Senator BAYH. The State of Indiana and the State of Ohio will make common cause in this area. If not on the Big Ten athletic field, at least in the area of manufacturing economics.

Senator BROWN. Thank you, Senator Bayh, for your insight.

A couple of comments on his thoughts, Senator Bayh's thoughts—thank you, if you need to go, that is fine—Mr. Marchick and Ms. Hart, about climate change. It is pretty clear that Ohio really is a State that has every one of the major energy-intensive industries: steel, glass, aluminum, cement, paper, chemicals, and all of them. That is why this needs to work.

And ultimately, I spoke with Carol Browner, the President's environmental advisor, about this, that ultimately we need some multilateral agreement to come to an agreed to carbon price among the nation's which have these manufacturing sectors. That is something we obviously need to get to at some point. That is not going to happen quickly, but it is what we need to strive for, Senator Bayh suggests, too.

Let me ask one more question of each and then we will bring the second panel in. Mr. Marchick, you talk in your testimony about the TALF program. How do we get—how do we enable manufacturers to take part in it?

Mr. MARCHICK. The first thing I would say is that it is important to understand the role of securitization in the banking system. Thirty years ago, when a company needed money, they would go to a bank and say we need some money, can I borrow it? They would say yes or no.

Today, banks are as much distributors as loaners. So they often will underwrite a loan but then sell pieces of that loan out to parts of the so-called shadow banking system. And that system provided about half the credit in the United States up until the credit crisis hit. That part of the banking system is basically moribund today. And so the TALF helps, hopefully, revive that part.

I think the way that the Federal Reserve has done it, to expand the asset classes which are eligible for TALF funding, is helpful. Commercial mortgages, which drives development, which drives sales of steel rods and other products used in construction; expanding it to dealers which helps them buy cars to be able to sell cars to consumers. And we have an investment in Hertz, for example. The Fed has expanded TALF to cover auto fleet financing, which is critical to be able to allow them to buy cars from the Big Three.

The problem is this AAA limitation is that with falling asset values, particularly of large physical assets like autos, it is very hard for companies to qualify for AAA rating. And therefore, the benefits of the TALF are, by definition, limited because it does not cover enough products.

So the Fed, I understand, is trying to limit the credit risk of the Government, which is a very legitimate and important policy objective. But in order to make it work, I think there will need to be additional flexibility and broader coverage area. They have expanded it, for example, from the residential mortgage sector to the commercial sector to auto fleet financing, to dealer floor plan financing. If they could continue to expand it to other markets, including the corporate loan sector, it would help manufacturing companies access loans.

Senator BROWN. Good answer. Thank you.

Ms. Hart, I have been a little intrigued lately that I seen an op-ed co-written by Leo Gerard and David Rubenstein, one of the founders of the Carlyle Group. And now I see this testimony. Explain this to me, the Carlyle Group and the steelworkers, what does this exactly mean? That you have been working in tandem, as you did today? I know you suggested this, that the op-ed piece.

Why this alliance that some people would find a bit peculiar?

Ms. HART. Or perhaps unholy, but we think it is going to produce great results.

Our union has been trying—we have been a voice in the wilderness for years on manufacturing. And we are trying every way we can think of to raise that profile and utilize tools that might not be available to us if we just stayed to ourselves. So we are forming partnerships in perhaps unlikely places to bring the message and to try to help forge policy solutions.

One of the things I would like—we have a history of it. We started the Alliance for American Manufacturing with some of our largest steel producers. It has now expanded to include Goodyear, as well. They have become a fairly outspoken—in fact, very outspoken—defender of American manufacturing and a good resource for many, as well, who choose to make those arguments.

We have published studies and done a whole lot of interesting events, as well, including the auto tour that is going on around the country and is going to culminate in a teach-in on May 19th that I am hoping you will be able to participate in at the Capitol Visitors Center to highlight just how important the auto sector is to our country.

So I think we have an innovative and dynamic leadership that does not believe we can just be protective. We have got to go on the offensive and we have got to find partners who are willing to work with us to do so.

We, of course, are happy to work with you, as well, in any way you see fit, to help address the problems as well.

Senator BROWN. Well, done. Thank you.

Mr. Marchick, do you want to say something?

Mr. MARCHICK. Let me just add one thing on that, because I really want to give credit to Leo Gerard and Tom Conway and Holly and the rest of their team.

We are major investors in the steel sector and other sectors that the USW supports. And we found them to be—well, they are very tough negotiators. Some of our folks still have scars to show for some of that.

But they have also been very progressive, in terms of the need for attracting capital into hardcore nonsexy manufacturing in the United States. And we have been able to work with the USW very closely to increase productivity to align incentives for the various parts of the capital structure: investors, management, and workers. And really, this collaboration is a tribute to Leo's very good work, and creative work, in leading this union into the 21st century.

Senator BROWN. Good, thank you. Mr. Marchick, thank you. Ms. Hart, thank you very much, both for joining us.

We will take a 60 second break while the second panel gets in place. So thanks very, very much. I apologize again that you had to wait today.

[Pause.]

Senator BROWN. Thank you for joining us, the second panel.

I will introduce William Gaskin, whom I have known for some time, President of Precision Metalforming Association, representing the $91 billion metalforming industry in North America, the industry that produces precision sheet metal components and assemblies used in autos, appliances, computers, and thousands of other applications. He's also President and Secretary of the PMA Educational Foundation; President and Secretary of PMA Services, which publishes Metalforming Magazine, a monthly circulation of 60,000.

He previously served as the Director of Community Development in Cuyahoga County, Cleveland, Ohio. A graduate of Heidelberg, Mr. Gaskin received his MS in Public Administration from Cleveland State. He earned his Certified Association Executive designation in 1995. Welcome, Mr. Gaskin.

Gene Haffely, whom I met yesterday, was a cofounder, Advanced Assembly Automation in 1984 and served as Vice President of Operations until 1996. Mr. Haffely then served as President of Hansford Manufacturing, a division of DT Industries; and is the Corporate Vice President of Operations for DT Industries from 1997 through 1999, when he returned to AAA as President.

He is a Vietnam vet, a graduate of the University of Wisconsin with a BS in Computer and Electrical Engineering. Welcome, Mr. Haffely. Thank you for joining us.

General Larry Farrell, U.S. Air Force, Retired, became the President and CEO of the National Defense Industrial Association in September 2001. Interesting timing.

Prior to his retirement from the Air Force in 1998, General Farrell served as the Deputy Chief of Staff for plans and programs at the Headquarters, U.S. Air Force in Washington. He was responsible for planning, programming, manpower activities within the corporate Air Force and for integrating the Air Force's future plans and requirements to support national security objectives and military strategy.

Previous positions include Vice Commander, Air Force Materiel Command, Wright-Patterson Air Force Base in Fairborn, Ohio; and Deputy Director, Defense Logistics Agency in Arlington. He served as Deputy Chief of Staff for Plans and Programs, headquarters U.S. Air Forces in Europe.

And thank you, particularly, for your service to our country, too.

Mr. Gaskin, you can begin, if you would. Welcome.

STATEMENT OF WILLIAM GASKIN, PRESIDENT, PRECISION METALFORMING ASSOCIATION

Mr. GASKIN. Thank you, Mr. Chairman. It is a pleasure to be here today.

For the record, my name is Bill Gaskin, President of Precision Metalforming Association in Independence, Ohio.

We have partnered with the National Tooling and Machining Association today to speak with one voice on behalf of the small middle-market manufacturers who produced stampings, fabrications, machine products, tooling, plastic injection molds, and other items. Together, we have a combined membership of more than 2,500 companies located in every State and employing more than 500,000 people.

Small middle-market manufacturers are being clobbered by the credit crisis and are in serious trouble, especially if they manufacture parts, components, and assemblies for the automotive, residential, or commercial construction, appliance, truck, and aerospace industries. This impacts hundreds of thousands of jobs, weakens our manufacturing base, and limits our ability to innovate, allocate funds to R&D, and provide growth opportunities for the future.

These are by far the most dire times that I have seen for metal stamping, roll forming, machining, tooling, and mold building companies. Today our typical metalforming company has annualized sales 35 percent lower than 1 year ago. They have had to eliminate nearly 38 percent of their employees.

In our May business conditions survey, some 80 percent reported that they had either laid off employees or that their facilities were working on short time, compared with roughly only 20 percent a year ago.

And it is going to get worse. Forty-nine percent report that shipping levels will be down over the next 3 months, and 39 percent report that new orders for products will decline over the next 3 months, as well. Only 17 percent of our members think that shipments will rise in the next quarter.

It is likely that more than 20 percent of these privately held or family owned businesses will not exist 1 year from now unless business conditions improve substantially or until additional steps are taken to free up lines of credit.

To quote one metalworking company with 60 employees, "No bank currently wants to deal with manufacturing. They are solely about mitigating their risk with their manufacturing clients. This is the reality that we face."

Metalforming companies across all industries report credit challenges. Of respondents to our survey, 36 percent noted serious problems in their credit situation and 30 percent reported moderate problems. More than half are having difficulty accessing credit for day-to-day operations, while over 70 percent have difficulty obtaining credit to finance capital investments they need to upgrade their domestic production facilities. Our greatest concern is that 72 percent anticipate difficulty securing the credit they will need when business starts to recover to buy raw materials and rehire people. Seven percent, 72 percent do not know if they can do that.

So while the Federal Government is investing billions of dollars to the Economic Stimulus Package for construction projects and other activity, through TARP to support banking, automotive OEM and tier one suppliers, small middle-market companies integral to our recovery lack the financing they need to supply the stampings, fasteners, tooling and molds to assemble the bridges, acquire new equipment, and manufacture fuel efficient vehicles.

The Automotive Supplier Support Program is helpful to tier one suppliers of General Motors and Chrysler but the economic benefits of these expenditures have yet to trickle down to the small middle-market tier two and three suppliers. Of course, help for the OEMs and tier ones help us, as well, but we cannot continue to provide components, tooling, and services without some guarantees of future payment.

This would also provide assurance to our creditors that we remain viable. Credit lines in our industry, which are currently averaging about 14 percent of annual sales, are largely based on a formula that values 80 percent of current trade receivables and 50 percent of the value of raw material and finished goods. In today's environment, receivables are discounted even more severely or they have almost no value at all. Most lenders are severely restricting lines of credit from manufacturing companies, especially automotive suppliers.

Recently, the Small Business Administration announced changes in their 7(a) and 504 loan programs. Yesterday I heard from one company, a member in Southern California, who had applied for an SBA loan from three banks in the last 3 weeks, including Omni National and Wells Fargo. Unfortunately, the company was unable to secure any help from the SBA program, as the banks' underwriting standards, which rule, were too strict to approve the loan.

The personal guarantees required by SBA on 100 percent of their loans are also a problem. In the non-SBA market, our members report that personal guarantees are required only about 40 percent of the time. Understandably, in today's environment, many business owners are too concerned about losing their family home to meet their personal guarantee requirements of the 7(a) program.

Last Thursday, at an auto parts suppliers conference in Michigan, a representative of the SBA briefed us about the new requirements, the new program. But in response to a question about whether he was aware of any SBA loans having been made to auto suppliers in the Detroit answer, he answered no, he wasn't. He then asked the audience, 75 people, do any of you know of a bank that has given a loan, and they said no, as well. So it is a problem that just is not working.

Mr. Chairman, we hope that the SBA program could be changed. We appreciate your efforts to find solutions to the credit crisis in manufacturing. This is not just an Ohio problem or an automotive problem. It is a global problem that requires an American solution here in the U.S.

Thank you.

Senator BROWN. Thank you very much, Mr. Gaskin.

Mr. Haffely.

STATEMENT OF EUGENE R. HAFFELY, CHIEF OPERATING OFFICER, ASSEMBLY & TEST WORLDWIDE, INC., ON BEHALF OF THE ASSOCIATION OF MAUNUFACTURING TECHNOLOGY

Mr. HAFFELY. Thank you for holding this hearing today and giving me the opportunity to be here and participate.

I am here today to speak on behalf of the Association of Manufacturing Technology, the AMT, founded in 1902 as the National Machine Tool Builders Association. My company, Assembly & Test Worldwide, Inc., is headquartered in Dayton, Ohio, and is a member of the AMT and I currently serve on the Board of Directors of the AMT, which represents more than 400 manufacturing technology providers located throughout the United States, including almost the entire universe of machine tool builders who manufacture in America.

I would like to make three points today. Our industry, as everyone has already said, is vital to American manufacturing, competitiveness, and national security; is critically weakened by the economic crisis; and this weakness makes it even harder to obtain the credit we need to survive the economic downturn.

The manufacturing technology providers I represent here today supply the innovative tools that enable production of all manufactured goods. These technological tools of industry—and I am talking about capital equipment and the technology that is a part of that capital equipment. These technological tools of industry magnify the productivity of each individual worker in our country and give an industrial nation the power to be competitive in the global marketplace. Our products also create the means to provide a strong and technologically sophisticated national defense.

Mr. Chairman, as critical and necessary a part of our American manufacturing sector as we are, our industry is in danger of not surviving the current economic crisis. And the major reason for that is because the lack of credit is endangering the continued existence of virtually all of our companies.

My company, as an example, is an American-owned business that designs and manufactures assembly and test equipment for global manufacturers, of which 60 percent is in the automotive and heavy truck industries. We are a critical supplier of custom designed automation for the production of fuel efficient engines, transmissions, and drive modules and are one of the many AMT companies that provides production tools and systems to a wide range of industries, including the producers of medical devices, pharmaceuticals, hybrid vehicles, solar panels, and various defense industry related products.

In 2008, my business was profitable with $150 million in revenues. During the banking crisis this past fall, in just a 3-month period, we lost over $20 million of our orders. They were canceled. This is totally unprecedented in the history of our company.

Due to this decline, mainly in our automotive business, we have been forced over the last 5 months to reduce our work force by 25 percent to 530 U.S. employees. In addition, my company's revenues are projected to decline 40 percent in 2009 primarily due to the weakness in the automotive sector and the deferral of capital spending in other markets.

In the bigger picture, AMT members are reporting a reduction in backlogs from 40 to 70 percent.

The overall uncertainty in our economy has caused our customers to take defensive measures, delaying existing production improvements, canceling new term orders, and delaying payments until 2010. The meltdown of the financial services sector has frozen credit to companies like mine.

But even with this revenue reduction I spoke of, my company can operate with minimal losses in this difficult environment and can remain a viable company, but only if we can get reasonable credit. In my 30 years in this industry, I have never seen a more difficult time for companies in our industry to obtain credit. The future holds promise, but our hands are tied if the banks refuse to lend to automotive manufacturing companies because their revenues are dismal for the next few quarters as we work our way through this economic chaos.

I do not mean to tell you that I am an expert on the solutions to this, but a couple of programs that have been brought up already I would like to comment on. I read recently that there is a 25 percent increase in SBA loans. To our companies in the AMT, no one is lending in this environment. We do not see it. Not even the SBA Preferred lenders, who must rely on a level of credit scrutiny for many companies that they cannot pass due to the recent events.

Small businesses are particularly hit hard. These companies cannot qualify for the programs that were designed to help them. We must reprioritize the metrics by which the SBA makes decisions away from cash flow. The AMT companies' cash flow position is weakened so they cannot qualify. We need to move to other relevant criteria. In my written statement, there are some suggestions about what that other criteria could be.

Moving toward the Defense Product Act. As I am sure you would agree, Mr. Chairman, our national security depends on a strong manufacturing technology base. I am here to tell you that if nothing is done to start credit flowing again to America's manufacturers, we lose more than the ability to manufacture automobiles and washing machines. We lose our ability to provide innovative manufacturing systems for the defense industry. Without a strong American manufacturing technology base, we also risk dependence on foreign sources for our defense needs, foreign sources who may not be there when we need them.

Mr. Chairman, my industry is absolutely essential to national security. Title III of the Defense Production Act provides for Federal loan guarantees to companies that play an important role in our national defense industrial base, companies that would be important to mobilize efforts if it were necessary to move from a peacetime economy to a wartime economy.

Mr. Chairman, I suggest the Banking Committee consider increasing this loan guarantee authority as it considers the DPA's reauthorization in September. With Government guarantees under Title III, I believe banks in Ohio and elsewhere around the country will have confidence to get credit flowing to manufacturing technology companies and the many other manufacturing companies who make up the backbone of the defense industrial base.

In conclusion, the United States is perilously close to losing a critical industry, one that it continues to depend upon for both economic stability and national security. I hope that you will be able to provide the legislative vehicles that can get us through this threat to our existence, building upon the SBA and the DPA programs I have mentioned and implementing other new loan guarantee programs targeted at manufacturing technology companies and our customers, the manufacturers in this country.

We must get credit flowing again. The only way to break this cycle of job loss and bankruptcy is to provide the manufacturing sector the cash flow we need to continue doing business and securing American jobs.

Thank you.

Senator BROWN. Thank you, Mr. Haffely.

General Farrell, thank you for joining us.

STATEMENT OF LIEUTENANT GENERAL LAWRENCE P. FARRELL, JR., (USAF RET.), PRESIDENT AND CHIEF EXECUTIVE OFFICER, NATIONAL DEFENSE INDUSTRIAL ASSOCIATION

General FARRELL. Good morning, and thank you for the opportunity here. My testimony is based upon a white paper that NDIA produced last year——

Senator BROWN. I am not sure your microphone is on.

General FARRELL. Oh, sorry. Thank you.

A lot of my testimony comes out of a white paper which we produced last year, which was prior to the present difficulty, but we find it still relevant. I will have copies for you.

I also have a coalition of partners that we work with, like AMT, Society for Manufacturing Engineers, Aerospace Industries Association, the National Center for Advanced Technology, and a lot of them have inputs to this as well.

You asked five questions, and I will take them on head on.

First of all, you said, Why should Congress care about this? Well, in addition to a lot of the things that have already been said, I would add that the manufacturing sector in this country throws off $1.37 for every $1 in the manufacturing sector. That is higher than any other industrial sector in the country. It provides, as you said, an entry to the middle class for lots of people, but in addition to that, it throws off a lot of intellectual property—90 percent of the patents every year awarded in the manufacturing sector, and in the defense sector, our edge on the battlefield is based upon the best weapons systems and platforms we can bring, plus the best trained people. So we need a highly capable manufacturing sector to deliver on that. If you will note, just the aerospace sector itself has a $60 billion trade surplus with the rest of the world, so it can be very efficient.

Second, you asked about credit. When I look at particularly my small business members, working capital is vital to what they do. Working capital basically is supplies and labor costs for people who get a contract who have not received their payment yet, and let us say you are a small businessman and you get a $10 million contract, a bank will loan you up to 50 percent on the inventory. That means you have got to put $5 million up yourself, if you can get a loan. And the invoice to payment is about 120 days, so credit is kind of important to these guys.

We checked one of our members in Chicago, one of the lawyers that has manufacturing clients; 30 percent of his clients are either in Chapter 11 or anticipating Chapter 11 just because of the lack of access to credit.

You asked a question about the supply chain and demand, but very quickly, when demand is down, inventories go up and labor goes down. But a response to that, a robust response, is maintain diversity across business sectors and segments so intertwined supply chains can help, especially with small business, if they can do it.

Your fourth question had to do with strategic and security considerations for the country and for the defense. I would say basically the advantage of this country has always been that we have been the most innovative, the most creative; we bring the best products to market before anybody else. And in defense, we do the same thing. How do we do that? We do that by being a leader in advanced manufacturing. So if you look at the manufacturing sector, the focus needs to be on the advanced piece of that and maintaining leadership there.

Then you asked what policies should we be pursuing. I have nine.

We think we need a higher level of representation in the executive level. Agriculture is 3 percent of GDP. We have the whole Agriculture Department. Manufacturing is 14 percent of GDP. We have a Deputy Assistant Secretary in the International Section of the Commerce Department. We need higher-level representation in the executive branch.

You need to reauthorize the Defense Production Act with particular focus on the Interagency Task Force, raising the funding to $500 million, and resuming the loan guarantee program under Title III.

We would like to see stable funding for Defense Manufacturing Technology at 1 percent of RDT&E. That is $790 million a year.

We would like to endorse the strategic thrust of the DoD ManTech Strategic Plan. I brought a copy for you here. But basically, there is a lot of focus in there on advanced manufacturing funding, which is only $10 million a year right now in defense.

Fifth, we would like to use Manufacturing Readiness Levels prior to Milestone B in defense Acquisition.

We need increased focus on the national workforce, manufacturing workforce. I have members of mine in States with high unemployment and manufacturing problems who have manufacturing jobs that cannot be accomplished because they cannot get a skilled workforce.

My members tell me that a kid coming out of high school, the average kid is not qualified to enter the manufacturing workforce without 2 years of community college or a vocational education on top of high school.

Then we see a bill in the Senate, S. 661, Restoring America's Manufacturing Leadership Through Energy Efficiency Act. We think that is a good bill to support because if you focus on reducing energy and resource consumption in the manufacturing process, you are going to create organic jobs here in the United States.

We would like to see progress payments which the original equipment manufacturers get. We would like to see it flow down through the supply chain to the Tier 1, 2, and 3 suppliers. And we would like to see you lower the threshold at which that can occur.

Then, finally, we would like to see more active leadership in the Senate. You have a Defense Depot Caucus, which is very effective. You have a Manufacturing Caucus in the Senate which is actually not active. We think if you had an active Manufacturing Caucus in the Senate along with increased representation in the executive branch, it would really help the manufacturing sector.

Thank you, sir.

Senator BROWN. Well done. Thank you, all three of you.

Former President Bush I remember appointed a manufacturing czar back in 2003, the Labor Day weekend. I remember the appointment, and it just sort of did not really work out. There was not much more after that. And when you say that agriculture is 3 percent of GDP and manufacturing is 14 percent, that is a pretty good contrast.

Let me start. Several of you overlapped on several things you said. I thought the testimony was exceptionally good, and, General Farrell, I want to get to your skilled workforce issue in a moment. But, Mr. Gaskin and Mr. Haffely, if you would, you both talked about SBA and what we need to do with SBA. Would you each be—and I know you have some more details in your written statements. Starting with Mr. Gaskin, if you would talk more prescriptively, more precisely what we ought to—what SBA needs to do to inject credit into particularly mid-level companies.

Mr. GASKIN. It is a topic we have heard a lot about as we have talk to the auto task force and other companies, even, about what do we do with the credit crisis in manufacturing. It happens that a lot of it is automotive related, and SBA keeps being brought up, and the plain fact is that SBA relies on the banks to determine their lending criteria. Their lending criteria are severe enough that most companies in distress do not qualify. Even though they have raised the guarantee level of a 7(a) loan to 90 percent instead of 80 percent, there is still 10 percent to the bank, and they are not willing to take that risk on manufacturing right now.

It does not change the fundamental structure under which they are evaluating the bankability of the company. The Basel II does not change for the company, the risk rate, and so it simply does not work.

Senator BROWN. Mr. Haffely.

Mr. HAFFELY. Yes, I would like to reemphasize that our companies are not qualifying for this SBA program. The regulation states that the ability to repay from cash flow is a necessary requirement, and our companies are weakened to the point where they cannot depend on cash flow in the near term to repay—or to qualify, rather. And I think instead they should take a look at the structure of the companies, the backlogs, the assets in the company, the employment level, look at some of the history of the company leading up to the point where the loan is made to evaluate if that is a solid company, looking at the profit history.

So as long as they are relying on cash flow, that is a problem for our companies, and I also do not know of any companies in AMT that have qualified.

Senator BROWN. Yes?

Mr. GASKIN. If I may, Mr. Chairman, there was a proposal for a direct loan program under SBA. That might be able to have different criteria—it was not funded—but rather than a reinsurance program with the banks, there might be a way to do it directly.

Senator BROWN. The SBA has never done that?

Mr. GASKIN. Well, currently, no.

Senator BROWN. OK.

Mr. HAFFELY. Mr. Chairman, there was a provision that did not make it to the final bill for the SBA 7(a), and it may be what Mr. Gaskin is referring to. That would allow a manufacturer, if he was turned down, I think three times, to go to the SBA and get the SBA to contact a list of preferred loaners, preferred suppliers of capital. And that I think was a very sound program, but I do not know why it did not make it to the bill. It was dropped.

Senator BROWN. OK. That is helpful.

Mr. Haffely and General Farrell, you both talked about the Defense Production Act. Both of your associations, the AMT and the NDIA, sent this Committee, sent Chairman Dodd and all of us a letter last month urging reauthorization reform of the Defense Production Act.

General Farrell, you talked about the Interagency Task Force. Mr. Haffely, you talked about the loan guarantee authority in your statements. Now, would you expand on those or anything specifically that you want us to do with defense production, particularly in light of—well, just leave it with that, and I will follow up.

General Farrell, do you want to be more specific for us orally? And the same with you, Mr. Haffely.

General FARRELL. Well, as you know, the Interagency Task Force has kind of fallen away. We would like to see that reenergized, and we would like to see maybe the President appoint a Chair of that. This is really important.

The other thing is we would like to see the funding go up. Funding should be about $500 million a year, we think.

The advantage of this is that once that money is appropriated, it is there forever. It can be used forever. And what it is, it is really a guaranteed purchase. So if you have got a guaranteed purchase using that money, that means the small business can now get credit. He can get a loan to enter this field because now there is a guaranteed purchase associated with it. So this is really important.

And one of the other things you ought to do under that, under Title III, is to resume the loan guarantees. That is going to help the small business as well.

So there are two things in there that——

Senator BROWN. Sorry to interrupt. Do we on the loan guarantee—we want to limit it to Tier 1, Tier 2, Tier 3. We do not want it to go to the major—it is not an issue—as Mr. Marchick said, it is not an issue for the big contractors that sell directly to the Pentagon. They do not particularly need credit.

General FARRELL. Right, right.

Senator BROWN. So you would limit it to the Tier 1, 2, 3?

General FARRELL. I think that is fair.

Senator BROWN. Little applicants, I would assume, companies, is that—Mr. Haffely, is that what you would think?

Mr. HAFFELY. Absolutely. If a smart bomb does not have a small widget from a Tier 3, it is not going to work. So it has got to go all the way down the food chain.

Senator BROWN. But to exclude the major defense—it is OK to exclude the major defense contractors because credit is not—I mean, we have—there is a limited amount of money. There is a limited amount of credit authority. So you go to—do you aim at the suppliers more than the major contractors?

General FARRELL. Yes. You have to aim at the suppliers. And if you look at defense especially, the large defense companies have been focusing on integration and higher valued-added tasks, and they have been outsourcing a lot of their manufacturing to the Tiers 1, 2, and 3. So there is more manufacturing being done there than has been done in the past. So those are the guys you have to focus on.

Let me just say one more thing about the Defense Production Act. Even though it is just defense, but it crosses over into commercial. I will give you one example. The batteries for the FCS vehicles, lithium ion, if somebody were to get a job under the Defense Production Act for lithium ion, those are the same batteries that are being used in the Chevy Volt. So that kind of research and development, it really slops over into the commercial area as well.

Senator BROWN. I am not sure I agree with the term “slops over,” but I got the idea.

General FARRELL. Sorry for that. “Washes over.”

Mr. HAFFELY. Yes, except for that term, I would like to emphasize the good point that Mr. Farrell made. Our companies are supplying the tools to manufacture automotive vehicles, heavy trucks, off-road vehicles. All of those talents, all of those capabilities apply to the defense industry. So this—“spilling over”? What was the term?

General FARRELL. Washing over.

Mr. HAFFELY. Washing over to the commercial side is a fact of life. If we can get loan guarantees and we can apply that capital to continuing what we do in those industries I mentioned, it is a direct parallel to what we would need to provide for the defense industry if we had to mobilize in a time of war.

Senator BROWN. Thank you. Because my time is up, before turning to Senator Merkley, I wanted to follow up with one thing General Farrell said about skilled workforce. I have done around the

State probably 140 roundtables where I will bring people—I have gone to each of Ohio's 88 counties and brought a group of 15, 20 people and a cross-section of the community—a carpenter, a school teacher, a superintendent, a hospital administrator, a plant manager, whatever. I hear universally that even in a State with higher-than-national-average unemployment, people cannot find—in all kinds of businesses and all kinds of organizations, they cannot find a skilled workforce. We are working on something called the SECTORS Act to bring together, as we reauthorize Workforce Investment legislation, to bring together local—to have local people to make it sort of homegrown organically coming from them, spending these WIA dollars locally, allowing community colleges, the local businesses, the Workforce Investment Boards, and labor unions when it is applicable, to make the determination what, in fact, they—what kinds of job skills they need. And, you know, in Toledo it might be food production. In Dayton it might be aerospace issues. And let local people decide that, local businesses working with others.

So any thoughts on any of that briefly? And then I want to turn to Senator Merkley.

General FARRELL. Yes, the problems my members tell me with respect to people coming into manufacturing, there are two skills that they lack: the ability to read and write, and math skills. They say they are just lacking. And if we look at the statistics, you want somebody to have a technical education, if you want them to, in college. You see? We look at 100 ninth graders. Within 6 years, only 18 graduate from college. Of those 18, less than 50 percent enter some kind of a technical education program.

So why is that? Well, if you look at the education in middle school, if you do not take Algebra I in middle school, you cannot take Algebra II in high school, and you cannot take AP Calculus, and you cannot enter a technical education college if you have not experienced Algebra I in middle school. There are only about six States in the Union that have a requirement for Algebra I.

It is more fundamental than just that. It goes way down at least to middle school where this thing starts.

Senator BROWN. Thank you.

A brief comment, Mr. Gaskin?

Mr. GASKIN. Yes, on skills, you know, foundation skills are critical to the success in the future of PMA and the other metalworking associations, for NIMS, the National Institute for Metalworking Skills, which is a foundational skill. And through the WIA program, the key there is—and your SECTORS Act—to make sure that there is the bringing together of community leaders, but also the local industries through the WIA boards to make sure that we drive it the right way and make sure that there is integration with the community colleges and the 4-year schools so there is that path from the foundational skills into community colleges and then into the Society of Manufacturing Engineers type higher-level programs.

Senator BROWN. Good. Thanks.

Mr. HAFFELY. I am obviously here because I love manufacturing. It has been my life, and I am deeply distressed by the opinion that our high school and college students have about the dirtyfingernailed manufacturing industry. Some of the smartest people I know are machinists who are turning cranks on bridge ports and lathes. These are bright people who are very creative and innovative. These are fantastic jobs, and there is not enough being done to get our high school students excited about coming into manufacturing. And they are excellent paying jobs. The skilled trades and the engineering professions pay very, very well.

The AMT provides a scholarship for 2-year technical school students, but there are other organizations. NAM has a wonderful program for educating high school and college students. Our local NTMA association in Dayton, Ohio, has one of those robot programs where the college students and the high school students work on those robots in a competition. They have done a lot to educate the local schools about manufacturing. They have put on a lot of programs.

There is a lot being done by the manufacturers, but I do not believe it is enough, because I think we still have a bad reputation amongst the students.

Senator BROWN. Thank you. And few communities in the country have the proud history of entrepreneurship that Dayton, Ohio, has, as you know. And that is a problem with it that is so serious, I think, that young people—just blue-collar jobs generally, whether it is manufacturing, whether it is the building trades—and they are good paying tickets to the middle class, and kids are not taking math in junior high, as General Farrell said, and all that. We have got to do much better with obviously the whole system of education.

Senator Merkley.

Senator MERKLEY. Thank you very much, Mr. Chair. I am listening to this conversation as the son of a mechanic and machinist who—I had the privilege of growing up building things in the garage, as I think most American kids did a generation ago. And as I was listening to you, I was thinking about the distinction between essentially the programs we lay out and the cultural influences. And as I watch my own children, they are far more interested in using software, playing games on the computer, and so on and so forth, than they are building things in the garage, which is something of a frustration to me, because I was looking forward to that.

But one of the things that seems to that is the virtual complete disappearance of shop activities in junior high and high school. Have you all been tracking that? And is that a significant factor in the lack of preparation of our students for the manufacturing workforce?

Mr. GASKIN. If I may, it is. Customers need to want to buy; they need to perceive that that particular training will result in a good career. And as Mr. Haffely said a few minutes ago, there is a perception that manufacturing is not where the future is. And the prior panel was asked what can we do about the perception of manufacturing. I think that the Chair hit on it a minute ago. We need a strong leader in the administration to talk about manufacturing, and we need every Senator to talk about manufacturing and every Congressman to talk about the importance of manufacturing to help create that demand.

In the Cleveland area and in most areas where we have members, there are very few strong machining programs to teach people the skills they need, the fundamental core skills.

There are now skill standards. There is non-time-based apprenticeship programs. There are new models based on competency that are coming online. And I think this is positive. I think the community colleges have bought into this level of training very well and will complement it was associated degrees in manufacturing, which will make it more palatable, even to the guidance counselors, who would never want to put somebody into a vocational education program. They want somebody to go to college. Well, let us get that career path that includes an associated degree, perhaps leading to an engineering degree.

So there are some good things starting now, I think.

Senator MERKLEY. Anyone else want to throw in any comments? Yes.

General FARRELL. What we are hearing is that manufacturing is perceived, you know, like Charles Dickens portrayed it in his novels. We do not see it in the schools; like you asked the question, we do not see it. Where we are most effective, at least in what we do, is where the community gets together some manufacturers and they put together a program, an after-school program, a mobile program. They take it to the schools, get the kids to go through it, and operate some of the equipment. And they are having a great deal of success that way, putting some advanced equipment in a mobile capability and taking it around to the schools. That is working pretty good.

Senator MERKLEY. OK, thank you.

I want to turn to the financial side of the puzzle that you all spent quite a bit of time talking about. Certainly the story you are presenting fits with the story I am hearing on the ground in Oregon. I wanted to get a little better sense of the traditional forms of financing.

Of course, we have the bank loans at one end. We have bonds being issued as well. And then I am hearing from a lot of folks in Oregon who have revolving 7-year commercial loans, that is more the developers, and where they have had performing properties and they are just not simply able to roll over those loans as they have in the past.

But do you utilize commercial 7-year loans? Are we really talking about primarily bonding, or are we talking about loans that are related to the development of new facilities? Or is it the whole spectrum? Where is the real heart of the challenge?

Mr. HAFFELY. Well, if I could speak just from my experience, being an engineer and not a finance guy, our programs go as long as 1 year. They can be million-dollar programs, 5, 10, 12, 15 million dollar programs. Very often in the automotive industry our payment terms are 90/10—90 percent when we ship, 10 percent when we prove that the equipment works properly in production.

So over the course of most of that year, we are spending up to 90 percent of the cost of that equipment, and we get our financing based on that work in process. Then once we ship, our financing is based on our receivables. So the credit problems that we are having, that our industry is having, are related to financing these large programs that last for a long period of time.

Mr. Farrell mentioned progress payments. They have always been hard to come by. No one wants to give progress payments today. And as I mentioned earlier, a lot of our customers now are saying you can have this program, but we are not going to make the first payment until 2010. So they are even getting worse than 90/10 payments. They are deferring the first payment and the shipment until next year.

So that is what we are talking about in my industry and in my company as far as the loan problem.

Senator MERKLEY. OK. Yes?

Mr. GASKIN. If I could, sir, the tooling side of what Mr. Haffely described is one thing. You are making a lot of mated assembly systems and such, and those are complex and take time. But, you know, tools and dies, molds that are used by second- and first-tier auto suppliers, it is even worse. The small business, the smallest piece of the credit, you know, market for the supply chain—and this is true in other markets as well, but primarily automotive. Billions of dollars of tools are off the books of the auto manufacturers and on the books of small businesses that are making progressive dies, molds, *et cetera*. It may take 12 to 18 months to complete it, and not only complete the die but then you need to go through the PPAP process, the Production Part Approval Process, where all the individual components that are made on a number of different dies get assembled, and then finally at the automotive plant, they say 18 months later, "OK. We got an assembly that works. It fits the requirement."

Well, the tooling company, the mold-building company has not been paid. At PPAP approval, the 60-days terms start so now it has gone from WIP into receivables, and they may get financing on that, 80 percent typically. So it can take up to 18 months. Progress payments do not exist within domestic auto manufacturers. We surveyed this recently among new domestic auto makers. There still are progress payments in tooling in some cases, although they are starting to change that. They are becoming more like General Motors, Chrysler, and Ford.

So it is a huge problem. The smallest companies are financing tooling and assembly machines.

Senator MERKLEY. That is helpful and I appreciate that. Actually, I have one more question, if I can.

One of you mentioned—Mr. Haffely, I think it was you—that instead of looking at revenue flows, we should be looking a little bit more at—I thought I understood you to say backlogs, and I assume by that you meant backlogged orders?

Mr. HAFFELY. Yes, sir. Actually, the criteria for the SBA is cash flow and analyzing cash flow to ensure that the loan can be paid back from cash flow.

What I am suggesting is in the current economic situation, that is an almost impossible criteria for today's small companies, small manufacturers. So if we looked at—and I do not know the right things. But, I mean, I think it is a mix of—and it is like the equity companies when they are analyzing your company for investment. They are looking at the same things. They are looking at your backlogs. They are looking at your history of backlogs. They are looking at your assets. They are looking at your employment levels, what is your employment level doing. And they look at historical profitability and they compare that to the future situation for the company.

Senator MERKLEY. So I would have assumed that during this downturn, the number of backlogged orders would have dropped dramatically. Am I correct about that?

Mr. HAFFELY. Yes. I stated earlier for the AMT companies, their backlogs are running 40 to 70 percent lower, but that 30 to 60 percent backlog they still have requires credit. And so that is what I am talking about them looking at.

I mean, we would love to be at 100 percent and looking at the larger number, of course, but we still need—they still can look at those backlogs. That still requires the capitalization financing.

Senator MERKLEY. Thank you very much. I appreciate it.

Senator BROWN. Senator Merkley, thank you. General Farrell, thank you; Mr. Haffely, thank you; Mr. Gaskin, thank you very much.

The Subcommittee record will remain open for 7 days. If there is additional information or additional comments you want to make to the Subcommittee, certainly feel free to be in touch with us. Our Members, of course, also have 7 days to respond. If there would be written questions to you, we would ask you if any Members send you written questions, any Senators, we would like you to answer those, too.

Thank you again for your testimony and your public service. The Subcommittee is adjourned.

[Whereupon, at 12:26 p.m., the hearing was adjourned.]

[Prepared statements and response to written questions supplied for the record follow:]

PREPARED STATEMENT OF LEO W. GERARD

PRESIDENT,

UNITED STEEL, PAPER AND FORESTRY, RUBBER, MANUFACTURING, ENERGY, ALLIED INDUSTRIAL AND SERVICE WORKERS INTERNATIONAL UNION

MAY 13, 2009

Mr. Chairman. Members of the Subcommittee. It is indeed a pleasure to appear before you on an issue that is vital not only to the future of the members of my union, but to the Nation. I'm Leo Gerard, president of the union, commonly known as the Steelworkers Union, which represents more than 1.2 million active and retired members.

While workers in the steel sector are represented by our union, workers we are extremely proud of, the full name of our union is the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union. Members of our union make products ranging from steel to aluminum to cement to tires to glass to many, many other products. They work in mines, in smelters, in oil refineries and many other industrial operations. But, we also represent nurses, bus drivers, bank workers and university professors who are supported in no small measure by domestic manufacturing. We are the largest industrial union in North America.

Your hearing comes at a very important time. The economic meltdown occurring in the U.S. and the world economy has devastated our manufacturing sector. Capacity utilization in many of our sectors is at levels unseen since the Great Depression. Many of the sectors in which my members work are on the front lines of this economic collapse. When retailers start cutting back, members of the Steelworkers who work in box-making plants feel the cutbacks as producers buy fewer boxes to ship their products. When commerce slows down, the workers in my union who make tires see orders decline as truckers drive fewer miles and buy fewer tires. The list goes on.

Well over 100,000 of the members of my union have either been laid off or face reduced hours as a result of the economic crisis. Their employers have seen orders dry up, and they've seen credit dry up as well. Too many of my members were hit by the subprime crisis not only in terms of the mortgages they took out, but also by the cascading problems that blew the lid off the economy. The harm to working families has been enormous.

Shuttered factories and shattered dreams are what many of my members and, indeed, workers in the manufacturing sector all across this great country face. But, while these problems accelerated at warp speed when the subprime crisis spiraled out of control, the manufacturing sector has been decimated by acts of omission and commission by prior Administrations. There's more than enough blame to go around. Rather than looking backward, however, I'd like to focus my comments today on where we are, and where I think we need to go.

Mr. Chairman, the first question you raised in your letter of invitation is the most important question: Why should Congress care about manufacturing? When I received your invitation, quite frankly, my view was that this is a question that, in past years, would never even need to be asked. But today, after more than 20 years of neglect and even adverse policy pursuits, it's clear to me that, indeed, this is a question that needs to be asked and answered.

Regrettably, we may be the only nation on earth that actually has to ask this question.

Over the last 20 years, or so, we have seen policy makers look to the information economy as the key to our future. Then the Internet bubble burst and they realized that not every student will be able to become a software programmer or Internet Web site developer. We have seen so-called "experts" say that the future is the service economy; that we provide the best and most competitive services in the world. Then, the economy came crashing down and the financial services sector finds itself on the wrong side of that optimism as we are going through fundamental questioning as to what the future of the financial sector should be and as the top management of our "best and brightest" financial institutions find themselves ridiculed for their excesses.

Manufacturing is a source of strength. Economic strength. Community strength. And, indeed, military strength.

Manufacturing provides millions of jobs in our economy. American manufacturing, prior to the downturn, directly employed 14 million Americans and accounts for 8 million additional jobs in other sectors. It is the single largest economic sector contributing to our economy. Our manufacturing sector is responsible for two-thirds of research and development investment in the U.S. and almost 80 percent of all patents that have been filed come from the sector. Manufacturing is a tremendous engine of growth.

Manufacturing is also key to community strength. Unlike service sector jobs that can migrate virtually anywhere, the enormous investments in plant and equipment that many of manufacturers make ensure that these companies are the bedrock of their communities. Michigan is known for autos. Pennsylvania for steel. Ohio for auto parts, glass, and rubber. The list goes on. These industries, these companies, have helped shape the communities they operate in and the lives of the workers that are employed there. Generations of workers have followed previous generations in working at these great industrial companies. They've created millions and millions of family and community supporting jobs. Manufacturing jobs pay, 40 percent or more in wages than other jobs in our economy.

America's standing in the world is, first and foremost, a tribute to our values of freedom and democracy. America is still a great beacon of hope.

But, America's values and vision have been backed up by our military might. Our willingness to stand up to injustice. Manufacturing is key to our military strength. In the first and second world wars, our ability to supply our troops and, often, our allies, with the weapons and the wherewithal to defeat aggression was the deciding factor. On today's battlefields, our high tech weaponry has been the deciding factor in many battles. Aggressors know that the power of our military is unmatched.

But all of this is increasingly at risk. Our economic strength has been eroded by those who have blindly worshiped at the altar of free trade and have traded away our manufacturing base. These free trade ideologues measure the success of our trade policies by the number of agreements they can negotiate, rather than the results they produce for our people.

Our market has been flooded, all too often, with products resulting from unfair and predatory trade practices. Subsidies. Preferential government policies. Mercantilist development strategies.

The result has been factory after factory that have either downsized, or shut completely. The steel crisis of the late '90s and early part of this decade left the steel sector devastated. Today's auto crisis will potentially lead to dozens of assembly plants and suppliers shutting down.

The result has been not only a continuing decline in manufacturing jobs here in America, but increased off-shoring and outsourcing of production. While many once viewed the production of high technology products as a bright star on the economic horizon, we now run a trade deficit in advanced technology products of tens of billions of dollars. And, our overall trade deficit in goods has grown year-after-year and is a significant drag on economic growth and a sign of increasing economic weakness and dependence. We're buying billions more in products from overseas than we make here at home, driving up our trade deficit and our borrowing costs. China, for example, now holds hundreds of billions of U.S. dollar-denominated securities.

More and more companies are setting up research and development facilities overseas to be closer to the production operations they've set up abroad. As that happens, the lifeblood of our economy continually drains away.

And, if that weren't enough, our national strength, our military security, is increasingly at risk. We no longer have the domestic capacity to make all the ammunition for our troops and law enforcement needs. Replacement parts for the military are harder to come by as the skills necessary to service older equipment—the machining and other skills—are dwindling. The military testified that our Nation was at risk of having to buy propellant for the Hellfire missile from China because there was no longer a domestic supplier. And now, we find that the globalization of the supply chain for computer equipment may have contributed to incursions into our defense contractors and government computer systems.

So, does manufacturing matter? The question, once again, shouldn't even have to be asked. But, yes, manufacturing matters and it's time that we look at policies to address the challenges confronting this vital sector.

While some small manufacturers may be able to rely on self-generated cash to be able to fund investments in existing operations as well as new plant and equipment, that is far from the norm. Many of the investments required to maintain and increase operations require credit to fuel the company's ongoing and future needs. Credit is the lifeblood of the manufacturing sector and when credit dries up or becomes prohibitively expensive, its impact can be felt throughout the economy.

Look at the collateral damage that has hit the manufacturing sector from the subprime crisis. As banks looked to shore up their balance sheets to address declining asset values in the home mortgage portfolios, they began to limit credit to other sectors, like manufacturing. As credit availability and terms got worse, operations began to suffer. First consumers—both commercial and private—felt the pain, then the shockwave reverberated throughout the economy.

Manufacturers saw credit terms get stricter and had to tighten their belts. Their suppliers felt the impact. The entire supply chain started to suffer. One only has to remember that auto parts suppliers were looking to guarantee $15 billion in receivables they had with the Big Three as a way to protect their operations.

There is a clear correlation between credit availability and terms, and the growth of manufacturing and its employment levels.

There are more members of my union whose jobs are affected by the current crisis in the auto industry than are in the United Auto Workers union. Virtually every car has six pieces of glass, five tires, hundreds of pounds of steel and other metal and many other parts and components that are produced by the members of my union.

So, when the auto companies sneeze, my members are at risk of getting pneumonia. When construction slows, there is less demand for steel, for cement, for glass, and many other commodities which my members produce.

Supply chains are intricately intertwined with the production of end products. So, when credit restrictions hit at any level—ordinary consumers or commercial entities—the impact can be devastating.

Right now, credit is still exceptionally tight for manufacturers. I've talked to companies that have had to cut back dramatically on spending plans because they can't afford credit, and if they can find it, at rates approaching 18 and 20 percent for some. Some employers have told me that the credit markets, when they open, have been doing so only for very short windows. Company after company has seen their credit ratings downgraded thereby forcing their borrowing costs up.

Thirty companies have filed for Chapter 11 bankruptcy protection since January. Seven companies have gone directly to Chapter 7. The economic crisis has forced these companies into bankruptcy and the dramatic freeze in the credit markets has meant that those companies that went directly to Chapter 7 couldn't find debtor-in-possession financing.

Too many financial institutions that had an inflow of capital from the government used it to simply shore up their own balance sheets without helping to strengthen the economy as a whole. They sat on their funds, refusing to reignite economic growth by opening up their credit operations.

And, let's recognize the unique problem that faces many manufacturers who produce globally competitive products. You don't simply flip a switch and bring a blast furnace back online once it has shut down. A company needs to know that its order book will start to fill again if it's going to be able to access the credit markets to resume operations. Our competitors—China, Russia, and many others are just waiting on the sidelines to dump products into our markets to gain market share. Their willingness to do whatever it takes—even resorting to subsidies and other unfair and predatory trade and pricing practices—means that some of our companies may not be able to increase production in the short-term. And, if credit doesn't begin flowing more freely and markets begin operating fairly, they may never come back.

Fewer and fewer companies are now triple-A rated. Every downgrade increases borrowing costs, if capital is, in fact, available. Small and medium-sized firms are heaviest hit, but the anemic credit markets have hurt everyone.

Policy Options

Mr. Chairman. The needs of the manufacturing sector are broad and deep. There is no one silver bullet. Just as manufacturing supply chains are increasingly intertwined, so are the policy issues that confront manufacturers. Health care policy. Pensions. Trade. Education and skills. Labor policy. Tax policy. Banking and credit policy. There are very few issues confronting you and your fellow legislators whose resolution does not have an impact on our Nation's manufacturing sector.

But, let me start with some things that need to be done quickly if we are to stabilize the sector and see it begin to grow again. Restoring growth in the manufacturing sector is vital to reigniting economic growth in this country.

Let me first make an important point. We all travel on planes regularly and probably no longer listen to the safety instructions the flight attendants give at the start of every flight. The other day, however, I stopped to listen for a moment. During the flight attendant's comments she said, "if the cabin pressure drops, oxygen masks will drop. Before helping those who may need assistance, put your own mask on first."

That's what we have to do here in America. If we are able to help the world economy, we first have to help ourselves. A strong America leads to a stronger world. We can no longer be the economy of first resort where other countries can send their products. World demand and supply needs to be in better balance in the future. But, if we fail to provide oxygen to the U.S. economy, it's hard to see any other economy surviving the crisis we face.

Credit for the manufacturing sector is oxygen to our economy. We've got to provide more credit at reasonable rates if we're going to succeed. The financial injections our government has made into the economy have stabilized some financial firms. But, too many of these firms have not restored credit operations and too many have spent more time worrying about how much their CEOs and senior management should be paid than on reviving the economy.

This isn't just limited to the banks and financial institutions. A press story recently related how some firms were refusing to participate in government support programs because of the potential limits on their own pay. They were seeking other sources of credit, at far higher rates, so that their own pockets wouldn't be affected. The victims were the workers and, indeed, the shareholders. This should be subject to legal challenge.

We need to restore demand in this country. The stimulus package was a good start. That law, as you know Mr. Chairman, since you were one of the leaders, included provisions to promote Buy America policies. This provision was vital, but it must be followed up with strong implementation actions at the State and local level and transparency at all levels. Already the Steelworkers have led efforts across the country that has led to hundreds of State and local resolutions supporting procurement policies that source domestically, whenever possible. We also need to urge the Administration to implement the law in a way that furthers Congressional intent. I'm troubled by how they have drafted the interim regulations, including their definition of manufactured good, and how they have failed to adequately ensure that the waiver request process is transparent, so that the public can determine how their tax dollars are being spent.

Credit must be more readily available to get companies that have had to declare bankruptcy to resume operations and to become profitable again. And, we need to make sure that it's available so that more companies don't go straight into liquidation.

Mr. Chairman, we also need a trade policy that works for working Americans. Too many companies and workers have lost faith in their government's willingness to enforce the laws we have on the books. Imports still flood our markets and, as I said before, if we're going to bring production back online, much less invest in growth for the future, companies have to have confidence that they're going to be able to get an adequate return on their investments. The cost of credit is one thing, and, indeed, it's in part, a function of our trade policies. But without substantial changes in the direction of our Nation's trade policies, we're going to continue to see devastation in our manufacturing sector.

We must also recognize that our economic strength and our national strength are intertwined.

We also need to get our auto policy right. We must not pursue a policy of trying to downsize and outsource to prosperity. That's a recipe for disaster. It will only result in downsizing the American dream.

Conclusion

Mr. Chairman, I want to thank you and the Members of the Subcommittee for holding this important hearing. I know that the challenges our Nation faces are great, and the solutions will not always come easily. But, we cannot afford not to act. The members of my union stand ready to work with you and others to restore the American Dream.

PREPARED STATEMENT OF DAVID MARCHICK

MANAGING DIRECTOR,
THE CARLYLE GROUP

MAY 13, 2009

Mr. Chairman and Members of the Subcommittee: Thank you for the opportunity to testify today on the impact of the financial crisis on manufacturing. A healthy manufacturing base is essential for our long term economic position, and no sector has been hit harder in this downturn than the industrial and manufacturing sector. I am also pleased to testify alongside Leo Gerard, President of the United Steel Workers (USW), with whom we have worked very closely on a variety of investments and issues.

Carlyle and Manufacturing

The Carlyle Group is one of the world's largest private equity firms, with $85.5 billion under management and current investments in around 260 companies around the world. Our core business is investing in small, medium, and large companies, improving their performance, and providing attractive returns to our investors, the largest group of which are public pension funds in the United States.

Over Carlyle's 22-year history, we have been a significant investor in the U.S. manufacturing sector because of our confidence in the creativity, vibrancy, and dynamism of our Nation's industrial base and because American workers are the most productive in the world. More specifically, we have been a significant investor in the aerospace, automotive and transportation, consumer, chemicals, building products, metals, and technology sectors. Today, we have more than $9 billion of equity invested in more than two dozen companies that manufacture products in the United States ranging from aircraft components to semiconductors to auto parts. We are also proud to be a significant investor in Ohio, where two of our companies, Veyance Technologies and John Maneely Company, employ thousands of workers manufacturing conveyer belts for coal mines, tracks for armored tanks and steel pipe and tube for the construction and energy industries. Approximately 80 percent of the employees at John Maneely and two-thirds of the employees at Veyance are members of industrial unions, primarily the USW.

Carlyle's strategy is to invest in companies with leadership positions in their product areas, back management teams with vision and operational discipline, and invest in growth. We often will acquire noncore divisions of companies from large multinationals and, with a singular focus on their product areas, improve and expand the companies. And, contrary to popular belief, we often hold our investments for many years before we are satisfied that our work with management has achieved the desired results.

For example, we acquired Veyance from Goodyear, Allison Transmission from General Motors, and Hertz from Ford. Allison, for example, is the global leader in automatic transmission for Class V and larger trucks, with a heavy manufacturing presence in Indiana. When we and Onex, another private equity firm, acquired Allison from GM in 2007, truck transmissions were far from General Motor's top priority. We and Onex are working closely with Allison's management to enhance research and development, including with respect to hybrid transmissions, expand products offerings, and increase exports from Indiana to Asia. We are also proud that, through close collaboration with the United Auto Workers (UAW), Allison's management has been able to reduce labor grievances from 2,400 at the time of the acquisition to less than 60 today.

In the last 12 months, we sold two industrial companies, both of which exemplify the work we pursue on a daily basis.

Carlyle acquired a Kentucky-based company called Kuhlman Electric in October 1999. Kuhlman designs, manufactures, and markets a broad range of transformers for electric utility distribution systems that serve commercial, industrial, and residential customers. We acquired Kuhlman when the industry was strong and the company's sales and revenue were on the rise. Shortly after the acquisition, Kuhlman was hit by one of the worst-ever downturns in the utility industry caused by, among other things, the California energy crisis and the dislocation in the markets related to Enron. Revenue dropped for four consecutive years, including 17 percent in 2002 alone. Employment and sales volumes also declined. By December 2003, Carlyle had written down the value of this investment to zero. But rather than throw in the towel, we and Kuhlman's management and workers redoubled our efforts to make this company a success. Because the value of the investment was written down to zero, Carlyle did not seek additional investment from its investors. Instead, partners at Carlyle invested their own money to keep Kuhlman afloat, enabling the company to retool and restructure. By 2007, sales had increased and employment was up 25 percent from the time we acquired Kuhlman. In August 2008, after a 9-year ownership period, global power company ABB acquired Kuhlman.

Another example is AxleTech, a medium-sized, Michigan-based manufacturer of heavy axles. We acquired Axletech in September 2005 and sold the company in December 2008. In the more than 3 years we owned Axletech, the company expanded product offerings and designed stronger, more durable suspension systems and components for light, medium, and heavy tactical and combat vehicles, including the MRAPs that our soldiers use in Iraq. During our ownership period, revenue and employment more than doubled, and the number of UAW-affiliated employees increased by almost 50 percent. Although small, Axletech may be one of the only UAW-affiliated companies that has created, and not lost, jobs in the last 5 years.

These are two success stories. And, according to a recent study by economist Robert Shapiro, they are typical of the performance of manufacturing firms when private equity firms take stakes in them. Sales and capital expenditures, on average, grow faster than the national average. Unfortunately, the financial crisis has had a devastating impact on parts of the manufacturing sector, and some of our companies have been negatively affected.

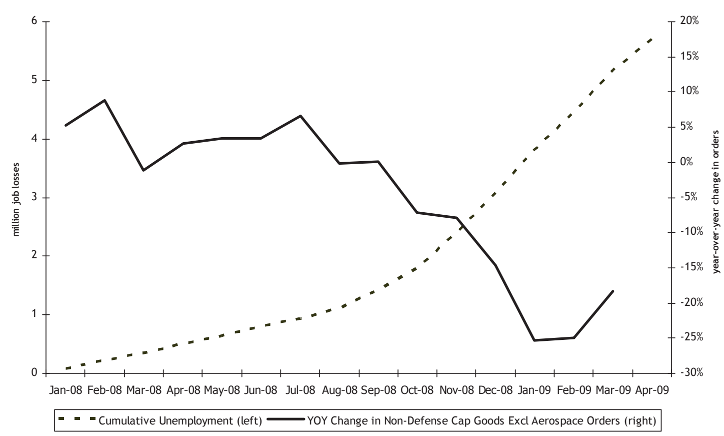
The State of the U.S. Manufacturing Sector

Manufacturing is the bedrock of our Nation's gross domestic product, producing approximately $1.40 of additional economic activity for every $1 of direct spending in the sector—more than all other U.S. industries. The manufacturing sector has driven productivity growth in the United States, and manufacturing workers make on average 41 percent more in wages than the rest of the workforce. Unfortunately, the manufacturing sector, particularly in the Midwest, has been the hardest hit by the financial and economic crisis.

Credit is the lifeblood of the manufacturing economy, and when the credit crisis hit, the industrial sector was immediately affected. Allison provides a good example. Free and available credit is critical throughout the manufacturing and distribution chain in the industrial truck sector. When Allison sells a transmission to an Original Equipment Manufacturer (OEM), the OEM typically buys Allison's products for inventory using credit. When the OEM sells a bus or truck to a dealer or distributor, and when a dealer or distributor sells a truck or bus to an end user, those transactions also require the use of credit.

When the credit crisis hit, it negatively affected each stage in the manufacturing and sales process. The sector literally fell off a cliff. When one part of the manufacturing sector is hit, it flows through other parts of the economy, creating a vicious cycle. Ultimately, this results in lost sales, lower demand and higher unemployment. The chart below shows what seems to be a clear correlation between the drop in manufacturing orders and increase in unemployment. Importantly, the uptick in the bottom right of the chart does not indicate a return to growth but rather a reduction of the rate of contraction, a decline of well over 15 percent in year-over-year orders.

Correlation between U.S. Manufacturing Activity and Job Losses

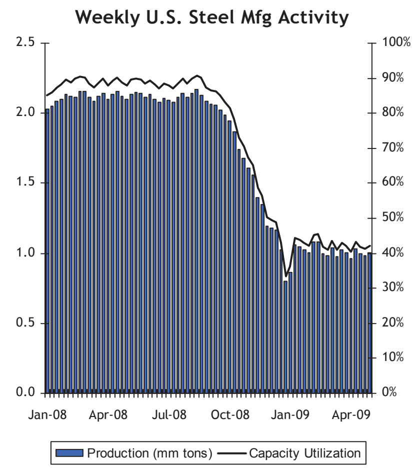


Source: Department of Labor, Department of Census.

Widely available data shows the staggering hit the manufacturing sector has experienced. The downturn in some parts of the manufacturing economy has been depression-like, not recession-like. A few examples:

- Steel production dropped by more than 50 percent between August 2008 and January 2009. Today, the steel sector is operating at slightly more than 40 percent of capacity. Only 8 of the 28 blast furnaces in the United States are in production.
- A staggering data point: Through the beginning of May, the U.S. steel industry is producing at a rate last seen in 1939.
- After falling 34 percent between 2005 and 2007, private residential construction dropped by another 33 percent in 2008—and is now at a run-rate 44 percent below that level. This has decimated manufacturers of building products.

- Suppliers to the Big 3 have seen drops in revenues in excess of 50 percent, and the impact of this decline in demand has created ripple effects throughout their supply chains.



Source: American Iron & Steel Institute.

The combination of dramatic drops in demand with lack of availability of credit has placed small, medium, and large manufacturing companies under severe stress. In these circumstances, managers stop focusing on profits and instead focus on liquidity and survival. Restructuring under Chapter 11 is an undesirable option today because of the lack of debtor-in-possession (DIP) financing. In normal times, companies use Chapter 11 to reduce debt, restructure operations, and lower costs. DIP lenders gain a preferred, senior status when lending into a Chapter 11 process. Today, however, DIP financing is scarce. As a result, filing under Chapter 11 could easily result in Chapter 7 liquidation.

There has been a significant amount of discussion in recent weeks of the "glimmers of hope" in the economy. On the positive side of the ledger, it does appear that the free fall has stopped. Consumer confidence is inching forward. The ISM index, a commonly used barometer of manufacturing activity, suggests that the rate of decline is slowing. And housing inventory in certain parts of the country has dropped. The Federal Reserve's extraordinary intervention in credit markets has freed credit up for the most credit worthy borrowers.

Although there have been some positive signs, the economy is still contracting. Whereas some parts of the economy may be at or near bottom, other parts of the economy are just beginning their downward cycle. The aerospace industry, for example, typically lags the rest of the economy both going into downward cycles and coming out of them. The foreclosure crisis shows no signs of abatement. *The Wall Street Journal* reported on May 6 that the downturn in home prices has left nearly 30 percent of U.S. homeowners owing more on a mortgage than their homes are worth. Until Americans across the country feel secure in their jobs and their homes, they won't begin spending again.

We would caution against reading one or 2 months of data and creating too much optimism. We hope that we will turn to growth again soon, but it is too early to tell, in our view. Credit markets remain severely compromised. Bank lending remains anemic, particularly to small- and medium-sized companies. The nonbank credit system is moribund. Unemployment will likely increase as consumers continue to be very cautious in their spending patterns. Finally, even if we are at the bottom, it will take years to climb out of the hole.

Policy Options

I would encourage Congress to avoid a sense of complacency and continue to support aggressive policy efforts by the Administration and the Federal Reserve.

The Administration, Federal Reserve, FDIC, and the Congress have been active, creative, and aggressive in their policy responses to the crisis. Secretary Geithner and his team deserve credit for not only being designing strong policy responses, but also articulating a conceptual framework to attack the problems with the economy: increasing aggregate demand; restoring credit markets; and mitigating problems in the housing sector. Without these actions, it is hard to imagine the carnage in the U.S. economy. A strong policy response is essential for the resumption of market confidence. And strong policy actions to strengthen credit markets are essential for the resumption of growth in the manufacturing sector.

Congress should be commended for increasing spending on infrastructure projects as part of the stimulus package earlier this year. But now the real work begins: deploying the $311 billion in Federal, State, and local spending in a way that jump-starts the economy and creates jobs. The key to success of the stimulus is maximizing the economic activity generated by each tax dollar spent. The more money spent in the manufacturing sector, the greater the economic benefit. That's why it's so important to concentrate the expenditures on products with significant domestic value added, which will more quickly generate more jobs and economic benefits.

One other point on the stimulus: unless the credit markets are repaired, the benefits of the stimulus package could be blunted. Unfortunately, in some cases, suppliers that want to fill orders related to stimulus demand don't have access to working capital necessary to buy parts and equipment to fill those orders.

The Administration and Federal Reserve's efforts to jumpstart credit markets have been important and well designed. For example, the Term Asset-Backed Securities Loan Facility (TALF) seeks to bring liquidity to the securitization market, the once large but now largely closed source of funding for residential mortgages, commercial real estate, small businesses, and large corporations. Year to date Asset Back Securities (ABS) financings are way down, and this financing source is critical for credit for consumers, businesses, and manufacturers.

Treasury and the Federal Reserve should be applauded for expanding the asset classes eligible for TALF funding to include commercial real estate, auto fleets, and dealer floor plans. At the same time, while it is critical that the Federal Reserve limit its risk exposure, potential beneficiaries, including auto dealers, may not be able to benefit from these securitizations because they may not be in a position to qualify for or support a AAA rating, especially because monoline insurance enhancement is no longer available in this market. Policymakers should consider expanding the credit criteria for securities that qualify for TALF support.

One important area of future focus for Treasury and the Federal Reserve will be to ensure that the corporate loan market remains vibrant. Today, only six large publicly traded companies are rated AAA, showing how difficult it is to achieve AAA rating. Small, medium, and large manufacturing companies, for example, lack access to term loans, working capital facilities and the bond market. This means that they do not have financing to undertake capital improvements, to fund research and development projects, or to fund new inventories. Moreover, given the staggering amount of new loans that were issued in the 2005–2007 that will come due in 2010–2014, it will be essential that credit markets can facilitate refinancing of this debt. Hopefully, credit markets will rebound in time, but if not, the Federal Reserve and Treasury will need to find ways to support the corporate loan market to avoid massive bankruptcies.

Allow me to flag three other areas of potential policy actions by the Treasury and Federal Reserve, which hopefully this Subcommittee will support.

First, once the economy starts to grow, businesses will need to increase inventory. To do so, they will need access to working capital. Today, companies' access to working capital loan facilities is very limited. I would encourage this Subcommittee to explore ways to invigorate this part of the credit market, which will be essential for recovery. The program recently launched by the Administration to insure receivables to the auto makers provides a good starting point.

Second, I would encourage the Committee to explore ways for Federal Reserve and Treasury programs to facilitate franchisee financing. Small business is a powerful and important driver of economic expansion. The relationship between lending, small business jobs and economic output can be summed up by the following: For every million dollars of lending obtained by small businesses, 34.1 jobs are created and $3.6 million in annual total economic output is realized. We know this through our investment in Dunkin Brands, which last year created 762 new Dunkin Donut and 124 Baskin Robbins stores in the U.S, resulting in more than 20,000 new jobs. A new franchise creates construction jobs, demand for new equipment and material, and employs dozens of workers. The loan market for franchisees, unfortunately, is very weak, and many franchisees are either not eligible for SBA loans or find the process too bureaucratic and slow. As a result of the credit crisis, many of the traditional lenders have pulled out of the market. Making capital available to small businesses and franchisees is critical to growing local economies.

Third, the number of bankruptcies will inevitably increase this year. The absence of an active debtor-in-possession financing market will cause companies that otherwise would be strong candidates for restructuring to instead liquidate. Without an active DIP financing market, unemployment will continue to soar and companies that should be restructured will cease to exist. I would encourage the Subcommittee to work with the Treasury and Federal Reserve to explore whether policy actions could help bring liquidity to the DIP financing market.

Finally, a few words on General Motors. It is hard to overestimate the importance of the auto sector to the U.S. economy. Virtually every manufacturer touches the auto sector in one way or another. Auto suppliers are already under distress, and the lack of orders and lack of credit has virtually eliminated any cushion. If not handled properly, a GM bankruptcy could be the "Lehman Brothers" of the manufacturing sector given the sensitivity of the automotive supply chain. It could affect suppliers outside the auto sector, including commercial vehicle, heavy equipment, and even military suppliers. If GM is indeed required to file under Chapter 11 reorganization, it will be critical that the process be efficient, quick, and transparent. It will be essential that GM honor its commitments to suppliers and business partners. A GM filing with any type of meaningful trade payment delays or impairments could push the next group of troubled suppliers into the abyss. And, as Leo Gerard has said, it is important that GM maintain as much manufacturing as possible in North America. I also want to compliment you, Mr. Chairman, on your work with Senator Stabenow on the "cash for clunkers" legislation, which I encourage the Senate to adopt.

Conclusion

Thank you once again for calling this hearing on the impact of the financial crisis on the manufacturing sector. Unfortunately, as mentioned above, the manufacturing sector has been hit harder than virtually any other sector, and no other sector is more important to the vitality and vibrancy of the U.S. economy. The Congress, Treasury, and Federal Reserve's policy actions have been helpful and important in reducing the impact of the crisis, but additional and broader policy actions will be needed.

One of the hallmarks of the U.S. economy is its resilience. The U.S. economy is more flexible, more diverse, and more dynamic than any other economy in the world. We are experiencing the most difficult economic circumstances of most of our lifetimes, but even in the darkest days, we should be comforted by the fact that we will rebound, retool, and return to growth and prosperity.

PREPARED STATEMENT OF WILLIAM GASKIN

PRESIDENT,

PRECISION METALFORMING ASSOCIATION,

ON BEHALF OF THE PRECISION METALFORMING ASSOCIATION AND NATIONAL TOOLING AND MACHINING ASSOCIATION

MAY 13, 2009

Mr. Chairman, Ranking Member DeMint, Members of the Subcommittee, thank you for the opportunity to testify today. My name is Bill Gaskin, President of the Precision Metalforming Association (PMA) based in Independence, Ohio. We have partnered with the National Tooling and Machining Association (NTMA) in Washington to speak with OneVoice on behalf of small middle-market manufacturers including thousands of manufacturing companies producing stampings, fabrications, machined components, tooling, plastic injection molds, and other products for the defense, aerospace, medical, and automotive industries among many others critical to our national and economic security. Our combined membership totals more than 2,500 companies, located in every State, with average employment between 40 and 100 persons.

Small middle-market manufacturers are being clobbered by the credit crisis and are in serious trouble, especially if they manufacture parts, components, and assemblies for the automotive, residential/commercial construction, appliance, truck, and commercial aircraft industries. This situation impacts hundreds of thousands of jobs, jeopardizes our ability to respond to any military situation, and weakens the manufacturing base in the U.S. Importantly, it also has impacted our ability to innovate, allocate sufficient funds to R&D, and provide growth opportunities for the future. Policy implications for your consideration relate to the need to restore access to credit for middle-market companies, providing stability in the face of unprecedented weakness in the automotive supply chain and other markets. Unless solutions are found, and quickly, there is likely to be a cascade of company failures over the next few months among middle-market manufacturers. The most financially precarious part of the business cycle is when the end of the downturn is reached and cash (or credit) is required to rehire workers and buy raw materials to supply customers with finished product.

Small middle-market manufacturers are bearing the brunt of the current global economic downturn. It has impacted virtually all market sectors in every State. PMA and NTMA members report this is not limited to the automotive industry, but includes aerospace, truck, appliance, construction, off-highway, and most every other market as well. As an example, as travelers fly less, the commercial and private airline industry cuts back on orders and decreases the demand for components and tools. In addition, because our companies have undergone significant diversification in their customer base in the past several years, when one sector of the economy begins a slide, it disrupts the entire supply chain reverberating throughout the economy.

In my more than 30 years in this industry, these times are by far the most dire times I have seen for stampers, roll formers, machining, tooling, and mold-building companies who comprise the thousands of small middle-market suppliers who employ millions of workers around the country. Today, the typical metalforming company has annualized sales which are 35 percent lower than 1 year ago and they have had to eliminate nearly 38 percent of their employees. And it is going to get worse—49 percent report that shipping levels will be down over the next 3 months compared to the last 90 days. Our monthly business conditions report for May, released yesterday, indicated that 39 percent expect that their new orders for products will be lower over the next 3 months than they were over the past 3 months, and only 17 percent think shipments will rise in the next 90 days. In the same survey, 80 percent of metalforming companies reported that their facilities are working on short time or have laid off employees, compared with roughly 20 percent this time last year. It is highly likely that somewhere near 30 percent of these privately held or family owned businesses will not exist 1 year from now, unless the U.S. government takes additional steps to support manufacturers, including taking steps to free up lines of credit to these industries.

To quote a metalworking company with 60 employees that responded to a credit survey this weekend, "No bank currently wants to deal with manufacturing—they are solely about mitigating their risk with their manufacturing clients." This is the reality we face.

Manufacturers across all industries report challenges to their credit health. Of respondents to the survey conducted May 9–11, 2009, 66 percent reported problems in their credit situation with more than half of them (36 percent of the total) experiencing "serious" problems. This includes companies in the medical, agriculture, and appliance sectors along with those supplying the automotive and truck sectors. In addition, more than half are having difficulty accessing credit for day-to-day operations. Our greatest concern is that 72 percent anticipate difficulty securing the credit they need to purchase raw materials and rehire workers as business conditions improve later this year. And more than 70 percent of metalworking companies who need credit to finance capital investments to upgrade their domestic production facilities are unable to obtain the credit they need to do so.

In the current environment, manufacturers who would invest in domestic production and stimulate growth are denied the lines of credit they need to help jumpstart the economy. While the Federal government is investing billions of dollars through the economic stimulus package for construction projects, companies integral to those projects lack the financing they need to supply the stampings, fasteners, tooling, and molds to assemble the bridges, build the equipment, and manufacture fuel-efficient vehicles. If this situation continues, the reality is that our customers will increasingly simply offshore the job to a low-cost country. And we all know that once the job is gone, it will never return. Preservation of our defense industrial base and our ability to manufacture critical supplies for national security needs is essential to our survival. Any disruption in the domestic supply chain can cause a reaction felt throughout our lives.

The Federal government has spent hundreds of billions of dollars extending support to financial institutions, General Motors, Chrysler, and large Tier 1 companies in the automotive supply chain, but the benefits have yet to trickle down to smaller middle-market Tier 2 and Tier 3 suppliers. The Automotive Supplier Support Program is helpful to Tier 1 suppliers of General Motors and Chrysler, but we have seen little benefit to Tier 2 and 3 companies. Of course, any help to the OEMs and Tier 1 suppliers helps our customers and therefore helps us survive, but we cannot continue providing components, tooling, and services to Tier 1 suppliers or vehicle manufacturers if we cannot guarantee or insure payment. In the past, Ford, GM, Chrysler, and others would pay downstream suppliers directly. However, over time, they began to pass payment through the Tier 1 suppliers. Recognizing the dire situation throughout the supply chain, I have heard recent reports of GM again bypassing the Tier 1 and paying the Tier 2 suppliers directly to ensure payment. That temporary Band-Aid cannot work for everyone and the government should play a more direct role.

I believe the Federal government can extend relief to middle-market companies by insuring or guaranteeing receivables of businesses supplying a vehicle manufacturer which receives taxpayer funds. For example, a tooling company could register their purchase order with the government to either guarantee or insure (or reinsure) payment under certain terms. The government, as is the case under current U.S. and Canadian programs, could charge downstream suppliers a 2 or 3 percent fee depending on the service provided. Under this scenario, the Federal government would make money, Tier 2 and 3 suppliers could continue operations providing tooling and components with the confidence that we will receive payment within a reasonable amount of time. This would also provide a significant comfort level to our creditors who would have assurance that we will remain viable.

The entire automotive supply chain tooling payment process has been dysfunctional for some time, and NTMA, PMA, and others are working with OEMs and others on long-term plans to fix the situation. However, in the short term, we need relief and one key element is for the government to provide a "safe passage" mechanism of our receivables through higher tier suppliers in the event of bankruptcy or disruption in the supply chain. There is no question the Federal government has much more leverage and resources to collect on outstanding invoices than the typical tool and die manufacturer with 50 to 100 employees.

Over the years, the domestic automotive industry has adopted a model for tooling payment that is unsustainable over the long term. When credit was easy, we were willing to live with it, but in the current environment we cannot continue because we can no longer secure credit for operations. We are working with the automobile manufacturers, Tier 1 suppliers, the White House Automotive Task Force and key players on both sides of the U.S.–Canadian border to find long-term solutions. In our meetings, we are not only focusing on the payment aspects of our industry but also trying to improve tooling design and part design to make our domestic industry more competitive. It is critical that we all partner together—industry, government, and labor—to help us emerge from the current situation more globally competitive and efficient.

Credit lines in our industry, which currently average 14 percent of annual sales, are largely based on a formula that values 80 percent of current trade receivables and 50 percent of the value of raw material and finished goods. In today's environment, receivables are discounted even more severely. This limits the ability of the business to invest in profitable growth areas due to lack of resources. Many lenders are severely restricting lines of credit if a manufacturer serves a Tier 1 automotive supplier. In addition, our members report that their ability to purchase credit insurance on accounts receivables is also drastically reduced. In some cases insurance brokers are only backing 10 percent of a Tier 1 automotive receivable, whereas the same company was typically able to secure 70–80 percent in the past. The lack of a market for guaranteed receivables further exposes small middle-market manufacturers to financial strain.

On several occasions we have reached out to our memberships and educated them on government support programs such as the newly modified Small Business Administration's 7(a) and 504 loan programs. Yesterday, I heard from one member in Southern California who had applied for an SBA loan from three banks, including Omni National and Wells Fargo. Unfortunately, the company was unable to secure any help from SBA, as the bank's underwriting standards were too strict to approve the loan.

Personal guarantees required by SBA loans are also a problem, as they are required on 100 percent of the loans. Yet in the non-SBA market, our members report that personal guarantees are required only about 40 percent of the time. Understandably, in today's environment, many business owners are too concerned about losing their family home to meet the personal guarantee requirements under the 7(a) program. Also in today's environment, if your business is connected with the automotive industry, you are highly unlikely to be able to qualify for SBA financing despite the government providing a 90 percent backing of the loan. Last Thursday, at a PMA automotive parts suppliers conference in Novi, Michigan, a representative of the SBA briefed the audience about SBA financing opportunities. In response to a question about whether the speaker was aware of ANY automotive supplier who had been approved by a Detroit-area bank for an SBA loan, the speaker indicated that he was not aware of a single loan being approved.

Chairman Brown, I applaud your efforts to highlight the credit crisis in manufacturing industries. I urge the Federal government and this Congress to take a ground-up approach. Rather than focusing almost exclusively on large financial institutions and the largest manufacturing companies, policymakers must support the small middle-market companies that are the backbone of our economy. This is not an Ohio problem. This is not an automotive problem. Access to credit and preservation of our domestic manufacturing base is a global problem that requires an American-led solution and it starts on Main Street, not Wall Street.

Thank you for the opportunity to testify before you today.

PREPARED STATEMENT OF EUGENE R. HAFFELY, JR.

CHIEF OPERATING OFFICER,

ASSEMBLY & TEST WORLDWIDE, INC.,

ON BEHALF OF THE ASSOCIATION OF MAUNUFACTURING TECHNOLOGY

MAY 13, 2009

Introduction

Thank you for holding this hearing today and for giving me the opportunity to be here and participate.

I am Chief Operating Officer of Assembly & Test Worldwide, Inc., (ATW) headquartered in Dayton, Ohio. ATW is an American-owned company that designs and manufactures assembly and test equipment for global manufacturers. In 2008, our customer base was 60 percent in the automotive and heavy truck industries. We are a critical supplier of engineered special equipment which enables the production of fuel efficient, state-of-the-art automobile engines, fuel injectors, transmissions, and drive modules. We also provide custom designed turnkey automation for the production of medical devices, pharmaceutical packaging, solar panels, and various defense industry related products. Due to the expected decline in mainly our automotive business, we have been forced to reduce our workforce by over 25 percent to 550 U.S. employees.

I serve on the Board of Directors of AMT—The Association For Manufacturing Technology. Pursuant to House Rule XI, I am obliged to report that AMT received $225,100 from the Commerce Department's Market Development Cooperator Program for a technical center in China—$207,254 of which was disbursed in 2005 and $17,846 in 2006.

AMT represents more than 400 manufacturing technology providers located throughout the United States—including almost the entire universe of machine tool builders who manufacture in America. Our members cover the full range of engineering and manufacturing capabilities—from product innovation, design, assembly, and installation services for a diverse range of technologies including automation, material cutting and forming, to workholding, cutting tools, assembly, inspection, and testing, and computer communications and control systems. Our employees include engineers, tool and die makers, mechanics, electricians, and of course the many professionals in administrative jobs. The overwhelming majority of our members are small businesses—more than half have revenues under $10 million—but what we contribute has a large impact on our country's ability to manufacture competitively and hence on the economy as well.

Manufacturing technology provides the innovative tools that enable production of all manufactured goods. These master tools of industry magnify the effort of individual workers and give an industrial nation the power to turn raw materials into the affordable, quality goods essential to today's society. In short, we play a significant role in making modern life in an industrialized society possible.

Manufacturing technology provides the productive tools that power a growing, stable economy and a rising standard of living. We represent an industry with a proud history that dates back to the founding of our country, and today we are recognized worldwide for the advanced manufacturing technology we produce for a wide range of industries. These tools make possible modern communications, affordable agricultural products, efficient transportation, innovative medical procedures, space exploration, and the everyday conveniences we take for granted. If we are to provide medical care to all Americans, a strong creative manufacturing base will assist this noble objective by supplying creative innovative solutions and tools that will reduce our medical costs. Our products also create the means to provide a strong and technologically sophisticated national defense.

The manufacturing technology industry is critical to building and maintaining the strong and dependable defense industrial base that enables our military to protect our citizens and our ideals around the world. Mr. Chairman, I am here to tell you that if nothing is done to get credit flowing again to America's manufacturers, we lose more than our ability to manufacture automobiles or washing machines in this country. We lose our ability to create the new innovative defense systems that provide an advantage over our Nation's adversaries throughout the world. We also risk dependence on foreign sources for our defense needs. I am not talking about merely producing inexpensive and convenient goods for everyday life. I am talking about an industry that is essential to America's national security.

Mr. Chairman, as crucial and necessary a part of our American manufacturing sector as we are, our industry is in danger of not surviving the current economic chaos, and the major reason is because the lack of credit is endangering the continued existence of virtually all of our companies. Although the Treasury Department's Troubled Assets Relief Program (TARP) is focused on addressing the credit crisis and getting money flowing through the economy again, there is still no evidence that this is happening in the industrial sector in any significant way. It certainly is not apparent to the members of the AMT or to the several hundred thousand small businesses that rely on their products to remain in business!

The Credit Crisis

Over the past few decades, AMT members have faced significantly increased competition from abroad, and they have seen a decline in their domestic market share. But our industry has weathered every storm and emerged even stronger. The depth of this current economic crisis, however, is threatening its very survival. In ATW's case, revenues are projected to decline approximately 40 percent in 2009 primarily due to weakness in the automotive sector. During the banking crisis last fall, over $20 million of existing orders were cancelled by the U.S. automotive companies and their suppliers due to their uncertain futures. This has never occurred in the history of our company.

The meltdown of the financial services sector has frozen credit to companies like mine. I have been involved for 30 years in the innovation application of manufacturing technology toward the objective of increasing the reliability and efficiency of manufacturing processes. In 2008, we were a profitable business with $150 million in revenue. We can operate with minimal losses in this difficult environment and will remain a viable company if reasonable credit is available. However, in all my years in business, I have never seen a more difficult time than the present for companies in our industry to obtain the credit necessary to continue to stay in business.

Many companies in the manufacturing technology sector historically have been debt-financed, with some of that debt actually personally guaranteed by the owners themselves. For the last 3 years, however, it has become increasingly difficult to obtain financing for businesses like mine (and many of my customers) because we are small privately owned manufacturing companies and more importantly because of our ties to the automotive industry. As you can imagine, the lending environment has gotten worse rather than better these last months as the automakers struggle to survive and restructure. The overall uncertainty in our economy has caused our customers to take defensive measures, delaying existing production improvement programs and cancelling near term orders. AMT members are reporting a reduction in backlogs of 40–70 percent.

The future holds promise, but an increasing number of banks are reluctant to lend to automotive manufacturing companies whose revenue forecasts are dismal for the next few quarters. ATW has been asked to quote material handling and test equipment for the General Motors (GM) Tier 1 electric vehicle battery suppliers, but we are hesitant due to the exposure to GM. This equipment is critical to developing an electric car platform for the United States.

An AMT survey on the credit crisis conducted earlier this year asked if and how our members are affected by the tightening of credit throughout the financial sector. An overwhelming majority of respondents have experienced a tightening of credit and altered the way they do business as a result. Additionally, most have experienced changes in lending terms, and some reported that banks have cut (or threatened to cut) their lines of credit altogether. Most telling are the comments given by survey respondents in the open-ended question at the end of the survey—comments from company owners across the country painting a profoundly bleak picture of what is really going on in the heart of American manufacturing, in case the grim statistics are not enough evidence that more must be done. I have included those comments with my written statement. (See AMT Credit Survey Comments at *http://www.amtonline.org/amt__items/031209surveycomments.pdf*.)

I appreciate that solving this problem is a hugely complex issue—and I do not presume to give you a simple answer—but I would like to offer suggestions that would help get credit flowing again to companies like those in the manufacturing technology industry.

SBA Loan Programs

The recent global economic collapse has resulted in a severe curtailment in capital spending. Many AMT members have seen a dramatic decrease in orders. Some have suffered through months without a single order. Others have reported that their new orders are off by 70 or 80 percent. That is due not simply to a lack of demand but more significantly to the lack of credit up and down the manufacturing production chain. Although many of us have sought bank loans to stay in business, NO ONE is lending in this environment—NOT EVEN the SBA Preferred Lenders, who must rely on a level of credit scrutiny that many cannot pass due to the unprecedented recent events.

I applaud the Congress for including the Small Business Administration (SBA) and its 7(a) loan program in The American Recovery and Reinvestment Act of 2009 (ARRA). However, higher guarantees and lower fees alone will not enable many small businesses, including many AMT members and customers, to obtain urgently needed funds to stay in business and preserve jobs. The SBA recently reported an increase in 7(a) loan volume since the ARRA was enacted. However, even with 90 percent guarantees and no borrower fees, our members have not seen an increase in SBA lending. One reason is that it is impossible for many AMT members to qualify for an SBA 7(a) loan in this current recession. Companies cannot obtain an SBA loan if they do not have sufficient cash flow in these trying times.

SBA loan regulations state, "Repayment ability from the cash flow of the business is a primary consideration in the SBA loan decision process." Given the extreme downturn in the economy, most small businesses have suffered a dramatic decline in business and will not, in the near term, be able to meet normal credit standards. We must reprioritize the metrics upon which 7(a) loan decisions are made away from cash flow as the primary consideration. I would suggest alternative but equally valid criteria for judging credit worthiness of a prospective borrower in the current economic environment such as: backlogs, assets, employment levels, and historic performance.

In addition to changing the metrics for SBA 7(a) loans, the Administration should move quickly to fulfill its pledge to purchase up to $15 billion in SBA secured assets. The secondary market for these SBA loans is frozen; forcing SBA preferred lenders, which include community banks and credit unions, to keep these loans on their books. This has severely restricted SBA 7(a) lending. The Administration's plan to purchase SBA securities should get banks lending again. However, a mechanism must be in place to ensure that banks increase their 7(a) lending.

Lastly regarding SBA, the House version of the ARRA contained a provision that would allow small businesses, repeatedly turned down for bank credit, to apply directly to the SBA for a loan. The agency would be required to first forward the application to lenders within 100 miles of the applicant's location. If none of these lenders decide to make the loan, the SBA would send the application to participants in the agency's Preferred Lenders program. If these lenders pass, the SBA itself could then originate, underwrite, close, and service the loan. Unfortunately, this provision did not make it into the final bill. I urge Congress to take another look at establishing this type of direct loan program within the SBA.

Title III of The Defense Production Act Loan Guarantees

As I am sure you would agree, Mr. Chairman, our national security depends on a strong manufacturing technology industry. It is at the very foundation of America's defense industrial base—an industry that produces the high technology that America depends upon to maintain its military superiority over potential adversaries.

A bit of history is in order. In 1985, President Ronald Reagan acknowledged our industry's importance when he declared the criticality of certain categories of machine tools under Section 232 of the Trade Act of 1962, authorizing our government to restrict the importation of machine tools for reasons of national security. President Reagan suspended that Section 232 finding after a Voluntary Restraint Arrangement (VRA) was successfully negotiated with Japan and Taiwan. That VRA limited the importation of machine tools into the United States for a period of 5 years so that the domestic industry could be rebuilt and strengthened. President Reagan's decision is one of the very few times in our history that our government has made the decision to restrict imports for national security purposes. It demonstrates how essential our industry is to our national defense.

Unfortunately, the current credit crisis has left many AMT members' very existence extremely precarious. I would argue that it threatens to accomplish what low-cost foreign competition almost did in the 1980s—with even more serious consequences.

For the past 7 months, banks have been denying credit to even the most creditworthy manufacturing technology companies. This lack of bank credit is threatening to drive those companies out of business. America can ill-afford to lose our machine tool industry and other critical parts of the defense industrial base that are now at risk. Without these companies, this country would be forced to rely on foreign sources to provide us the innovative manufacturing solutions the defense industry will require in times of critical need. The Chinese have been a generally reliable part of our peacetime industrial supply chain. But do we really want to be dependent on them—or any other foreign country—for critical products at a time of crisis?

ATW has a highly skilled domestic workforce that contributes to the technological advancement of U.S. and global manufacturing. The failure of our company would negatively impact this country's competitive edge in special equipment design to the benefit of our European and Japanese competitors. Not only that, if the U.S. defense required redeployment of our domestic manufacturing capacity, ATW's expertise as a critical asset would be gone.

The Defense Production Act (DPA) confers on the President the power to mobilize the domestic economy in order to best supply the military in the event of a wartime mobilization. It authorizes the President to direct certain industries to produce vital military products. It also authorizes the President to direct those industries to place military production as a priority over civilian production in order to serve the defense needs of our Nation.

In order to advance America's defense production needs, Title III of the DPA provides for Federal loan guarantees to companies that play an important role in our Nation's defense industrial base—companies, like ATW, that would be important to mobilization efforts if it were necessary to move from a peacetime economy to a wartime economy. The Banking Committee has jurisdiction over the DPA, and I understand that the DPA is up for reauthorization during 2009.

Mr. Chairman, I suggest that this Subcommittee consider increasing the loan guarantee authority under Title III as it considers the DPA's reauthorization, so that credit is available to our defense industrial base companies that are unable to get credit elsewhere in the current economic environment. This program allows assistance to be quickly targeted and precisely applied to defense-related companies, such as those in the manufacturing technology industry, that are in desperate need of bank credit.

I would note, however, that the current Title III guarantee program funding is insufficient to have an effect in this current crisis. Thus, if this Committee decides to authorize Title III once again, it would be necessary to provide significantly greater lending authority. With U.S. Government guarantees under the DPA's Title III, I believe banks in Ohio, and elsewhere around the country, would have the confidence to get credit flowing to manufacturing technology companies and the many other companies who make up the backbone of the defense industrial base. Reauthorization at a higher loan guarantee level would be a step toward protecting America's national security while at the same time saving jobs and small industrial companies that are so important to our economic health.

Conclusion

In his February 24 address to a joint session of Congress, President Obama said that, "the flow of credit is the life blood of our economy." He also noted that, "credit has stopped flowing the way it should. With so much debt and so little confidence, these banks are now fearful of lending out any more money to households, to businesses, or to each other. When there is no lending, families can't afford to buy homes or cars. So businesses are forced to make layoffs. Our economy suffers even more, and credit dries up even further."

Mr. Chairman, every member of AMT manufactures products in the United States, and our products are located in factories around the world. Each is fiercely competitive and determined to ensure that American manufacturing technology remains preeminent. Our members continue to create jobs and spur innovation by investing time and money in their businesses to grow their share of the American Dream not only for themselves and their families, but for their employees and their employees' families as well. However in this economic crisis, most of them are struggling not for that share of the American Dream but to simply stay alive.

We must get credit flowing again to America's producers of manufacturing technology and our customers. We are where it all begins and we are where it will end for "Manufactured in America." The only way to break this cycle of job loss and bankruptcy is to provide the manufacturing sector the cash flow we need to continue doing business and securing American jobs. Building upon successful programs, such as the SBA's 7(a) loan program and Title III of the Defense Production Act, and implementing new targeted programs, such as the SBA direct loan program included in the House version of the ARRA, are ways to support companies that are unable to get access to credit, like AMT members, while the economy recovers. AMT would be glad to discuss additional suggestions for supporting America's manufacturing technology sector during these difficult times.

The United States is perilously close to losing a critical industry—one that we depend upon for both economic stability and national security. The manufacturing technology industry provides productivity improvements that level the playing field for America's highly skilled workforce, helping us to compete against producers in low-cost labor markets. It's not an exaggeration to say that essential future innovations in manufacturing are simply impossible without a robust supply chain that includes stable and healthy factory floor equipment producers. We need your help. I hope that you will be able to provide the legislative vehicles that can get us through this threat to our existence.

Thank you for allowing me to testify today.

PREPARED STATEMENT OF LIEUTENANT GENERAL LAWRENCE P. FARRELL, JR., (USAF RET.)

PRESIDENT AND CHIEF EXECUTIVE OFFICER,
NATIONAL DEFENSE INDUSTRIAL ASSOCIATION

MAY 13, 2009

Chairman Brown, I am Larry Farrell, President and CEO of the National Defense Industrial Association and on behalf of our 1,518 corporate members, and just over 67,800 individual members, I'm pleased to appear before the Senate Subcommittee on Economic Policy today to emphasize the importance of manufacturing to the health of the U.S. economy and security of the Nation. The Manufacturing Division of NDIA has recently published a white paper entitled, *Maintaining a Viable Defense Industrial Base,* which I urge you to review in addition to my testimony today. (See *http://www.ndia.org/Divisions/Divisions/Manufacturing/Documents/MaintainingAViableDefenseIndustrialBase.pdf.*)

Based upon your request to cover topics of vital interest to manufacturing and in consideration of the reauthorization of the Defense Production Act slated for later this year, I will address five questions:

- Why should Congress care about manufacturing?
- How do manufacturers rely on credit?
- How are manufacturing supply chains intertwined and what happens when demand falls off?
- What strategic and security considerations regarding manufacturing should Congress know of?
- What policies should Congress consider in supporting American manufacturing?

Why should Congress care about manufacturing?

Congress MUST care about manufacturing simply because of its enormous impact across all aspects of our Nation, including economic, class, and security. While manufacturing has been declining as a percent of GDP since the 1950s, manufacturing still remains the largest productive sector in the overall U.S. economy at 13.6 percent, and the U.S. produces more goods than any other country—$1.6 trillion worth, according to the Federal Bureau of Economic Analysis. Additionally, manufacturing multiplies each dollar spent into an additional $1.37 of economic activity, higher than any other sector. However, the most critical benefit of manufacturing is not simply the size of the sector, but that manufacturing CREATES wealth by producing something of higher value from materials or common components. It is not a service sector that just transfers wealth between entities. And unlike other wealth creators, such as mining or agriculture, the jobs produced by manufacturing activities are generally higher paying and represent an entry into the middle class for a large portion of the workforce. For all these reasons and more, manufacturing is, and must continue to be, the foundation of a strong economy, and thus needs active support by Congress.

How do manufacturers rely on credit?

Manufacturers rely extensively on credit, particularly for working capital. Thus, while access to credit for capital equipment or facilities is necessary, the lack of credit to buy supplies and meet payroll will more rapidly drive manufacturers out of business. Manufacturers are obliged to purchase materials and supplies prior to being paid by their customer. This problem is exacerbated by the fairly long period between invoice and payment in the supply base, sometimes up to 120 days.

A recent comment by Roger Stelle, a lawyer for many small manufacturers in the Chicago area, reveals the degree of the current situation: "Many of my clients are contemplating filing or have already filed for Chapter 11, not because their business volume has fallen below previously viable levels, but rather because they can no longer get credit to borrow for their long established working capital needs."

How are manufacturing supply chains intertwined and what happens when demand falls off?

Manufacturing is most productive when company resources, such as capital equipment or workforce, are being fully utilized to generate product, or wealth. When demand falls off, and company resources are not used to their fullest capacity, inventories rise and revenues fall—initially impacting employment and if the decline is too severe impacting the viability of the business. Diversity is one business strategy that can mitigate a downturn in specific business segments. A company that serves more than one market sector is less likely to face failure from a downturn in one sector. Even in today's business climate there are sectors that remain healthy, and many businesses that participate in these markets, such as the Defense and Energy sectors, remain viable. Therefore, supply chains intertwined among various market sectors will promote more viable and robust manufacturing and preserve jobs.

What strategic and security considerations regarding manufacturing should Congress know of?

America relies on the development and implementation of advanced manufacturing technologies to maintain a globally competitive industrial base, which is strategically vital due to the 13 million jobs contained within the sector. Our industrial base provides these advanced manufacturing technologies through innovation and application of technologies that promote both performance and affordability. National security requires a manufacturing sector based on assured sources to safeguard our economy and national defense and provide trusted sources of supply to meet the demands of our citizens and warfighter.

In today's global political environment, National Security includes an underlying requirement for economic strength and viability, which in turn requires an industrial base that generates wealth based upon manufacturing goods, not based upon the transfer of wealth.

What policies should Congress consider in supporting American manufacturing?

Above all else, manufacturing requires a senior leader in the Administration, at a level sufficient to drive a national campaign advocating the government's policies. Considering that agriculture is 3 percent of GDP and is represented by a department with a cabinet position, a segment representing 13.6 percent of GDP such as manufacturing should have greater visibility than a Deputy Assistant Secretary within the International Trade Administration of the Department of Commerce. We recommend that Congress endorse an Assistant Secretary for Manufacturing within Commerce in a new top level department, responsible for coordinating policy, strategic investment, and workforce development.

We strongly endorse the reauthorization of the Defense Production Act (DPA) with particular emphasis on:

1. Revitalizing the Interagency Task Force which administers the DPA, with a chairman designated by the President.
2. Increasing the level of funding available for DPA to approximately $500M across all Departments (DHS, DoE, DoD, DoC, *etc.*) in order to significantly impact the domestic industrial base.
3. Resuming the practice of loan guarantees under the Title III Authority, in accordance with OMB guidance.

We strongly agree with the 2006 Defense Science Board Recommendation that a stable funding profile should be established for the Department of Defense (DoD) Manufacturing Technology (ManTech) program, by returning the total program investment to 1 percent of the RDT&E budget. (This would represent a $790M program, vice the $200M in the Fiscal Year 2010 Budget.) Furthermore, we endorse the four strategic thrusts of the *DoD Manufacturing Technology Strategic Plan,* submitted to Congress in March 2009 by the Under Secretary of Defense for Acquisition, Technology and Logistics, which emphasizes investment in advanced manufacturing technology.

We recommend the use of Manufacturing Readiness Levels early in the Development and Acquisition of Defense Systems as a "Producibility Stress Test" to assess manufacturing feasibility and promote affordability.

The average age of the U.S. manufacturing workforce exceeds 52 years. Policies are needed to attract, educate, and retain future generations of skilled workers. The Federal government must help encourage and promote manufacturing as a respected and desired career path.

Another policy need is to incentivize Sustainable Manufacturing, using a cohesive policy framework to include legislation such as S. 661 "Restoring America's Manufacturing Leadership Through Energy Efficiency Act," currently under consideration by the Senate Committee on Energy and Natural Resources. Timely enactment of this legislation would result in more local (U.S.) manufacturing as the true impact of global sourcing is better understood in terms of economic, environmental, and social costs.

A final approach to decrease the impact of the credit crisis is to encourage the practice of progress payments throughout the supply chain by reducing required threshold value for which progress payments can be made.

While considering the manner in which to pursue these recommendations, I must note that an active Senate Manufacturing Caucus could provide effective leadership for all the issues I've just outlined. I urge you to revitalize this organization to advocate for manufacturing within Congress.

Chairman Brown and Members of Subcommittee, I'm honored to have had this opportunity to provide you a defense industry perspective on the critical nature of manufacturing to our Nation, and hope that you embrace the opportunity to strengthen the government's commitment to manufacturing in the economic and national security interests of the country.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR BROWN FROM EUGENE R. HAFFELY

Q.1. Title III of the Defense Production Act is designed to help companies that are integral parts of the defense industrial base, so that they are capable of building the weapons systems and weapons system components that are necessary to procure in the event of a mobilization pursuant to national emergency requiring the use of America's armed forces.

How would helping such companies stay viable during the current recession have a crossover benefit to helping the general manufacturing base gain access to capital to help them through the economic downturn?

A.1. America's manufacturing base is an integrated group of companies who are dependent on each other to provide services to virtually all U.S. industries. Take for example a typical production system that my company, Assembly & Test Worldwide (ATW), would provide. When we design and build a system we outsource a large amount of machining and tooling. Each of these tooling suppliers is a part of a tooling industry that is also critical to our national defense. They in turn must purchase machine tools and related tooling accessories, hopefully from U.S.-based companies, to make their machined products. In addition, purchased materials are usually over 50 percent of ATW's final product and are provided by U.S.-based manufacturers like Allen-Bradley controls, Hoffman enclosures and Parker Hannifin fluid power and servo controls. They, in turn, must tool their production systems with products and services provided by other manufacturing companies. All of the manufacturing technology and manufacturing companies are customers of a vast array of service providers who rely on them as a major part of their customer base. These service providers are companies whose products range from insurances to landscaping, medical and legal services. If manufacturing technology companies have increased access to working capital through Title III, it would introduce cash flow into the manufacturing supply chain and the entire manufacturing sector plus many service companies would benefit.

Many companies in my industry are at the low tiers of the production chain but they are no less critical to the process. If you don't have every single part of a wind turbine or a smart bomb, for example, it won't work. And you need companies in my industry to provide the means to make those parts and assemble and test the end product. We don't want to depend on foreign suppliers for the wind turbine or the smart bomb. An expanded Title III of the Defense Production Act can help ensure that we don't have to by making sure the companies that are critical to our national defense survive this economic crisis.

Right now, the number one problem facing U.S. manufacturers is lack of credit. Looking back to just over a year ago, many would not have predicted this crisis in the manufacturing sector. Early last year, the manufacturing technology industry was poised for a successful 2008 with substantial backlogs on the books and orders on the horizon. At that time, access to working capital was not a problem. However, as 2008 wound down and the economic recession began to take hold, orders lagged, cancellations mounted, and negative bookings resulted in dramatically decreased backlogs. Now many of us are looking to barely break even in 3rd and 4th quarters of this year, as some companies have suffered through months without a single order. Banks are not extending credit under these circumstances, even to companies that they have long successful histories with. The crisis in Detroit has only exacerbated the problem.

The country is at very real risk of losing an industry that we depend on to protect our national security because companies like ATW cannot access the credit we need to stay in business. When our companies are forced to close their doors, it affects the entire manufacturing production chain, in many industries, all important to America's competitiveness. America's manufacturers are natural innovators, and many of our most successful innovations were developed from the close working partnership that exists between product manufacturers and the manufacturing technology suppliers. That informal partnership between manufacturing technology suppliers and our customers takes us from concept to factory floor to commercial marketplace. Ink jet printing cartridges, electronic ignitions, micro valves (in everything from appliances to artificial hearts), are just a few examples of products whose manufacturing process was engineered by an American manufacturing technology supplier. U.S. innovators simply could not have been a success in these industries without companies like ATW that possess the engineering know-how to see a product from idea to commercial application.

That is why Congress must act now to halt the decline in manufacturing. If nothing is done, America's competitiveness will continue to suffer and we, as a nation, will be forced to go offshore to meet our defense needs. These are precisely the harsh economic times that Title III is intended to protect our critical industries against.

Q.2. My understanding of Title III of the Defense Production Act, is that it assists companies that manufacture products with both government and commercial applications. Do you think that use of the Title III loan guarantee program authorities help manufacturers attract that private financing that is lacking today?

A.2. It has to improve the current situation. As I stated in my written testimony, credit for companies like those in my industry has all but dried up. By reducing risk with a loan guarantee backed by our Federal government, cautious lenders are more apt to start lending again. Once critical suppliers get the working capital they need to start producing again, our customers benefit, and our customers' customers' benefit, and so on throughout the production supply chain as I described in the previous question. As business improves and cash flow increases, it should become easier to attract private sector financing.

Extending Title III loan guarantees to companies critical to national security will act as a lifeline to companies with no other option. It will also introduce some much needed cash into the entire cash-starved manufacturing sector, as the effects of the loan guarantees ripple through the production chain. This is exactly the type of program we need to help us survive this trying time.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR BROWN FROM LIEUTENANT GENERAL LAWRENCE P. FARRELL, JR.

Q.1. My understanding of Title III of the Defense Production Act is that it assists companies that manufacture products with both government and commercial applications. Do you think that use of the Title III loan guarantee program authorities help manufacturers attract that private financing that is lacking today?

A.1. Yes, the use of the Title III loan guarantee program authorities will significantly help both government and commercial manufacturers attract private financing, particularly the type of financing that is difficult to secure in the current economic climate.

Title III loan guarantees and loans for working capital and facility expansion are effective tools to assist businesses that are viable, but are unable to obtain credit either on reasonable terms or at all. Of particular importance to manufacturers is the availability of working capital, which pays salaries, buys supplies, and services creditors. Many viable U.S. businesses, including small and medium sized manufacturers, are currently struggling to maintain the cash balances needed to meet these obligations, due to the credit crisis. The U.S. manufacturing base could benefit substantially from Government loan guarantees.

The lack of private financing that is currently being experienced is based upon the uncertainty in the demand for manufactured goods. The Title III loan guarantees would significantly reduce the risk associated with financing manufacturers, particularly for working capital needs. With risk lowered, more financial lenders are attracted and reasonable terms are made available.

Similarly, the Title III production commitments authority can also be used to attract private financing. By providing a commitment to purchase a certain level of manufactured goods or supplies, the uncertainty due to market conditions is substantially reduced, allowing access to reasonable terms for credit. Under this approach, the risk due to uncertain demand is eliminated. The use of loan guarantees leads more directly to the elimination of risk through credit default.

However, it should be noted that the Title III loan/loan guarantee authorities have not been used since 1982 when an agreement was reached between the Director, Office of Management and Budget, and the Secretary of Defense not to use the authorities without OMB approval. None of the objections cited by OMB in 1982 still apply, leaving the 1982 agreement as an obsolete obstruction. Ironically, the obsolete agreement serves only to prevent use of Title III authorities that could, under certain circumstances, be the most cost-effective tools to meet a national defense need. At a minimum the agreement should be amended if not outright canceled.

The loan/loan guarantee authorities exist as a matter of law within Title III of the Defense Production Act and there should be no prohibition on the use of these authorities by the President when their use is appropriate to address domestic manufacturing issues.

I understand that there are proposed amendments, which I fully support, providing new requirements for loan guarantees. These requirements specify that Government loan guarantees or loans may only be provided if: (1) credit is not, otherwise, available to loan applicants on reasonable terms; (2) the earning power and pledged security of the applicants provide reasonable assurance of repayment; (3) the interest rate on guaranteed loans is determined to be reasonable by the Secretary of Treasury; (4) the terms on guaranteed loans cannot be changed without Government approval; and (5) borrowers are at risk for at least 20 percent of the guaranteed loan amounts.

Q.2. There have been media reports over the past several years about the threat our military faces because of counterfeit components, including microchips. As our military becomes more high tech, how equipped are we for the domestic production of key components? Is this an issue of concern for the National Defense Industrial Association?

A.2. Counterfeit parts are an issue of significant and growing concern to the National Defense Industrial Association. This has been a key element addressed in many recent member forums, as well as the USAF ManTech Strategic Planning session we participated in. Counterfeit parts have two motivations: greed and malice. To combat greed, Counterfeit detection tools and Qualified Vendors are required. To combat malice, an assured supply chain is required, including domestic production capability.

Counterfeit parts are facilitated by component obsolescence, the growing sophistication of counterfeiters, the inherent profitability of demanding military applications, and the globalization of the supply base. The reliability of counterfeit components is suspect and the chain of ownership is unverifiable, which means they are dangerous if they are unknowingly used in U.S. weapon systems.

Counterfeit parts is not the only issue of concern for NDIA. Microchip functionality must also be assured. A growing number of these components are coming from high-risk locations such as China, the Far East, and Russia. Therefore we must protect our supply chain from any possibility of malicious alterations of microchip functionality, which are then embedded in defense systems. In particular, there is great concern that the number of "trusted" foundries for ASIC chips is rapidly shrinking as companies outsource foundry services to the Far East. Only IBM and several small suppliers remain in the U.S. to fabricate classified, national security or ITAR devices. Also, the potential for subtle sabotage is very high in high function COTS devices, especially if an offshore supplier knows that a specific lot is destined for delivery to a defense contractor.

A domestic microchip supply is therefore crucial for national security. A recent Department of Commerce study entitled *Defense Industrial Base Assessment: U.S. Integrated Circuit Design and Fabrication Capability* [1] implies the U.S. does indeed have sufficient capacity and resources to design and produce microchips for military use. The report relies upon the relatively small production numbers of microcircuits required for defense use to conclude that the U.S. Industrial Base has enough production capacity. However, our members tend to disagree with this position. Although assured

[1] *www.bis.doc.gov/defenseindustrialbaseprograms/osies/defmarketresearchrpts/bis__ote__ic__report__051209.pdf.*

capacity does exist, primarily in large firms for design and production of specialized circuits, there has been and will continue to be a growing trend to implement Commercial Off The Shelf (COTS) components for cost reduction and maintainability. These COTS components are part of a global supply chain, and are outside the control of the defense industrial base due to the small market share.

Unfortunately the COTS electronics supply chain is moving and now manufacturing in the U.S., Japan, and Western Europe account for less than 50 percent of global electronics output. Between 1995 and 2006, the Asia Pacific area's share increased from 20 percent to 42 percent, with China seeing the largest share of that increase, from 3 percent to 20.5 percent.[2] Further there are some critical components for our high tech weapon systems, such as LCD flat panel displays, that have no domestic source. All these components are imported from foreign suppliers, some from the high-risk countries mentioned above.

A longer term risk lies in the historical fact that leading-edge R&D tends to follow production. The most attractive positions for talented process scientists and engineers moves with advanced production. For this reason and others, the 2005 *DSB Study on High Performance Microchip Supply* concluded that "The Department of Defense and its suppliers face a major integrated circuit supply dilemma that threatens the security and integrity of classified and sensitive circuit design information, the superiority and correct functioning of electronic systems, system reliability, continued supply of long system-life and special technology components."[3]

In summary the NDIA is concerned that the U.S. is not currently equipped for domestic production of some of the key components, particularly microcircuits, in our high tech defense systems. This highlights the importance of the Defense Production Act Title III program, which is able to monitor gaps between the defense requirements and the domestic capabilities and then invest in the U.S. Industrial Base to assure the required capability.

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[2] Source: Printed Circuit Design and Fab, 6/6/08.

[3] *Defense Science Board Task Force on High Performance Microchip Supply,* February, 2005.