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CHALLENGES CONFRONTING THE MACHINE TOOL INDUSTRY

HEARING

BEFORE THE

SUBCOMMITTEE ON MANUFACTURING AND COMPETITIVENESS

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

OCTOBER 28, 1999

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ONE HUNDRED SIXTH CONGRESS

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CHALLENGES CONFRONTING THE MACHINE TOOL INDUSTRY

THURSDAY, OCTOBER 28, 1999

U.S. SENATE,
SUBCOMMITTEE ON MANUFACTURING AND COMPETITIVENESS
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The subcommittee met, pursuant to notice, at 2:05 p.m., in room SR–253, Russell Senate Office Building, Hon. Spencer Abraham, chairman of the subcommittee, presiding.

Staff members assigned to this hearing: Gregg Willhauck, Republican legislative assistant to Senator Abraham; and Gregg Elias, Democratic senior counsel.

OPENING STATEMENT OF HON. SPENCER ABRAHAM, U.S. SENATOR FROM MICHIGAN

Senator ABRAHAM. We will begin this hearing of our subcommittee. Today's topic is the challenges which are confronting the United States machine tool industry. This industry, of course, for those of us who come from industrial States is the foundation of the manufacturing sector of our economy. And so we thought it was very important today to try to focus a little bit of attention on the issues that are confronting the industry for reasons I will get into in a few minutes.

Our first panel, though, I want to get going, because I know there is going to be a vote here in the House very soon. We are fortunate to have two members of the House who are going to be addressing us today. They are the co-chairs of the House of Representatives Machine Tool Caucus. We already have here Congressman Don Manzullo, of Illinois. And I believe that Congressman Richard Neal, of Massachusetts, may be joining us. We at least expect him to be here.

Normally I would make my opening statement now, but Congressman Manzullo may need to get back to the House soon. So what I would like to do is maybe let him comment first, if that would help, and then I will make my opening statement. And then, if Congressman Neal is here, we may go to him. There is the bell.

Mr. MANZULLO. Should I go over and vote and come back?

Senator ABRAHAM. You probably need to go now if you are going to vote.

Mr. MANZULLO. Yes. I will vote and then come right back.

Senator ABRAHAM. Why don't you do that, Don.

Mr. MANZULLO. Thank you.

Senator ABRAHAM. I will begin with my statement, and we will see how far we get. We will maybe move to the second panel and then come back.

Let me begin, then, by commenting a little bit more specifically. As I said, in my judgment, this industry that we are focusing on today is the foundation of our Nation's manufacturing sector. It is very hard to imagine a manufacturing industry that is not in some way very reliant on machine tools. Whether that is for the production of some component or for some essential element of the manufacturing process itself, machine tools are essential.

Certainly the machine tool industry is a vital component of the economy of my home State of Michigan, and I know that it is for Illinois and Massachusetts, as we will hear in a minute, and for most of the other States, as well. We need a healthy and thriving machine tool industry in this country if we are going to produce automobiles and auto parts, planes or ships, appliances, electronics, construction equipment, and virtually every other product that we produce. We need it to maintain a healthy manufacturing sector. We need it to maintain a healthy economy.

Which brings us to the reason for today's hearing. There have been a number of reports in recent months that the machine tool industry was suffering, at a time when most manufacturing industries are thriving. This is a particular concern, because many look to the machine tool industry as a barometer of the health of the manufacturing sector overall. Downturns in the business cycle of the machine tool industry often precede downturns in other manufacturing industries and, consequently, the overall economy.

Any slowdown in the machine tool industry sends troublesome signals about the health of our economy. This, in my view, meant that it was crucial for our subcommittee on manufacturing and competitiveness to look into the causes of this recent sluggishness, and to try to come up with ideas for improving the performance of the machine tool industry.

Let me briefly cite some statistics which illustrate the situation for everybody. I would also like to ask unanimous consent to include this information in the hearing record. And since there is no one to object, I will.

[The information referred to follows:]

SENATOR SPENCER ABRAHAM PRESS RELEASE, QCTOBER 28, 1999

ABRAHAM SEEKS TO BOOST MIDWEST MANUFACTURING COMPETITIVENESS

-Senator chairs hearing to examine the challenges confronting the machine tool industry—the largest sector of the manufacturing industry-

(WASHINGTON) U.S. Senator Spencer Abraham (R-Michigan) today convened a hearing of the Commerce Subcommittee on Manufacturing and Competitiveness to examine the challenges confronting the machine tool industry—which is currently suffering the most in the Midwest. The machine tool industry is the foundation of the United States manufacturing sector. Abraham's statement at today's hearing follows.xxx

"It is difficult to imagine a manufacturing industry that is not in some way reliant on machine tools. Whether for the production of some component or for some essential element of the manufacturing process itself, machine tools are essential. We often take the goods produced by and with machine tools for granted But our economy would be a shambles without them. Certainly, the machine tool industry is a vital component of the economy of my state of Michigan. Autos and auto parts,

planes, ships, appliances, electronics and even construction equipment, all would be impossible—or impossibly expensive—without machine tools.

"We need a healthy and thriving machine tool industry in this country. We need it to maintain a healthy manufacturing sector. We need it to maintain a healthy economy.

"Which brings me to the reason for this hearing. There have been a number of reports in recent months that the machine tool industry was suffering at a time when most manufacturing industries are still thriving. This is of particular concern because many look to the machine tool industry as a barometer of the health of the manufacturing sector overall. Downturns in the business cycle of the machine tool industry often precede downturns in other manufacturing industries—and the overall economy.

"Any slowdown in the machine tool industry sends troublesome signals about the health of our economy. This, in my view, meant that is was crucial for the Subcommittee on Manufacturing and Competitiveness to look into the causes of this recent sluggishness and try to come up with ideas for improving the performance of the machine tool industry.

"To begin, let me simply cite some statistics that I would like to include in the hearing record. These figures come from a report issued jointly by the Association for Manufacturing Technology and the American Machine Tool Distributors' Association. That report is dated September 13, 1999. It is a nationwide survey of machine tool companies, documenting comparative levels of machine tool consumption for this year compared to last year. The results, I think are quite significant and clearly demonstrate why it is important for us to be here today.

"Specifically, this report noted that in July of this year, U.S. machine tool consumption totaled an estimated $501 million. That figure was down roughly 10% from the revised estimate for the previous month, June, 1999, and down 18% compared to the estimated $608 million total for July 1998. The year-to-date total of $3.2 billion for 1999 is 35% lower than for the same period last year.

"Of particular interest is the breakdown of these consumption figures along regional lines. Of the five geographical regions surveyed—making up the contiguous 48 states—all showed significant declines in their 1999 year-to-date figures on consumption when compared to the identical period last year. The Midwestern region—comprising Michigan, Ohio, Indiana, Illinois, and Wisconsin—experienced a drop of 40.7% over the same period in 1998. This figure is even more daunting when one considers that the Midwestern region made up 44% of the nationwide consumption volume surveyed. Similarly, the Central and Western regions both experienced drops of 37% compared to a year ago. And while the losses in the Southern and Northeast region were less dramatic—26% and almost 16% respectively—they are still quite sizable. So there is no region of the country that has been spared significant decreases in the level of consumption of machine tool products.

"Finally, while the Midwestern region was the only one of the five regions to show improved consumption figures between June and July 1999, the figures for the Midwest this July compared to last July were still down 31%.

"With those disturbing statistics in mind, let me now discuss how we will proceed today.

"We are fortunate this afternoon to have with us the two Chairmen of the House of Representative's Machine Tool Caucus, Congressman Donald Manzullo of Illinois and Congressman Richard Neal of Massachusetts. Obviously, these two Members are leaders on Capitol Hill regarding issues affecting the machine tool industry. I would like to acknowledge and thank them for the interest and dedication they have shown on these issues. I would also like to thank them for their willingness to take time out of their busy schedules to come over and testify at this hearing today.

"For our panel of witnesses, we will hear from three individuals with impressive backgrounds in the machine tool industry. The first gentleman, John Logan, will testify on behalf of The Association for Manufacturing Technology, a major trade association for the machine tool industry. He currently serves as Chairman of the Board of Directors for AMT. Mr. Logan will describe for us the national picture with respect to the machine tool industry, outlining the current state of the industry and identifying key problems that industry confronts. I hope he will also indicate to us ideas for solutions to those problems. I should note that Mr. Logan does indeed have his own machine tool company as well: DT Industries, of which he is Automation Group President.

"Our other two witnesses will testify on behalf of the industry in their capacity as executives with successful machine tool companies. David Danjczek represents UNOVA Corporation, a top producer of machine tools and manufacturing systems in the United States. Jeffrey Clevenger, of Saginaw Michigan, is President and CEO of SMS Group Incorporated. He will provide us with the perspective of a small ma-

chine tool business. Both these gentlemen will tell us about their unique experiences with their own companies and identify for us specific challenges that their companies are facing today."

Senator ABRAHAM. These figures come from a report issued jointly by the Association for Manufacturing Technology and the American Machine Tool Distributors Association. It is a report which is dated September 13, 1999. In this nationwide survey of machine tool companies, the report documents comparative levels of machine tool consumption for this year compared to last year.

Specifically, this report noted that in July of this year, United States machine tool consumption totaled an estimated $501 million. That figure was down roughly 10 percent from the revised estimate for the previous month, June 1999, and down 18 percent compared to the estimated $608 million total for July 1998. The year-to-date total of $3.2 billion for 1999 is 35 percent lower than for the same period last year.

Of particular interest is the breakdown of this consumption along regional lines. Of the five geographical regions surveyed making up the contiguous 48 States, all showed significant declines in their 1999 year-to-date figures on consumption when compared to the identical timeframe last year. The Midwestern region, comprising Michigan, Ohio, Indiana, Wisconsin, and Illinois, experienced a drop of 40.7 percent over the same period in 1998; hence, even greater than the national average.

This figure is even more daunting when one considers that the Midwestern region made up 44 percent of the nationwide consumption volume surveyed. Similarly, the Central and Western regions both experienced drops of 37 percent compared to a year ago. And while the South and the Northeast regions were less dramatic in their reductions, 26 percent and 16 percent respectively, they are still quite sizable. So there is no region of the country that has been spared significant decreased in the level of consumption of machine tool products.

Finally, while the Midwestern region was the only one of the five regions to show improved consumption figures between June and July 1999, the figures for the Midwest this July compared to last were still down 31 percent.

With those troubling statistics in mind, let me now discuss how we will proceed today. As I said, we have two Members of Congress who will be part of a panel, though it may now be the second panel I guess. And, in addition, we will have several people from the front lines who will be here for a second panel. That panel of witnesses is made up of individuals, all with impressive backgrounds, in the machine tool industry.

And so what I think I will do is ask that panel to come forward at this time and take seats. I will ask our staff if they would clarify who sits where. We will have you speak in the order of the name tags here. Then, if it is OK with the panel, what I thought we would do is, when the members come back, if they wish to make comments, because of their time constraints, we will let them do that.

Let me introduce the three individuals here, although the name tags are now different than the way I have got it written, but I am going to introduce you in a different order than you are seated.

First, I want to introduce John Logan, who will testify on behalf of the Association for Manufacturing Technology, a major trade association for the machine tool industry. John currently serves as Chairman of the Board of Directors for AMT. Mr. Logan will describe for us the national picture with respect to the machine tool industry, outlining the current state of the industry and identifying key problems that the industry confronts. He will also indicate to us ideas for solutions to these problems. I should note that Mr. Logan indeed has his own machine tool company as well, which is named DT Industries, of which he is Automation Group President.

Our other two witnesses will testify on behalf of the industry in their capacities as executives with successful machine tool companies. Dave Danjczek represents UNOVA Corporation, a top producer of machine tools and manufacturing systems in the United States; and Jeffrey Clevenger, of Saginaw, Michigan, is President and CEO of SMS Group, Incorporated. He will provide us with the perspective of the small machine tool business. Both of these gentleman will tell us about their unique experiences with their own companies and identify for us specific challenges that their companies are facing today.

And I especially of course want to introduce or to welcome here Mr. Clevenger, who is a friend and constituent and with whom I am very familiar. We appreciate your being here and taking the time to come down from Michigan to participate. One of the few remaining perks, I think, in the Congress is the chance, from time to time, when you chair a subcommittee or a committee, to be able to make sure that people who represent your own constituency and have some of the challenges and issues confronting them that we are dealing with here in Washington are given the opportunity to participate. Jeff, I want to thank you for coming down today.

So, with that said, let us begin with this panel. As I say, if Congressman Manzullo or Congressman Neal reappear, at an appropriate point after whoever might be speaking finishes, we will let them have a chance to speak at that time.

We will begin with you, Mr. Logan. Thanks for being here. Good to see you again.

STATEMENT OF JOHN F. LOGAN, AUTOMATION GROUP PRESIDENT, DT INDUSTRIES, AND CHAIRMAN, ASSOCIATION FOR MANUFACTURING TECHNOLOGY

Mr. LOGAN. The United States machine tool industry is critical to both national security and economic prosperity. With production of over $7 billion, the machine tool industry is small when compared to other industries, but our industries products and technology are the essence of the industrial manufacturing process and the key to a strong defense industrial base.

With the manufacturing technologies related to machine tools, the other manufacturing industries would not exist. There would be no aircraft, ships, tanks, or missiles. There would be no appliances, automobiles, agricultural machines, or factory automation without machine tools. In short, life as we know it today would be impossible without the modern machine tool industry and the manufacturing technology related to it.

Over the past year, domestic demand for machine tools has fallen dramatically. The first 6 months of 1999 have seen machine tool consumption in the United States fall 39 percent when compared to the same period last year. This dramatic decline can partly be attributed to a decrease in customer demand, which in turn can be partly attributed to a collapse in the Asian export market for many of our industry's customers.

To make matters worse, this reduction in machine tool demand has been compounded by a sudden change in the marketing approach and an increase in the market share of the largest three Asian producers of machine tools; that being Japan, South Korea, and Taiwan. Asian machine tool builders have increased their shares of the U.S. market to the point where U.S. builders have seen our share of our market decline to 40 percent, compared with about 50 percent in the late eighties and the early to mid-nineties.

As the charts accompanying my written testimony show, some Asian machine tool builders have cut their prices in some commodity lines by 30 to 50 percent over the past year. Machine tool consumption has traditionally been used by economic forecasters as a leading indicator of the larger economy. Whether the decline is a harbinger of an overall slowdown from what has been an amazing record of economic expansion or whether it is an indication of structural changes in traditional capital spending patterns, or is a combination of these factors, the sharp decline in U.S. machine tool consumption should concern thoughtful policymakers.

Given the importance of the U.S. machine tool industry to America's national and economic security, the U.S. Government must adopt policies that assure the continued strength of America's machine tool industry and which provide a level playing field for American machine tool builders.

These actions include enactment of an 18-year product liability statute of repose, vigorous enforcement of U.S. trade laws, passage of tax laws that encourage U.S. manufacturing and that are saver/investor friendly, adoption of technology R&D policies and funding that ensures that U.S. manufacturing technology is second to none, and application of sensible export control policy and regulations.

I would like to say a few words about our current export control policy and what I saw at the China International Machine Tool Show last week. Several Chinese companies were showing very sophisticated machinery, machines that U.S. manufacturers cannot export to China because they are considered a national security threat in the hands of the Chinese. Yet there they were, right on the show floor in China. The Europeans were all over the show, urging the Chinese to forget about buying American machine tools because of the difficulty in getting an export license.

I will tell you that the unilateral imposition of export controls on machines that are readily available elsewhere is hurting our industry in this critical market, without affecting one iota access of the Chinese to the manufacturing equipment they need.

Last, I would like to comment on the WTO ruling that foreign sales corporation must be repealed by October 2000. Unless Congress acts, either the Europeans will retaliate against U.S. exports or U.S. exporters will face a $3 billion per year tax increase on our exports. The solution is to move to a territorial, border-adjustable

system of taxation, which would not tax exports at all, but would impose a tax on imports. This is a system used by all of our major trading partners. We cannot maintain our leadership as either the preeminent world power or as the premier world economy with a second-rate machine tool industry. Please listen carefully to my colleagues as they present their ideas for meeting the challenges facing our industry.

Mr. Chairman, one of our member companies that is not present has asked that a written statement relative to Australian Government subsidizing of machine tool exports be submitted for the record.

Senator ABRAHAM. Without objection, it will be submitted. Again, I am struggling to find out where the objection will come from, but at least it appears as if it is unanimous. So, unanimously, it will be included in the record.

[The prepared statement of Mr. Logan and summary of the Huffman Corp. follow:]

PREPARED STATEMENT OF JOHN F. LOGAN, AUTOMATION GROUP PRESIDENT, DT INDUSTRIES, AND CHAIRMAN, ASSOCIATION FOR MANUFACTURING TECHNOLOGY

I. INTRODUCTION

My name is John F. Logan. DT Industries (DTI) is a leading global and the largest North American provider of automated assembly, test, material handling and packaging systems for a broad range of consumer and industrial products. DTI consists of two complementary operating groups—Automation and Packaging. I am President of the Automation Group. The Groups, and the divisions within them, share design, engineering and manufacturing resources in pursuit of indispensable engineered solutions for customers delivering local service within the context of global teamwork. DTI provides our engineering and manufacturing expertise to customers involved in electronics, automotive, pharmaceuticals, consumer products, high technology, medical devices, cosmetics, hardware, agriculture and heavy trucks.

DTI currently operates 20 manufacturing facilities located in the United States, the United Kingdom, Canada and Germany. Additionally, we have an extensive service network established in over 15 countries. We employ approximately 2,800 people.

I am Chairman of the Board of Directors of AMT—The Association For Manufacturing Technology—a trade association whose membership represents over 370 machine tool building firms with locations throughout the United States, including DT Industries. The majority of AMT's members are small businesses. According to the U.S. Census of Manufacturers, 73 percent of the companies in our industry have less than 50 employees. They build and provide to a wide range of industries the tools of manufacturing technology including cutting, grinding, forming and assembly machines, as well as inspection and measuring machines, and automated manufacturing systems.

II. THE U.S. MACHINE TOOL INDUSTRY IS CRITICAL TO OUR NATIONAL AND ECONOMIC SECURITY

The United States machine tool industry is critical to both national security and economic prosperity. With production of over $7 billion, the machine tool industry is small when compared to other industries. But that industry's products and technology are the essence of the industrial manufacturing process and the key to a strong defense industrial base. Without the manufacturing technologies related to machine tools, the other manufacturing industries would not exist. With 377 members, AMT—the Association for Manufacturing Technology—represents the U.S. machine tool industry, comprised of companies that provide manufacturing technology to cut, shape, form, and assemble metal and other materials and provide software and measuring devices for those processes.

By definition, machine tools and related manufacturing technology are the "tools" of production. Our nation's ability to compete globally in electronics, optics, aerospace, and other high technology arenas and our ability to produce advanced weap-

ons systems for national defense depend on the availability of state-of-the-art machine tools and the health of the U.S. industry. Without machine tools and related manufacturing technology there would be no aircraft, ships, tanks, or missiles. Nor would there be appliances, automobiles, agricultural machines, or factory automation without machine tools. In short, life as we know it today would be impossible without the modern machine tool industry and the manufacturing technology related to it.

The industry was a serious bottleneck to military production during World Wars I and II and the Korean War. Even during the Gulf War, the need for production increases in specific weapons and mobilization priorities pushed civilian manufacturing projects to the back of the production queue so that weapons systems and war materiel would be available in a timely fashion for the conflict with the Iraqis. Indeed, throughout our history machine tools have been a critical tool for mobilization and eventual victory over all the enemies we have faced. That is even more true today given the high-tech nature of America's weapons systems, than when machine tools were used to make the rifles and cannons of the Civil War.

Wartime production priorities and mobilization require large numbers of machine tools be made available on short notice, and that can only be accomplished with great assurance by a strong and healthy domestic machine tool industry. While the U.S. Government, using laws such as the Defense Production Act, can order machine tool production to be converted from civilian to military priority as soon as the need arises, the U.S. Government cannot order foreign machine tool makers to do likewise. It can only make a request, and then hope that our allies see a particular conflict in the same way that we do. Certainly, there is no guarantee that our European or Asian allies will see every conflict from the same perspective as the United States. Moreover, despite our current overwhelming military dominance, air and shipping lanes are not as secure in wartime as they are in peacetime. That is why the U.S. defense industrial base is only considered by the Pentagon to include the continental United States, plus Mexico and Canada.

Machine tools play an equally important role in peacetime as well. Machine tools are the heart of our civilian economy and, hence, our prosperity. Alan Greenspan has testified before Congress to the fact that U.S. corporate profits and worker wages have risen dramatically without inflation in recent years in large part because productivity is once more on the rise. A good part of that productivity can be traced back to the effective use of more efficient machinery and factory automation. In essence, Chairman Greenspan was explaining that the output of the modern U.S. machine tool industry accounts for a good deal of our recent spurt in productivity and, hence, has played an important role in our current prosperity.

If we were to lose the domestic core of our machine tool industry, we would become wholly dependent on our allies and trade competitors for the industrial production machinery that fuels our productivity and our keeps our industries on the cutting edge of the latest technology. Without a domestic base for machine tools, Boeing would be second in line behind Airbus; and General Motors and Ford would have to wait behind Toyota before acquiring the latest in production equipment. Being second to market with innovation is not the way to maintain industrial leadership. That is not a situation in which we should want to place our key industrial sectors, which is why a healthy domestic machine tool industry is so important both for national security and for continued prosperity. The recent combination of a sharp decrease in U.S. demand and a huge increase in Asian exports to the U.S. marketplace has been extremely damaging to the U.S. machine tool industry.

III. THE MACHINE TOOL INDUSTRY DOWNTURN (1998-1999)

Over the past year, domestic demand for machine tools has fallen dramatically. The first six months of 1999 have seen machine tool consumption in the United States fall 39 percent when compared to the same period last year *(see Chart 1).* While all but a handful of machine tool product areas experienced lower order rates in the first half of 1999, some product areas were severely hit *(see Chart 2).* Machine tool consumption has traditionally been used by economic forecasters as a leading indicator of the larger economy. Whether the decline is a harbinger of an overall slowdown from what has been an amazing record of economic expansion; or whether it is an indication of structural changes in traditional capital spending patterns; or is a combination of these factors; the sharp decline in U.S. machine tool consumption should concern thoughtful policy makers.

The U.S. machine tool market is composed of manufactured durables producers—the largest of which are the auto parts industry, Detroit's Big Three, the aerospace industry, and the off-road and highway construction industry. Total capital spending (including machine tools) for these four sectors fell 21 percent during the first quar-

ter of 1999 relative to the first quarter of 1998, although the spending levels varied significantly by sector. The auto parts industry's capital spending climbed 45 percent while capital spending by the aerospace industry and Big Three both fell by 25 percent. The 39 percent decline in machine orders cannot be accounted for solely by these significant capital spending declines among the major customers.

Some Wall Street analysts suggest that some of the difference can be attributed to a significant change in the mix of capital spending in 1999 relative to the mix over the past three years. In the past three years, these four sectors spent heavily on new manufacturing technologies and increases in capacity to meet the growing demand of the world market. In 1999, capital spending will be focused more towards software solutions to the Y2K issue and investments in knowledge and information technologies. The Y2K issue is a short-term distortion whose impact will dissipate over the next twelve months. The shift from investments in new capital equipment is a longer-term issue.

Many financial analysts point to lax bank regulation and extraordinary investment in new capacity during 1994-1997 by Asian auto, auto parts, and heavy equipment manufacturers as principal causes for the financial crisis in Korea and other Asian countries. Economists who follow the situation in Asia suggest that it may take two to five years to rationalize the over-capacity in various industries throughout Asia. In the meantime, additional capacity needs of the U.S. auto and heavy equipment industries will be weighed against the cost of investing/buying foreign capacity in Asia at fire sale prices. Not only is the U.S. machine tool market three-fifths of the size that it was at the end of 1997; but to make matters worse, this already vexing problem has been compounded by a sudden change in the marketing approach and an increase in the market share of the three largest Asian producers of machine tools: Japan, South Korea, and Taiwan. In addition, U.S. machine tool exports to Asia have collapsed (e.g., machine tool exports to Korea dropped 69 percent from 1996-1998).

Their approach has utilized a very aggressive—if not predatory—marketing strategy that has seen, even accounting for currency fluctuations, Asian prices for some commodity machines cut 50 percent or more in just one year *(see Chart 3).* As a result, Asian machine tool builders have increased their shares of the U.S. market to the point where U.S. builders have seen their domestic market share decline over the past year to a level where we now supply about 40 percent of the U.S. machine tool market, compared with about 50 percent or more a few years ago *(see Chart 4).* AMT does not have legal standing to initiate an antidumping case on behalf of its members.

The import surge from Asia can be explained by the Asian financial crisis, brought on in part by over-investment in certain key industries, including machine tools. But whatever the cause, the response chosen by the Asian machine tool builders to the lack of demand in the Asian marketplace has been to export their over-capacity to the United States. One telling example of the shift caused by the Asian financial crisis is that South Korea, which only exported 15 percent of its machine tool production to the United States in 1995, exported fully 50 percent of that production to the U.S. in 1998. Similar, if less dramatic, shifts have occurred in Japan's and Taiwan's exporting patterns *(see Chart 5).*

The dramatic decline in U.S. machine tool industry orders over the first half of 1999 can be attributed to a decline in customer demand and a significant increase in import competition. Both can be directly related to the effects of the Asian financial crisis, which has also had a substantial negative impact on U.S. machine tool exports to Asia.

During the past 13 years, two Presidents have seen fit to negotiate Voluntary Restraint Arrangements ("VRAs") with Asian Governments; because they concluded that the continuation of a healthy U.S. machine tool industry was critical to national security. Those VRAs lasted seven years, during which time the industry did exactly what was required to return to profitability and competitiveness. U.S. machine tool builders doubled their investment to depreciation ratios. They dramatically increased expenditures on research and development, and by the termination of the VRAs in 1993, U.S. machine tool competitiveness in world markets was measured by the fact that the industry was actually exporting over 30 percent of its output.

Nonetheless, the recent combination of a sharp decrease in U.S. demand and a huge increase in Asian exports to the U.S. marketplace has been extremely damaging to the U.S. machine tool industry.

IV. WHAT SHOULD BE DONE TO HELP THE U.S. MACHINE TOOL INDUSTRY

Given the importance of the U.S. machine tool industry to America's national and economic security, the U.S. government must adopt policies that assure the continued strength of America's machine tool industry and which provide a level playing field for American machine tool builders. These actions include:

- Enactment of an 18-year product liability statute-of-repose.
- Vigorous enforcement of U.S. trade laws—both to assure that trade is fair and that the national security is protected.
- Passage of tax laws that encourage U.S. manufacturing and that are saver/investor friendly.
- Adoption of technology/R&D policy and funding that assures that U.S. manufacturing technology is second to none..
- Application of sensible export control policy and regulations.

I would like to say a few words about our current export control policy. Mr. Danjczek will address the issue in greater detail. However, I want to describe what I saw at the China International Machine Tool Show last week. Several Chinese companies were showing fully integrated 5-axis CNC-controlled machines. In addition, several are showing very high accuracy turning and milling machines with accuracies of +/- 3 microns and one spherical lathe with accuracies of +/- 2 microns. These are machines that U.S. manufacturers cannot export to China because they are considered a national security threat in the hands of the Chinese. Yet, there they were right on the show floor in China. I will tell you that the unilateral imposition of export controls on machines that are readily available elsewhere is hurting our industry in this critical market without affecting one iota access of the Chinese to the manufacturing equipment they need.

V. FSC REPLACEMENT

Mr. Chairman, my colleagues will be discussing a variety of other issues which affect U.S. machine tool manufacturers—from product liability to technology policy to trade policy and export control reform. I would like to touch on one other issue before I conclude my remarks—Foreign Sales Corporations. Specifically what does Congress intend to do in the wake of the World Trade Organization's (WTO) dispute resolution panel ruling that the Foreign Sales Corporation (FSC) violates WTO rules and must be repealed by October 2000. FSCs provide an enhancement to exports by allowing U.S. companies to deduct 14 percent of their export income. These funds are used to make U.S. exports more competitive in world markets. DT Industries has a FSC, as do many other AMT members—both large and small.

Unless Congress acts by October of next year, billions of dollars of U.S. exports will be subject to retaliatory "compensation" by the European Union and others. But simply repealing the FSC would deprive U.S. companies of a powerful incentive to export and effectively amount to a $3 billion per year tax increase on U.S. exports. On the other hand, simply replacing FSC with a slightly different version could be inconsistent with the WTO decision and could lead to European retaliation.

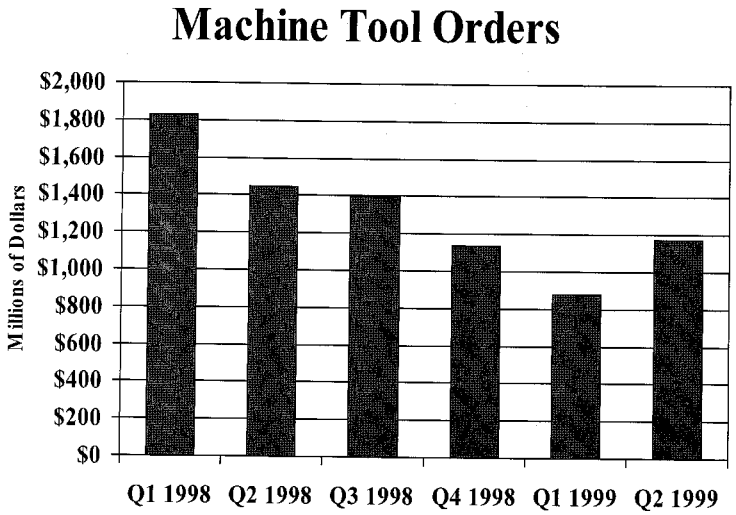
The dispute resolution panel has pointed the way towards a logical solution to FSC replacement. The U.S. currently maintains a system of worldwide taxation of its businesses. We are the only major industrial nation that does so. The WTO dispute resolution panel clearly states that we cannot couple territorial treatment of exports with a system of taxing the worldwide income of our companies. The solution is to move to a territorial, border-adjustable system of taxation, which would *not* tax exports at all but would impose a tax on imports. This is the system used by *all* of our major trading partners.

You may recall that a few years ago, your colleagues, Sens. Domenici (R-NM) and Nunn (D-GA), introduced a comprehensive tax reform proposal called the USA Tax. It called for replacing our current tax system with a cash flow tax that would be both border-adjustable and territorial and would provide for the expensing of capital purchases. Cong. English (R-PA) has introduced similar legislation in the House. AMT supports Cong. English's proposal. Enactment of this approach is a top legislative priority for AMT.

VI. CONCLUSION

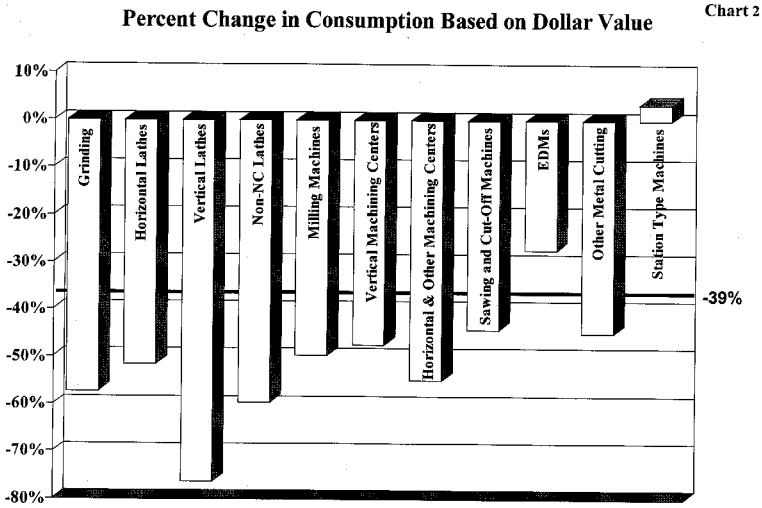
We cannot maintain our leadership as either the pre-eminent world power or as the premier world economy with a second-rate machine tool industry. Please listen carefully as my colleagues present their ideas for meeting the challenges facing our industry.

Chart 1



Source: USMTC

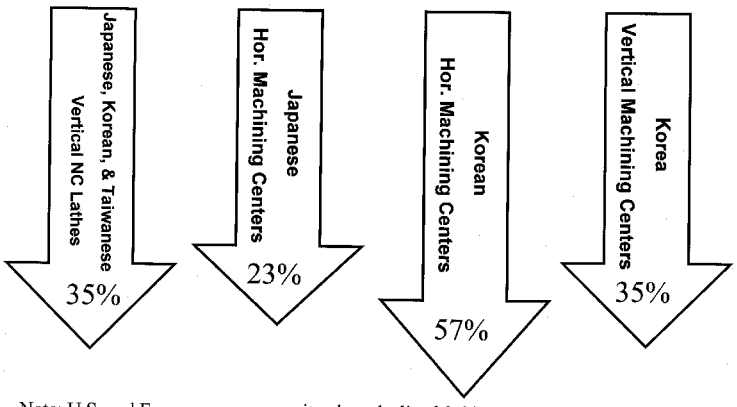
Chart 2



Source: USMTC

Chart 3

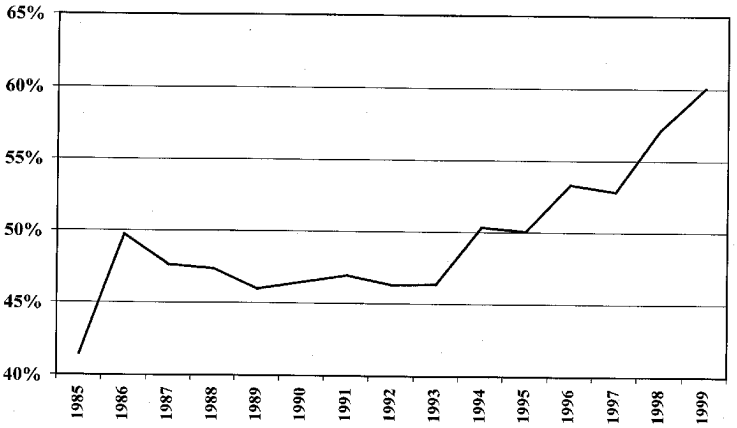
Asian Imports' Average Unit Values Drop During 1998 & 1999



Note: U.S. and European average unit values declined 3-11 percent.
Source: Department of Commerce

Chart 4

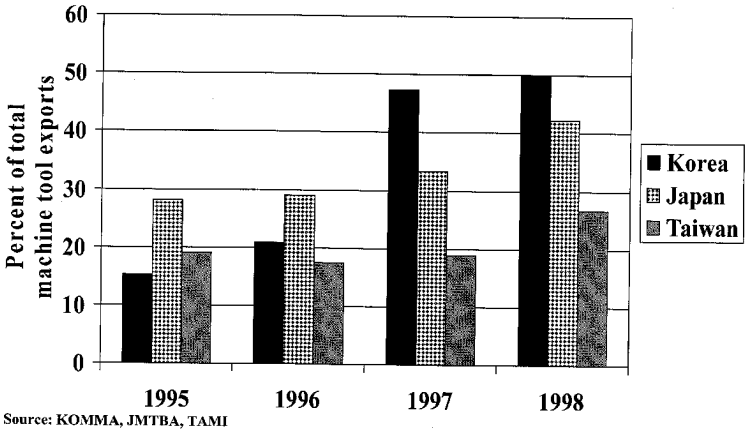
Import Penetration of All Machine Tools Based on Dollar Values



Source: Department of Commerce

Chart 5

Machine Tool Exports to the U.S. as a Percentage of South Korean, Japanese, and Taiwanese Machine Tool Exports



Source: KOMMA, JMTBA, TAMI

SUMMARY of the Effect of the Australian Government Subsidizing of Its Machine Tool Industry Over the Decade & How It Has Affected the Huffman Corporation, a Privately Owned South Carolina Corporation

The U.S. machine tool manufacturing base is comprised of many small technically innovative companies, with the average company being less than 50 people. The focus of U. S. trade law has been on larger corporations, but increasingly the fountain of technical innovation is actually in small companies. Microsoft or Dell is an obvious example of a little company turning large. But Small Business Administration statistics and forecasts show that the majority of U.S. economic growth and job creations are coming from, and will come from the burgeoning number of small technically advanced manufacturing companies. Indeed, the merging of larger companies into global titans is at once able to happen and is caused to happen by this trend. Large global corporations are becoming design, assemble and service companies that outsource parts manufacture. In the latest design of automotive plants, for example, it is the parts supplier who actually assembles the car, and not the automotive manufacturer. A good reason for this outsourcing drive is that smaller companies are early adopters of technology, whereas larger companies are late adopters or laggards. Increasing use of smaller suppliers allows the large companies to enjoy the benefit of the latest technology, while not having to fund it or absorb mis-starts or mistakes. This trend is gaining momentum, and changes the very fabric of how industrial America works. It radically shifts the importance in the whole of smaller U.S. manufacturing technology innovators.

Foreign governments seem to have realized this trend and have acted to incubate their own growth by significantly tampering with U.S. free trade laws. Their subsidy of whole manufacturing technology industries to the distinct detriment of the same capability in the U.S. is alarming and is accelerating. The U.S. economy and government, glowing from the effects of the aggregate of these trends, appear to still be playing yesterday's game. That is, watching the large companies while foreign governments, more alert due to depressed times, have been quick to see the change and have acted to take advantage of it to foster their own technically led economic revolutions. In the balance of this document, I will outline an example of what one government has done, and how it has affected a typical U.S. company.

The Huffman Corporation is an example of one of these entrepreneurial companies, known for supply of both inventive and innovative manufacturing technology to the U.S. Fortune 50. In the past year, the average machine sold increased customer productivity by 3.5 times. That's 350%. In some cases, gains were much higher. The U.S. economy's annual productivity gains are on the order of 3.5%. So Huffman's products increase productivity 100 times more than average. Products made on the company's machines touch virtually every American. If you have driven in a car or flown in an airplane, some of the components were made on Huffman machines. If you or someone you know have had a knee or hip replacement, you have been touched by products made on Huffman machinery. The company's machines have been exported to 17 other countries.

Founded in the early 60's. Huffman grew and prospered from inventions and innovations in the development of CNC Superabrasive Grinding Machining Systems. 20% of its output has been exported. The company has a reputation for high quality, precise, reliable and durable machines, besides its technical leadership. Returns on investment have been, and are extremely high, the ultimate test of the value of capital investment.

In 1990, machine tools built in Australia began to enter the U.S. with no prior experience. The product always seemed to be priced 1000 below Huffman's prices. The Australians then hired away Huffman's Sales Manager and a key software development employee. They sold light duty machines, calling Huffman's overbuilt for the applications, and telling customers that Huffman had not stayed ahead of the cost curve. With price as their main advantage, they ate quickly into Huffman's market leader position. Huffman's sales fell a staggering 45% from 1991 to 1994 before stabilizing. Employment went from a peak of 165 to just below 90, a loss of 75 manufacturing jobs. In the self-deprecating mood of the times, the company's problems were written off to poor "American" management.

In early 1994, teetering on bankruptcy, new management took over. Working through the Association for Manufacturing Technology (AMT), a 1990 Australian Government Bounty Act was uncovered that gave a 24% subsidy to its machine tool builders for exports. One specifically targeted Huffman. As it turned out, Huffman's cost was actually competitive all along, but the Australian Government had stacked the deck in their industries' favor. Old familiar story. Investigating further, several other "helps" were uncovered, but none as strong as the "Bounty Act." Earlier the Australian Government created an "Australian National Control Association" for the purpose of providing affordable CNC controls to help incubate a domestic CNC machine tool industry. Later, to develop specific automotive parts manufacturing capability, the Australian government provided "R&D" subsidies to their machine tool builders.

While Huffman had been staggered by the broad market impact, it was able to stop the free fall because it had developed a strong base of innovative applications for parts that required a significant amount of self funded R&D to create. In one case, Huffman had self-funded over $1,000,000 of R&D to create an entirely new process for manufacturing power steering pump spool valves (the one that eliminated the squeak at turning limits of power steering units). The machine was one of the first in America to achieve a Six Sigma process capability—that later became the world standard. In 1994, the Australians quoted a large requirement in Detroit, and with no experience promised two times the Huffman productivity. With so low pricing, we couldn't figure out how they could afford to fund the research to make this complex system. But then AMT uncovered the R&D subsidy. The machines they delivered only achieved half of the Huffman cycle time and failed to meet the Huffman quality level. Three years later, Huffman got the business back. But in the meantime, Huffman suffered yet another devastating loss of millions in business.

Working through AMT, other U.S. member companies affected by the Australian situation reported other apparently curious business practices. To design such technically complex and process critical machinery requires a lot of face to face technical review time between the buying team and the selling team, usually at the supplier's factory. Travel to the other side of the world is exorbitantly expensive, besides time consuming. Hearsay from customers is that their roundtrip airfares to Australia at times have been reimbursed. Other customers report that the Australian machine tool manufacturers ship to the U.S. by airfreight to avoid the lengthy delay of ocean freight. Yet the machines weigh several tons. The standard industrial practice is to ship ocean freight.

All of these practices violate WTO rules, we are told. Through AMT work with various U.S. Government agencies, by the end of 1997 the Australian Government agreed to end the larger documented subsidies. By then, interestingly many of the lightweight Australian machines that had entered the U.S. were experiencing severe reliability problems. In some cases, a machine expected to last 12 years or more was

failing to perform to its depreciation life of 7 years. Others limped on greatly reduced cycle times and poor uptime. The situation became so bad that the Australians were forced to design a much larger, more robust machine, which was introduced in late 1998. But this machine was 30% more expensive.

In the interim from the first appearance of the subsidized Australians, until their subsidies ended in late '97. Huffman Corporation reduced its cost by 35%, while retaining its premier quality, reliability and precision, and increasing its productive rates. In 1998, without the subsidies, Australian exports to the U.S. dropped by 35% to below the 1996 level. In that same period, Huffman's sales grew by 25%, after 8 years finally competing on a true cost and quality basis.

In 1998 and into 1999, a recession began in the machine tool industry worldwide. In the U.S., business dropped by 40% industry wide, with equal to or worse drops seen in Asia and Europe. In the U.S., the grinding market (Huffman and Australia's principal market) dropped 60%. In spite of this, Huffman's sales continued into the first and second quarter of 1999 above its 1998 level. Then suddenly in the third quarter, customers began reporting being able to purchase Australian machines at huge mark downs, some as much as 35%. In their September '99 quarter, Huffman's bookings and shipments dropped in spite of having no effect of the overall Industry recession to date.

Again checking with the AMT, it was discovered the Australians had instituted yet another subsidy scheme called the "Automotive Industry Export Facilitation Scheme." Basically the "scheme" allowed for *100% subsidy of machine tools value added and exported.* This clearly accounted for the sudden drop in the selling price for the much larger, more expensive Australian machine design. Clearly the earlier subsidies had fostered a false competition, and now the situation was so bad they had to extend a 100% value added subsidy for exported machines. No manufacturer in any free economy can compete against a government subsidizing competition by 100%. Huffman had hired back 20 of the 75 workers laid off in the early 90's and with the growth, had planned to hire another 20. Instead Huffman laid off 20.

Huffman has worked with NCMS and developed two types of machinery vital to reducing the cost of airframe, air engine and industrial gas turbine components. Huffman has also developed machinery that increases the quality and productivity of carbide cutting tools used to increase the productivity of making aircraft airframes and engines. Huffman also provides a critical machine that results in a 5X productivity gain in the production of automotive gears. Advances in the medical orthopedic industry were mentioned above. In spite of Huffman machines being of higher quality and better productivity, the capital goods buyers naturally gravitate to a substantially lower price. In some cases, like in the Industrial Gas Turbine power generation industry. Huffman has developed what so far is the only way to manufacture the latest generation coming to market. Without volume generated from past developments, we are unable to self-fund new developments. The difficulty with the small companies developing critical technologies to support the big global corporations is that if they are targeted by foreign countries as vital technologies, and then face 100% subsidized competition, their critical manufacturing technology will be cut off as the knowledge base is dispersed when people are scattered to find other employment. Unison, another American company hit by the Australian subsidies, went bankrupt. They were eventually able to reorganize but lost all their people in the meantime. 95% of their intellectual property evaporated, causing massive destruction from the lack of support of their thousands of installed machines and still born customer specific development projects.

On a free trade basis. Unison was competitive. Huffman is extremely competitive, not just in the U.S. but when exporting products to 17 countries. A small private company, however, is not capable of competing with a government subsidized industry that totally supports R&D and reimburses freight and travel expense. We certainly can't compete with a 100% valued added subsidy. The lost volume takes away R&D money used to fund Laser and Waterjet manufacturing in the Gas Turbine Industry that raises productivity by 5-700 percent, greatly reducing the cost in those industries.

Huffman is in favor of free trade and seeks no advantage from the U.S. Government. Instead, we would like to see cooperation between our government and our industry, which will address free trade as diligently as the Australians bias trade in their favor. The issue here is that if we as a country continue to allow violations to our free trade policies, we will be destroyed as surely as we would be if we allowed similar transgressions from a military standpoint. To deal with the slow response, more and more U.S. companies are moving production offshore to countries with favorable manufacturing policies. When large innovative manufacturing companies, like Chrysler, merge with Daimler and choose to become a German company due to non-competitive U.S. Government trade and tax policy, we are beyond the

point when we can afford to take a passive view of the economic war we are fighting, and the flagrant violations. What a national embarrassment. When the U.S. makes a transgression, other national governments are only too quick to post retaliatory duties. After ten years of flagrant abuse from the Australians, isn't it time to do something?

Senator ABRAHAM. We thank you very much.

I know Congressman Neal is here, but we will go to you, Mr. Clevenger.

STATEMENT OF JEFFREY A. CLEVENGER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, SMS GROUP, INC.

Mr. CLEVENGER. Today I want to address just two areas where Congress can help our industry compete in the emerging global market: First, the enactment of an 18-year statute of repose for work place products; and, second, the continuation and supporting of research and development programs such as Commerce's Advanced Technology Program and the R&D tax credit.

My written testimony describes the many reasons for the abundance of older machines in use in plants and on shop floors today. This old and often modified equipment causes a threat to my company and to my industry because of the very costly litigation. My written statement documents our product liability history.

We are a 20-year-old company. Of the 23 product liability suits we have defended during that time, not one involved a machine manufactured by SMS Group. They were built years ago by a company we acquired. We do not service, provide technical assistance or spare parts for these machines. In every one of the 23 cases, the machine had been through at least two owners, had been altered or modified, and in every case the machine involved was 18 years or older.

These 23 cases have cost my company in excess of $6.5 million, most of it in very wasteful transaction costs. That is $6.5 million that could have been reinvested to develop state-of-the-art products which will enhance us to survive in a global marketplace. SMS is now able to carry product liability insurance, but a large judgment against us could put us out of business quickly. It has happened to many companies in this industry.

Our foreign competitors do not bear these long-tail costs or risks because they have a 10-year statute of repose in their home markets, and their entrance into our market has been in relatively recent years.

H.R. 2005 was recently approved by the House Judiciary Committee, and may be on the floor as easily as next week. The bill provides a Federal 18-year statute of repose for equipment used in the work place. Under this proposal, no injured worker would go completely uncompensated. What the bill would do is improve the competitiveness of my company and the industry by driving down litigation costs.

Enactment of H.R. 2005 would eliminate 42 percent of my industry's product liability lawsuits. Please, we need you to adopt the 18-year statute of repose for capital goods in the work place.

While the current product liability system imposes financial hardship on my company and the industry, Commerce's ATP program does exactly the opposite for research and development. Very few companies in my industry have the capability and the re-

sources to advance state-of-the-art, and then only with substantial risk. Without ATP program advancements in manufacturing in our industry, these projects will not be taken on as frequently. By forging a partnership, however, with government, industry, and academia, the ATP enhances and encourages advancements for all.

SMS has been a very successful recipient of numerous ATP awards. My written statement details some of the ATP projects that we have successfully completed. I urge you to continue supporting this program.

Last, I would strongly urge the Senate to take action before the end of this session to extend R&D tax credits. The tax credit is another inexpensive way for Congress to encourage the R&D efforts of American businesses. Please do not go home without extending that for us.

Thank you.

[The prepared statement of Mr. Clevenger follows:]

PREPARED STATEMENT OF JEFFREY A. CLEVENGER, PRESIDENT AND CHIEF EXECUTIVE OFFICER, SMS GROUP, INC.

I. *INTRODUCTION*

My name is Jeffrey A. Clevenger. I am President & C.E.O. of SMS Group Incorporated located in Saginaw, Michigan. SMS Group employs roughly 100 workers. The bulk of our product line is devoted to vertical and inverted spindle lathes at an annual sales volume of about $20 million. I am Chairman of the Government Relations Committee of AMT, the trade association that John Logan chairs.

Today, I would like to focus my remarks on two areas in which Congress can facilitate enhanced competitiveness in the global marketplace for American manufacturers. One is to address the liability exposure resulting from the abundance of overage durable equipment used in workplaces today. The other is a continued commitment to government-sponsored R&D funding such as that provided by the Commerce Department's Advanced Technology Program (ATP).

II. *THE NEED FOR A FEDERAL STATUTE-OF-REPOSE FOR WORKPLACE DURABLE GOODS*

According to American Machinist magazine, in 1996 (the last year for which data is available), over 60% of machine tools used in U.S. metalworking industries were over 10 years old. When a factory decides to invest in new capital equipment, the old machinery is not thrown in the trash heap. Instead, companies, who lack the resources for new machines, purchase these overage machines, often altering them to fit their needs. This process is repeated, as newer machines are acquired and older ones resold. As a result of base closures over the past few years, the Defense Department has resold over 15,000 overage machine tools since 1994. They are now being used in job shops across America. Most of the machines are of World War II or Korean War vintage. The result of all of these factors is a big overhang of overage machine tools in the U.S. market. This exposes the manufacturers of the old equipment to costly litigation. In addition, it exposes companies that, like SMS, sprung out of corporate divestiture and later discovered they had assumed the historical liability for the equipment built by the dissolved company. Machines they never even manufactured.

Under product liability law today, in many states, potential liability for my industry's products is endless—literally "forever." Many of these machines—built before the creation of OSHA, before Neil Armstrong walked on the moon, before the Beatles came to America—are still in use today. Although these machines were built decades ago to safety standards of their day and although they are likely to have passed through several owners—each of whom are likely to have made their own modifications to accommodate their needs—they are still the subject of almost half of our industry's lawsuits. SMS Group has been in business for about 20 years. Of all the product liability suits we have defended during that time, not one involved a machine made by SMS. All 23 cases involved equipment manufactured by the company whose assets were purchased to form SMS more than two decades ago. SMS does not even manufacture the same types of machines named in the suits. We provide no service for them, no specs, and no spare parts. Yet defending them

in court has cost us in excess of $6.5 million. In every case, the machine in question had passed through at least two owners (and in some cases, four or five). And in every case, the machine had been modified (sometimes contrary to government safety standards). Very often, every safety door and guard had been removed prior to the injury. All 23 machines involved were over 18 years old.

Of that $6.5 million spent to defend these cases, only $2.5 million went to claimants, and of that, at least one-third went to plaintiffs' lawyers and some went as subrogation to claimant's employers or their insurance companies, even in instances where there was substantial employer fault. Some of these cases are eventually dismissed. Still others are withdrawn by plaintiffs who did not count on companies like us fighting back. Yet, we still spent $4 million defending ourselves in litigation over machines that we didn't make, and in most cases, has lost complete track of. These figures exclude the many extra man-hours put in by me and my employees working on these cases. Just tracking a serial number for one of these machines is a lesson in diligence and patience because most, if not all, of the companies originally associated with this equipment have since gone out of business.

SMS is lucky. We are able to carry product liability insurance coverage—$1 million worth of it at an annual premium of $100,000. When it came time to renew our policy this year, we wrote to several insurance companies with letters looking for additional coverage. We did not receive one quote. I believe the reason our carrier continues our present coverage is because of the aggressive manner in which we tackle these cases. However, should a case ever reach trial and the jury find for the claimant, a large judgment would force us to close our doors. The $7.5 million verdict in 1996 involving a machine built in 1948 against Mattison Technologies, a 100-year old Rockford, Illinois machine tool builder, led to the company's bankruptcy.

In contrast to the significant long-tail exposure of U.S. builders, the incursion by foreign machine tool builders into the U.S. market is fairly recent (within the past 20 years). American companies that have been in business for many years must factor into their prices the risk of litigation involving thousands of overage machines. Our Japanese and European competitors don't have those risks and those costs. Their liability exposure is relatively small (both Europe and Japan have 10-year statutes-of-repose). Enactment of a federal statute-of-repose for workplace durable goods would therefore level the playing field for U.S. manufacturers and achieve the uniformity and certainty necessary to produce the state-of-the-art products for which we are noted.

III. *H.R. 2005*

Over the years, we have testified before this and other Congressional committees in support of numerous product liability bills. Because those bills were broad in scope, some of their provisions drew controversy that could not be overcome during their consideration by the Senate and/or the White House. H.R. 2005, recently approved by the House Judiciary Committee, deals *only* with the issue of overage workplace products. It provides for a federal 18-year statute-of-repose for equipment used in the workplace. It does *not* contain controversial provisions on other product liability issues that have held up passage in past years. The bill is identical to the statute-of-repose provisions contained in product liability legislation agreed upon for consideration in the last Congress, after extensive negotiations between the White House and a bipartisan group of Congressional leaders.

Under this proposal, no injured worker would go uncompensated. H.R. 2005 would only deal with claims involving injuries allegedly caused by workplace durable goods for which the plaintiff has received or is eligible to receive worker compensation. For that specific category of cases, the provision would create a uniform, national statute-of-repose, preempting any state statutes-of-repose that apply to those claims. Otherwise, state law would continue to apply. Thus, state statutes-of-repose that may cover consumer goods and other non-durable goods would *not* be affected.

The period within which claimants could bring a lawsuit would be extended to 18 years in the 12 states that have enacted time limits (all of them shorter than 18 years); but our members are willing to accept that extension in order to achieve the certainty a national period of repose would provide.

An additional eight states have enacted statutes-of-repose based on the "useful safe life" of the product. This approach has proven to be ineffective; because the "useful safe life" of each product must be litigated in every case, and substantial transaction costs must still be incurred. Enactment of a federal 18-year statute-of-repose for workplace products would improve the competitiveness of U.S. workplace equipment manufacturers by driving down their litigation costs and cutting down on meritless lawsuits. Passage of similar legislation relating to private aircraft has revitalized the domestic aircraft industry.

SMS Group sees no end to our potential liability for the machines that are the subject of all of our company's lawsuits—machines that SMS did not even build. As long as the equipment is still on factory floors, we can be sued. Any one of those lawsuits could put us out of business. Please adopt an 18-year statute-of-repose for capital goods used in the workplace.

IV. *THE ADVANCED TECHNOLOGY PROGRAM*

I would like to take a moment to touch on another issue that affects the competitiveness of the machine tool industry and that is government-funded research and development. House and Senate conferees have provided $211 million (5% more than last year) for the Commerce Department's Advanced Technology Program (ATP). The ATP facilitates cooperative research by private industry and academia to accelerate the development of high-risk technologies that promise significant commercial payoffs and widespread benefits for the economy. ATP projects are private industry driven. Universities and non-profit independent research organizations play an important role in ATP projects. More than 100 different universities (including the University of Michigan) are involved in more than 180 ATP projects. SMS has been a very successful recipient of ATP awards. Four out of five SMS proposals have received ATP grants.

Using one as an example, in 1991, SMS, working with the Engineering School of the University of Michigan, collaborated to obtain a $1.7 million grant "Advanced Compensation Techniques for Enhancing Machine Tool Accuracy." Because of this ATP grant, we were able to combine the development by the University of Michigan of computer mathematical modeling with SMS' real-time measuring of heat build-up in various parts of cutting-type machine tool.

The problem this R&D project solved is that, as machinery is used on the factory floor, it "heats up;" thus changing the parts it is producing. As a result of what we learned from this project, the parts produced at the end of a day (when the machine is "hot") are exactly the same as the parts produced when the machine starts up in the morning.

We placed seven sensors in the machine. These sensors feed the temperature data into a computer processor, then developed software and modeling tells the computer to automatically make adjustments to compensate for temperature changes. Temperature changes that occur during the day cause the machine to lose accuracy due to "thermal growth." The new system improves accuracy (often in the tenths of a thousandth of an inch) without manual intervention, yielding higher quality and productivity with less operator intervention.

Our "commercialization effort" now has many machines in the field successfully working with an expected forecast of up to 50 percent of all new machines of this type built with the "Accu-System" feature. In 1998, we partnered with the University of Michigan again to take this technology to a broader application of machine tools through a National Science Foundation (NSF) grant entitled "Robust Error Compensation Methods for Machine Tools."

In summary, very few companies have the capability and resources to advance the "state-of-the-art" without substantial risk. As a result, further advancements in manufacturing will have to be done collaboratively and with reduced risk. By forging a unique partnership between government, industry, and academia, the ATP enhances and encourages both. I urge you to continue supporting this program.

V. *CONCLUSION*

Mr. Chairman, I want to thank you and the Committee for inviting me to appear with two of my colleagues to speak on behalf of our industry about some of the issues that affect us as we prepare to do business in the new millennium. I touched on two areas where Congress can help.

By enacting an 18-year statute-of-repose, such as H.R. 2005, Congress would be declaring that endless litigation involving overage workplace equipment in the U.S. marketplace is a serious problem facing American producers who are, after all, the foundation of our industrial economy; and that the interstate commerce clause impels a federal solution. It is a problem not faced by our Asian and European competitors in their own markets nor, because of the longtail of exposure, in ours. The current system has cost jobs, money, and time. The principal beneficiaries have been lawyers on both sides of the counsel table. Advances in high-tech products are slowed as a result. Resources that could have gone toward the development of new technology and higher productivity for America have been expended on wasteful transaction costs with a relatively small percentage of total litigation dollars going to injured workers.

H.R. 2005 does not contain controversial provisions on other product liability issues that have held up passage of reform in past years. In fact, the bill is identical

to the statute-of-repose provisions contained in product liability legislation agreed upon for consideration in the last Congress, after extensive negotiations between the White House and a bipartisan group of Congressional leaders. I urge you to enact H.R. 2005 as quickly as possible.

And by continuing to fund government-sponsored R&D programs, such as Commerce's ATP, Congress would be supporting a working partnership between the government, American industry and universities that will develop the technologies that will lead to the state-of-the-art products for which we are known throughout the world—a partnership that would not come together without the program.

Lastly, I would strongly urge the Senate to take action before the end of the session to extend the R&D tax credit. The Senate Finance Committee has approved an 18-month, retroactive extension of the credit. The tax credit is an inexpensive way for the Congress to encourage the R&D efforts of American businesses. Please do not go home without extending it.

Thank you for your attention. I would be pleased to respond to your questions.

Senator ABRAHAM. Thank you very much.

Mr. Danjczek.

STATEMENT OF DAVID W. DANJCZEK, STAFF VICE PRESIDENT, UNOVA, INC.

Mr. DANJCZEK. Thank you very much, Mr. Chairman. I appreciate the opportunity to appear before you today.

I am Staff Vice President of UNOVA, Inc., which is the largest producer of machine tools and manufacturing systems in the United States. Today I would like to focus on the issue of how our Nation's export controls and its policies affect the machine tool industry.

The most difficult issues revolves about what to do about China. China presents a dilemma for U.S. export policy. The picture is no clearer with our allies. There is no consensus about how to treat technology transfer to China, and there is presently no effective multilateral forum in which to address U.S. Government concerns. The Chinese can readily obtain the machine tools they desire, and U.S. companies are denied participation in the business.

The Wassenaar arrangement with our allies leaves licensing decisions up to individual countries based on a concept called national discretion. This arrangement provides neither a level playing field nor clear rules. U.S. licensing policies and practices have been far more restrictive than those of our European allies. In some cases, U.S. machine tool manufacturers have been denied even the opportunity to bid on projects by the Chinese because of the likely outcome of the U.S. licensing process.

At least seven different Chinese machine tool manufacturers were exhibiting sophisticated machine tools this month, which, if they were of U.S. origin, would have required a U.S. export license. Under separate cover, I am submitting the data and the brochures from the recent Chinese show for your records.

[The information referred to was not available at the time this hearing was sent to press.]

Mr. DANJCZEK. Our current multilateral export licensing system is not keeping the Chinese from acquiring highly sophisticated machine tool technology, since they can either manufacture such machines themselves or obtain them from the Europeans. There is a basic, fundamental problem with the current export regime. It puts U.S. companies on an uneven playing field with regards to sales to what is likely to be the fastest growing and largest market for cap-

ital goods over the coming decade. The Chinese have been denied nothing in terms of high technology, but U.S. firms have lost out in a crucial market, and U.S. jobs have been lost.

I would like to commend the Banking Committee for undertaking the critically important task of revising the Export Administration Act. That bill is a strong beginning toward new export control legislation. We are pleased that the legislation acknowledges, for the first time, that foreign availability can exist within a multilateral control system, including Wassenaar, not just outside that system.

I am, however, concerned with the length of time proposed for negotiations to eliminate foreign availability. Eighteen months is simply too long. We recommend that the time limit be reduced to 6 months.

We would also recommend that within the next year the administration make a serious effort to strengthen the overall Wassenaar arrangement, to include far better rules for information exchange than exist today. There ought to be a commitment among regime members to honor one another's denials. It is imperative that the status of China be clarified under the regime.

Permit me to digress very briefly on two other issues. The U.S. machine tool industry is highly successful in world markets. Our technology is absolutely second to none. We can compete head to head and win against the best machine tool companies that Europe and Asia have to offer. However, we cannot prevail on an uneven playing field. I join my two colleagues in urging you to pass an 18-year statute of repose during this Congress.

Second, UNOVA has had a very positive experiences with the Advanced Technology Program of the Commerce Department. The vast majority of these funds have gone to the universities, which were our partners in this program. The ATP program offers just the right incentive to stimulate cooperative ventures in the new technologies that are mandatory to keep American manufacturing ahead of the worldwide competition.

I will go back to the thrust of my testimony. The manner in which the current multilateral export regime is administered by the U.S. Government constitutes a major impediment to accessing key world markets, such as China. We need to create both a domestic and an international regulatory climate that puts U.S. companies on an equal footing with our foreign competitors. Our Nation's economic health and our national security demand no less.

We urge you to support the Banking Committee's EAA renewal when it comes to the Senate floor, and to oppose amendments that will make U.S. export control policy even more unilateral than it is today.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Danjczek follows:]

PREPARED STATEMENT OF DAVID W. DANJCZEK, STAFF VICE PRESIDENT, UNOVA, INC.

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to testify before you today. I am the Staff Vice President of UNOVA , Inc. UNOVA is the largest producer of machine tools and manufacturing systems in the United States, with total sales of $2 billion and machine tool sales in excess of $1 billion. Today I appear before you on behalf of AMT—The Association for Manufacturing Technology and will focus my testimony on The United States Government's technology

policy and on the issue of how our nation's export controls affect the machine tool industry, particularly those controls as they apply to China.

There seems to be widespread agreement regarding United States export control policies aimed at keeping dangerous technology out of the hands of the so-called pariahs, or rogue states, and AMT strongly supports this policy. Nevertheless, the most difficult issues revolve around what to do about China.

Certainly China presents a dilemma for U.S. export policy. On the one hand, China is a major trading partner and needs to import capital goods, including machine tools, to support its commercial economic development. On the other hand, China is quite clearly viewed by U.S. export licensing authorities as a potential military threat and technology transfer risk.

The picture is no clearer with our allies. There is no consensus within the Western alliance about how to treat technology transfer to China, and there is presently no effective multilateral forum in which to address U.S. Government concerns about dual-use exports. This dilemma has led to the worst of all worlds for both the U.S. Government and U.S. machine tool companies. The Chinese can readily obtain the machine tools they desire, and U.S. companies are denied participation in the business.

UNOVA, particularly our Cincinnati Machine Division, has been a major exporter to China, and so I would like to add something of our own experiences as a U.S. Government licensee. In the days of CoCom, the multilateral organization that coordinated technology transfer during the Cold War, the licensing process was slow and the outcome was uncertain. But we were confident that it provided a level playing field among our potential competitors, with rules that were reasonably clear. Its successor regime, the Wassenaar Arrangement, which has been in existence since 1996, leaves licensing decisions and methods up to individual countries, based on a concept called ″national discretion.″ This arrangement provides neither a level playing field nor clear rules, and our experience operating under it suggests that since CoCom ended, U.S. licensing policies and practices have been far more restrictive than those of our European allies.

As a result of our trade association—AMT's—role as a machine tool list technical advisor to the Wassenaar negotiating team, we have conducted studies of the licensing process and its outcomes among Wassenaar members. These studies show that the licensing process in the U.S. is far lengthier and far less certain in outcome than the equivalent process in European countries and Japan. The length of the process and the uncertainty of the outcome combine to put U.S. companies at a tremendous competitive disadvantage in China, even when we are competing for obviously legitimate commercial projects.

In some cases, U.S machine tool manufacturers, including Cincinnati Machine, have been denied even the opportunity to bid on projects in China because of the wariness of the Chinese customer about the likely outcome of the U.S. licensing process. More recently, Chinese customers have asked that my company provide a guarantee that an export license will be obtained as a condition of the order with significant financial penalties to accrue if the license is denied. Of course, no U.S. machine tool company could offer such a guarantee.

The view of these Chinese companies is well justified. Statistics indicate that the United States Government is far more likely to disapprove machine tool licenses for China than any of our European allies. While a mere handful of U.S. machine tool licenses have been approved over the past five years (a total of 25 licenses, or an average of five licenses per year during the period from 1992 through 1997), trade statistics indicate that our European allies have, during that period, shipped a substantial volume of highly sophisticated machine tools to Chinese end-users.

This is reflected in the average unit prices of machine tools exported from Europe to China, which are up to five times the average unit price of machine tools exported from the U.S. to China. Since the technical sophistication, accuracy, and productivity of a machine tool is directly proportional to its selling price, this indicates that the Europeans are shipping to China precisely those machine tools that are likely to be subject to export controls. Trade figures further indicate that by freely selling the same sophisticated machine tools to the Chinese which would be most likely unavailable from United States manufacturers, German, and other European providers, are also garnering sales in the non-controlled machine tool categories, putting U.S. manufacturers at a further disadvantage. Germany alone now has twice the market share of machine tool sales to China as does the United States. This is in marked contrast to the situation in South Korea where favorable export policies by the U.S. Government have led to a 20 percent market share by U.S. companies, twice the market share that we have in China. Of course, exports to Korea have deteriorated sharply due to the Asian financial crisis.

In the past three years, representatives of my company have visited many of the Chinese companies involved in the manufacture of components for commercial aircraft. We were astounded at the number of state-of-the-art European machine tools (all of which required export licenses) that had been delivered into those companies since 1994. Just last week, as John Logan has noted in his testimony, those same European manufacturers were exhibiting their five-axis machines at the China International Machine Tool ("CIMT") show, in Beijing, and assuring their Chinese customers that there would be no problem obtaining an export license from their Governments. Even more significantly, at least seven different Chinese machine tool builders were exhibiting sophisticated machine tools at the show, machines that would require an export license if sold by a U.S. manufacturer as a consequence of features on the Chinese machines such as five axes and very high levels of precision. One Chinese-made spherical lathe had a stated accuracy down to +/- .2 microns, as good as any machine made in the United States, Europe, or Japan. Under a separate cover, I am submitting data and brochures from the CIMT for the record.

Our current multilateral export licensing system certainly isn't keeping the Chinese from acquiring highly sophisticated machine tool technology, since they can readily obtain it from the Europeans or, as the CIMT demonstrated, even manufacture such machines themselves.

By far the most frustrating aspect of this situation is that many of the commercial aircraft factories in China contain joint ventures and co-production arrangements with American aircraft companies. Some of our industry's most valued domestic customers are moving production work from the U.S. to China to satisfy offset requirements related to Chinese aircraft purchases. Offsets are the practice by which China (or any other buyer of defense products or machinery) demands that a certain percentage of large capital goods sales to their country be built in their country, or that a comparable amount of business be directed to China as an offset" for the large capital goods contracts that China signs.

China already accounts for seven percent of Boeing Company's sales. Boeing projects that China will become the largest aircraft market outside of the U.S. and could, within seven years, account for nearly 25 percent of Boeing's total business. Thus, there is every reason to believe that production of commercial aircraft parts in Chinese factories will continue to grow in tandem with the Chinese demand for commercial aircraft.

The Chinese factories producing parts for American aircraft are often supervised or monitored on site by American managers, yet current U.S. Government export control policy virtually assures that the machine tools used in those factories will be of European, not American, origin. I am at a loss to understand how this policy enhances our national security.

In sum, as my industry has testified previously, there is a fundamental problem with the current export regime. Not only does it lack discipline internationally with regard to a country about which the United States Government has indicated technology transfer concerns; it also puts U.S. companies on an uneven playing field with regard to sales to what is likely to be the fastest growing and largest market for capital goods over the coming decade. Repeatedly over the past five years, the United States Government has taken a negative approach toward machine tool sales to China while our allies have not. The result has been that the Chinese have been denied nothing in terms of high technology, but U.S. firms have lost out in a crucial market. This serves neither our commercial nor our strategic interests and needs to be addressed in whatever legislation that is produced during the 106th Congress.

With this as background, I would now like to comment on specific provisions in the Export Administration Act which has just been reported to the Senate by Chairman Phil Gramm's Banking Committee.

First, I would like to commend the Banking Committee for undertaking the critically important task of revising the Export Administration Act ("EAA"). As everyone is aware, the EAA was last amended in 1988, a year before the collapse of the Soviet Union, and the authority of the Act lapsed almost five years ago. Certainly, there is ample justification to draft and adopt a new EAA to guide export controls in the 21st Century. The Banking Committee bill is a strong beginning toward new export control legislation. AMT would like to comment on a few areas where we feel the bill deals with issues important to the machine tool industry.

In earlier testimony, AMT strongly recommended that any export control legislation have a very strong provision defining ″foreign availability″ in order to reflect the reality in which U.S. companies compete today. Current law defines ″foreign availability″ as any item that can be supplied from outside the multilateral export control system in sufficient quantity and comparable quality so as to make the existing export controls on any particular item ineffective in achieving the objective of the controls.

Today, however, we operate in a context of weak to non-existent multilateral controls and, as I have pointed out, a multilateral system that allows any member country to use its own ″national discretion″ to decide whether or not, or how rigorously, to license a product. We agree with the Banking Committee that the new EAA should not be allowed to perpetuate the fiction that the current multilateral export control system functions effectively to deny technology to targets of the multilateral regime, particularly China, which has, at best, an ambiguous status in relation to the Wassenaar Arrangement's list of restricted technologies.

We are pleased that the legislation acknowledges that "foreign availability" can exist *within a multilateral control system, not just outside that system.* We strongly support language in the bill that explicitly acknowledges that "foreign availability" can come from U.S. allies and fellow participants in multilateral export control regimes, such as Wassenaar. The Banking Committee bill mandates that the Secretary of Commerce shall determine that an item has foreign availability status if the item "is available to controlled countries from sources outside the United States, including countries that participate with the United States in multilateral export control regimes." This provision should create a more reasonable "foreign availability" definition, one that reflects the new reality, where "foreign availability" of a controlled product is most likely to come from a U.S. ally rather than a company outside the multilateral control regime.

Nevertheless, we are concerned with the length of time proposed for negotiations to eliminate ″foreign availability.″ In an age when the product cycle for some high technology products is scarcely two years, eighteen months is simply too long a time limit for such negotiations. Either the country in question is willing to stop selling the particular product or technology to the target country, or it is not. For many U.S. companies, a year and one-half would give foreign competitors too great a head start in developing a new market. Thus, in practice, the liberal time limit in the proposed legislation could fatally undermine the stated purpose of the foreign availability provision, which would be to give U.S. companies a fair opportunity to compete for business in products already available to the target country. AMT recommends that the time limit be reduced to six months, or, at most, nine months to ensure a better balance between adequate time for negotiations and competitive consequences to U.S. companies.

Finally, we would recommend that, within the next year or so, the Administration go back to the negotiating table and make a serious effort to strengthen the overall Wassenaar Arrangement. As I have noted, and as the Cox Committee points out, Wassenaar provides weak guidance and almost no discipline upon its members. It is almost worse than having no multilateral regime at all, because it gives the appearance of restricting technology transfer, while leaving all the key judgments up to Wassenaar's constituent members.

Revisions of the Wassenaar charter ought to include far better rules for information exchange than exist today. Under current rules, there is not even a "no undercut" pledge, under which each member state promises not to grant licenses to companies in target countries which have been previously denied licenses by another member of the multilateral regime. At the very least, the U.S. Government ought to be informed beforehand of the intent of other members to grant such licenses, and, at best, there ought to be a commitment among regime members to honor one another's denials.

It is imperative that the status of China be clarified for regime members. If China is not a target of Wassenaar, what is it? Are there any limits on what technology Wassenaar members, at their own discretion, can export to China? These are the sorts of questions that need to be addressed. They are left ambiguous in the current multilateral arrangement.

The U.S. machine tool industry is highly successful in world markets. Its technology is second to none, and its companies can compete head-to-head and win against the best machine tool companies that Europe and Asia have to offer. But those companies cannot prevail on an uneven playing field. I join my colleagues in urging you to pass an eighteen-year statute of repose during the 106th Congress. I strongly believe that such a law would be a beginning point in the battle to level the playing field with our foreign competitors. I would also like to say a word about the Advanced Technology Program ("ATP") of the Commerce Department. UNOVA has had a very positive experience with the ATP program. Although the vast majority of the funds have gone to the universities that were our partners in this program, we found that the ATP program offers just the right incentive to stimulate cooperative ventures in the new technologies that are necessary to keep American manufacturing ahead of the worldwide competition.

But let me return to the thrust of my testimony. As I have argued, the manner in which the current multilateral export regime is administered by the U.S. Govern-

ment constitutes a major impediment to accessing key world markets, such as China. I have attempted to detail some of those problems here today. There is some reason for optimism. In particular, we are encouraged by the legislation that has just been reported by the Banking Committee, and it is our hope that an appropriately amended Export Administration bill will become law. We need to create both a domestic and an international regulatory climate that puts U.S. companies on equal footing with their foreign competitors. Our nation's economic health and national security demand no less.

We urge you to support the Banking Committee's EAA renewal when it comes to the Senate floor and to oppose amendments that would make U.S. export control policy even more unilateral than it is today.

Senator ABRAHAM. Thank you very much, Mr. Danjczek.

What I am going to do is ask this panel if you would not mind taking seats in the first row for a brief period of time, and we will hear from our congressional panel. And then we will ask our business panel to return so that we might engage in some questioning with them.

Let me again welcome Congressman Don Manzullo, and now Congressman Richard Neal, from Massachusetts. They are the co-chairs of the Machine Tool Caucus of the House of Representatives. And we appreciate very much your efforts on behalf of this industry. And as you can tell, there is some interest over here as well on some of the issues that you both have worked on in the Caucus.

I just wanted to add, we normally, as everybody knows, would have had the congressional panel first. So I suspect some of the issues we have just heard about are going to be part of the comments that you are making in terms of some of the legislative efforts that you have engaged in. And we apologize for the re-sequencing here, but hopefully it will not lose the purpose of trying to draw together both the -- in fact, it may be in some ways, hearing some of the problems first and then hearing about some of the ideas that are being debated for solutions is in some ways more effective.

So we will begin with Congressman Neal. Thank you for being here today.

STATEMENT OF HON. RICHARD E. NEAL, U.S. REPRESENTATIVE FROM MASSACHUSETTS

Mr. NEAL. Thank you, Mr. Chairman. And I want to thank members of the subcommittee who have taken an ardent interest in this critical issue.

I appreciate the opportunity to testify today on a subject of great concern to me, the status of the United States machine tool industry. I am especially pleased to appear here with my fellow co-chair of the House Machine Tool Caucus, Representative Don Manzullo, one of the most ardent champions of the industry in the House.

As we are all aware, our Nation is going through an unprecedented economic boom. Much of that boom can be attributed to a revolution that has taken place in productivity. In the past 5 years, productivity grew at double the pace of the previous 25 years. This, in part, explains why the economy grew at 4 percent last year, while the core inflation rate dropped by a half a percentage point, and the employment rate remained stable.

But what explains this remarkable productivity increase?

Well, in part, it is obviously a result of productivity gains of the information age, the computer, and the Internet. But dramatically

better machine tools and industrial automation deserve a significant part of the credit, as well. This is why I would argue that machine tools are vital underpinnings of our economy and our continued prosperity.

It is the health of this critical industry that we are concerned about today. The industry witnesses certainly will, and have, provided details on the health of the industry itself, which we know is not good. And they will make suggestions about how to improve that health. You will hear about the recent downturn in both U.S. and foreign demand and how the Asian financial crisis has reached across the Pacific to affect the profitability of the U.S. industry.

In 1998, we saw a dramatic 39 percent drop in U.S. machine tool consumption. At the same time, demand for machine tools everywhere in Asia, with the exception of China, went down to almost nothing. In response, much as they did with steel, the major Asian producers—Japan, Taiwan and Korea—redirected their machine tool sales efforts to the United States. Literally, the Asian machine tool producers exported their unemployment to our shores by conducting fire sales on machine tools, cutting their prices 30, 40 and even 50 percent in order to unload their inventory in the U.S. marketplace.

Fortunately, there are trade remedies under U.S. law to deal with such practices when U.S. companies are injured by unfair foreign competition. The continued availability of those trade remedies—anti-dumping and countervailing duty rules—is one of the reasons why I will be attending the WTO ministerial in Seattle as a member of the Ways and Means Committee Trade Subcommittee next month.

As the press has reported, developing nations, along with Japan, are trying to undermine our trade laws by placing revisions to the international guidelines concerning these trade remedies on the agenda for the next trade round, beginning in Seattle at the end of November. If the U.S. Government were to accept these trade law revisions as a debatable topic, I believe that the already fragile coalition that supports free trade in the U.S. Congress would fall apart. It is that serious.

The situation in which the machine tool industry finds itself today is a perfect example of why we need strong and effective trade remedies. Whether the industry decides to petition for the redress under U.S. trade laws or not, it is critical that the machine tool industry retain that option.

I am a cosponsor, along with more than 200 of my colleagues in the House, of the Visclosky resolution, H. Res. 298, instructing our trade negotiators not to participate in any negotiations which revision of trade remedies is part of that negotiating agenda. We cannot afford to make any concessions regarding these vital protections available under international agreement, and which are a cornerstone of the open trade policy of the U.S.

Another issue about which you will be hearing today is that of our Nation's export control regulations and how they affect the U.S. machine tool industry. In that regard, I would like to share with you the experience of one of my constituencies, Bostomatic, which employs 140 people in Milford, Massachusetts. Bostomatic has aggressively pursued business in the China market, which is

the fastest growing machine tool market in the world and one of the few markets where there is not an artificial barrier to protect the home industry.

Bostomatic makes an excellent five-axis machining center, which is highly competitive with products made by its 23 competitors who make a similar product for the Chinese market. However, the Defense Department seems to feel that there is something unique about the Bostomatic model that causes DOD to either object or slow down the licenses that are submitted for sales to China. This is a tremendous handicap for a company already in a highly competitive market.

Just last week, Defense objected to a license for an aircraft engine plant, even though the Chinese have made it clear that they will switch to a Swiss competitor if a license is not forthcoming from the U.S. shortly. Other potential Chinese customers have become aware of the delay and do note this problem when deciding from whom they wish to buy.

This particular situation is especially puzzling because there are so many competitors ready to step up and take over the business from Bostomatic. Moreover, none of the European companies take any more than a few weeks to obtain a license for machine tools destined for China, while the U.S. process goes on and on and on for months and months and months.

While I fully and completely support export controls on critical machinery, I fail to see how our national security is protected by ensuring that the Swiss or the French or the Germans get machine tool business in China, in lieu of American companies like Bostomatic. As both Vice President Gore and Governor Bush pointed out in separate speeches last week, our export control system is broken and we need to fix it.

We need to fix it before more of my constituents and your constituents are put out of work for no good reason, and the U.S. machine tool industry is put at an overwhelming disadvantage in the fasting growing market in the world—China. As you will hear, there are a number of other things that we could do that would help this vital industry. We certainly need to renew the research and development tax credit. We in Congress need to realize how important it is to support technology research and development funding, which has enormous payoffs in the competitiveness of U.S. companies at home and in world markets.

The Advanced Technology Program, ATP, has been underfunded, in my view. That should be corrected as soon as possible, as well, although most of the work needs to be done in the House, rather than in the Senate.

In sum, let me thank you for the opportunity to bring these matters to your attention. The machine tool industry is a vital part of our Nation's competitiveness and prosperity. And I cannot think of a better subject for your subcommittee to explore.

Thank you very much, Mr. Chairman.

[The prepared statement of Congressman Neal follows:]

PREPARED STATEMENT OF HON. RICHARD E. NEAL, U.S. REPRESENTATIVE FROM MASSACHUSETTS

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to testify today on a subject of great concern to me, the status of the United States machine tool industry. I am especially pleased to appear here with my fellow cochair of the House Machine Tool Caucus. Rep. Donald Manzullo, one of the most ardent champions of the industry in the House.

As we are all aware, our nation is going through an unprecedented economic boom. Much of that boom can be attributed to a revolution that has taken place in productivity. During the past five years, productivity grew at double the pace of the previous 25 years. This in part explains why the economy grew at four percent last year, while the core inflation rate dropped by half a percentage point and the employment rate was stable.

What explains this remarkable productivity increase? Well, in part it is obviously a result of productivity gains of the information age, the computer and the Internet. But dramatically better machine tools and industrial automation deserve a significant part of the credit as well. This is why I would argue that machine tools are a vital underpinning of our economy and our continued prosperity. It is the health of this critical industry which we are concerned about today.

The industry witnesses will provide detail on the health of the U.S. machine tool industry, which is not good, and they will make suggestions about how to improve that health. You will hear about the recent downturn in both U.S. and foreign demand and how the Asian financial crisis has reached across the Pacific to affect the profitability of the U.S. industry. In 1998, we saw a dramatic 39 percent drop in U.S. machine tool consumption. At the same time, demand for machine tools everywhere in Asia, with the exception of China, went down to almost nothing. In response, much as they did with steel, the major Asian producers—Japan, Taiwan, and Korea—redirected their machine tool sales efforts to the United States. Literally, the Asian machine tool producers exported their unemployment to our shores by conducting fire sales on machine tools, cutting their prices 30, 40, and even 50 percent in order to unload their inventory in the U.S. marketplace.

Fortunately, there are trade remedies under U.S. law to deal with such practices when U.S. companies are injured by unfair foreign competition. The continued availability of those trade remedies, i.e. antidumping and countervailing duty rules, is one reason why I will be attending the WTO Ministerial in Seattle at the end of next month. As the press has reported, developing nations along with Japan, are trying to undermine our trade laws by placing revisions to the international guidelines concerning these trade remedies on the agenda for the next trade round beginning in Seattle at the end of November. If the U.S. Government were to accept these trade law revisions as a debatable topic, I believe that the already fragile coalition that supports free trade in the U.S. Congress would fall apart. It is that serious.

The situation in which the machine tool industry finds itself today is a perfect example of why we need strong and effective trade remedies. Whether the industry decides to petition for redress under U.S. trade laws, or not, it is critical that the machine tool industry retain that option. I am a cosponsor, along with more than 200 of my colleagues, of the Visclosky Resolution (H. Res. 298) instructing our trade negotiators not to participate in any negotiations in which revision of trade remedies is part of the negotiating agenda. We cannot afford to make any concessions regarding these vital protections available under international agreement, and which are a cornerstone of the open trade policy of the U.S.

Another issue about which you will be hearing today is that of our nation's export control regulations and how they affect the U.S. machine tool industry. In that regard, I would like to share with you the experience of one of my constituents, Bostomatic, which employs 140 people in Milford, Massachusetts. Bostomatie has aggressively pursued business in the China market, which is the fastest growing machine tool market in the world, and one of the few markets in which there are not artificial barriers to protect the home industry. Bostomatic makes an excellent five-axis machining center, which is highly competitive with the products made by its 23 competitors who make a similar product for the Chinese market. However, the Defense Department seems to feel that there is something unique about the Bostomatic model that causes DOD to either object or slow down the licenses that are submitted for sales to China. That is a tremendous handicap for a company already in a highly competitive market. Just last week Defense objected to a license for an aircraft engine plant, even though the Chinese have made it clear that they will switch to a Swiss competitor if a license is not forthcoming from the U.S. shortly. Other potential Chinese customers have become aware of the delay and do note this problem when deciding from whom they wish to buy. This particular situation

is especially puzzling because there are so many competitors ready to step up and take over the business from Bostomatic. Moreover, none of the Europeans companies take any more than a few weeks to obtain a license for machine tools destined for China, while the U.S. process goes on for months and months. While I fully and completely support export controls on critical machinery, I fail to see how our national security is protected by ensuring that the Swiss, or the French, or the Germans, get machine tool business in China in lieu of American companies like Bostomatic. As both Vice President Gore and Governor Bush pointed out in separate speeches last week, our export control system is broken, and we need to fix it. We need to fix it before more of my constituents, and your constituents, are put out of work for no good reason, and the U.S. machine tool industry is put at an overwhelming disadvantage in the fastest growing market in the world, China.

As you will hear, there are a number of other things that we could do to help this vital industry. We need to renew the Research & Development tax credit. And we in Congress need to realize how important it is to support technology research and development funding, which has enormous payoffs in the competitiveness of U.S. companies at home and in world markets. The Advanced Technology Program ("ATP") has been underfunded in my view, and that should be corrected as soon as possible, although most of the work needs to be done in the House rather than in the Senate.

In sum, I would like to thank you for the opportunity to bring these matters to your attention. The machine tool industry is a vital part of our nation's competitiveness and prosperity, and I cannot think of a better subject for your Subcommittee to explore. Thank you.

Senator ABRAHAM. Thank you very much, Congressman.

We will now turn to Congressman Manzullo. We appreciate your having had to go back and forth here. We appreciate that you came back to participate today and for your leadership on this issue.

STATEMENT OF HON. DONALD A. MANZULLO, U.S. REPRESENTATIVE FROM ILLINOIS

Mr. MANZULLO. Thank you very much, Senator. I appreciate the opportunity to speak here.

Mr. Neal and I formed the House Machine Tool Caucus earlier this year to work together to find bipartisan solutions to the problems facing the machine tool industry. I represent the northern tier counties of the State of Illinois, which includes Rockford, a center of machine tool manufacturing in the United States. Over the past year, I have heard from my business leaders back home that they have never had it this bad.

The city of Rockford has less than 150,000 people, but has over 1,100 machine shops and factories of all sizes. The situation, they tell me, is even worse than in the recessions of the early eighties and nineties. In fact, in 1981, Rockford, Illinois led the Nation in unemployment, with between 25 and 27 percent. We lost 100 factories and over 10,000 highly skilled jobs.

Some of the old-timers even believe that business prospects are worse than the Great Depression of the 1930's. So here we are, from the Rust Belt, if you want to call it that, testifying before the Senate. People are absolutely jubilant or ebullient, whatever the word is, over the economy. And yet, we see a very dark side to the economy that is growing and growing. And that is why Mr. Neal and I formed this Machine Tool Caucus and why we appreciate the opportunity to express our concerns to you, Senator.

Just this past Monday, I met with owners of small machining shops who are thinking about closing up because, in part, orders from machine tool companies have dried up. How can this be, when many say that these are the best of economic times? I believe that

these rosy economic statistics mask an underlying reality that may erode our manufacturing base and our long-term competitiveness.

While the machine tool industry is small when compared to other industries, it forms the base of manufacturing in this country. In my mind, the health of the machine tool industry is a harbinger of things to come for the rest of the U.S. economy. The machine tool industry is usually the first to suffer during an economic downturn and the last to recover.

We may be seeing the first steps toward an economic downturn in this country unless we take steps now to improve the state of the U.S. machine tool industry. Let me give you some concrete examples from back home.

Beloit Corporation, of Rockton, Illinois, a manufacturer of large paper-making machines, and Reed-Chatwood, of Rockford, a textile machinery manufacturer, went bankrupt primarily because the Asian financial crisis dried up all their export markets.

W.A. Whitney, of Rockford, makes punch plasma machine tools for farm equipment manufacturers. Because U.S. farmers are suffering primarily due to a drop-off in U.S. agricultural exports to Asia, they are not buying new farm equipment. Thus, farm equipment manufacturers are cutting back on their suppliers, including their purchases of machine tools from W.A. Whitney. To further compound the problem, the strong U.S. dollar has dried up W.A. Whitney's exports to Europe, and made it very difficult for them to compete domestically against price-discounted imports.

The Ingersoll Milling Machine Company, of Rockford, is one of the largest employers of the City, with over 2,000 workers. Just last week, Ingersoll announced an additional cut of 17 workers, on top of the 60 jobs lost last summer, because of slow sales.

Our export policy compounds the domestic problems that face every machine tool builder. Ingersoll finds it very cumbersome and difficult to export to China. Our Nation's export control laws have made it next to impossible for Ingersoll to sell a five-axis machine tool to legitimate civilian end users in China.

In 1997, only one U.S.-made five-axis machine was sold to China. Germany has sold China 18. Something is not right.

The Export Administration Reauthorization Act, as reported by the Senate Banking Committee, goes a long way toward a sensible export control policy that recognizes post-cold war realities.

In addition, Ingersoll was caught up in the middle of the sanctions imposed on India. Just as they were about to close a deal on selling a $5 million, four-axis machining center to a state-owned electrical powerplant in India, the U.S. put the brakes on this and future Ingersoll exports to India as retaliation for India testing a nuclear device. This is retaliation? Laying off workers in Rockford, Illinois, to protest India's new nuclear testing policy?

All India has to do is purchase similar machines from Europe. It is time for a total reexamination of our unilateral economic sanctions policies.

Senator, it is very, very disheartening, as Mr. Neal and I sit by and see the members of our House with the so-called retaliations, that every time there is a bad actor overseas, they come up with sanctions and stop us from exporting to these bad actors, where as the bad actors will simply turn around and buy the very same ma-

chinery from a foreign country. And here we are back home, with hundreds and hundreds of employees that are being laid off because of a misguided, misunderstood, so-called export policy.

Rockford used to have Madison Technologies, a manufacturer of large grinding machines. Shortly after celebrating their 100th birthday, Madison went bankrupt because they could not pay a $7.5 million product liability verdict on a machine they had built almost 50 years earlier. In fact, at the time they filed bankruptcy there was a summons sitting on the desk of the president on a machine that they had built at the time that the Czars had ruled Russia.

Other nations place limits on the number of years someone can file a product liability lawsuit. This helps foreign machine tool builders reduce the cost of their machines. Adopting a modest statute of repose for work place durable goods, such as 18 years as contained in H.R. 2005, in the U.S. would go a long way toward helping machine tool manufacturers.

In fact, Senator, it is the very same philosophy that Dan Glickman and others in the House of Representatives and members of your body set forth when private aviation manufacturing came to a stop when Cessna no longer manufactured anything other than commercial aircraft and business jets. Former Representative Dan Glickman guided legislation through the House and other members guided it through the Senate. In fact, I think it passed the House unanimously and the Senate unanimously, a bill that applied a nationwide statute of repose on aircraft and aircraft parts.

That brought back the aircraft industry and Cessna. They built, a plant in Topeka, Kansas for starting all over again in private aviation that now employs between 2,000 and 3,000 workers. That is the situation where reasonable and practical product liability reform brought back a sector that we had completely lost.

Finally, Mr. Chairman, I would be remiss if I did not mention the regulatory and tax burdens that face the machine tool industry. Profit margins are so thin, and in some cases nonexistent, that any increase in cost in these areas could push the companies into bankruptcies. Several companies—and these are the little guys, Senator, some with 10–15 employees, most with under 100 employees—have mentioned to me that their health and accident insurance premiums went up 30 to 40 percent this past year.

Other companies described increased inspections by the Occupational Safety and Health Administration, OSHA, even though they have never had a worker injured on the job in the entire history of the company. These inspections always result in the payment of some fine for an obscure violation to justify the inspector's visit. This is in spite the rhetoric I keep on hearing from OSHA in Washington that they no longer issue fines for paperwork violations and they want to help companies comply with the law.

That is why I believe we need to pass comprehensive OSHA reform in order to transform the agency—one that ensures the safety of the worker, but does not penalize the small businesses that are trying to improve the worker environment.

Thank you, again, Mr. Chairman, for holding this important meeting. We need a vibrant machine tool industry in the U.S. for our national defense and for our future economic well-being.

[The prepared statement of Congressman Manzullo follows:]

PREPARED STATEMENT OF HON. DONALD A. MANZULLO,
U.S. REPRESENTATIVE FROM ILLINOIS

Thank you Chairman Abraham and Members of the Subcommittee for allowing both Representative Neal and I to speak to the challenges confronting the machine tool industry.

We formed the House Machine Tool Caucus earlier this year to work together to find bipartisan solutions to the problems facing the machine tool industry. I represent the northern counties of Illinois, which includes Rockford, a center of machine tool manufacturing in the United States. For over the past year, I have heard from my business leaders back home that they have never had it this bad. The situation is even worse than the recessions of the early 1980's and 1990's. Some old timers even believe that business prospects are even worse than the Great Depression of the 1930's. Just this past Monday, I met with the owners of small machining shops who are thinking about closing up because, in part, orders from machine tool companies have dried up.

How can this be when many say that these are the best of economic times? I believe these rosy economic statistics mask an underlying reality that may erode our manufacturing base and our long-term competitiveness.

While the machine tool industry is small when compared to other industries, it forms the base of manufacturing in this country. In my mind, the health of the machine tool industry is a harbinger of things to come for the rest of the U.S. economy. The machine tool industry is usually the first to suffer during an economic downturn and the last to recover. We may be seeing the first steps towards an economic downturn in this country unless we take steps now to improve the state of the U.S. machine tool industry.

Let me give you some concrete examples from back home. Beloit Corporation of Rockton—a manufacturer of large paper-making machines—and Reed-Chatwood of Rockford a textile machinery manufacturer—went bankrupt primarily because the Asian financial crisis dried up all their export markets.

W.A. Whitney of Rockford makes punch plasma machine tools for farm equipment manufacturers. Because U.S. farmers are suffering primarily due to a drop-off in U.S. agricultural exports to Asia, they are not buying new farm equipment. Thus, farm equipment manufacturers are cutting back on their suppliers, including their purchases of machine tools from W.A. Whitney. To further compound their problem, the strong U.S. dollar has dried up W.A. Whitney's exports to Europe and made it very difficult for them to compete domestically against price discounted imports.

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In addition, Ingersoll was caught up in the middle of the sanctions imposed on India. Just as they were about to close a deal on selling a $5 million four axis machining center to a state-owned electrical power plant in India, the U.S. put the brakes on this and future Ingersoll exports to India as retaliation for India testing a nuclear devise. This is retaliation? Laying off workers in Rockford to protest India's new nuclear testing policy? All India has to do is purchase similar machines from Europe. It's time for a total reexamination of our unilateral economic sanctions policy.

Rockford used to have Mattison Technologies, a manufacturer of large grinder machines. Shortly after celebrating its 100th birthday, Mattison went bankrupt because it couldn't pay a $7.5 million product liability verdict on a machine they built in 1948. Other nations place limits on the number of years someone can file a product liability lawsuit. This helps foreign machine tool builders reduce the cost of their machines. Adopting a modest statute of repose for workplace durable goods—such as 18 years as contained in HR 2005—in the United States would go a long way towards helping machine tool manufacturers.

Finally, Mr. Chairman, I would be remiss if I did not mention the regulatory and tax burdens that face the machine tool industry. Profit margins are so thin—in some cases, nonexistent—that any increase in costs in these areas could push these companies into bankruptcy. Several companies mentioned to me that their health and accident insurance premiums went up 30 to 40 percent this past year.

Other companies describe increased inspections by the Occupational Safety and Health Administration (OSHA) even though they have never had a worker injured on the job in the entire history of the company. These inspections always result in the payment of some fine for an obscure violation to justify the inspector's visit. This is in spite of the rhetoric I keep hearing from OSHA in Washington that they no longer issue fines for paperwork violations and they want to help companies comply with the law. That's why I believe we need to pass comprehensive OSHA reform in order to transform the agency into one that helps—not penalizes—these small businesses improve the worker environment.

Thank you, again, Mr. Chairman, for holding this important hearing. We need a vibrant machine tool industry in the United States for our national defense and our future economic wellbeing.

Senator ABRAHAM. Congressman, thank you.

I thank you both for coming over here. I know there are activities still going on, on the House floor, and so we will let you return to your side of the Hill. But we appreciate your leadership on these issues as well as the time you have spent with us today. And we look forward to continuing to work on these together. Thank you.

Mr. MANZULLO. Thank you.

Mr. NEAL. Thank you.

Senator ABRAHAM. Now we will ask our first panel to return, now in the form of being the second panel. We thank you again for your patience.

I also want to state, on behalf of Senator Dorgan, who you saw stop by briefly, he had hoped to be able to participate in full in the hearing today, but has had something come up with the Democratic leadership that he has to attend to. So he asked me to please convey his regrets, but also to express his interest in what we are doing here today and his continuing involvement with us in that effort.

Let me start with you, Mr. Clevenger. You mentioned that you had supported broader-based legal reform of product liability legislation but had—in fact testified in favor of that in the past, but now have sort of been willing to shift gears a little bit to support the notions contained in H.R. 2005. Could you give us just a little bit more of a expansion of why?

Mr. CLEVENGER. Well, as I think you know, Senator, we have been at this for a long time, my colleagues and I. I am a second-timer on the Government Relations Committee, endeavoring to help the industry. In the analysis of what would do us the most good, the statute of repose is that. As I stated, 42 percent of our industry lawsuits would be eliminated just by taking out of context the machines over 18 years.

The other issues were very difficult to get by the Senate, and even the House, the number of times we have attempted. And we felt pretty comfortable that this got as far as the White House last year. By narrowing it to the statute of repose, we are willing to look at a half a loaf of bread, frankly.

Senator ABRAHAM. I understand.

Mr. Danjczek, let me ask you this. You have talked about export control policies and concerns about that. In your judgment, what do

you think is the best thing we could do to strengthen the current export control system?

Mr. DANJCZEK. I think that we need to have true multilateral controls. I do not think the unilateral sanctions have ever achieved their intended goal, if that goal was to stop someone from gaining certain technology. I also think that we need to speed up the time period of the licensing process to that in fact U.S. companies know where they will stand in a much more expeditious manner, so that our foreign customers cannot complain that our system is holding us hostage.

Finally, I think that we really also need to have better certainty in the system. I mean, in the old days there was a much tighter system, but there was much more certainty to it, as well. And I think those are the three areas that need improvements done.

Senator ABRAHAM. Have you felt that our allies have been cooperating and helping us with our efforts to prevent sophisticated technology from falling into the hands of countries——

Mr. DANJCZEK. By helping making them be stronger competitors, they have helped us in that way, Senator. [Laughter.]

But in fact they actually go around to our customers saying, why would you ever consider buying a U.S. machine tool; you do not know whether you can get an export license; chances are you cannot. And so they really have been a great hindrance, and they take advantage of the U.S. export control system to their own competitive advantage.

Senator ABRAHAM. If the United States does decide to license sophisticated machine tools to China or other places, what kind of protections are there that they would not be misused?

Mr. DANJCZEK. Senator, there is no absolute certainty that they would not be used for an inappropriate purpose. I think I need to state that right up front. However, the U.S. Government, in the past, has imposed export restrictions and conditions on the exports that U.S. companies have been able to abide by without too much difficulty. Our foreign competitors have no such restrictions. Even having some small restraints, I think, helps.

Generally, in the plants in which these machine tools are used, those plants have U.S. citizen managers and U.S. co-producers. The U.S. air frame manufacturers, which co-produce the parts, are physically present, who are able to monitor and who will be able to report on the event of any diversion or inappropriate use.

Senator ABRAHAM. Are you familiar with Senator Gramm's export legislation?

Mr. DANJCZEK. Yes, sir, I am.

Senator ABRAHAM. What are your thoughts on that?

Mr. DANJCZEK. I think that it is an outstanding step. I would love to see it become law—the sooner, the better. I believe that it does provide some of the necessary conditions. There are areas, such as in foreign availability research, and I think 18 months is too long a period of time. It should be 6 months. I think that there should be some requirement for the administration to negotiate with our allies a stronger Wassenaar regime.

Senator ABRAHAM. Mr. Logan, would you comment on that at all?

Mr. LOGAN. I think Mr. Danjczek has clearly spelled out the position that the organization has on that.

Senator ABRAHAM. Very well. Earlier this year I sponsored a symposium here on the Hill, along with NACFAM, which is the National Coalition for Advanced Manufacturing. I know that each of you, as well as I think maybe our congressional members, commented a little bit about some of the advanced technology programs and so on.

The symposium included almost three dozen companies, most of which are involved in manufacturing to one extent or another. Our topic that day was basically ways by which Congress and the administration can assist businesses in improving productivity. One came away from these meetings with the certainty that increasing productivity was the key factor in terms of increasing American economic growth, because the size of our work force is really not going to be much of a positive factor in the future, in terms of overall economic growth. Growth is more or less a function of both the labor force and productivity.

So one of the things we were trying to do was to come up with various ideas and so on which we thought would be useful actions for us to take potentially here, or actions to avoid taking, to increase productivity. And so I guess I was wondering if maybe each of you could comment a little bit on this in general, and maybe just comment from your own experiences on the whole question of productivity and its relationship with all these issues, such as economic growth, higher salaries and so on. And if you wanted to add to it any specific recommendations to us that might assist people in the industries you represent in terms of increasing productivity, I would be interested in that, as well.

Mr. DANJCZEK. Senator, I think some basic research—and I had spoken earlier, and I believe that both Jeff and John had also spoken on the Advanced Technology Program—companies themselves will often do applied research and apply their own money to that to take an existing idea and productionize it, to join with the universities, where the universities are getting the majority of the funds under the ATP program. Companies participate with them in what is a basic level of research which actually leads us to have higher productivity, to come up with new ideas and new technologies that can assist all of us in achieving the productivity gains that we need to achieve to grow as a Nation.

Senator ABRAHAM. Mr. Logan.

Mr. LOGAN. My view is one that encouraging manufacturing productivity is the essence of our industry. And in order to do that, we need to continuously reinforce the competitiveness of the industry itself. And, to me, the shortest distance between where we are today and where we should be is a review of tax issues, border adjustability issues, tax credit issues. Those are the steps I think that could be most effective in promoting the industry and hence promoting productivity.

Senator ABRAHAM. Jeff.

Mr. CLEVENGER. I think my colleagues have covered the two areas I think that are probably the most important. But I would leave you with the thought that technology development is still a business. It is not some inventor in the basement of his house inventing things. Today technology development is a collaboration, as

I said, of academia, of government and of business. It cannot be competitive alone.

I think ATP has facilitated, through the grant efforts, us working together. If we could learn to work together on and on and on, we can increase productivity. It is our goal, every time we sit down with a major manufacturing business or company, it is our goal to increase their productivity. That is all we think about in terms of gaining orders is what can we do new, different and better. And sometimes it does not exist within the cobwebs or the experience of a 100-person factor and it does require working with other people.

So our company has been very successful at it. We will continue to use it. But, clearly, the cost of doing business has to enter into everything we do.

Senator ABRAHAM. Good. We have been joined by Senator Ashcroft, who is, I know, very interested in a number of these issues. I have come sort of to the end of my questions, and the panel has made their statements. If you had either an opening statement or questions, either one really, John, I think the floor can be yours.

I know we have a Senate Republican conference coming up at 3. So what I am inclined to do is to turn this over to you and let you finish. I have got a few more questions, but I think I may submit them in writing so that we can make it to that meeting. So I will just turn it over to you.

STATEMENT OF HON. JOHN ASHCROFT, U.S. SENATOR FROM MISSOURI

Senator ASHCROFT. Thank you, Mr. Chairman. Let me just commend you for your interest in the fundamentals of American productivity.

There are industries that are sort of the last participants in the line of productivity. There are industries that are the first elements of the line of productivity. The machine tool industry is at the very beginning of our capacity. For that reason, I think it is very, very important. No one understands or cares about that more than you do, Mr. Chairman. I am grateful.

I believe that the genius of America is not that you come to Washington and hear Senators speak, not that you come to learn, but that you come to teach, and it is for us to hear you. I thank you for coming.

I think you can help us make informed judgments and decisions about things we can do to make sure that the U.S. machine tool industry participates in a tremendous surge in the next century, as America leads the world. And I am aware of the sort of double hit that is come on the machine tool industry, that has come from lowered exports because of the depressions in some parts of the world, and the rise of individuals in other settings that would compete.

I want you to know that I want to do everything within my power to make it possible for the United States superiority, creativity, vitality, energy, and understanding of productivity to be reflected in the U.S. machine tool industry. I know that we have that industry present in the State of Missouri. It is not only present in

the State of Missouri, close to my home in the southwest of Missouri, in Lebanon there, but in other settings around the State.

Machine tools are the foundation of an industrialized society, and I think we need to make sure that there is an environment in which we operate which provides a basis for you to be competitive. If you are the foundation of industry, America and its governmental setting needs to be a foundation for you, to put you on a playing field that makes it possible for your superior skills to prevail.

Mr. Chairman, without a healthy and robust machine tool industry, I strongly believe that not only our economic freedom, but our national security is at risk. I hope this committee will work with industry and other committees in the Senate to explore areas where our national policies have, in the past, maybe hindered the ability of the machine tool industry to survive and thrive, and that we could adjust those policies to make it possible for us to be the world leaders and continue to be the world leaders.

We have watched as the Asian response to reduced demand at home in the Pacific Rim was to unload their machine tools at cut-rate prices in other markets. And we have got to make sure that our industry has the great opportunity.

The last point I would like to make is sometimes other foreign manufacturers do not suffer from what would be referred to as the long tail of liability that follows the American machine tool industry. We cannot add a cost that is not only substantial, but very difficult to estimate and ascertain and sort of an undetermined liability hanging over the head of this industry. I think we need to correct that, to make it possible for this industry to thrive.

With that, I have exhausted our time. I want to thank again these folks for coming, and I look forward to your written submissions, as well.

I would ask that the entirety of my remarks be made a part of the record.

Senator Abraham: Without objection, it will be.

[The prepared statement of Senator Ashcroft follows:]

PREPARED STATEMENT OF HON. JOHN ASHCROFT,
U.S. SENATOR FROM MISSOURI

Mr. Chairman, I thank you for holding today's hearing. The machine tool industry is vital to the American economy. It also is vital to the security and defense of this nation. It also is very important to my state. During the fist five months of 1999, U.S. machine tool consumption was down 39% from the same period in 1998. Compounding the decrease in U.S. machine tool consumption, imports also are growing—rising from 50 percent of the entire U.S. market in 1995 to an estimated 60% in 1999—resulting in a reduction in business and jobs for U.S. machine tool producers. The Asian response to reduced demand at home is to unload their machine tools at cut-rate prices to the United States.

There are a number of reasons for this decline in demand for U.S. machine tools. First, the U.S. export controls are the toughest in the world and frequently are unilateral. Second, unlike foreign manufacturers, who do not suffer from a "long tail of liability," U.S. machine tool producers must factor into their prices the cost of product liability insurance and litigation on overage products. Other countries, the U.S.' main competitors, have a ten-year statute of repose while our companies have unlimited liability. Finally, the Asian economic crisis has created an overcapacity in the industry. Most economists conclude it may take 2 to 5 years before the various overcapacities throughout Asia can be absorbed. U.S. market share in Asia has all but disappeared in some countries: machine tool exports to Korea dropped 69% from 1996-1998. Meanwhile, South Korea has increased its exports to the U.S. from

15% of its machine tool production in 1995 to an astonishing 50% of that production in 1998.

The U.S. machine tool industry suffers from a double hit — a decrease in domestic demand for machine tools and lowered exports while, at the same time, imports, particularly from Asia, are seizing more and more market share in the United States. Historically, the machine tool industry is the first to suffer in an economic decline and the last to recover.

Because machine tools are the foundation for an industrialized society, the state of the machine tool industry should be of concern to all Members of Congress. If American's machine tool industry is severely weakened, how long can America's productivity continue to improve and its economy continue to grow? If U.S. buyers of machine tools become too dependent on imports, they will be at risk of receiving yesterday's manufacturing technology while the productivity of their foreign competitors will be enhanced by the infusion of tomorrow's technology into their facilities.

Mr. Chairman, without a healthy and robust machine tool industry, I strongly believe that not only our economic freedom but also our national security is at risk. I hope this Committee will work with the industry, and other committees in the Senate to remediate areas where our national policies hinder their ability to thrive. Again, thank you for holding this very important hearing.

Senator ABRAHAM. Thank you very much, Senator Ashcroft.

I want to thank our panelists and our audience. Again, we apologize. The convening of this conference was not on the agenda when we set today's meeting date, but I think that it may account for a couple of our other members who we thought were going to be able to join us not having gotten by yet. And so we will ask them to submit any questions they have in writing.

Senator ABRAHAM. We look forward to working with each of you and with the various associations that have helped us put today's hearing together; for the future, to try to focus more specifically on the issues that we talked about today and some of the solutions we have heard about. We thank you all for being here.

With that, our hearing is adjourned.

[Whereupon, at 3 p.m., the hearing was adjourned.]

APPENDIX

PREPARED STATEMENT OF HON. ERNEST F. HOLLINGS, U.S. SENATOR FROM SOUTH CAROLINA

Mr. Chairman, I too am troubled by the downturn of the machine tool industry in this country. Because of the industry's importance to other manufacturing sectors and to the economy in general, this is a trend that we need to continue to monitor closely. I thank the Chairman for holding this hearing so that we can talk more about the specific problems confronting machine tool makers.

I would like to speak to one of the issues that I expect to come up at this hearing, namely product liability. We often hear small manufacturers, both in the machine tool industry and in other sectors, complaining that they are forced to spend too much money on litigation to defend themselves against liability claims. Their solution to this problem is to ask Congress to enact statute-of-repose legislation to shelter them from claims on products that are older than a specified age. I disagree with this course of action.

Manufacturing firms can protect themselves against lawsuits by purchasing liability insurance. It is my understanding that this insurance is presently widely available, at affordable cost, both for small and large manufacturers. Of course, if insurance is not available at reasonable rates, then that is an issue that must be examined. In fact, if it is shown that insurance is available only at high costs in an otherwise booming economy, insurance availability is the central issue. The machine tool industry has already asserted that insurance costs are too high for them to afford. That being the case, I definitely want to see numbers that back up this assertion. So far the industry has not been able to prove that insurance costs make up a large portion of their revenues, or that insurance is prohibitively expensive.

My concern is that the statute-of-repose issue is really a backdoor effort to justify federal tort reform. As I have noted in the past, tort law is controlled and managed by the states; it has been since the founding of the Republic. The states have the most experience with legislating tort laws. Given this tradition, Congress should only interfere when there is proof of a compelling reason to do so. From what I have read thus far, this standard has not been met.

I was happy to see that in their written testimony our witnesses mentioned the value of the Advanced Technology Program (ATP) within the Department of Commerce. The ATP is a unique partnership between government and private industry to accelerate the development of high-risk, pre-competitive technologies that promise significant commercial payoffs and widespread benefits for the economy. With the help of people working in industry like yourselves, it is my hope that we can now move the debate over ATP away from partisan politics and back to national policy—which is how the program was viewed in Congress when it was created under the leadership of President Bush.

Measurement and evaluation have been part of the ATP since its beginning. The benefits of the program are well documented. What the analysis has shown many times is that the ATP is stimulating collaboration, accelerating the development of high-risk technologies, and paying off for the nation. In fact, a March 1999 study found that future returns from just *three* of the 50 completed ATP projects—improving automobile manufacturing processes, reducing the cost of blood and immune cell production, and using a new material for prosthesis devices—would pay for all projects funded to date by the ATP. I strongly support this program, and I thank the representatives of the machine tool industry for doing so as well.

I thank the Chairman for this time and I look forward to hearing the testimony of the witnesses, in particular in regard to the product liability issue.

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