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**U.S. CHAMBER OF COMMERCE**

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# Statement of the U.S. Chamber of Commerce

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ON: "Fostering the U.S. Competitive Edge: Examining the Effect of Federal Policies on Competition, Innovation, and Job Growth"

TO: The House Committee on Science, Space and Technology's Subcommittee on Technology and Innovation

BY: Mick Truitt, Vice President  
Ludlum Measurements, Inc.  
Sweetwater, Texas

DATE: March 27, 2012

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The Chamber's mission is to advance human progress through an economic, political and social system based on individual freedom, incentive, initiative, opportunity and responsibility.

The U.S. Chamber of Commerce is the world's largest business federation, representing the interests of more than three million businesses and organizations of every size, sector, and region.

More than 96 percent of the Chamber's members are small businesses with 100 or fewer employees, 70 percent of which have 10 or fewer employees. Yet, virtually all of the nation's largest companies are also active members. As a result, we are particularly cognizant of both the problems with which smaller businesses grapple, as well as those issues facing the business community at large.

Besides representing a cross-section of the American business community in terms of number of employees, the Chamber represents a wide management spectrum across many varied types of business and location. Each major classification of American business—manufacturing, retailing, services, construction, wholesaling, and finance—is represented. Also, the Chamber has substantial membership in all 50 states.

The Chamber's international reach is substantial as well. In addition to the U.S. Chamber of Commerce's 115 American Chambers of Commerce abroad, an increasing number of our member companies engage in the export and import of both goods and services and have ongoing investment activities. The Chamber favors greater international competitiveness and opposes artificial U.S. and foreign barriers to international business.

Positions on national issues are developed by a cross-section of Chamber members serving on committees, subcommittees, and task forces. More than 1,000 business people participate in this process.

**Statement on  
“Fostering the U.S. Competitive Edge: Examining the Effect of Federal Policies  
on Competition, Innovation, and Job Growth”**

**Submitted to  
THE HOUSE COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY  
SUBCOMMITTEE ON TECHNOLOGY AND INNOVATION**

**on behalf of the  
U.S. CHAMBER OF COMMERCE**

**By  
Mick Truitt  
Vice President  
Ludlum Measurements, Inc.  
Sweetwater, Texas  
March 27, 2012**

Chairman Quayle, Ranking Member Edwards and distinguished members of the Subcommittee, thank you for inviting me to testify before you today on the impact Federal policies have on the ability of U.S. businesses and entrepreneurs to compete, innovate and create jobs. I commend your efforts in holding this important hearing to better understand the effects this critical relationship between the decisions made, or not made, in Washington, DC and decisions made, or not made, in America’s private sector.

I am Mick Truitt, Vice President of Ludlum Measurements, Inc. (LMI or Ludlum), a family-owned business headquartered in the West Texas town of Sweetwater which has a population of roughly 11,000. At LMI, I am responsible for global sales, marketing and business development. I am here to speak with you today on behalf of the U.S. Chamber of Commerce. I have the honor of serving on the U.S. Chamber of Commerce’s Corporate Leadership Advisory Council. I am also active in the Sweetwater Chamber of Commerce where I just rolled off of their Board of Directors.

The U.S. Chamber of Commerce is the world's largest business federation, representing the interests of more than three million businesses and organizations of every size, sector, and region. More than 96 percent of the Chamber's members are small businesses with 100 or fewer employees, 70 percent of which have 10 or fewer employees. Yet, virtually all of the nation's largest companies are also active members. Therefore, the Chamber is particularly cognizant of the problems of smaller businesses, as well as the issues facing the business community at large.

**Company Background**

Ludlum Measurements, Inc. has been designing, manufacturing and supplying radiation detection and measurement equipment in response to the world’s need for greater safety since 1962. In fact, we celebrated 50 years in business earlier this year on February 14. LMI is a family business. Don Ludlum, the company’s founder, remains at the helm as President and all of his children are now part owners. I joined the LMI family in 2007. Throughout its five decade history,

LMI has developed radiation detection technologies and instruments to enhance the safety of personnel, secure borders, and protect the environment.

LMI services the nuclear power, energy research, medical, metals, emergency response and homeland security/defense markets. We are proud to offer one of the largest lines of radiation detection instrumentation available from any one company. After September 11, LMI was selected to provide approximately 300 vehicle radiation monitoring systems that are deployed along the entire northern U.S. border with Canada. LMI also supplies component parts for use in some of the current equipment utilized as part of the security systems in airports and borders around the world. In response to the crisis at the Fukushima Daiichi nuclear plant in Japan, our team at LMI was working seven days a week to prepare and ship thousands of our instruments to Japan to ensure the safety of the people and provide them with a sense of security. We did all we could to support the initial containment and will continue to support the Japanese people throughout the eventual cleanup efforts, and remain committed to helping make the world safer.

Ludlum has invested heavily into becoming a vertically integrated radiation detection company in order to better control costs, quality, and delivery times. Recent additions of in-house automated PC board assembly and plastic injection molding capability, plus photomultiplier tube and plastic scintillation detector design and manufacturing, all contribute to this succeeding philosophy. Ludlum is the parent company and its divisions include: Eljen Technology, which manufactures a wide range of scintillator products such as plastic and liquid scintillators, wave length shifting plastics and acrylic light guides; ADIT, which designs and manufactures photomultiplier tubes for industry and the scientific community; ET Enterprises, which offers a wide range of photomultiplier housings, modular signal processing electronics and complete photon counting systems; Ludlum Medical Physics, which offers a unique product line created to more fully serve the medical physics community; Protean Instrument Corporation, which is a leading manufacturer of ultra-high performance sample counting systems for measuring alpha and beta activity at very low environmental levels; and West Texas Molding, which offers plastic injection molding services with an emphasis on short runs, quick turn-around deliveries and affordable pricing.

At our corporate headquarters in Sweetwater, Texas, Ludlum employs 450 people, making us the community's largest employer. We also have 100 employees at a facility in the United Kingdom and 10 in Knoxville, Tennessee. Typically, our annual revenues are \$65 million. Approximately 20% of our sales are international. We use distributor organizations located in country and currently are in over 80 countries worldwide. These numbers squarely put Ludlum in the range of companies known as mid-sized or middle market businesses. We are not a small business; nor are we a big business.

This is important to note because I believe many in Washington, DC do not understand the complex nature of the U.S. economy and business community. More often than not, those who pass the laws and write the regulations hold a simple, binary view of the U.S. business community: you are either small or other than small. Such a perspective fails to take into account the dynamic mid-tier section of American businesses. This is a critical shortfall in understanding when you recognize how important mid-tier companies are to the U.S. economy. Consider the following findings of a research initiative on the U.S. middle market (defined as companies with annual revenues ranging

between \$10 million and \$1 billion) completed by The Fisher College of Business at The Ohio State University and GE Capital:

- Middle market businesses contribute \$3.84 trillion annually to the U.S. private sector GDP—the equivalent of the world’s fourth largest economy, just behind Japan but ahead of Germany.
- 80% of middle market businesses expect to grow over the next 12 months.
- More than one-third of U.S. workers are employed by middle market businesses.
- 82% of middle market businesses survived the recession.
- One in four big businesses were middle market companies just five years ago.

With such a sizeable contribution to U.S. employment and GDP, this dynamic middle market is clearly a vital segment of our private sector. Yet this is seemingly underappreciated and/or not understood by the decision-makers in Washington, DC. As I turn to focus on actual policy matters, I would ask that today and going forward you would be mindful of the impacts your decisions have, not only on small and big businesses, but on those in the middle as well. It is here that a great deal of innovation, sustained growth, and job creation is occurring.

There are numerous Federal issues that impact LMI’s competitiveness both domestically and internationally. Today, I would like to focus on three of the most important: high-skilled immigration, taxes and trade. It is important to be mindful of the fact that my story, if you will, is similar to the stories of millions of small and mid-sized businesses across our nation.

### **High-Skilled Immigration**

It may seem surprising, but, yes, a company with 450 employees in Sweetwater, Texas is directly impacted by the dysfunction of our nation’s high-skilled immigration system.

#### Access to Human Capital, Regardless of Nationality

Perhaps most fundamentally, our high-skilled immigration system doesn’t take into account the extent to which global collaboration is a premise in the 21<sup>st</sup> century for businesses of all sizes and stripes. In today’s world, it doesn’t take much to become a multinational company and develop a need for global collaboration among our own staff and between our staff and our customers. Not only do we sell our products in 80 countries, we have staff in two countries and, on occasion, we find the best qualified candidate for a job here in the U.S. doesn’t happen to be an American citizen. At LMI, we have accepted the reality that the intellectual capital we need to do business does not reside solely in the United States with U.S.-born staff. A federal immigration policy which fails to recognize this simple fact does a disservice to America’s business community.

The Chamber recommends an increased recognition of the importance of “human capital” in our high-skilled immigration policies. We see that human capital, which any business owner can tell you is vital to economic success, is not evenly distributed around the world. While there is ample human capital already in the United States, there are also enormous stocks of human capital –

and potential capital – found overseas in a variety of specialized fields that will greatly contribute to productivity growth in America.<sup>1</sup>

At LMI, if it relates to radiation detection instrumentation, we do it and we do it in-house, in Sweetwater. When we determined that we needed to have plastic injection molding capability we purchased a company that did that and brought the capability in-house. When we established that new types of plastic and liquid scintillators needed to be added to our production process, we established a new division that did that and brought the capability in-house. Sometimes, when we expand our Sweetwater operations and hire more Americans we also need a special, sophisticated skill set that we aren't able to find in the U.S. labor market. Hiring a foreign national to fill this need shouldn't be the confusing, difficult and sometimes impossible hurdle it is under current law. Instead, there should be a means to facilitate our ability to hire the best qualified high skilled professional we can get to come to Sweetwater, regardless of nationality.

In 2007, Ludlum was given an opportunity to purchase a UK competitor in the photomultiplier industry. Purchasing the competitor gave LMI an expanded product line while also limiting the number of photomultiplier suppliers to 3 in the world. The purchase of the UK company also gave Ludlum a research and development group that is not available in the United States. As this was a growing market with fewer and fewer suppliers, down to 2 suppliers by 2008, we needed to expand the capacity of our UK product line because there was the opportunity for market share expansion for Ludlum.

While LMI could have expanded in the UK, instead we decided to bring that expansion to West Texas. To do this, specialized equipment had to be purchased or manufactured. Once this production equipment was in place Ludlum would need a highly skilled, qualified production engineer familiar with photomultiplier tube production to get the equipment up and operating and to train people to operate the equipment and test the end product. As this is a highly specialized market there are few people in the world that could do this. Unable to find anyone locally we sought out the past experience of our people at the UK facility. Initially, we thought it would be sufficient for one of our British engineers to simply attend a few meetings here as a B-1 business visitor, but it became evident that we required a production engineer to provide services on behalf of Ludlum in Sweetwater in order to establish the new production division. In fall 2009, we started the process to secure an L-1A intracompany transfer visa, so that one of our British engineers could come to West Texas to manage the new photomultiplier production function here. Three months and \$7,000 later we were finally able to have the engineering expertise onsite that was needed. Until our British colleague was able to travel back and forth to oversee our expansion and direct and advise our new technician staff, we were not able to fully take advantage of our acquisition, take our new production equipment out of storage, and make new U.S. hires for the new manufacturing operation. Today our photomultiplier tube expansion employs an additional 20 Americans.

In 2008, we were looking for an electronics engineer with experience in the radiation detection industry to come to Sweetwater and work in technical sales. It is exceedingly hard to find qualified, highly educated professionals who want to live in a small West Texas community. We were thrilled when a Mexican engineer who had an undergraduate engineering degree and a

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<sup>1</sup> *The Human Capital Imperative: Bringing More Minds to America*, by Nick Schulz, U.S. Chamber of Commerce and National Chamber Foundation, January 2012.

graduate business degree from the University of Texas accepted our offer of employment. We had never had an engineer with an MBA even apply to join our company, so having this skill set in our engineering corps was a great asset. Our Mexican engineer graduated with honors in Electronic Engineering with the highest grade point average in the electronic engineering program (degree from the Instituto Tecnológico de Ciudad Victoria), worked for several years in Mexico in the radiation detection manufacturing industry, and completed a Masters of Business Administration from the University of Texas (at Brownsville). It seemed that because his professional skill set was a perfect match for our needs that the immigration process would be straightforward. However, to date, it has cost our West Texas company over \$17,500 in legal services to obtain and maintain lawful status for our Mexican engineer. We are sponsoring this key employee for permanent resident status, but the green card process will take many more years to complete. Meanwhile, as a direct result of this hire, we have expanded our sales and distribution in Central America from a little under \$200,000 to over \$1 million annually.

Ludlum's experience in having so much difficulty with the high-skilled immigration system is not unusual. Despite the fact that our hires of high-skilled immigrants directly contribute to job creation here in the U.S., the business community is faced with hurdles. For example, other Chamber member companies have experienced the following:

- A company manufacturing equipment conducts product testing in the United States after global teams develop new equipment specifications. A team of American engineers collaborating with company staff at design centers in North America, Asia and elsewhere comes together to complete product testing in the U.S. before manufacturing commences. Products are manufactured principally in the U.S. although some manufacturing is also conducted abroad. Products are principally sold outside the U.S. and most competing manufacturers in the particular industry are foreign corporations manufacturing solely outside the U.S. Visa petitions are denied for the foreign engineers working on the design team to come to the U.S. for product testing. Product testing is delayed, new product specifications can't be finalized, manufacturing engineering processes are delayed, and U.S.-based manufacturing jobs are reduced or new hiring delayed, while foreign competition is helped.
- A company has proprietary game software and a team of engineers working globally on updates and expansions to the product, with the product team based in the U.S. A foreign engineer already in the U.S. needs an extension of stay to continue his work on a key aspect of the game. A lengthy request for evidence is issued in the visa petition extension proceedings, questioning whether the worker qualifies to retain the same job for the same employer that he is already fulfilling, and in this case happens to hold several patents related to the game.
- A company designs and manufactures precision controls. It has three design facilities in the United States, two in Europe, and one in Asia. Individuals working on product design are typically in three or more locations, working jointly on different aspects of the project. The expertise of the engineers is not narrowly held within the company; instead a large number and percentage of the engineers are experts on precision controls and the company's proprietary systems. However, the expertise is narrowly held within the

industry and work on the design projects cannot be done without the engineers internal to the company. The company has regularly received denials over the last few years when it petitions for a visa to have an intra-company transfer come to the U.S. to continue working on new product designs with American staff.

- A company has a leadership program where key up-and-coming staff come to the U.S. to both facilitate U.S.-centric experience for the future management of the company and promote the cross-fertilization of ideas that are needed in a multinational company. Visa petitions are regularly denied, despite the interest of the American company to ensure its professional, degreed staff is exposed to American business methods.
- A company wants to open a fulfillment center in the U.S. where online orders can be processed and sent to North American customers. Visa petitions to bring in a handful of foreign staff well-versed in the company's internal processes are denied. While the foreign staff would have trained new American staff to be hired, the center cannot be opened without some experienced internal staff. Instead, the company considers opening a fulfillment center in Canada.

### A Modest Proposal: More Green Cards for Scientists and Engineers

These types of examples show that current high-skilled immigration policies do not help foster America's competitiveness. In order to put a spotlight on this, the U.S. Chamber held an event in September 2011 to discuss Immigration and American Competitiveness, with a focus on high-skilled immigration issues. Mayor Bloomberg was the keynote speaker, and there was a panel of Chamber member companies discussing high-skilled immigration with Pia Orrenius, an economist with the Federal Reserve Bank at Dallas.<sup>2</sup> When speaking at the Chamber event, Ms. Orrenius opined that "economists typically don't think that free lunches exist; but permitting more skilled immigrants to enter and stay is about as close as you can get to a free lunch."

From LMI's experiences, it does not seem our current federal immigration policies are aligned to get our nation's businesses at "the lunch table" to benefit from the economic benefit of skilled immigration. While broad-based immigration reform addressing and correcting the panoply of high-skilled immigration issues is not doable before the end of this election year, perhaps Congress can bite off one area where it is most obvious that our immigration policies need fixing regarding skilled immigrants. There appears to be an emerging consensus that action should be taken regarding foreign graduate students in the U.S. receiving Masters or Doctorates in the natural sciences and engineering from our fabulous U.S. universities.

Allocating more green cards for permanent resident status of these scientists and engineers who have job offers would be very sensible. Such a change would be responsive to one of the key

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<sup>2</sup> Ms. Orrenius has written widely on immigration-related economic analysis. She often co-authors reports with Madeline Zavodny, a labor economist on the faculty of Agnes Scott College in Atlanta. Among other books and reports, Ms. Orrenius and Ms. Zavodny have co-authored *Beside the Golden Door*, 2010.



conclusions of the National Bureau of Economic Research, that “the U.S. economy will generate rising demand for highly-educated workers” through 2018.<sup>3</sup>

The 2000 census indicated that immigrants constitute approximately half of the scientists and engineers in the U.S. with Doctorates, “a remarkable statistic given that they otherwise represent only 12% of the U.S. population.”<sup>4</sup> A focus solely on workers who possess a Doctorate is misplaced, though, since only about 2% of computer, mathematical, and engineering employment in the private sector is geared to individuals who have earned a Ph.D.<sup>5</sup> Critically, more than 15% of workers in computer, mathematical, and engineering occupations in private industry are required to possess a Master’s degree.<sup>6</sup> More specifically, by way of example, in computer science and mathematical science occupations, the job distribution is 6.9% of jobs require skills of high school diploma or less, 18.7% require skills based on some college, 10.5% require Associates level skills, 43.8% Bachelor’s skills, 17.7% Masters skills, .8% Professional Degree skills, 1.7% Doctorate skills.<sup>7</sup>

International students presently earn about one-half of all Master’s level degrees from U.S. universities in fields corresponding to natural sciences and engineering occupations.<sup>8</sup> To the extent we want to ensure that American businesses have full access to the skill sets needed to create and retain jobs here at home, a streamlined process to have access to professionals who have been trained here, speak English, are acclimated to our culture and our business and research practices, want to stay here, and have a job offer from a U.S. employer would be a good start.

### Coupling Education Reforms with Immigration Reform

High-skilled immigrants play a positive role in creating and retaining jobs in America. Critically, though, the U.S. Chamber believes that high-skilled immigration reform needs to be coupled with education reforms. As the U.S. Chamber pointed out in an Immigration Myths and Facts report last May,<sup>9</sup> current immigrants make up a disproportionately large segment of both the population holding graduate degrees as well as those without a high school diploma.<sup>10</sup> To the extent that graduate education or university studies in certain fields is a prerequisite to the specialized skills and expertise needed in today’s knowledge economy, pushing the interest and development

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<sup>3</sup> *Future Skill Shortages in the U.S. Economy?* National Bureau of Economic Research, July 2011.  
<http://www.nber.org/papers/w17213>

<sup>4</sup> *Immigrants’ Success in Science Education and Careers*, University of California at Berkeley’s Center for Research on Teaching Excellence, <http://escholarship.org/uc/item/2m14z6np#page-7> .

[http://www.uschamber.com/sites/default/files/reports/16628\\_ImmigrationMythFacts\\_OPT.pdf](http://www.uschamber.com/sites/default/files/reports/16628_ImmigrationMythFacts_OPT.pdf)

<sup>5</sup> 2008 American Community Survey.

<sup>6</sup> Distribution of workers possessing a Master’s degree: 17.7% computer and mathematical science occupations, 16.9% architecture and engineering occupations. 2008 American Community Survey.

<sup>7</sup> *Future Skill Shortages in the U.S. Economy?* National Bureau of Economic Research, July 2011, at Table 5.  
<http://www.nber.org/papers/w17213>

<sup>8</sup> See, Stuart Anderson, *Keeping Talent in America*, National Foundation for American Policy, October 2011, at Page 6, and Science and Engineering Indicators 2010, Chapter 2, Higher Education in Science and Engineering (Graduate Education, Enrollment, and Degrees).

<sup>9</sup> *Immigration Myths and Facts*, U.S. Chamber of Commerce May 2011.

[http://www.uschamber.com/sites/default/files/reports/16628\\_ImmigrationMythFacts\\_OPT.pdf](http://www.uschamber.com/sites/default/files/reports/16628_ImmigrationMythFacts_OPT.pdf)

<sup>10</sup> Id. Page 1, citing Pia Orrenius and Madeline Zavodny, *From Brawn to Brains: How Immigration Works for America*, 2010 Annual Report (Dallas, TX: Federal Reserve Bank of Dallas, 2010), p. 6-7, [http://www.dallasfed.org/fed/annual/2010/ar10b.pdf#page=3\\_](http://www.dallasfed.org/fed/annual/2010/ar10b.pdf#page=3_).

by U.S. students in these fields is also an economic imperative, starting at the K-12 level and continuing into higher education.

It is not just the “titans of American industry” which are looking for high-skilled workers and finding skill gaps in the domestic workforce. Middle market businesses have the same issues. For example, as described above, when LMI was looking for a technical sales engineer, the ideal skill set was an individual with an electrical engineering degree as well as business school training. To find someone with this skill set willing to be based in a small West Texas community is a challenge, and we jumped at the opportunity to hire a Mexican citizen with a top notch engineering degree from Mexico and a University of Texas MBA. Moreover, LMI needs highly skilled technicians, which we also frequently have had difficulty in locating in sufficient numbers.

Many Chamber companies in various sectors are aware of the education reform necessity and have their own education support programs.<sup>11</sup> For example, one large diversified manufacturing company has taken the following steps: While the company typically recruits only graduate students for its professional jobs, it also has created a program where it seeks out highly qualified candidates with undergraduate degrees who the company puts through a two-year corporate professional management program for recruited university graduates in the fields of engineering, manufacturing, finance, and other business specializations to expose the participants to rotational assignments throughout the organization in order to develop both technical and management skills and create a diverse, knowledgeable global talent pool. Additionally, the company is a major contributor to U.S. colleges and universities and academic research projects.

The U.S. Chamber of Commerce has its own educational arm, the Institute for a Competitive Work Force (ICW), which promotes the rigorous educational standards and effective job training systems needed to preserve the strength of America's greatest economic resource, our workforce.

Last summer, ICW released a report addressing what kind of business involvement it would take to truly make a difference in K-12 schooling. *Partnership is a Two-Way Street: What it Takes for Business to Help Drive School Reform*<sup>12</sup> explains and analyzes how the business community can function as a critical customer, partner, or policy advocate in primary and secondary education. As discussed in the report, leaders in Texas, Tennessee, and Massachusetts adopted each of these roles, thus stepping up to make a big difference in K-12 schooling. In each case, business leaders talked seriously and bluntly with educators. They recruited well-respected experts to lead the reform efforts. They built sustainable structures, brought top-level executives to the table, and stayed engaged. They tackled tough questions, understood that some steps would be political and unpopular, and took the heat when there was pushback. Among its other ongoing activities, ICW conducts regional training for local and state chamber and business leaders, to create a leadership network in as many states as possible that is focused on the role business can play in improving

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<sup>11</sup> See the Compete America coalition website for a summary of what some of the nation's largest high tech companies are doing to support education and workforce development. <http://www.competeamerica.org/workforce/american-workforce>.

<sup>12</sup> *Partnership is a Two-Way Street: What it Takes for Business to Help Drive School Reform*, U.S. Chamber of Commerce, Institute for a Competitive Workforce June 2011  
[http://icw.uschamber.com/sites/default/files/Partnership%20is%20a%20Two%20Way%20Street\\_2011.pdf](http://icw.uschamber.com/sites/default/files/Partnership%20is%20a%20Two%20Way%20Street_2011.pdf)

education and workforce training. Also, ICW conducts an ongoing assessment of K-12 education in all 50 states and the District of Columbia through its *Leaders and Laggards*<sup>13</sup> report.

Another recent report from ICW focuses on higher education. *Transforming Higher Education through Greater Innovation and Smarter Regulation*<sup>14</sup> focuses on how academic programs and institutions must be transformed to serve the changing educational needs of a knowledge economy. The U.S. higher education system has long been one of the country's crown jewels. With the right leadership and policy choices, it will remain so. Higher education has not changed its basic structure and delivery model because it hasn't been forced to do so. However, an array of forces are now working to disrupt the traditional business model of higher education. Increasing international competition, a decline in government funding, changing demographics, and an increasingly mobile population are just some of the factors threatening the status quo. If innovation in higher education is discouraged through funding that fails to reward quality and outcomes, or simply thwarted by complacency within traditional intuitions, then the U.S. is likely to lose its edge to faster moving international competitors. In encouraging students to be ready for post-secondary education, ICW maintains active participation in coalitions focusing on both science and engineering as well as K-12 education, including Change The Equation, the Coalition for a College and Career Ready America, and the Business Coalition for Student Achievement.

## **Taxes**

Another critical issue area for Ludlum is federal tax policy. There is absolutely no doubt that tax policy—both the burden and the uncertainty—impacts our competitiveness in what is a very competitive global marketplace. I want to focus on aspects of the federal tax code most pertinent to our business.

### R&D Tax Credit

An essential factor in LMI's ability to stay competitive is a steadfast dedication to research and cutting-edge product development that has positioned us as a global leader in radiation detection devices. As a result of our commitment to innovation, many new, well-paying jobs have been created from investments we have made from advances in technology. The research and development (R&D) tax credit is one federal government policy that has further incentivized and assisted us in devoting additional resources toward research.

Regrettably, the recent anticipated yearly retroactive reinstatement of the R&D tax credit has served to undermine its salutary effects since it does not provide us certainty prior to our projected use. Even though the R&D tax credit has been in the Internal Revenue Code (Code) for many years and has been extended multiple times, the uncertainty of expired deductions and credits has had a material impact on our commitment to take full use of the benefit.

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<sup>13</sup> <http://www.uschamber.com/reportcard>.

<sup>14</sup> *Transforming Higher Education through Greater Innovation and Smarter Regulation*, U.S. Chamber of Commerce, Institute for a Competitive Workforce May 2011  
[http://icw.uschamber.com/sites/default/files/HigherEducationReport\\_final\\_high%20res.pdf](http://icw.uschamber.com/sites/default/files/HigherEducationReport_final_high%20res.pdf)

Moreover, many research projects are budgeted and planned for on a three- to five-year basis. In order for us to map out a long-range business plan for future innovation and investment, we need reasonable assurances of the federal government's commitment in reinstating the tax credit beyond one-year increments. Not having a permanent R&D tax credit erodes the confidence and certainty needed to dedicate the maximum amount of resources possible for riskier, yet potentially more rewarding, long-term scientific endeavors.

Additionally, we find the complex accounting requirements required to take full advantage of the credit creates unproductive and time-consuming paperwork demands that reduce the ability for us to use the maximize amount of the credit that we would otherwise be allowed. Simplifying the bookwork needed to take advantage of the credit would provide our scientists and engineers more time to do what they do best, innovating and creating jobs rather than subjecting them to overwhelming paperwork requirements.

Nevertheless, the R&D tax credit has been in the Code for almost 30 years and is a proven incentive for driving investment in R&D, encouraging long term capital investment, creating jobs, strengthening the economy, and spurring innovation in the United States.<sup>15</sup> In 1981, the United States was one of the first countries to add an incentive for research and development to the Code. For a period in the 1980's, the United States was at the forefront of R&D incentives. However, other countries soon followed, introducing their own R&D incentives. By 2008, the United States' R&D tax incentive ranked 17th overall amongst OECD nations.<sup>16</sup>

Other countries have moved to incentivize R&D, through adoption of super deductions, credits, and patent and innovation boxes. These countries use these incentives to promote the relocation of R&D operations to their countries as part of "innovation-led economic development strategies."<sup>17</sup> Thus, the United States' R&D credit must compete with the aggressive incentives marketed by other countries. The failure to, at the very least, simply maintain our current credit increases the risk that the jobs, capital investment, and intangible property developed in the R&D process will move outside our borders.

Further, as Congress considers changes to the tax code in the context of fundamental comprehensive tax reform they should strive for a more permanent provision to incentivize R&D. Taxpayers need stable and predictable rules they can rely upon until fundamental permanent reforms can be made. We strongly urge Congress to act quickly to extend this longstanding policy and prevent unnecessary damage to the economy and job creators.

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<sup>15</sup> See, e.g., U.S. Department of the Treasury, "Investing in U.S. Competitiveness: The Benefits of Enhancing the Research and Experimentation (R&E) Tax Credit" (March 25, 2011) (noting that the R&D credit in its current form offers a cost-effective way to encourage research spending and supports high-wage jobs). See also Carroll, Prante, and Quek, "The R&D Credit: An effective policy for promoting research" (September 2011) (estimating the higher wage and employment impacts of the R&D credit).

<sup>16</sup> See Information Technology and Innovation Foundation, "Create Jobs by Expanding the R&D Tax Credit," (January 26, 2010).

<sup>17</sup> See Deloitte, "Global Survey of R&D Tax Incentives," (July 2011).

## The Tax Code and Marginal Rates

Another barrier to innovation and investment for our company is the uncertainty and potential increase of the individual marginal income tax rates. LMI is structured for tax purposes as a Subchapter S corporation which means that profits are passed through to the shareholders in the form of distributions and taxed at the individual's marginal income tax rate. It also means that the rate-of-return on any reinvestment on those profits retained by the company will be impacted by the individual rate.

As we attempt to plan for future long-term growth and expansion or paying off the principal on existing debt, individual marginal income tax rates do matter. Moreover, the uncertainty of whether those rates will dramatically increase at the end of the year, or will be extended, instills yet another layer of risk in the growth and investment decision making process. Any potential increase in the rates will increase the cost of capital obtained through the retention of earnings, which in turn, decreases the return on any capital investment. Since it is uncertain as to whether or not some or all rates will increase, we must also take this possibility into account in determining the feasibility of the project.

The bottom line—any increase in marginal income tax rates and the uncertainty of whether increases will take place has a chilling effect on our ability to grow, expand and create jobs.

Besides individual marginal rates, many other provisions of the Code are currently set to automatically increase at the end of the year which will complicate our business decisions. Increases in capital gains tax, tax on dividends, the estate tax, the Alternative Minimum Tax (AMT) patch, and the uncertainty of how these provisions will be treated going forward will complicate our ability to innovate, grow and create jobs.

Additionally, some lawmakers are discussing undertaking corporate only tax reform. Having a tax system where marginal corporate rates are not synchronized with the individual rates pass through entities are subject to, would cause S corporations, such as LMI, to be forced to dedicate significant time and resources to financial engineering to address the lack of rate parity. Further, if certain tax expenditures were eliminated to fund a corporate rate reduction, pass through entities would see a de facto tax increase from the loss of these credits and deductions with no corresponding marginal rate reduction. Accordingly, any tax reform proposals must be comprehensive and address both corporate and individual rates.

## **Trade**

For LMI, doing business beyond the domestic U.S. market is a critical part of our existing business model as well as a key part of our growth strategy. As I mentioned earlier, through distributor organizations we sell our products in more than 80 countries with these international sales contributing approximately 20% of our annual revenues. Like thousands of other American businesses, we understand the opportunity the global marketplace offers: outside our borders are markets that represent 80% of the world's purchasing power, 92% of its economic growth, and 95% of its customers. And we know first-hand that trade is not just important to big companies. Often overlooked in the U.S. trade debate is the fact that more than 97% of the quarter million U.S.

companies that export are small and medium-sized enterprises, and they account for nearly a third of U.S. merchandise exports, according to the U.S. Department of Commerce.

### Export-Import Bank

The Export-Import Bank of the United States (Ex-Im) has been of value to LMI in helping us complete international deals and generally enabling us to be more competitive globally. In FY 2011, Ex-Im authorized more than \$4.5 billion in export credit financing for Texas companies, supporting over 400 companies in the state, with over half of those being small business. In fact, Texas ranks number 1 in the country for small business financing. Here at LMI, Ex-Im has supported \$15 million of our export sales over the past five years.

I want to urge Congress to approve a four-year reauthorization of Ex-Im before its temporary reauthorization expires on May 31. Failure to do so would disadvantage Ludlum and U.S. companies—small, medium, and large—in foreign markets.

Ex-Im has a proven record of success. Far from being a burden on the taxpayer, Ex-Im turns a profit for the American taxpayer. Since 2005, Ex-Im has returned more than \$3.4 billion to the Treasury above all costs and loss reserves, including \$700 million in FY 2011 alone.

Nor does Ex-Im only help big business. In fact, small businesses account for 87% of Ex-Im's transactions; further, these small business transaction figures are in addition to the tens of thousands of small and medium-sized businesses that supply goods and services to large exporters. In FY 2011, Ex-Im provided more than \$6 billion in financing and insurance for U.S. small businesses—an increase of nearly 90% since FY 2008. Ex-Im has set the goal of adding 5,000 new small businesses to its portfolio by 2015.

Another myth holds that Ex-Im competes unfairly with private financial institutions. In fact, Ex-Im covers critical gaps in financing for U.S. exports to developing countries where commercial-bank financing is unavailable or insufficient. Ex-Im also acted to fill the void when the availability of private-sector trade finance fell by 40% during the 2008-2009 financial crisis. In the aircraft sector, a new multilateral agreement doubled the fees for export credit financing, thereby addressing the concern that some export credit financing was below market rates.

Ex-Im lending exposes the taxpayer to very little risk. Borrowers have defaulted on less than 2% of all loans backed by Ex-Im since its inception in 1934, a default rate lower than commercial banks. Ex-Im loans and guarantees present very low risks because they are backed by the collateral of real goods for which a buyer has already been found and a price has been agreed. As a result, Ex-Im poses none of the risks to taxpayers that, for instance, government-sponsored enterprises in the housing sector ultimately did.

Failure to reauthorize Ex-Im would amount to unilateral disarmament in the face of other nations' aggressive trade finance programs. For example, the export credit agency in Canada has extended three times as much export financing as Ex-Im; Japan more than five times; and China an estimated eleven times. Failure to reauthorize Ex-Im will put billions of dollars in U.S. exports and thousands of American jobs at risk.

## Trade Promotion Authority

Looking beyond the immediate priority of reauthorizing Ex-Im, a pro-jobs trade agenda that includes more market-opening agreements, such as those recently approved with South Korea, Colombia, and Panama, should be a focal point for a Congress concerned about the competitiveness of U.S. businesses, economic growth and job creation. While I am not a trade specialist, I know enough to recognize that first the president needs the authority to negotiate such agreements— Trade Promotion Authority (TPA). Congress has granted every president since FDR the authority to negotiate market-opening trade agreements in consultation with Congress.

TPA lapsed in 2007. That's unacceptable; every American president needs TPA, and every president should have it. It sends a wrong signal to potential partners who won't negotiate seriously if they know agreements could be picked apart by Congress.

Without TPA, the United States is relegated to the sidelines as other nations negotiate trade agreements without us— putting American companies at a *competitive disadvantage*. Already, more than 300 free trade agreements are in force around the globe, but the United States is a party to just 14 such agreements covering 20 countries. And that includes the most recent three, which have yet to be implemented. To be competitive globally, grow our economy and create U.S. jobs, we must be in the game and getting back in it starts with TPA.

## Other Opportunities

LMI does a considerable amount of business in Asia and Europe. I am pleased that the United States has a seat at the table for negotiations of the Trans-Pacific Partnership (TPP) which are underway. It's a great place to start. Asia accounts for half of the world's population and is projected to account for a large share of its economic growth for years to come. To boost U.S. exports and create jobs at home, the United States needs to improve its access to Asian markets.

Asian nations are designing a new architecture for trade in the global economy's most dynamic region — threatening to draw “a line down the middle of the Pacific.” The TPP is our chance to ensure the United States is in the game in Asia. Embracing nine countries today, many hope additional countries will accede over time. The United States must be engaged, it is critical to our competitiveness and economic growth.

As we consider new trade accords, Europe calls out for attention. Indeed, the European Union is by far America's largest international economic partner and, in the size of its economy, our only true economic peer. It is also an important market for Ludlum.

Last year, the Chamber supported a study to gauge the potential benefits of eliminating tariffs between the United States and the European Union. The study found that eliminating transatlantic tariffs would boost U.S.-EU trade by more than \$120 billion within five years. It would also generate GDP gains of \$180 billion — a budget-neutral boost to the U.S. and EU economies. I support the proposal for a Transatlantic Economic and Trade Pact that eliminates tariffs, ensures compatible regulatory regimes, and addresses investment, services, and procurement.

## **Conclusion**

I am told that given the existing political realities in Washington, DC, it is difficult to find common ground and get things done. I want to remind you that business owners across our nation and the men and women they employ face great challenges every day as well. Yet we find a way to overcome hurdles, make progress, and ultimately achieve solutions. I do not think it is too much to ask of our elected officeholders to do the same. Just as we have men and women and their families at LMI who directly depend on us for their jobs and livelihood, you have a nation of entrepreneurs and business owners who are impacted by your ability (or inability) to foster a policy and regulatory environment that encourages risk-taking, investment, innovation and job creation. The bottom line is that the decisions you make can help or hinder us. By that I mean the laws you create will either cultivate a climate that provides entrepreneurs and small and mid-sized business owners greater confidence and certainty to grow and generate new jobs, or one that does just the opposite.

We desperately need elected officeholders who are on the right side of that debate who are willing to lead. I served in the United States Navy for 20 years and travelled the world aboard nuclear submarines. Between my military service and business experience, I have been exposed to numerous countries and cultures around the globe. I am incredibly proud to be an American and strongly believe this nation is still the greatest place to live and do business.

I am hopeful that each member of this Subcommittee as well as all of your colleagues in the House and Senate will commit to advancing legislation in the areas of high-skilled immigration, tax, and trade policies to boost the competitiveness of U.S. businesses while also coming together to eliminate onerous mandates and regulatory burdens which saddle businesses with hurdles that actually hamper economic growth and job creation.

One of the most significant areas where Congress can legislate reforms with a direct impact on expanding job creation is high-skilled immigration reform. Thus, there is an economic imperative for employment-based immigration reform.

The Chamber applauds the Subcommittee for holding this hearing, and thanks you for this opportunity to testify. I look forward to your questions.