



# CPPPI

Center for Public Policy Innovation

## **Restoring U.S. Competitiveness: Navigating a Path Forward Through Innovation and Entrepreneurship**



**SPECIAL REPORT**  
**Sept. 7, 2011**

# Introduction

No country in the history of the world can match the United States of America's track record of success in the area of innovation, but this position has recently begun to erode as other nations have emerged as leaders in the global economy. If the United States economy is to remain competitive, the country must continue to strengthen the innovative edge that has always been a driving economic force. Unfortunately, outdated policies and other barriers are hindering innovation and dampening the entrepreneurial ecosystem that fuels our economy.

In a period of economic duress with an unemployment rate of more than nine percent, the federal government must take a proactive approach towards spurring innovation by providing the necessary support to job creating businesses large and small. There are several ways that the government can and should be helpful in this respect.

Startup companies, especially those in the technology sector, will never materi-

alize without the brilliant minds that turn great ideas into reality. The workforce of tomorrow demands that we have a large supply of highly skilled individuals, including both native-born students and their foreign counterparts, so that American businesses will no longer be disadvantaged when competing against their competitors around the globe. Employer-based immigration reform and a renewed commitment to turning the

---

## **CPPI's recent forum explored immigration and education reform, federal funding for research and development, barriers to entrepreneurship, and tax reform.**

students of today into the innovators of tomorrow will ultimately help restore American competitiveness.

Similarly, United States tax policy has recently shown itself to be out of sync with the realities of the global economic system, and structural changes will be necessary if the United States is to remain competitive. For instance, America's corporate tax rate is one of the highest among developed nations. In addition, trillions of dollars in corporate earnings remain overseas, and United States-based multi-national companies face an onerous tax penalty in repatriating those profits. With nations such as China and India developing a more hospitable business climate and creating incentives to attract manufacturing and research and development activities, the status quo is no longer an option for the United States. Robust policy changes, coupled with



CPPI President Chris Long convenes the forum

targeted government funding to spur innovation in research laboratories around the country, are vital to our success.

**O**n June 16, 2011, the **Center for Public Policy Innovation (CPPI)** launched the first in a series of events in the nation's capital to examine these issues and others. CPPI's standing room only Public Policy Forum attracted a broad cross section of participants from government, academia, and industry, all of whom were eager to engage in an interactive panel discussion on the important topics of innovation and entrepreneurship. Moderated by Gautham Nagesh of *The Hill* newspaper, the panel consisted of Tom Weithman from the Commonwealth of Virginia's Center for Innovative Technology (CIT), Brink Lindsey from the Ewing Marion Kauffman Foundation, and John Backus of New Atlantic Ventures, each of whom lent their expertise to exploring American competitiveness issues. The panelists fielded thought-provoking questions and comments from the audience, which was invited to submit discussion topics and questions via Twitter and text messaging to make for a more inclusive and complete discussion.



Gautham Nagesh of *The Hill* newspaper

Among the most pressing issues discussed at CPPI's recent forum were immigration and education reform, federal



An overflow crowd participates in the discussion via text messaging and Twitter

funding for research and development, barriers to entrepreneurship, and tax reform.

**M**any of these same topics were also addressed in the remarks delivered by the event's keynote speaker, Peggy Johnson, Executive Vice President and President of Global Market Development for the United States-based mobile technology company Qualcomm, as well as the symposium's final speaker, Congressman Jared Polis (CO-2), a well-known entrepreneur who recently founded the bipartisan Congressional Caucus on Innovation and Entrepreneurship. Although the speakers' views varied from issue to issue, the consensus was clear: fundamental policy changes are necessary if the United States is to maintain its competitive edge in the global economy of the 21st Century.



# Barriers to Entrepreneurship

## Encouraging Innovation by Removing Barriers to Entrepreneurship

**S**tartup companies aren't just the largest source of job creation; they're also a durable form of job creation as new firms age.<sup>i</sup> Nurturing the entrepreneurial ecosystem will require structural changes if the United States aims to remain competitive in the world economy.

"America's economic future rests in its continued leadership in innovation," said Congressman Polis at the event. "Disturbingly, studies show that entrepreneurs are leaving our shores because many feel that the business climate overseas offers them better opportunities. We must accelerate American innovation by reducing barriers to entrepreneurship so we can create jobs here at home. Working together, Democrats and Republicans must foster an economic climate that will create the next generation of great American innovators."

One major hurdle for entrepreneurial businessmen and women is the capital gap that Backus, the noted venture capitalist, knows all too well. He began his remarks on a positive note, exclaiming that our future is "incredibly bright," especially when you consider the fact that at least 500,000 people in America now make a substantial part of their living developing applications for mobile phones and tablet computers that didn't even exist a couple of years ago. However, despite this optimism, Backus told attendees that corporate pension funds are "pretty much gone" as a funding source for the venture capital (VC) community and that the endowments that had once been a good source of capital are also becoming more elusive.

Backus also expressed concern that the implementation of the 2010 Dodd-Frank financial reform package has made it difficult for American institutions to invest in venture funds. Taken together, these forces make it challenging for the VC community to continue investing in bright new companies.

Backus critiqued the current tax system, saying, "If we could make one simple change to our tax code, on a revenue neutral basis, it would be to change the short and long term definitions of capital gains: change the short term to two or three years from one, at the current ordinary income rates, and this will bring in more revenue. Then leave the 15 percent rate for medium term investments, and create a super-low, super-long term rate of 5 percent for assets held over five years. I would also make stock options issued to employees at a private company subject to capital gains treatment, and leave carried interest tax rates for Venture Capitalists at 15 percent. If you broaden the definition of capital gains and factor in



Venture Capitalist John Backus lends his expertise to the discussion

stock options, all of the sudden it's a little more worthwhile for an entrepreneur to work for one of these startups."

**W**hen Nagesh asked the panelists whether the so-called "500 shareholder rule" was a significant obstacle for growing new companies, Backus surprised his fellow panelists by saying that the rule, which sets the threshold at which a growing company has to publicly reveal certain financial details, isn't really a big deal. "The threshold doesn't necessarily mean that you have to go public, but that you have to report information as if you were public. The real issue is all of the secondary markets and the mismatch of information," he said.

While the venture capitalist admitted that there are lots of companies that went public during the technology boom of the 1990s that never should have done so, he lamented the fact that so few companies are able to go public today due to some of the onerous rules and regulations placed upon them. "It's a terrible problem that fewer companies are going public today," Backus commented.

Backus also suggested that companies under a certain size limit should be able to comply with a simplified version of Sarbanes-Oxley, a legislative package dealing with securities issues that was signed into law in 2002 to restore investor confidence and deter fraud following the accounting scandals involving several companies including Enron and WorldCom. Critics point out that Sarbanes-Oxley disproportionately affects smaller companies, who are less able to deal with the increased costs of auditing than larger ones. If you lessen the

burden placed on smaller companies you might increase the number of firms that are able go public, Backus argued, saying, "It's not a panacea, but Sarbanes-Oxley restrictions have been a challenge for companies."

Another stumbling block for new ideas is the current system for transferring knowledge out of American universities. Lindsey explained that while many universities have started technology transfer offices to try and commercialize ideas, in many instances those offices suffer from a bottleneck that prevents good ideas from moving forward. The Kauffman Foundation has proposed moving to a free agency model: in most cases professors can choose anyone, anywhere in the world to work with on their research, but when it comes time to commercialize their work, these same professors are locked into using their home university's possibly ineffective technology transfer office. A system where entrepreneurial professors would be allowed to choose their own licensing agents from anywhere in the world offers the potential to ameliorate the situation and spur the development of new businesses.

**W**hile Backus and Lindsey focused the bulk of their remarks on the policy and regulatory hurdles to entrepreneurship, Weithman suggested that entrepreneurship should be encouraged through academia, citing a program that has had success in working with youths from disadvantaged populations. The idea of starting a business was made available to these students at an early age, broadening their horizons and helping them to think outside the box about their economic future.



## CPPI tweets from the June 16th event on Restoring U.S. Competitiveness

@CPPIOnline

Thank you to attendees for participating in #CPPI June 16 policy forum, please stay tuned for info regarding other upcoming CPPI events

@jaredpolis supports immigration reform so foreign students in the U.S. can legally remain here and leverage their skills & abilities

@jaredpolis comments that his focus is on promoting human capital and education to improve the economy

Corporate tax reform is another solution to restore economic vitality to the United States from @jaredpolis

Also, we appreciate the support of our #CPPI speakers: @KauffmanFDN, @jaredpolis, @jcbackus, and @nagesh!

# The Workforce of Tomorrow

## The Importance of Immigration and Education Reform to the Workforce of Tomorrow

In Johnson's keynote address, she noted that Qualcomm has grown from a small San Diego, California, startup company to a global leader in developing and delivering innovative digital wireless communications products in less than 25 years. According to Johnson, Qualcomm could not have succeeded without government policies that encouraged innovation. After all, said Johnson, "It was a group of professors at a public university who started out by perusing federal grants that resulted in the creation of our company... It was America's welcome to immigrants that brought many of the best and brightest to our shores and to our company." However, Johnson cited recent troubling statistics to show how the domestic climate has changed. The United States currently ranks 27th among developed nations in the proportion of college students receiving degrees in science or engineering, and 48th in the quality of math and science education. These alarming numbers are a clear indicator that when it comes

to fostering American competitiveness and innovation, human capital is a factor that cannot be left out of the equation.

In order to remain competitive, it's vital that the workforce of tomorrow be made up of highly skilled workers who will drive innovation. This will require additional investment in skills, education and training, according to Lindsey. "Human capital has stagnated. High school graduation rates peaked in the 1960s and college graduation rates peaked in the 1980s. A decline in those figures will lead to less productivity overall, and a negative drag on the economy," argued the Kauffman Foundation's Senior Scholar for Research and Policy.

Congressman Polis also emphasized the importance of strengthening education in his closing remarks. "I think that our intellectual capital is going to be a way for us to have a competitive advantage in the longer term, and the best way to boost our intellectual capital is to do a better job in the area of education," he said.

Interestingly, CPPI's panelists noted that strengthening education – especially in the so-called "STEM" areas of Science, Technology, Engineering, and Mathematics – is crucial to American competitiveness, however our current schooled generation has not embraced these fields. "I'm a father of two, and I'm telling you that's a hard problem to solve. Math and science are still stigmatized in a lot of ways... I don't know how you get that cool back," said Bauckus.

The problem really lies at the K through 12 levels, according to Backus, who responded to a question about whether grant funding could support college-level studies in these areas by saying, "If you aren't



Keynote speaker Peggy Johnson from Qualcomm highlights government policies that foster innovation

engaging students during their younger years, you're never going to get those kids active once they hit college."

The state of education in this country has not gone unnoticed by the White House. In September 2010, President Barack Obama announced the ambitious goal of recruiting 10,000 STEM teachers over the next two years and preparing 100,000 STEM teachers over the next decade. In a statement, President Obama said, "When I came

## The "STEM" areas of Science, Technology, Engineering, and Mathematics are crucial to American competitiveness.

into office, I set a goal of moving our nation from the middle to the top of the pack in math and science education. Strengthening STEM education is vital to preparing our students to compete in the 21st Century economy and we need to recruit and train math and science teachers to support our nation's students."<sup>ii</sup>

While producing necessary intellectual capital is crucial to the business sector, it is also important for industry to be able to retain intellectual capital. The United States is home to some of the greatest universities in the world; and, every year, at least 50,000 workers with advanced degrees leave the country for better opportunities elsewhere.<sup>iii</sup> "If there were enough United States citizens graduating with this sort of expertise then you could shut the door to the immigrant communities and our business community would have all the talent they need. But shutting the door to immigrants with STEM expertise is just not

feasible at this point," Backus commented.

Highly skilled immigrants positively impact the United States economy in many ways. According to a recent study by Vivek Washwa of Duke University and his co-authors, approximately 25 percent of technology and engineering companies that were launched in the United States between 1995 and 2005 had at least one immigrant key founder.<sup>iv</sup> Foreign-born employees clearly play a valuable role in moving American businesses forward, as evidenced by the fact that 25 percent of international patent applications from the United States were submitted by non-citizens.<sup>v</sup> Unfortunately, it has become increasingly difficult for policymakers to argue in favor of increasing the number of skilled visas given the high rate of unemployment among American workers today.

Interestingly, according to Lindsey, data also suggests that immigrants are often more entrepreneurial by nature than native-born Americans. Immigrants have already taken the bold step of leaving their home and family and moving far away to create a better life. These individuals have an entrepreneurial attitude that is somewhat unusual in today's workplace. However, Lindsey also complained that skilled immigration issues are often lumped together with the subject of illegal immigration enforcement, making it difficult for Congress to successfully intervene and increase the talent pool of highly-skilled workers available to businesses large and small.

Of the many policy reforms that could spark economic growth and create jobs in the private sector, eliminating barriers to employer-based immigration and encouraging STEM education are among the most needed.



@jcbackus predicts huge changes in education with a shift from physical classrooms to more Internet courses.

Thank you to the generous support of @Qualcomm for making this #CPPI public policy forum a success!

Congressman @jaredpolis should arrive as soon he finishes a vote on the floor!

One audience member asked how can we make entrepreneurship and science "cool" in school to attract more students to these fields?

Brink Lindsey of @KauffmanFDN suggests an area of focus should be technology transfer out of universities

On average, 1/4 of U.S. tech companies founded from 1995-2005 have a foreign-born person as the lead technologist from @KauffmanFDN

Tom Weithman suggests basic R&D struggles because it is difficult to trace the outcomes

# Government-Funded Research

## The Value of Government-Funded Research

In the 1970s, most of the nation's top innovations were the result of corporations working alone. However, in recent years, approximately two-thirds of award-winning United States innovations have involved collaboration between businesses, government, universities, or other organizations. In fact, only 11 of the United States' entities that produced award-winning innovations in 2006 were not beneficiaries of federal funding.<sup>vi</sup>

Weithman knows well the value of government-funded research. In 2004, he established CIT GAP Funds, a family of seed-stage venture funds focused on making equity investments in the Commonwealth of Virginia's most promising companies. While the impact of federal funding on corporate research and development (R&D) may be hard to quantify, it is extremely important, said Weithman. CIT's partnership model

was launched several years ago when the capital gap in the Commonwealth of Virginia for seed stage funding became apparent. CIT leverages private sector capital and public dollars across their portfolio, mobilizing those resources into new companies, and leveraging public dollars at a rate of 16 to 1.

---

**Despite the current budget environment, it seems clear that the government should reexamine its commitment to R&D.**

One success story at the federal level involves the United States Small Business Administration's (SBA) Office of Technology, which administers the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. Through these two competitive initiatives, SBA ensures that the nation's small, high-tech, innovative businesses are a significant part of the federal government's R&D efforts. Eleven federal agencies participate in the SBIR program and five participate in the STTR program; awarding approximately \$2 billion to small high-tech businesses nationwide.<sup>vii</sup> Participating agencies are certainly encouraged by the results of the programs' early stage investments: the SBIR program has received plaudits for its effectiveness in spawning successful, job creating commercial ventures; and one recent study concluded that the program produces as much as 25 percent of the nation's most important innovations each year.<sup>viii</sup>



Tom Weithman discusses the value of government funded research



Panel moderator @gnagesh asks great question, what stands in the way of entrepreneurs and what policies can help?

U.S. long-term economic prospects depend on revision of law and policy to better support innovation from Brink Lindsey @KauffmanFDN

Interesting point made by panelist @jcbackus venture capital industry has unintentionally come under attack in last 10 years

Brink Lindsey of @KauffmanFDN comments some economic sources of growth are stagnant highlighting the need for innovation

Panelist Tom Weithman of the Center for Innovative Technology works to fill the capital gap in the Commonwealth of Virginia

U.S. Patent and Trademark Office granted 219,614 patents in 2010, a jump of 40% from recession-year lows in 2008 via @uspto



The Defense Advanced Research Projects Agency (DARPA) is another research-intensive federal government agency that has been highly successful in bringing about new waves of innovation and technologi-



Brink Lindsey of the Kauffman Foundation

cal advancement through the years. DARPA's strategic investments in basic research have brought about advancements in a large number of areas, such as satellite-based technologies, cognitive speech recognition, electronic surveillance, stealth technology, and advanced composite materials, among others. Most importantly, however, it was the organization's original idea to link time-sharing computers into a national system that led to the creation of the Internet.

Despite these success stories, federally funded R&D is unfortunately on the decline. Total federal R&D spending grew at a sluggish 2.5 percent per year from 1994 to 2004, a figure that is much lower than the long-term average of 3.5 percent growth per year from 1953 to 2004.<sup>ix</sup> Despite the current budget environment, it seems clear that the government should reexamine its commitment to R&D in a number of areas, especially given the economic competition facing the United States.

# Corporate Tax Reform

## The Impact of Corporate Tax Incentives on American Competitiveness

Over the past several years, many countries have incentivized domestic growth and boosted their global competitiveness by reducing corporate tax rates within their borders. Since 2000, 27 of the 30 nations in the Organisation for Economic Co-operation and Development (OECD) have reduced their corporate tax rates by an average of more than 7 percentage points and the average corporate tax rate currently stands at 25.5 percent; meanwhile, the United States has failed to adjust its tax policies in a similar manner.<sup>x</sup> Many countries have also created specific economic incentives, such as tax holidays that attract international investment, to promote lasting growth in their economies. While other nations have adapted to meet the challenges of a global economy, the United States corporate tax rate remains one of the highest in the developed world.

Congressman Polis acknowledged the need for corporate tax reform, saying, "Repatriation of earnings and for-

eign subsidiaries would have a stimulative effect on the economy. There's over a trillion dollars in capital earned by American companies that sits overseas, not being repatriated because of steep penalties... The goal is to reduce the corporate tax rate and bring it more in line with national tax rates in a revenue neutral way. On a revenue neutral basis, we should be able to get the rate from 35 percent to about 27 or 28 percent."

Unfortunately, an inhospitable corporate tax climate has negatively impacted manufacturing in the United States and, along with it, the corporate R&D that drives innovation and, ultimately, global competitiveness. In the 1980s, the United States had the best R&D tax incentive for companies among OECD countries; however, by 2011, the United States had dropped to 17th on the list.<sup>xi</sup> First enacted 30 years ago, the R&D tax credit provides incentive for private sector investment in R&D and it creates domestic, high-wage R&D jobs. For manufacturers, this translates into new product development and increased productivity.

According to the Milken Institute's report *Jobs for America*, which was released in January 2010, total employment in the United States would increase by 510,000 people within a decade if the R&D tax credit were to be made permanent. The credit, which is used by companies of all sizes, will expire in December of 2011 for the 15th time.<sup>xii</sup> A stronger, permanent R&D tax credit will ensure that American companies are better positioned to compete on a global scale and create much needed jobs domestically, rather than overseas.

When American companies outsource manufacturing, the nation loses more than jobs; it loses its innovative advantage. As manufacturing moves to other,



U.S. Rep. Jared Polis (CO-2) delivers closing remarks



Rep. Jared Polis and Peggy Johnson of Qualcomm

more business friendly locales, R&D dollars aren't far behind. In the book *Great Again*, author Henry Nothhaft writes, "Manufacturing is the vehicle through which the wealth created by innovation is dispersed throughout all of society and not just to a tiny elite. But beginning in the 1980s, our nation began to divorce innovation from production."<sup>xiii</sup>

**U**nfortunately, the exodus of manufacturing has become increasingly apparent in the semiconductor industry over the past several years. In 2009, there were 16 semiconductor plants built world-wide. Of those, six were built in China and only one was built in the United States. This discrepancy is due in large part to the generous tax incentives and other policies that have been implemented by other nations to encourage domestic production. In China, for example, semiconductor plants don't pay any taxes for first five years and pay only half of the top rate of 25 percent for the next five years.<sup>xiv</sup> For the United States to remain competitive globally, American tax reform must be addressed in a meaningful manner.

## Conclusion

Over the last several decades technology has advanced in ways that our forefathers could never have imagined. How-

ever, in recent years, antiquated policies have caused the entrepreneurial ecosystem to become stagnant, thereby threatening the economic growth and innovative spirit that made the United States into an industrial powerhouse. The U.S. economy doesn't exist in a vacuum, and public policy at the federal, state, and local levels must acknowledge the realities of the interconnected and complex global economic system.

At CPPI's recent Public Policy Forum on innovation & entrepreneurship, Peggy Johnson said that federal policies are an important catalyst for bringing about the next generation of innovators, commenting, "Federal government policies played a key role in the success of [Qualcomm's] inventions, and they are critical to enabling the next generation of U.S. innovation." Qualcomm's success is a testament to what is possible when government policies in the areas of immigration, education, tax reform, and R&D are geared towards fostering economic growth in the United States.

The repressed state of innovation today does not represent a death sentence for American competitiveness, but it does warrant a call for action. CPPI stands ready to address the complex policy challenges associated with competing in the 21st Century economy.



Other remarks from Peggy Johnson highlight innovative mobile apps that improve the quality of life for people around the world

Peggy Johnson of @Qualcomm keynote remarks focus on investment in the future to once again make America's economy strong

Did you know that the companies Apple, CNN, and Disney were all founded during a recession via @KauffmanFDN

CPPI President Chris Long opening remarks highlight restoring economic vitality by creating new jobs through innovation

CPPI's Public Policy Forum on Restoring U.S. Competitiveness: Innovation & Entrepreneurship has a hashtag #CPPI

The #CPPI public policy forum will commence at 12 noon to focus on how innovation and entrepreneurship can restore U.S. jobs

# HIGHLIGHTS

## **Strategies to boost economic competitiveness, drive innovation, & foster entrepreneurship**

### **Reforming America's financial rules and regulations:**

Changing the definitions of capital gains could encourage increased investment in innovative start-up companies. For example, changing the short term rate to two or three years from one, at the current ordinary income rates; leaving the medium term rate unchanged; and creating a super-low, super-long term rate of five percent for assets held more than five years would drive longer-term investments in small businesses.

Policymakers are currently examining the possibility of raising carried interest tax rates for Venture Capitalists, which could lead to a decline of venture investment over time and hinder job creation. Leaving carried interest tax rates at 15 percent would help ensure that seed and early-stage investments remain available for innovative small businesses.

Companies under a certain size limit should be able to comply with a simplified version of Sarbanes-Oxley. If the burden placed on smaller companies is lessened, the number of firms that are able to go public might increase.

### **Strengthening the American workforce:**

Highly skilled workers are critical to spurring innovation and entrepreneurship. Additional investment in skills, education, and training are needed to ensure that the labor supply in the United States meets the current and future demand for talented employees.

Strengthening education in the areas of Science, Technology, Engineering, and Mathematics is crucial to American competitiveness. It's especially important to engage students at the K-12 levels, before they enter college.

K-12 academic programs that broaden students' horizons and help them to think outside the box about their economic futures could bring about the next generation of innovators and entrepreneurs.

While producing the necessary intellectual capital is crucial to the business sector, it is also important for industry to be able to retain intellectual capital, as well. Eliminating barriers to skilled immigration is needed to spark economic growth and create jobs.

Employer-based immigration reform efforts continue to be bogged down in controversial issues related to illegal immigration. Congress should consider addressing employer-based immigration policies separately, as part of the economic growth agenda, rather than as a part of the larger comprehensive immigration reform effort.

### **Updating tax and spending policy:**

At 39.2 percent, the United States' corporate tax rate is more than 50 percent higher than the Organisation for Economic Co-operation and Development's average of 25.5 percent among industrialized nations. Reducing the corporate tax rate would make it easier for American businesses to compete in the global economy.

Temporary tax credits have incentivized private sector investment in research and development, thereby creating high-wage jobs across the United States. A stronger, permanent research and development tax credit will ensure that innovative American companies remain at the forefront of technology in the future.

Approximately two-thirds of award-winning innovations in the United States have involved collaboration between businesses, government, universities, or other organizations, yet the total amount of federal funding dedicated to research and development has fallen dramatically since the 1960s. The government should reexamine its commitment to research and development, especially given the aggressive economic competition currently facing the United States.

### **Developing new models for technology transfer:**

It has become increasingly difficult to transfer cutting-edge research in American universities to the private sector due to the universities' insistence that their researchers work solely through the universities' own technology transfer offices. Moving to a free agency model, where entrepreneurial professors would be allowed to choose their own licensing agents from anywhere in the world, offers the potential to spur the development of new businesses.



## **About the Center for Public Policy Innovation**

The Center for Public Policy Innovation (CPPI) is a 501(c)(3) not for profit educational think tank that aims to assist government officials in addressing the many challenging issues brought on by the rapid advancement of Information Technology.

CPPI provides policymakers with thought leadership, informed policy analysis, and innovative strategies to help ensure American competitiveness in the global economy and comprehensive security on the homefront. CPPI convenes educational symposiums, site visits, and other forums that bring together stakeholders from government, industry, academia, and the civic sector to discuss policy issues in a collaborative environment.

# End Notes

<sup>i</sup> “Jobs Created by Startup Companies Have Long-Lasting Economic Impact.” Ewing Marion Kauffman Foundation press release. August 2, 2010. <http://www.kauffman.org/newsroom/jobs-created-by-startup-companies-have-long-lasting-economic-impact.aspx>. Accessed July 21, 2011.

<sup>ii</sup> “President Obama Announces Goal of Recruiting 10,000 STEM Teachers Over the Next Two Years.” White House press release. September 27, 2010. <http://www.whitehouse.gov/the-press-office/2010/09/27/president-obama-announces-goal-recruiting-10000-stem-teachers-over-next-/>. Accessed July 21, 2011.

<sup>iii</sup> Kane, Tim, and Robert E. Litan. “Knowledge Economy Immigration: A Priority for U.S. Growth Policy.” Ewing Marion Kauffman Foundation. April 30, 2009, p. 3. <http://www.kauffman.org/research-and-policy/knowledge-economy-immigration-a-priority-for-us-growth-policy.aspx>. Accessed July 21, 2011.

<sup>iv</sup> *Ibid.*, 5.

<sup>v</sup> Hunt, Jennifer, and Marjolaine Gauthier-Loiselle. “How Much Does Immigration Boost Innovation?” *American Economic Journal: Macroeconomics* 2, no. 2 (2010): 31-56, cited in Papademetriou, Demetrios G., and Madeleine Sumption. “The Role of Immigration in Fostering Competitiveness in the United States.” Migration Policy Institute. May 2011, p. 8. <http://www.migrationpolicy.org/pubs/competitiveness-US.pdf>. Accessed July 21, 2011.

<sup>vi</sup> Nelson, Jenifer. “Federal Funding Fosters Innovation.” July 10, 2008. Post on blog “Science Progress.” Science Progress. <http://www.scienceprogress.org/2008/07/federal-funding-fosters-innovation/>. Accessed July 21, 2011.

<sup>vii</sup> SBIR - Small Business Innovation Research. “About SBIR and STTR Programs.” SBIR website. <http://www.sbir.gov/about/>. Accessed July 21, 2011.

<sup>viii</sup> Nothhaft, Henry R., and David Kline. *Great Again: Revitalizing America's Entrepreneurial Leadership*. (Boston, MA: Harvard Business Review, 2011), p. 171.

<sup>ix</sup> Galama, Titus, and James Hosek. *U.S. Competitiveness in Science and Technology*. (Santa Monica, CA: RAND Corporation, 2008), p. 67, cited in U.S. House of Representatives Committee on Science and Technology, Subcommittee on Technology and Innovation; "Role the U.S. Government Can Play in Restoring U.S. Innovation Leadership," testimony of Dr. Robert D. Atkinson, President of The Information Technology & Innovation Foundation. March 24, 2010, p. 11. [http://science.house.gov/sites/republicans.science.house.gov/files/documents/hearings/032410\\_Atkinson.pdf](http://science.house.gov/sites/republicans.science.house.gov/files/documents/hearings/032410_Atkinson.pdf). Accessed July 21, 2011.

<sup>x</sup> Nothhaft, Henry R., and David Kline. *Great Again: Revitalizing America's Entrepreneurial Leadership*. (Boston, MA: Harvard Business Review, 2011), p.24.

<sup>xi</sup> "The Research & Development Tax Credit: Creating Jobs and Economic Growth through Innovation." R&D Credit Coalition. March 8, 2011. [http://www.investinamericasfuture.org/PDFs/Coalition%20Talking%20Points\\_3-8-11.pdf](http://www.investinamericasfuture.org/PDFs/Coalition%20Talking%20Points_3-8-11.pdf). Accessed July 21, 2011.

<sup>xii</sup> "ManuFACTS: R&D Tax Credit." National Association of Manufacturers. June 23, 2011. <http://www.nam.org/~media/C480FB95A9A645F590486A45AF26821D.ashx>. Accessed July 21, 2011.

<sup>xiii</sup> Nothhaft, Henry R., and David Kline. *Great Again: Revitalizing America's Entrepreneurial Leadership*. (Boston, MA: Harvard Business Review, 2011).

<sup>xiv</sup> *Ibid.*, 111.

