

**THE ROLE OF IMMIGRANTS IN AMERICA'S  
INNOVATION ECONOMY**

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**HEARING**

BEFORE THE

**COMMITTEE ON COMMERCE,  
SCIENCE, AND TRANSPORTATION  
UNITED STATES SENATE**

**ONE HUNDRED THIRTEENTH CONGRESS**

**FIRST SESSION**

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**MAY 8, 2013**  
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ONE HUNDRED THIRTEENTH CONGRESS

FIRST SESSION

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# **THE ROLE OF IMMIGRANTS IN AMERICA'S INNOVATION ECONOMY**

**WEDNESDAY, MAY 8, 2013**

U.S. SENATE,  
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,  
*Washington, DC.*

The Committee met, pursuant to notice, at 2:35 p.m., in room SR-253, Russell Senate Office Building, Hon. John D. Rockefeller IV, Chairman of the Committee, presiding.

## **OPENING STATEMENT OF HON. JOHN D. ROCKEFELLER IV, U.S. SENATOR FROM WEST VIRGINIA**

The CHAIRMAN. We are starting because it is time to start. There is still a vote completing itself having to do with oceans, which is most of the Earth. So members will come by.

The United States has always been and still is a place that attracts talented people from all across the country and all around the world, and they are searching for new opportunities. They view our country as a place that values and rewards hard work. They are attracted to our vibrant, open economy, and they admire our universities and research institutions that lead the world in technological and scientific innovation. Now, the question is, is that a statement about today or a statement about a couple of years ago? And we can talk about that.

They are often top students in their home countries and would have plenty of career opportunities if they decided to stay there. But they want a bigger challenge and they want a bigger stage, so they come here to the United States.

Tens of thousands of high-skilled immigrants come to this country every year to study, work, or start a business. We should welcome these people because they make our country and our economy stronger. They create American jobs.

The role of immigrants in the phenomenal growth of the U.S. technology industry over the past 2 decades is very well-documented and stunning, is it not? Absolutely stunning. Many of our largest and most successful tech companies, like Intel, eBay, Yahoo, and Google were founded or cofounded by foreign-born immigrants. In fact, from 1995 to 2005, foreign-born entrepreneurs helped found 25 percent of all new high-tech companies in America.

But the contributions of high-skilled immigrant workers to economic success go way beyond Silicon Valley. It even reaches West Virginia. We are a relatively small state. We are not a big, urban state like South Dakota, but we do our best.

[Laughter.]

The CHAIRMAN. And we have really a lot of companies that have people who have worked their way up, who have come from overseas and decided not to return home but to stay.

But the contributions of high-skilled immigrant workers to our economic success go beyond, as I indicated. As our witnesses are going to tell us today, companies in every region of our country—large, midsize, and small—benefit from their talents and skills.

My home state of West Virginia has benefited from the high-quality foreign-trained doctors who practice in underserved areas. And this is the subject of some soreness to me, on the side of those doctors who come here and stay. And I think that probably South Dakota is more open to new people than West Virginia was. I was new to West Virginia when I went there, and it took me 12 years to not be a carpetbagger, 12 long years.

[Laughter.]

The CHAIRMAN. I mean, that is just the nature, Scotch-Irish.

But these foreign-trained doctors—and they practice in areas where other doctors will not practice or do not practice. Therefore, I value them incredibly.

So when a West Virginian comments that their pronunciation of a word might be different, to me it makes absolutely no difference whatsoever. For some of them, it creates a pattern which makes it harder for them to go back, which is so silly, is it not? It is so silly. And it is part of American isolationism, and it is not healthy. And it is what we are going to try and change in this immigration bill, or at least start to change.

We benefit from foreign professionals who do some specialized advanced manufacturing jobs in our states, and I have a whole slew of examples.

Our witnesses are also going to tell us our immigration laws sometimes make our country a very much less welcoming place for high-skilled immigrants than it should be. High demand for H-1B visas and long waiting times for green cards make it more difficult for talented foreign students to work, to start a business here after they finish their degrees.

Unfortunately, some students give up and go home. Now, there are two arguments to that. Part of me says that is good because when they go back, they are needed. They are needed here; they are needed there. So let's say I am Korean or I am Pakistani or whatever. If they come and they get their degrees here and stay here, I am very happy about that, but, quite frankly, I am also happy if they go home, you know, but I don't want to push them home. I want to make it a choice that they can make on their own.

So, you know, Canada and Australia, they are actively recruiting. We seem to be making things harder. So that is the reason that my learned colleague, Senator Thune, and I are having this hearing.

As the Senate begins debating immigration reform, which I have hope for, I have real hope for, I have called this hearing—we have called this hearing to examine what changes are needed in our laws to maintain our ability to attract the best and the brightest to the United States.

This issue is part of a bigger challenge that we spend a lot of time discussing in this committee, and that is the challenge of

maintaining our country's position as a world leader in technology and scientific innovation. To maintain our lead, we have to be producing enough workers with the skills and training to do the jobs that our 21st century innovation economy is creating.

One of the reasons American companies have foreign engineers and scientists is because our U.S. education system is not even coming close to producing enough of them. In fact, I think on a net basis we may be backsliding. We talk a lot about it, even give it a certain amount of money, and of course the states do. But it is just woefully inadequate. It is woefully inadequate.

Leaders in government, academia, and the private sector have all identified this issue as one of the keys to our long-term economic success. We have to do a better job encouraging our children to pursue STEM subjects. Now, how do you do that?

I have had so many roundtables in West Virginia with STEM teachers. I remember one woman had been a coalminer, and she had stopped that and she had gone into math teaching, where she was an absolute genius. And, of course, to be a coalminer, you have to have all kinds of technical skills anyway, but she just brought an awful lot to the table.

But science, technology, engineering, and mathematics, those are the most important things we can study, other than how to be nice to each other in the classroom and not shoot.

A few years ago, President Obama commented that our economy would be in better shape if fewer young people aspired to be investment bankers and more, instead, became engineers, scientists, doctors, and teachers. And, of course, that is true, but try to sell that to somebody who has college and graduate degree loans to pay off.

He received some flak for this comment, but I think he had it exactly right. The industries that are creating the high-paid, rewarding jobs of the 21st century are the science and technology sectors. We have to do a better job getting our students excited about these subjects, both at the K-through-12 and the college level.

We have a long way to go in this country to reach the point where we celebrate the accomplishments of science fair winners in the same way that we celebrate sports champions. I don't know much really to celebrate about sports champions, except for the 4½ years that they survive if they play football. And then they have to rely on what they learned in school, which would be very little, and so the rest of their life is sort of a big downer. On the other hand, you get into STEM and your life has no limits.

To keep our economy and our country strong in the coming decades, we are going to need a lot of well-educated, tech- and science-savvy workers and entrepreneurs. That is obvious. They are the people who are going to create the good American jobs of the future. And whether these people are American-born or come to this country as teenagers or as adults, we need to give them all the opportunity to contribute to the success and prosperity of our country.

And that concludes my remarks.

The distinguished Ranking Member, Senator Thune.

**STATEMENT OF HON. JOHN THUNE,  
U.S. SENATOR FROM SOUTH DAKOTA**

Senator THUNE. Chairman Rockefeller, thank you for holding today's hearing on the role of immigrants in America's innovation economy.

And I want to extend a warm welcome to our witnesses, some of whom, I understand, are testifying before Congress for the first time today. So welcome. It is nice to have you all here.

Immigrants have been an undeniably important part of our nation's economic success story, especially in the technology industry. In fact, according to a study by the Kauffman Foundation, over 20 percent of high-tech companies in the United States have been founded by immigrants. Immigrants created revolutionary companies like Google, Intel, and eBay. It would be hard to imagine modern American life without these innovative companies.

It is worrying, however, that for the first time in decades the growth rate of immigrant-founded startups nationwide has stagnated, perhaps even declined.

Our nation is currently engaged in a global battle for jobs and economic prosperity. Many of our foreign economic competitors are taking aggressive action to lure the brightest minds, including scores, by the way, educated here in the United States, to their countries, not just for the talent that they bring individually but for the jobs that they help to create and sustain.

That is why it is more important than ever before that we put in place policies that will keep the United States in first place as the world's top economy. We can win this battle for jobs and talent by ensuring that the United States continues to be the innovation capital of the world.

We should have a competitive tax policy that encourages, rather than discourages, investment and growth. We must continue to identify new export markets and fight to increase market access and reduce tariffs. And we need to examine our regulatory framework so that job creators have regulatory certainty and are not unnecessarily burdened.

In addition to these goals, our country needs an updated high skills immigration policy that allows the brightest minds to come to our country and become entrepreneurs. The fact that the Commerce Committee is holding this hearing reflects the fact that immigration policy is a multifaceted issue and that we must consider the issue from all perspectives if we are going to get the policy right.

Our panel today is composed of people from a variety of backgrounds and demonstrates the struggle of the private sector to obtain and keep talented people. I look forward to hearing about the experiences and the challenges high-skill immigrants face as they seek to found companies, create jobs, and help grow our nation's economy.

Before I close, I wanted to take a moment to mention a proposal to expand high skills immigration known as the Immigration Innovation Act, otherwise known as the I-Squared Act, a bill that was introduced by Senator Orrin Hatch. I am a cosponsor of this important bill along with many other members of this committee.

This bipartisan legislation seeks to change the H-1B visa program by, among other things, increasing the annual allocation of H-1B visas from 65,000 to 115,000. And I might add that I think it should go much higher than that. The bill also includes a novel market-based escalator that allows the supply of H-1B visas to increase or decrease to adequately meet the market's demand.

I believe the I-Squared Act addresses the immediate need to provide American employers with greater access to high-skilled workers and puts in place a sustainable long-term policy that should help us avoid repeated short-term fixes.

Of course, today's hearing occurs in the shadow of a much larger debate about reform of our immigration system and the comprehensive proposal put forward by eight of our colleagues, including Senator Rubio, who is a member of this committee. As the Judiciary Committee prepares the markup of that legislation and as we all look ahead to likely floor consideration, I hope our committee's hearing will inform key aspects of the ongoing immigration debate.

Again, Mr. Chairman, I want to thank you and I want to thank our witnesses for joining us today.

I commend each of you for engaging with this committee on a critical issue to our nation's future, and I look forward to hearing your testimony.

Thank you.

The CHAIRMAN. Thank you, Senator Thune.

So now we will have our panel, and we will start with Ms. Ruchi Sanghvi.

How did I do?

Ms. SANGHVI. Pretty good.

The CHAIRMAN. That means I didn't do very well.

[Laughter.]

The CHAIRMAN. Anyway.

#### **STATEMENT OF RUCHI SANGHVI**

Ms. SANGHVI. Thank you. Good afternoon, Chairman Rockefeller, Ranking Member Thune, and members of the Committee. My name is Ruchi Sanghvi, and I am honored to be here today. My testimony today is my own personal story, and I am here in my own capacity and not on behalf of my employer.

I am grateful for the opportunities I could have only had here in the United States, but the immigration system that I have experienced leaves much room for improvement. For that reason, I want to begin by thanking the senators for putting forward a comprehensive, bipartisan plan. I know from personal experience that this is a deeply human issue and hope that Congress passes a comprehensive bill this year.

I came to America as a starry-eyed college student and have been on a roller coaster ride ever since then. I have worked at companies like Facebook, Dropbox, and even started my own company called Cove. I am privileged to work with people I respect and learn from every day. I met my husband here in the U.S. and have friends who are like family.

I want to give back to the community that I have come to know and love in a meaningful way, but it has been difficult every step of the way. I have been an immigrant for the last 12 years. I have

had all kinds of visas, from F-1s, OPTs, CPTs, H-1Bs, and now, finally, a green card. I had to overcome many roadblocks to get to where I am today, roadblocks that I hope can be addressed in the new legislation.

I was raised in Pune, India, and in the fall of 2000 traveled to Pittsburgh to study at Carnegie Mellon University. After graduating from college, I got a job doing math modeling at a bank in New York City. But when I arrived in New York City, I panicked. I didn't want to work on Wall Street like my other friends from college.

Most people in my position would have quit their job and looked for a new one, but I couldn't because I was on a visa. I had to find a new job before I could quit my old one. Choosing your profession, your place of work, and where you want to live all seem like fundamental choices everyone should have, but if you are an immigrant on a visa, it is a hard, stressful decision fraught with many uncertainties.

When I first started at Facebook back in 2005, I was the first female engineer. I was also one of the first employees on a visa, and it took us a few months to understand how to transfer my H-1B. I created and built many important features, like News Feed, Facebook Platform, Facebook Connect, and others, but I also spent a lot of time finding talent, interviewing people, and building out the Facebook team.

Talent is the lifeblood of most startups. Startups create jobs and then compete for talent to fill those jobs. Much like me, there were many talented individuals educated at top U.S. universities who were immigrants and would have been able to contribute significantly at Facebook.

The H-1B application process is a black box to most people and most startups. Very few people on an H-1B are willing to risk joining a startup, and even fewer startups are willing to invest the time and energy to interview candidates on a visa.

So after a few years at Facebook, I realized I wanted to start my own company, but I had to have my green card before I could leave Facebook to start a company. All I wanted was permission to follow my passion, to follow that American dream, but yet again I was faced with roadblocks even before I could take that first step.

So in early 2011, I finally started my own company called Cove. We needed engineering talent and were competing with the likes of Google, Apple, and Facebook. I wasn't going to turn away anyone who was interested in working at Cove, even those on a visa.

I consulted three immigration lawyers, and they gave me a two-page list of requirements that would make my case a strong one. So instead of spending time building a product and the company, I was checking off a list of requirements to secure H-1Bs. The process took 6 months—6 months just to transfer a visa, not get a new visa, but transfer a visa to my company.

My story is not a sad one. It is an American story, one of hope and hard work. And I am hopeful that if we are to be able to fix the immigration system, there will be many more like me wanting to create value, wanting to create jobs, and give back to the community.

The fact is that the current system results in more than 40 percent of math and science graduates leaving the United States after we have educated them. The economic reality is that 40 percent of Fortune 500 companies are started by immigrants and their children. Our economy, based on knowledge and ideas, can only grow if we add more talented, skilled, and hardworking people to it.

Thank you again for the opportunity and privilege to share my story with this committee.

[The prepared statement of Ms. Sanghvi follows:]

PREPARED STATEMENT OF RUCHI SANGHVI

Good afternoon Chairman Rockefeller, Ranking Member Thune and Members of the Committee. My name is Ruchi Sanghvi and I am honored to be here today as a representative story for the hopes and dreams of millions of people wanting to have the right and privilege of living and working in the US. My testimony today is my own personal story; and I am here in my own capacity and not on behalf of my employer.

I made it through the gauntlet of today's immigration system. For that, I am grateful. I am also particularly grateful for the opportunities that I could have only had here in the United States. But the system that I have experienced leaves much room for improvement. For that reason, I want to begin by thanking the Senators in the Gang of 8 for putting forward a comprehensive, bipartisan plan that aims to fix our nation's archaic and broken immigration system. It's easy to get lost in the numbers, but I know from personal experience that this is a deeply human issue—our current system isn't working for the economy or for families in the United States. I hope that Congress passes a comprehensive immigration bill this year so that President Obama can sign it into law.

I came to America in 2000 as an impressionable and excited college student at Carnegie Mellon University and have been on a roller coaster ride ever since then. I am proud to say I was the first female engineer hired at Facebook, and later started my own company, Cove, which was acquired by Dropbox, where I work today. I'm privileged to work with talented people I respect and learn from every day. I met my husband here in the U.S. and have friends who are like family. I want to give back to the community I've come to know and love in a meaningful way, and I intend to continue to do so in the years ahead. I am tremendously thankful for the opportunities that have been afforded me.

My path, however, has not been easy. I've been an immigrant for the past 12 years. Being an immigrant not only dictates your professional life but your personal life as well. I've had all kinds of visas from F1s, OPTs, CPTs, H1-Bs, and now finally a green card. Things that most people take for granted—such as switching jobs, following your dreams to start your own business, investing in relationships or building a home—are truly a challenge because of the great uncertainty surrounding your long-term status.

Today, I want to talk about some of the roadblocks I had to overcome to get to where I am today—roadblocks that I hope can be addressed in new legislation.

I was raised in Pune, India and, in the fall of 2000, travelled to Pittsburgh to study Computer Engineering at Carnegie Mellon University (CMU). I chose CMU because it was one of the premier institutions in the world for Computer Engineering and Computer Science. After graduating from college, I got a job doing math modeling for a derivatives trading group at a bank in NYC. But when I arrived in New York City, I panicked when I realized I didn't want to work on Wall Street like many of my other college friends. Living in the U.S. on a visa meant I had to search for and secure another opportunity before I could leave the job in New York—a process already stressful enough for any new graduate.

Choosing your profession, your place of work, and where you want to live all seem like fundamental choices everyone should be able to make. But if you are an immigrant on a visa, it's a hard, stressful decision fraught with many uncertainties.

A few months after arriving in Silicon Valley and starting work at Oracle, a friend of mine told me about a recently launched startup called Facebook. Out of curiosity, I went to check out their offices and, near the entrance, they had a chalkboard with three words: "Looking for Engineers." I was blown away by the energy and intensity of the people working there. On a whim, I decided to apply and got the job—but as I was one of the first Facebook employees on a visa, it took us a few months to understand how to transfer the H1-B over from my previous employer.

As all entrepreneurs know, building the employee base is the lifeblood for any startup. Startups create jobs and then compete for talent to fill those jobs. This was not any different at Facebook—we dedicated a large amount of time recruiting and attracting the world’s best engineers, designers and product managers to come work at the company. I personally spent a lot of time finding, interviewing, evaluating and expanding the Facebook team.

Much like me, there were talented individuals educated at top U.S. universities who clearly would have been able to contribute significantly in our workplace but for the fact that the combination of uncertainty, risk and time required to secure a visa meant that they shied away from startups. The H1-B visa application and transfer process is a black box to many talented immigrants and startup companies—however bright and talented, very few workers on an H1-B are willing to risk joining a startup and even fewer startups are willing to invest the time and energy interviewing applicants on a visa.

After a few years at Facebook, I realized I wanted to be an entrepreneur. I really wanted to start my own company but couldn’t do it on my H1-B status. I had to wait for my green card before doing so. All I wanted was permission to follow my passions, to follow the American Dream, but yet again I faced roadblocks because of a broken immigration system.

In early 2011, I finally started my own company Cove. We needed engineering talent and were competing with the likes of Google, Apple, and Facebook. I wasn’t going to turn away anyone who was interested in working at Cove, including those on a work permit. I now was in the unique position of applying for H1Bs and work permits for my employees. I consulted three immigration lawyers and they gave me a two page list of requirements that would help increase the likelihood of securing the appropriate visa for an employee interested in working at my startup. Instead of spending time building the product and the company, I was trying to check off the list of requirements to secure the H1-Bs. Because we didn’t have millions of users or millions in funding, I had to apply for bank loans, look for office space and ask prominent VCs and CEOs for letters of recommendation just to prove we were a legitimate startup. The process to apply for a “transfer” alone took 6 months.

As a student, employee, entrepreneur and wife, I’ve seen firsthand how the broken U.S. immigration system makes it more difficult at every turn for talented, law-abiding people to build their lives in the U.S., serve their communities, and create jobs here.

My tale is not a sad one; it’s one of hard work, hope and the opportunities that America offers. I have been able to achieve all that I have despite the immigration system, not because of it. I’m hopeful that if we are to be able to fix the immigration system, there will undoubtedly be many more like me wanting to create value, wanting to create jobs and give back to the community. The fact is that the current system results in more than 40 percent of math and science graduate students leaving the United States after educating them. The economic reality is that 40 percent of Fortune 500 companies are started by immigrants and their children. And that should not be surprising; the very idea of leaving your home for a new land to pursue a better life is inherently a risky and entrepreneurial activity. A person with this risk-taking mindset is already predisposed to take great chances to do great things. If we made it easier for the world’s talent to stay here, we would be creating more opportunities for everyone. Today’s economy based on knowledge and ideas can only grow if we add more talented, skilled and hardworking people to it.

Thank you again for the opportunity and privilege to share my story with the Committee. I hope the Congress will find a way to pass comprehensive immigration reform in the near term as the long-term future of our economy depends upon it.

The CHAIRMAN. Thank you very much. Is it not true that when you went to Facebook, there was a sign that said, “We need engineers”?

Ms. SANGHVI. It is true.

The CHAIRMAN. And you just walked right in and got a job.

Ms. SANGHVI. I walked right in, interviewed, and then got a job. [Laughter.]

The CHAIRMAN. Mr. Jeffrey Bussgang, who is General Partner, Flybridge Capital Partners, and a senior lecturer of business administration at the Harvard Business School.

Please.

**STATEMENT OF JEFFREY J. BUSSGANG, GENERAL PARTNER,  
FLYBRIDGE CAPITAL, SENIOR LECTURER,  
HARVARD BUSINESS SCHOOL**

Mr. BUSSGANG. Thank you, Chairman Rockefeller and Ranking Member Thune and other members of the Committee, for the opportunity to testify here today.

I want to especially thank the Senators who have worked on this important issue over the years, including the work that went into predecessor efforts, such as the Startup Visa bill, led by Senator Warner, and the I-Squared Act, led by Senator Thune, and the current bill being debated, led by Senator Rubio and the other members of the Gang of Eight. The proposed bipartisan legislation is a strong start, including expanding H-1Bs and creating the Invest Visa program as well as a path to citizenship.

I am a former entrepreneur turned venture capitalist and also teach entrepreneurship at Harvard Business School. My firm, Flybridge Capital, has offices in Boston and New York and invests in early stage technology startups around the country.

It is no surprise that I am passionate about this topic. My father was born in pre-war Poland and survived the Holocaust as a refugee and soldier. When he arrived in the U.S. after the war, he liked to say that he spoke five languages but all with an accent. When he came to America, he attended MIT and then earned his Ph.D. at Harvard and then himself became an entrepreneur, creating a small business that eventually employed over 100 people.

In my own career, I have watched our dysfunctional immigration system turn away the best and brightest from creating jobs and wealth in America. I won't dwell on the aggregate statistics because you all already know them, but instead I would like to share a few examples of how our broken immigration system is working against our national economic interests. By humanizing this issue, I hope to convey why it is that in the global war for talent America's immigration policy has become a laughingstock—except the stakes are so high, it is no laughing matter.

One of my star students at Harvard Business School, T.T. Nguyen Duc, grew up in Vietnam and came to America to attend Stanford University. She worked at a prestigious consulting firm before enrolling at Harvard to earn her MBA. For the last 2 years, T.T. has been working on starting an online education company that will dramatically decrease the cost and increase the access of a quality high school education. Naturally, she wants to start the company here in the U.S.

A few weeks ago, T.T. came to me very upset. She has learned that once she graduates next month, she has to either leave the country within 60 days or find a job with someone that will sponsor her H-1B visa. As you know, the odds of this are long. This year, the H-1B cap sold out very quickly. It appears T.T. will have to abandon her dreams of starting a new company and instead pursue it in another country that will welcome her instead.

Another example is Sravish Sridhar. Sravish came to America from India over 15 years ago to attend the University of Texas and earned a degree in computer science. He cofounded a software company that raised \$30 million in venture capital and sold it successfully. A few years ago, he founded another software company in

Boston, has raised \$7 million, and employs 20 people. Last week, Sravish was named the Rising Entrepreneur of the Year by a local business association.

He applied for his residency under the EB-3 category in 2003. Even though it has been 10 years, he is still not yet eligible to get his green card because of the large backlog of visas. When his wife earns her Ph.D. at Harvard in a few months, she, too, will have no permanent status. Thus, Sravish may be forced to leave America and move his company with him.

Another entrepreneur I know—I will call her Jackie—is Canadian. She was an executive in two successful startups in the U.S. Her success allowed her to cofound her own company and also become an angel investor in other startups. She has provided angel capital and mentorship to over a dozen entrepreneurs. She was recently named by Inc. magazine among the top 10 women in technology.

Jackie is here on an H-1B visa. Due to a technicality, the visa didn't identify her as the president of her own company but rather as a consultant. When she returned from Canada last fall from a business trip, Jackie was detained at Boston's Logan Airport. After some rough questioning, she was handcuffed and taken to an immigration prison. She stayed in prison for 2 nights before being able to clarify the minor error and secure her release.

Each of these three stories has a set of common themes: Our outdated immigration system has unintended consequences. The world's best and brightest are clamoring to attend our world-class universities, integrate with our superior entrepreneurial ecosystem, access our capital, and build their companies and do great things. They recognize that the U.S. is the absolute best place in the world to found and build a company.

In order for us to continue to be the place where the world's most creative, brilliant entrepreneurs come to build the next eBay, the next Intel, and the next Google, our immigration system needs to change. I fear it may be too late for T.T., Sravish, and Jackie, but, with your leadership, it won't be too late for the millions like them who are eager to follow in their footsteps.

Thank you again for the opportunity. I look forward to your questions.

[The prepared statement of Mr. Bussgang follows:]

PREPARED STATEMENT OF JEFFREY J. BUSSGANG, GENERAL PARTNER, FLYBRIDGE CAPITAL, SENIOR LECTURER, HARVARD BUSINESS SCHOOL

Thank you, Chairman Rockefeller, ranking member Thune and other members of the Committee for the opportunity to testify here today. I want to especially thank the senators who have worked on this important issue over the years, including the work that went into predecessor efforts, such as the Startup Visa bill led by Senator Warner, and the current bill being debated, led by Senator Rubio and the other members of the "Gang of Eight". The bipartisan legislation being worked on, which includes the Invest Visa program as well as a path to citizenship, is a strong start.

My name is Jeff Bussgang. I am a former entrepreneur turned venture capitalist and also teach entrepreneurship at Harvard Business School. My firm, Flybridge Capital, has offices in Boston and New York City and invests in early-stage, technology start-ups around the country. We have invested in over 70 companies in our history and our portfolio companies employ over 3,300 people.

It is no surprise that I am passionate about the issue of immigration. My father was born in pre-War Poland and survived the Holocaust as a refugee and soldier. When he arrived in the United States after the war, he liked to say he spoke 5 lan-

guages, but all with an accent. When he came to America, he attended MIT, earned his PhD at Harvard and then himself became an entrepreneur, creating a small business that worked closely with the Department of Defense on major satellite communications and missile defense systems, employing over 100 people.

In my own role as an entrepreneur, venture capitalist and business school professor, I have watched our dysfunctional immigration system turn away the best and brightest from creating jobs and wealth in America. I won't dwell on the aggregate statistics—that 40 percent of all Fortune 500 companies were founded by an immigrant or the child of an immigrant, that 76 percent of patents issued to our top 10 university systems had an immigrant inventor and that in many of the high technology sectors that I operate and invest in, the unemployment rate is effectively below zero due to a lack of qualified technology workers, choking off further growth and opportunity. But you all already know all this.

Instead, I'd like to share with you a few specific examples of how our broken immigration system is working against our national economic interests. By humanizing this issue, I hope to convey why it is that in the global war for talent, America's immigration policies have become a laughingstock. Except the stakes are so high, there's nothing funny about it.

One of my students at Harvard Business School, T.T. Nguyen Duc, grew up in Vietnam and came to America to attend Stanford University on a full, merit-based scholarship. She worked at a prestigious management consulting firm before enrolling at Harvard to earn her MBA. T.T. took my entrepreneurship class and was one of my star students. For the last two years, she has been working on starting an online education company that will dramatically decrease the cost, and increase the access, of a quality high school education—an issue of tremendous importance to all American families. Naturally, she wants to start the company here in the US, because she knows that this is the best place in the world to finance and build an entrepreneurial company. A few weeks ago, T.T. came to me very upset. She has learned that once she graduates next month, she has to either leave the country within 60 days or find a job with someone that will sponsor her H-1B visa. As you know, the odds of this are long. This year, the H-1B cap was “sold out” within a week. It appears T.T. will have to abandon her startup dream, or pursue it in another country that will welcome her instead.

Another example: Sravish Sridhar came to America from India over 15 years ago to attend the University of Texas in Austin and earned a degree in computer science. He co-founded a software company in Texas that raised \$30 million in venture capital and employed 120. After selling that firm successfully a few years ago, he founded another software company in Boston and has raised \$7 million and employs over 20. Last week, Sravish was named the Rising Entrepreneur of the Year by a local business association. Unfortunately, Sravish may be forced to leave America and move his business overseas. He applied for his permanent residency (“Green Card”), under the EB-3 category in 2003. Even though it has been 10 years, he is still not yet eligible to get his green card because of the large backlog of visas. When his wife earns her PhD at Harvard in a few months, she will have no permanent status. Our system should be rewarding the Sridhars and their families for building their companies in America, not chasing them away.

Another entrepreneur I know, I will call her Jackie as she prefers her story not be public, is Canadian. She was an executive in two startups that raised venture capital and sold successfully. Her success allowed her to cofound her own company and also become an angel investor in other startups. She has provided angel investment and mentorship to over a dozen entrepreneurs. Her own company has raised \$12 million in venture capital. Jackie was recently named a top 10 women to watch in technology by Inc Magazine and one of the most powerful women in advertising by another magazine. She is here on an H1-B visa. Due to a technicality, the visa didn't identify her as the president of her own company, but rather as a consultant. When she returned from Canada last fall from a business trip, she was detained at Boston's Logan Airport. After some rough questioning, she was handcuffed and taken to an immigration prison. She stayed in prison for two nights before being able to secure her release.

Each of these three stories has a set of common themes. Our outdated immigration system has unintended consequences. The world's best and brightest are clamoring to attend our world-class universities and access our superior entrepreneurial ecosystem. They want to integrate with our community and access our capital and knowhow to help build their companies. They recognize that the United States of America is the absolute best place in the world to found and build a company. In order for us to continue to be the place where the world's most creative, brilliant entrepreneurs come to build the next eBay, Google and Intel—each of which was co-founded by an immigrant entrepreneur—our immigration system needs to

change. I fear it may be too late for T.T., Sravish and Jackie, but with your leadership, it won't be too late for the millions like them that are eager to follow in their pioneering footsteps.

Thank you again for the opportunity. I look forward to your questions.

The CHAIRMAN. Thank you for your excellent testimony.

Ms. Gwenne Henricks?

And I am very happy about you because you don't come from the Silicon Valley and you don't come from Boston and you don't come from New York. You come from Mossville, Illinois, which is the home of Caterpillar, which has, I think, something like 10,000 engineers?

Ms. HENRICKS. That is right.

The CHAIRMAN. So, I mean, so there it is, right in the middle of the country.

Anyway, you are the Chief Technology Officer and Vice President of Product Development and Global Technology. We are glad you are here.

**STATEMENT OF GWENNE A. HENRICKS, CHIEF TECHNOLOGY OFFICER AND VICE PRESIDENT, PRODUCT DEVELOPMENT AND GLOBAL TECHNOLOGY, CATERPILLAR, INC.**

Ms. HENRICKS. Thank you. Good afternoon, Chairman Rockefeller, Ranking Member Thune, and members of the Senate Commerce Committee. Thank you for holding this important hearing.

I am Caterpillar's Chief Technology Officer and President of Product Development and Global Technology. And Caterpillar's world headquarters are located in Peoria, Illinois. We employ more than 132,000 people worldwide, and we distribute our products to more than 180 countries around the world.

In my position, I oversee global innovation. And when you look at our big, yellow machinery, you may not think of us as high-tech, but I assure you we are. We currently employ more than 10,000 engineers and scientists and technologists all around the world. Last year, we filed nearly 1,100 new patent applications and we invested \$2.4 billion on research and development. Today, our machines are powered as much by software as they are by fuel.

Our competition is global, and to maintain our competitive advantage, we need access to the world's best talent. And that includes a sustainable pipeline of workers in the fields of science, technology, engineering, and math, or STEM. Caterpillar has a long history of working to increase the supply of skilled STEM talent in the U.S. However, we still fall short of meeting our needs.

And that is where our immigration system comes into play. Of course, high-skilled immigration reform will benefit Silicon Valley-type companies, but it will also benefit Midwestern manufacturers like Caterpillar. Today, we have more than 1,400 employees working in the U.S. on non-immigrant visas and an additional 300 employees who have obtained their green card through Caterpillar. The vast majority of these employees are working in STEM fields.

However, our current system for high-skilled immigration is broken. From the cap on H-1B visas to the backlog of green card applications, there is a lot of room for improvement. As you know, H-1B visas are the primary way a company like ours can hire foreign workers. And as you are also aware, the cap on H-1Bs was filled

immediately this year. Accordingly, we will not be able to recruit H-1B employees again until October 1st, 2014. That is 18 months from now.

This cap has not been permanently increased in more than 20 years. However, technology and innovation has dramatically changed since then. The current cap and the system for petitioning for H-1B visas is outdated. Not only would we like to see the overall cap increased significantly, but we would like to see the number of H-1Bs allotted each year increase to accommodate demand.

After we hire a foreign national and sponsor his or her H-1B visa, we often want them to stay at Caterpillar as a permanent employee. In that case, we sponsor the individual for a green card.

As you know, many foreign nationals receive advanced STEM degrees from American universities, yet they are unsure if they will be able to stay here to work. And, as a result, these highly skilled foreign nationals often have no choice but to return home, and they may end up working for one of our competitors. Any legislative solution should exempt STEM graduates from the annual cap.

Further, there is a significant backlog on green card petitions based on a per-country limit. Because of this backlog, some of our employees have been waiting 8 to 10 years to receive their green card. And these are hardworking employees who have assimilated into American culture, and they want to make the U.S. their home.

In January, Senators Hatch, Klobuchar, and Rubio introduced S. 169, the I-Squared Act of 2013. This legislation is important because it establishes the link between the need for high-skilled immigration and the need for greater STEM education and funding in the U.S. I would also like to thank the other members of this Senate Commerce Committee who have cosponsored this bill.

And we appreciate the hard work and the continued resolve of the Gang of Eight. Reaching bipartisan compromise on any issue is difficult, but their work signifies the importance of finding consensus on commonsense immigration reform.

The Gang of Eight bill includes important elements of high-skilled immigration reform. It includes an increase of the H-1B visa cap, exempts many STEM graduates from the green card cap, and repeals the per-country limits, among other things. However, it also contains some potentially onerous provisions related to recruiting, nondisplacement, and outplacement that could make it much more difficult for a company like Caterpillar to obtain new H-1B visas for our employees.

In summary, our country's future competitiveness relies on reforming both our education system and our immigration system. And we look forward to working with you and your colleagues in both the House and the Senate to pass meaningful, commonsense immigration reform this year.

Thank you again for the opportunity to be here today, and I look forward to answering any questions you may have.

[The prepared statement of Ms. Henricks follows:]

PREPARED STATEMENT OF GWENNE A. HENRICKS, CHIEF TECHNOLOGY OFFICER AND VICE PRESIDENT, PRODUCT DEVELOPMENT AND GLOBAL TECHNOLOGY, CATERPILLAR INC.

### **Introduction**

Good afternoon. Chairman Rockefeller, Ranking Member Thune, and members of the Senate Commerce Committee, thank you for holding this hearing and providing me the opportunity to testify here today on behalf of Caterpillar.

My name is Gwenne Henricks, and I am the Chief Technology Officer and Vice President of Product Development and Global Technology of Caterpillar Inc. Caterpillar employs more than 132,000 employees worldwide and distributes products in more than 180 countries through a dealer network that consists of about 190 dealers worldwide.

Headquartered in Peoria, Illinois, Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. We have a long history of innovating on behalf of the customers we serve.

In my position as Chief Technology Officer, I am responsible for overseeing our global innovation and product development. When you look at our big yellow machinery or engines, you may not think of us as "high tech;" however, our company is constantly innovating at a rapid pace. In fact, we currently employ more than 10,000 engineers, scientists and technologists worldwide who are dedicated to providing high-quality solutions that our customers need to be successful. Last year, we filed nearly 1,100 patents and spent approximately \$2.4 billion on research and development. Today, our machines are powered as much by software as they are by fuel.

Whether we are researching ways to move more dirt with less fuel, developing products that generate fewer emissions or exploring new autonomous solutions—Caterpillar technologies are reshaping the process of using, managing and owning heavy equipment.

### **Innovation and Education**

To continue to innovate at this level, we must maintain our competitive advantages, and at Caterpillar, we consider our people to be our greatest asset. The world has changed, and our competition is global. To maintain our economic and technological advantages over those global competitors, Caterpillar needs access to the world's best talent. That includes a sustainable pipeline of workers with an education in the fields of science, technology, engineering and math, or STEM. We must recruit from across the United States, but beyond our borders, too.

Our education system in the United States is currently not producing a robust pipeline of students in STEM-related fields. A recent study by the National Association of Manufacturers found that manufacturing creates 65 to 70 percent of U.S. engineering jobs, but the number of U.S. graduates in the STEM fields has been declining since 2003. Meanwhile, other countries are producing far more engineers and scientists.

Caterpillar has a long history of supporting educational opportunities that motivate and encourage STEM-field studies and is actively working to increase the supply of skilled STEM talent around the world. For instance, in 2013 more than 800 Caterpillar employees volunteered to mentor more than 2,000 students around the world participating on FIRST LEGO League, FIRST Tech Challenge and FIRST Robotics Competition teams. Caterpillar will contribute almost a half million dollars this year to support FIRST initiatives with the majority of this investment in the United States. However, we still fall short in meeting all of our needs in these jobs. That is where our immigration system comes into play by filling these gaps with much needed talent.

There may be a perception that High Skilled Immigration Reform would only benefit Silicon Valley-type companies. That is certainly true, but it will also benefit Midwest manufacturers such as Caterpillar. Today, Caterpillar has more than 1,400 employees working in the U.S. on non-immigrant visas and an additional 300 employees who have obtained their green card through Caterpillar. The vast majority of these employees are working in STEM fields, particularly in engineering and IT positions. Many of these foreign nationals are working on research and development projects.

However, our current system for high-skilled immigration is broken. From the cap on H-1B visas to the backlog of green card applications, there is much room for improvement. As Congress takes on Comprehensive Immigration Reform, I urge you to adopt sensible immigration reform that will allow Caterpillar to attract and retain world-class STEM talent.

### **H-1B Visas**

H-1B visas are the primary way a company like Caterpillar hires foreign workers who are in specialized occupations, such as science and engineering. The current annual cap for H-1B visas is set at 65,000 (with an additional 20,000 exempted from the cap for those who have received a Master's degree or higher from a U.S. university).

The United States Citizenship and Immigration Services (USCIS) begins accepting applications on April 1 of each year, yet those foreign nationals cannot begin working in the United States until the first day of the Fiscal Year (typically October 1). As you are probably aware, the cap was filled immediately this year. On April 1, 2013, there were actually more petitions received than the cap would allow, sending a number of petitions into a lottery. Accordingly, companies such as Caterpillar will not be able to recruit H-1B employees again until October 1, 2014. That's 18 months from now.

This cap has not been permanently increased in more than 20 years. However, technology and innovation has dramatically changed since then. As the competition for STEM graduates has increased among U.S. companies in the last few decades, the number of foreign nationals we can hire through the H-1B program has virtually stayed the same-with only a temporary increase from 1998 to 2003.

We feel strongly that the current cap and system for petitioning for new H-1B visas is outdated and must be changed. Not only would we like to see the overall cap increased significantly, but also we would like the number of H-1Bs allotted each year to accommodate demand. If demand increases, the cap should increase.

### **Green Cards**

After we hire a foreign national and sponsor his or her H-1B visa, we often want him or her to stay at Caterpillar as a permanent employee. In that case, we sponsor the individual for a green card (permanent legal resident).

We recruit both Americans and foreign nationals from colleges and universities across the United States. Many foreign nationals receive advanced degrees from American universities in STEM fields, yet they are unsure if they will be able to stay here to work. As a result, these highly skilled and educated foreign nationals often have no choice but to return to their home countries and might end up working for one of our competitors. Any legislative solution should exempt STEM graduates from the annual cap.

Further, there is a significant backlog on green card petitions based on a "per country limit," which limits the number of green cards that can be approved annually from each country. Because of this backlog, particularly from foreign nationals from China and India, some of our employees have been waiting eight to 10 years to receive their green card! These are hard-working, educated, highly skilled employees who have assimilated into American culture. Their kids are in our schools. They have acclimated to their communities, and they are committed to staying here and making the United States their home. However, they are subject to a prolonged waiting period based solely on what country in which they were born.

Modernizing our high-skilled immigration system will help American companies like Caterpillar to continue to innovate by having access to high-skilled workers when we need them. We are counting on this next generation of engineers and scientists to meet the world's needs while preserving the environment for future generations through innovation and collaboration.

### **I-Squared Bill**

In January, Senator Orrin Hatch (R-UT), along with a bipartisan group of senators including Senators Amy Klobuchar (D-MN) and Marco Rubio (R-FL) helping lead the effort, introduced S. 169, the *Innovation and Immigration Act of 2013*. This legislation is important because it establishes the link between the need for high-skilled immigration reform and the need for greater STEM education and funding in the U.S.

As members of the inSPIRE Coalition, we feel strongly that those two issues go hand-in-hand. There is an undeniable link between education and immigration, and while we work to build up our pipeline of STEM talent in the U.S. for our long-term needs, we must also meet the needs of today through high-skilled immigration. I'd like to thank Senators Klobuchar and Rubio for their leadership on the bill's introduction. I'd also like to thank the other sponsors who are on the Commerce Committee: Senators Ayotte, Blumenthal, Blunt, Heller, McCaskill, Nelson, Schatz, Thune and Warner.

**S. 744**

We also appreciate the hard work and continued resolve of the “Gang of Eight.” Reaching bipartisan compromise on any issue is difficult, but their work signifies the importance of finding consensus on common sense immigration reform.

The Gang of Eight bill, S. 744, the *Border Security, Economic Opportunity and Immigration Modernization Act*, was introduced two weeks ago and includes important elements of high-skilled immigration reform. It includes an increase of the H-1B visa cap, exempts many STEM graduates from the green card cap and repeals the “per country limits,” among other things.

However, it also contains some potentially onerous provisions relating to recruiting, non-displacement and outplacement that could make it much more difficult for a company such as Caterpillar to obtain new H-1B visas for our employees and recruits. Please understand we agree with the intent of these provisions, but we are concerned that the language related to these provisions, if left unchanged, could actually create a piece of legislation that is more harmful than helpful to a company like Caterpillar.

**Summary**

It’s worth repeating that at Caterpillar, we know our people are our greatest asset. That’s why we need immigration laws that help us attract—and keep—the best talent from around the world and allow us to serve our global customers.

Our country’s future competitiveness relies on reforming both our education system and our immigration system. It is not an either/or situation. We need both, and as business leaders, we stand ready to find solutions at the local and national level. If U.S. companies did not have the ability to recruit foreign nationals into these STEM positions, it would create significant challenges for companies in competing with foreign competitors to attract and retain world-class STEM talent. Increasing the number and availability of non-immigrant visas and green cards will lead to the creation of more jobs for U.S. citizens—not take them away. Further, it would incentivize companies such as Caterpillar to increase the number of operations facilities in the United States as well as increase its U.S.-based research and development spend.

We look forward to working with you and your colleagues in both the House and Senate to pass meaningful, common sense immigration reform this year.

Thank you, again, for the opportunity to be here today. I look forward to answering any questions you may have.

The CHAIRMAN. Thank you very much. Thank you very much, indeed.

Mr. Stuart Anderson, who is Executive Director of the National Foundation for American Policy.

**STATEMENT OF STUART ANDERSON, EXECUTIVE DIRECTOR,  
NATIONAL FOUNDATION FOR AMERICAN POLICY**

Mr. ANDERSON. Thank you, Chairman Rockefeller and Ranking Member Thune, for inviting me to testify. I appreciate the opportunity to discuss the contributions of immigrant entrepreneurs, engineers, and scientists and the immigration bill before Congress.

The sponsors of S. 744, the Gang of Eight immigration bill, deserve credit for tackling the contentious issue of immigration and attempting to fix all parts of the immigration system. No immigration category exists for entrepreneurs, but S. 744 would change that by providing a way for foreign nationals to obtain a green card if they start a business and create jobs in the United States.

I recently examined the top 50 venture-funded startup companies in America and found nearly half had at least one immigrant founder. Equally important, more than 75 percent had an immigrant in a top management or product-development position to help the companies grow and innovate.

Startups and established companies need access to hardworking and talented individuals, both U.S.- and foreign-born. Unfortu-

nately, S. 744, as currently written, is likely to harm the ability of U.S. companies to grow, innovate, and compete against foreign companies.

I understand in a large, bipartisan bill there are going to be provisions that not all the sponsors support, but while S. 744 contains several very positive provisions on employment-based green cards, some of which have been alluded to, it also, surprisingly, adopts numerous restrictive measures against H-1B and L-1 temporary visa holders and their employers.

The new H-1B restrictions in the bill include applying attestations on recruitment and nondisplacement to all companies. These attestations may push more hiring and investment outside the U.S. because, otherwise, individual employers would likely need to defend at least hundreds of personnel decisions years after the fact to potentially unsympathetic Federal investigators.

In addition, the bill requires H-1B visa holders to be paid thousands of dollars more in salary, I think, comparable to U.S. professionals. It will ban foreign nationals from being hired in the U.S. by companies with a high percentage of H-1B workers. It would limit or even prohibit foreign nationals from working on client sites. And it removes virtually all restrictions on the Department of Labor's investigative authority.

For most skilled foreign nationals, it is simply not practical to become permanent residents or green card holders before starting to work in the United States. So despite S. 744's positive green card provisions, H-1B and L-1 temporary visas will remain very important.

I support legalization, but, to point out the irony of the bill as it is written, it would give an advantage to anyone who entered the country illegally over skilled foreign nationals who work in America in the future.

If a software engineer from India flew to Canada in 2011, sneaked into the United States, and stayed here illegally, under the bill he would get legal status, and an employer could hire him without bureaucratic rules and send him to a customer worksite, for example, without any restrictions.

In contrast, if in 2014 a software engineer from India doesn't qualify for an exemption from the green card quotas, to work in the U.S. his employer must hire him on an H-1B visa. But under S. 744, he could not work here unless his employer pays him an inflated salary and offers the job to anyone the company thinks Department of Labor may later think is, quote, "equally qualified."

And the company must make legally binding attestations about future layoffs or dismissals. If transferred into the country on an L-1 visa, he could not work on another company's site unless that second company legally attested it would not displace a U.S. worker 90 days before or after, a provision companies find unworkable to impose on their own customers.

Far from producing harm, providing H-1B visas to skilled foreign nationals has helped the U.S. economy. H-1B visa holders contributed between 10 and 25 percent of the aggregate productivity growth that took place in the United States from 1990 to 2010, according to economists Giovanni Peri, Kevin Shih, and Chad Sparber.

Under GATS, the General Agreement on Trade in Services, the United States is committed to providing a specific degree of access to H-1B and L-1 visas. In 2010, our organization asked the law firm of Jochum Shore & Trossevin to perform a legal analysis on restrictions very similar to those in S. 744. And the firm concluded that nearly all the provisions I have mentioned here may violate GATS, which would lead to an unfavorable ruling potentially before the World Trade Organization and potentially retaliation against U.S. exporters.

In closing, 25 U.S. senators, including 11 members of the Senate Commerce Committee, are cosponsors of the I-Squared Act, which would increase H-1B visas without the new restrictions proposed in S. 744. The best approach for innovation would be to substitute the I-Squared Act in place of the provisions on temporary visas in S. 744. Such an action would prevent Congress from adopting policies likely to shift much more work and investment and resources outside the United States, rather than achieving the goal we all share, which is creating more jobs and innovation in America.

Thank you.

[The prepared statement of Mr. Anderson follows:]

PREPARED STATEMENT OF STUART ANDERSON, EXECUTIVE DIRECTOR,  
NATIONAL FOUNDATION FOR AMERICAN POLICY

Thank you, Mr. Chairman.

I appreciate the opportunity to discuss the contributions of immigrant entrepreneurs, engineers and scientists and the immigration bill before Congress. The sponsors of S. 744, the Gang of Eight immigration bill, deserve credit for tackling immigration reform and attempting to fix all parts of the immigration system.

For example, few people realize that although engineers and scientists can immigrate to America, no immigration category exists for entrepreneurs.

S. 744 would change that by providing a way for foreign nationals to obtain a green card if they start a business that creates jobs in the United States. Analyzing the Startup Act 3.0, the Ewing Marion Kauffman Foundation concluded that adding immigrant visas for entrepreneurs “has the potential to add, conservatively, between 500,000 and 1.6 million new jobs over the next 10 years.”<sup>1</sup> That estimate was based on the 75,000 immigrant visas for entrepreneurs in the Startup Act 3.0 vs. the 10,000 a year in S. 744, but it shows the potential for such a provision.

Part of the Kauffman Foundation’s analysis was derived from research I undertook on the top 50 venture-funded startup companies in America.<sup>2</sup> I found nearly half of the top 50 venture-funded companies, 48 percent, had at least one immigrant founder, such as Ofer Shapiro, born in Israel, who worked with two other immigrants to establish Vidyo to make high quality video conferencing available over the Internet at a fraction of the cost of traditional conferencing methods. The company today employs over 200 people.

Another was Alex Mehr, who nearly won an entrepreneurship contest at the University of Maryland but on what he describes as the “worst day of his life” an immigration attorney advised him to disband the company because the immigration service would never approve an H-1B visa for him and his friends as founders of their own company. The students went their separate ways. One left the country, but Alex eventually re-connected a decade later with his college roommate Shayan Zadeh. Over a weekend, they began developing Facebook applications for uploading videos and that eventually sparked another idea. So in an “only in America” story, two immigrants born in the Islamic Republic of Iran started an online dating site called Zoosk, which now employs more than 100 people and has 15 million active users a month.

<sup>1</sup>Dane Stangler and Jared Konczal, *Give Me Your Entrepreneurs, Your Innovators: Estimating the Employment Impact of a Startup Visa*, Ewing Marion Kauffman Foundation, February 2013.

<sup>2</sup>Stuart Anderson, *Immigrant Founders and Key Personnel in America’s 50 Top Venture-Funded Companies*, NFAP Policy Brief, National Foundation for American Policy, December 2011.

What Alex Mehr, Ofer Shapiro and other entrepreneurs will tell you is that startups and long established companies need access to hard-working and talented individuals, both U.S.- and foreign-born. Research on the top 50 venture-funded companies shows more than 75 percent of these cutting-edge companies have a foreign-born individual as a member of their management or product development teams to help the company grow and innovate.

#### **Harming the Ability of Companies to Grow and Innovate**

S. 744, in its current form, is likely to harm the ability of both startups and established companies to grow and innovate in the United States. I understand in a large bipartisan bill there will be measures not all the sponsors support. But while S. 744 contains an entrepreneur visa and several positive provisions on employment-based green cards (for permanent residence), it also surprisingly adopts nearly every restrictive measure ever conceived against H-1B and L-1 temporary visa holders and their employers.

The new H-1B restrictions in the bill include in Section 4211 applying attestations on recruitment and nondisplacement to all companies, attestations that may force individual employers to defend potentially hundreds of personnel decisions years after the fact to unsympathetic federal investigators. In addition to forcing companies to make legally binding predictions about future layoffs or dismissals, it would permit a federal government agency to inject its own judgments into which employees a company should have hired. Under the bill, the Department of Labor would be empowered to determine whether an H-1B professional or another worker was the most qualified person for a job.

The bill changes the law to require H-1B visa holders to be paid much higher wages than comparable U.S. professionals, in some cases about \$10,000 to \$18,000 more. (Section 4211) It places an eventual ban on petitioning for foreign nationals on companies with a high percentage of their workforce on H-1Bs. (Section 4213) It would limit or even prohibit foreign nationals from working on client sites. (Section 4211 and 4301) And it would remove virtually all current restrictions on the Department of Labor's investigative authority to enforce these and other provisions. (Section 4223)

A premise of S. 744 appears to be that green cards are good but temporary visas are bad, and employers should be able to meet essentially all their employment needs through green cards. This premise is incorrect. First, to obtain their green cards, over 90 percent of employment-based immigrants each year adjusted their status inside the United States from a temporary visa category, primarily H-1B and L-1 status.<sup>3</sup> In fact, often the only way previous employment-based immigrants could work in America prior to receiving their green cards was if they first obtained H-1B and L-1 status. In effect, since the new rules in the Senate bill would make it far more difficult to obtain a temporary visa, many individuals who in the past would have become permanent residents will be unlikely to do so in the future.

Moreover, individuals now waiting for green card processing could be forced to leave the country if they require a renewal of H-1B status to keep working and their new employer cannot meet the new conditions established in the Senate bill. The portability provisions in the bill would not help such individuals if a new employer were not able to comply with the bill's new H-1B provisions.

Second, for most skilled foreign nationals it is not practical to become permanent residents (green card recipients) before being allowed to start work in the United States. According to Lynden Melmed, former chief counsel of U.S. Citizenship and Immigration Services, and now a partner at the law firm of Berry Appleman & Leiden, "As an immigration attorney, in many circumstances I can tell you an H-1B will be the only appropriate visa category to allow a person into the United States to work."<sup>4</sup> He lists situations such as lateral hires of experienced people from overseas, acquisitions, individuals who come to work on time-limited projects, as well as anyone who does not fit into one of the exemptions from the green card quotas in the bill or does not plan to live the rest of their life in the United States.

#### **Green Card Reforms in S. 744 Are Welcomed**

The green card reforms in S. 744 are welcomed because they address a significant problem—long wait times discourage highly skilled individuals from making their careers in America. The long waits for employment-based green cards are caused by two primary factors: (1) the 140,000 annual quota is too low and (2) the per country limit, which restricts the number of green cards available to skilled immigrants

<sup>3</sup> 2012 Yearbook of Immigration Statistics, U.S. Department of Homeland Security.

<sup>4</sup> Remarks of Lynden Melmed on teleconference releasing report on H-1B visas, National Foundation for American Policy, May 1, 2013.

from one country to 7 percent of the total. Due to the per country limit, skilled foreign nationals from India and China, who make up most of the applicants, wait years longer than nationals of other countries.

Analyzing data in 2011, I estimated that a highly skilled Indian national sponsored today for an employment-based immigrant visa in the 3rd preference could wait potentially 70 years to receive a green card.<sup>5</sup>

In addition to the problems experienced by Indians, many skilled foreign nationals from China have been waiting 6 or 7 years for an employment-based green card and can expect to wait additional years without a change to the law. Skilled foreign nationals from countries other than India and China have been waiting one to 6 years in the employment-based third preference and some may wait another four years or more. In the EB-2 category (second employment-based preference), skilled foreign nationals from India and China may wait 6 years or more, although nationals of other countries typically receive green cards in the category with little or no wait.

While I have not completed a new analysis of green card wait times since 2011, a recent examination of the State Department Visa Bulletin and other data indicates that the wait times have not improved or have even worsened for individuals from India, while there has been some improvement for skilled immigrants from China in the employment-based third preference.

The reforms in S. 744 will eliminate wait times for many skilled immigrants and reduce the wait times for nearly all, which will encourage additional highly skilled people to stay in the United States. As noted earlier, despite these positive reforms we should keep in mind that almost any immigration attorney can provide examples of why it is impractical to move toward a “green card only” immigration system for high skill work in the United States.

#### **Disadvantaging Skilled Foreign Nationals Seeking to Work Legally in the Future**

An important premise of S. 744 is to ensure that those who came into the country illegally do not receive an advantage over those who have already applied to live and work in America. And it appears the bill accomplishes that through a variety of means, including backlog reduction, recapture of unused green cards from previous years, and exemptions from the employment-based immigration quotas for STEM (science, technology, engineering and math) graduates from U.S. universities and dependents of employer-sponsored immigrants.

However, the bill gives an advantage to anyone who entered the country illegally over many skilled foreign nationals who would want to work in America through legal means in the future. Let’s take the example of two software engineers who graduated from a top university in India. The first individual, in 2011, flies to Canada, sneaks into the United States and stays here illegally. Under the bill, he will get legal status and be able to work for any employer in the United States. And that employer will be able to hire him without undue bureaucracy, can pay him the market wage, and can send him to a client or customer worksite without restriction.

In contrast, if in 2014, a software engineer from India doesn’t qualify for an exemption from the green card quotas, he will find, like most skilled foreign nationals today, his employer must hire him on an H-1B visa. But before he can start work in the United States, under S. 744, his employer must agree to pay him significantly more than a comparable U.S. professional. Before that an employer must advertise the position for 30 days and offer the job to anyone the company thinks the Department of Labor may later believe is “equally qualified.” The employer must also attest that any dismissal the company has made in the recent past or will make in the future (for at least 3 months) will not be interpreted as being in the “essentially equivalent” job as the new H-1B hire.

If an employer has 15 percent or more of its workforce on H-1B visas, the software engineer could not work on projects at any other employer’s site; employers below the 15 percent threshold must pay \$500 for him to work at another site. If his potential employer has 50 percent or more of its workforce on H-1Bs it must pay large fees (up to \$10,000), cannot send him to any other site, and cannot even hire him or anyone else on an H-1B visa after 2016 because they would be banned from doing so.

Under S. 744, if the engineer was transferred into the country on an L-1 visa for any employer, he could not do any work on another company’s worksite unless that

<sup>5</sup>Stuart Anderson, *Waiting and More Waiting: America’s Family and Employment-Based Immigration System*, NFAP Policy Brief, National Foundation for American Policy, October 2011. The 70-year theoretical wait time is derived from estimating the backlog of Indians in the employment-based 3rd preference (EB-3) and dividing that by the number of Indians who receive permanent residence in the category each year.

second employer attested it would not displace a U.S. worker 90 days before or after, a provision companies find to be unworkable for their clients and customers.

In sum, the software engineer who sought to come here legally would have been better off if he had entered the country illegally in 2011, because many skilled foreign nationals who want to work in the United States in the future likely will be out of luck under S. 744.

The scenario is not intended to suggest I oppose legalization. I think legalization of those here in the country out of legal status represents an important legislative compromise if it helps achieve what should be the two most important goals of immigration reform legislation: 1) expanding the number of employment-based green cards and high skill temporary visas, without undue regulations, to keep jobs and innovation in the United States, and 2) providing sufficient legal temporary visas for low-skilled workers to prevent future illegal immigration, provide available, legal workers, and save the lives of those who otherwise would attempt to enter the country illegally.

#### **Significant Likelihood of Trade Violations in S. 744**

Related to the proposed restrictions on H-1B and L-1 visas, it is important to consider the potential of unintended consequences, not only in the bill shifting more hiring outside the United States but also in how the legislation would affect the ability of U.S. companies to compete in foreign markets. Under the General Agreement on Trade in Services (GATS) the United States is committed to provide a specific degree of access to H-1B and L-1 visas. As such, certain restrictions on H-1B and L-1 visas could place the United States in violation of that agreement and subject the U.S. to a challenge before the World Trade Organization (WTO). "Such a challenge, if successful, could lead to retaliation against U.S. exporters and harm America's reputation on trade issues," noted a legal analysis by Jochum Shore & Trossevin PC for the National Foundation for American Policy. "As such the analysis and its conclusions should be considered in deliberations over possible changes to U.S. immigration policy."<sup>6</sup>

The 2010 legal analysis examined a number of provisions in previous legislation that are the same or similar to those in S. 744 and concluded there was a "significant likelihood the provisions would be found inconsistent with U.S. commitments under GATS."

Among these provisions included in the current Senate bill:

- Changing the H-1B wage rules.
- Changing the 90-day nondisplacement rule for H-1B to 180 days for H-1B dependent employers.
- Prohibiting employers with more than 50 employees from employing another H-1B or L-1 nonimmigrant if the sum of their H-1B and L-1 visa holders is more than 50 percent of their total workforce.
- Outplacement restrictions on L-1 visa holders. (A similar restriction on H-1B visa holders was not examined but raises similar issues.)
- Large increase in H-1B visa fees.

The list above is not intended to be inclusive of all potential or likely GATS violations in the Senate bill. A more thorough analysis than permitted here would be necessary. For example, the recruitment requirements may be inconsistent with U.S. commitments under GATS. But in sum, the bill raises significant issues for its practical impact on employers and the U.S. economy, as well as for U.S. trade obligations that Congress should consider.

#### **Economic Benefits of Admitting Skilled Foreign Nationals to Work in America**

The economic record shows far from producing harm, providing H-1B visas to skilled foreign nationals has helped the U.S. economy. Moreover, many of the premises upon which restrictions have been proposed are not supported by data and research.

First, H-1B visa holders contributed "between 10 and 25 percent of the aggregate productivity growth . . . that took place in the United States from 1990 to 2010,"

<sup>6</sup>Jochum Shore & Trossevin, *Legal Analysis: Proposed Changes to Skilled Worker Visa Laws Likely to Violate Major U.S. Trade Commitments*, National Foundation for American Policy, June 2010.

according to economists Giovanni Peri, Kevin Shih and Chad Sparber.<sup>7</sup> Peri, Shih and Sparber also found, “An increase in foreign STEM workers of 1 percent of total employment increased the wage of native college educated workers (both STEM and non-STEM) over the period 1990–2000 by 4 to 6 percent.”<sup>8</sup> Economist Madeline Zavodny found each additional 100 approved H–1B workers were associated with an additional 183 jobs among U.S. natives from 2001 to 2010.<sup>9</sup>

Second, S. 744 would artificially inflate the minimum required wage paid to H–1B visa holders under the belief that H–1B professionals are generally paid below that of comparable U.S. workers. Under the law, when hiring an H–1B professional, companies must pay the higher of the prevailing wage or actual wage paid to “all other individuals with similar experience and qualifications for the specific employment in question.”<sup>10</sup> Moreover, the Government Accountability Office found the median salary for H–1B visa holders age 20–39 was \$80,000 compared to \$75,000 for U.S. workers in Electrical/Electronics Engineering, and \$60,000 for H–1B professionals age 20–29 in Systems Analysis/Programming vs. \$58,000 for U.S. workers.<sup>11</sup> Other studies, including by University of Maryland economists Sunil Mithas and Henry C. Lucas, Jr., find H–1B professionals in information technology (IT) earned more than their native counterparts with similar experience and do not harm the prospects of U.S.-born workers.<sup>12</sup>

Third, employment in Computer and Math occupations rose by 12.1 percent between 2007 and 2012, the second highest of any U.S. job category during that period, according to the Bureau of Labor Statistics.<sup>13</sup> Some argue the size of the average wage growth in certain technology fields means companies are not having a difficult time filling positions. But wage growth can be hidden when the number of jobs in a sector grows. Statistically, adding more employees in an occupational category tends to limit average wage growth (newer workers tend to earn less than incumbent workers), while a field like construction, which lost 25 percent of its jobs between 2007 and 2012, shows reasonable average wage growth, since newer, lesser paid workers are usually the most likely to lose their jobs. Also, it is not really possible to gauge the demand for professionals with technology skills by counting only “STEM occupations,” as suggested in a recent Economic Policy Institute report. According to the National Science Foundation, over 4 million people in America use their science & engineering degree in their jobs even though their occupation is not formally classified as a science & engineering occupation.<sup>14</sup>

The competition for labor in high tech fields is global, which means employers can fill vacancies or complete projects outside the U.S. that would not appear in domestic “shortage” data. Still, large technology companies today report many job openings.<sup>15</sup>

Fourth, India-based companies do not use up most of the yearly H–1B allotment, as some believe. Between FY 2006 and FY 2011, the top 25 India-based companies utilized between 6 and 15 percent of the new H–1B visa approved for initial employment, and 19.9 percent in FY 2012.<sup>16</sup> In FY 2012, the 26,865 new H–1B visas approved for the top 25 India-based companies equaled only 0.017 percent of the U.S. labor force.<sup>17</sup> Many of these companies perform services under contract for U.S. companies attempting to focus on core business functions.

<sup>7</sup> Giovanni Peri, Kevin Shih and Chad Sparber, “STEM workers, H–1B Visas and Productivity in U.S. Cities,” January 29, 2013.

<sup>8</sup> *Ibid.*

<sup>9</sup> Madeline Zavodny, *Immigration and American Jobs*, American Enterprise Institute and the Partnership for a New American Economy, December 2011.

<sup>10</sup> Section 212(n)(1) of the Immigration and Nationality Act.

<sup>11</sup> *H–1B Visa Program: Reforms Are Needed to Minimize the Risks and Costs of Current Program*, Government Accountability Office, GAO–11–26, January 2011.

<sup>12</sup> S. Mithas and H.C. Lucas, “Are Foreign IT workers Cheaper? U.S. Visa Policies and Compensation of Information Technology Professionals,” *Management Science* (56:5) 2010. See also Magnus Lofstrom and Joseph Hayes, “H–1Bs: How Do They Stack Up to U.S. Workers?” IZA Discussion Paper #6259, December 2011, pp. 14–15. Lofstrom and Hayes concluded, “Overall, the data point towards a picture of comparatively highly skilled workers with earnings at least on par with those of U.S. born workers.”

<sup>13</sup> Bureau of Labor Statistics Occupational and Employment Statistics.

<sup>14</sup> National Science Board, *Science and Engineering Indicators 2012*, National Science Foundation, 2012, p. 3–10.

<sup>15</sup> Written Testimony of Brad Smith, General Counsel and Executive Vice President, Legal and Corporate Affairs, Microsoft Corporation, Before the Senate Judiciary Committee, on the Border Security, Economic Opportunity, and Immigration Modernization Act, S.744, April 22, 2013. Smith lists 10,000 job openings among five well-known tech companies.

<sup>16</sup> National Foundation for American Policy analysis of USCIS H–1B data. Note: Figures would be higher if included some U.S. companies with significant operations in India.

<sup>17</sup> USCIS H–1B data and Department of Labor data on U.S. labor force.

Fifth, education levels for new H-1B visa holders are high, with 58 percent having earned a master's degree or higher. New H-1B visa holders in the United States accounted for 0.087 percent of the U.S. labor force in 2012.<sup>18</sup>

Sixth, rather than harming U.S. students, as some contend, a large proportion of the approximately \$4 billion in government fees paid by employers since 1999 for H-1B visa holders have provided over 63,000 scholarships for U.S. students in science and technology fields, according to the National Science Foundation.<sup>19</sup> Key members of the next generation of outstanding scientists and engineers are the children of H-1B visa holders, who accounted for 60 percent of the finalists at the 2011 Intel Science Talent Search competition for top U.S. high school students.<sup>20</sup>

Seventh, significant government oversight of H-1B visas currently exists. In FY 2010 and FY 2011, U.S. Citizenship and Immigration Services conducted approximately 30,000 on site audits of employers of H-1B visa holders. In FY 2010, only 1 percent of the audit visits resulted in referrals for a fraud investigation. Many companies receive multiple visits in a year. "A large U.S. professional services provider reports well over 100 site visits in calendar year 2011. In all cases, no fraud was found and no compliance issues were found."<sup>21</sup>

### The Way Forward

The premises on which new restrictions have been proposed for H-1B visas are often based on incorrect information and flawed assumptions. Congress should expand the number of green cards and H-1B visas but without burdening employers or visa holders with new rules and limitations that will harm the ability of U.S. companies to compete and grow in this country.

Twenty-five U.S. Senators, including 11 members of the Senate Commerce, Science, and Transportation Committee, are sponsors of the I-Squared Act of 2013. That legislation would increase the annual allotment of H-1B visas and make other changes to enhance innovation in America without imposing any of the new restrictions proposed in S. 744. The best approach would be to substitute the provisions of the I-Squared Act in place of the current provisions on temporary visas in S. 744. Such an action would prevent Congress from adopting policies likely to shift much more work, investment and resources outside the United States, rather than achieving the goal we all share—creating more jobs and innovation in America. Thank you.

Table 1.—H-1B Statistics in a Snapshot

H-1B-Led Productivity Gains	Growth in foreign STEM workers "may explain between 10 and 25 percent of the aggregate productivity growth . . . that took place in the U.S." from 1990–2010." (Peri, Shih, Sparber)
H-1B and Increased U.S. Jobs	Each additional 100 approved H-1B workers associated with an additional 183 jobs among U.S. natives from 2001–2010. (Zavodny)
H-1B and Increased U.S. Wages	"An increase in foreign STEM workers of 1 percent of total employment increased the wage of native college educated workers (both STEM and non-STEM) over the period 1990–2000 by 4 to 6 percent." (Peri, Shih, Sparber)
H-1B Professionals Earn Comparable or Higher Wages Than U.S. Workers in Same Age Grouping	Median salary Electrical/Electronics Engineering age 20–39 H-1B: \$80,000 vs. U.S. worker: \$75,000. Median salary Systems Analysis/Programming age 20–29: H-1B: \$60,000 vs. U.S. worker: \$58,000. (GAO)
H-1B and Patents	"A 10 percent growth in H-1B admissions correlates with an 8 percent growth in Indian invention" relative to firms outside of the computer sector less reliant on H-1Bs. (Kerr and Lincoln)

<sup>18</sup> *Characteristics of Specialty Occupational Workers (H-1B): Fiscal Year 2011*, Department of Homeland Security, March 12, 2012, p. 10; 0.087 percent is derived from USCIS H-1B data on approved initial employment and DOL labor force statistics.

<sup>19</sup> FY 2013 National Science Foundation Budget Request to Congress, EHR—19–20.

<sup>20</sup> Stuart Anderson, *The Impact of the Children of Immigrants on Scientific Achievement in America*, NFAP Policy Brief, National Foundation for American Policy, May 2011.

<sup>21</sup> USCIS Fraud Detection & National Security (FDNS) Directorate Answers AILA Administrative Site Visit & Verification Program (ASVVP) Questions, June 7, 2011, and AILA Verification and Documentation Liaison Committee, USCIS NDNS Meeting, March 28, 2012. According to USCIS, "14,433 H-1B site visits were conducted in FY 2010" and 15,648 were conducted in FY 2011.

Table 1.—H-1B Statistics in a Snapshot—Continued

New H-1B Visas in U.S. Labor Force	New H-1B visa holders are 0.087 percent of U.S. labor force. (DOL)
H-1B Employer-Paid H-1B Fees	\$4 billion in H-1B fees paid since 1999 (estimate) (USCIS)
H-1B Employer Fees for Scholarships	63,800 scholarships for U.S. students since 1999. (NSF)
3H-1B and Taxes	Foreign-born with B.A. pays \$9,335 more a year in taxes than benefits received; \$20,254 more with M.A. (Zavodny)
Onsite Audits of H-1B Employers	14,433 H-1B site visits in FY 2010 and 15,648 in FY 2011. (USCIS)
Percent of H-1B Visa Audits Referred for Fraud Investigations (FY 2010)	1 percent (USCIS)
Months Employers Wait for a Foreign Professional When H-1B Unavailable	15 to 18 months to start work on new H-1B for FY 2013 and FY 2014; FY 2003 last year annual cap not reached. (USCIS)
2011 Intel Science Talent Search Finalists With H-1B Parent	60 percent of the 2011 finalists had a parent who entered U.S. on H-1B visa; 30 percent of the finalists had U.S.-born parents. (NFAP)

Source: National Foundation for American Policy. Sources listed in testimony.

Table 2.—Job Growth in Major Occupation Groups: 2007–2012

Major Occupation Group	Percentage Change in Employment, 2007 to 2012
Personal Care and Service Occupations	14.1 percent
Computer and Mathematical Occupations	12.1 percent
Healthcare Practitioners and Technical Occupations	11.2 percent
Healthcare Support Occupations	8.0 percent
Business and Financial Operations Occupations	6.7 percent
Management Occupations	6.4 percent
Community and Social Service Occupations	5.0 percent
Protective Service Occupations	3.9 percent
Legal Occupations	2.4 percent
Food Preparation and Serving Related Occupations	2.4 percent
Education, Training, and Library Occupations	0.7 percent
Arts, Design, Entertainment, Sports, and Media Occupations	-0.6 percent
ALL OCCUPATIONS	-3.0 percent
Sales and Related Occupations	-3.5 percent
Building, Grounds Cleaning and Maintenance Occupations	-3.6 percent
Farming, Fishing, and Forestry Occupations	-4.5 percent
Architecture and Engineering Occupations	-5.2 percent
Installation, Maintenance, and Repair Occupations	-5.9 percent
Office and Administrative Support Occupations	-8.2 percent
Transportation and Material Moving Occupations	-8.9 percent
Life, Physical, and Social Science Occupations	-12.1 percent
Production Occupations	-15.3 percent
Construction and Extraction Occupations	-25.8 percent

Source: Bureau of Labor Statistics Occupational and Employment Statistics

Table 3.—Median Reported Salaries of H-1B and U.S. Workers: Systems Analysis, Programming, and Other Computer-Related Occupations

Age Group	H-1B	U.S. Workers
20–29	\$60,000	\$58,000
30–39	\$70,000	\$70,000

Source: H-1B Visa Program: Reforms Are Needed to Minimize the Risks and Costs of Current Program. Government Accountability Office, GAO-11-26, January 2011, Table 1. Salaries are 2008.

Table 4.—Median Reported Salaries of H-1B and U.S. Workers: Electrical/Electronics Engineering Occupations

Age Group	H-1B	U.S. Workers
20–39	\$80,000	\$75,000

Source: H-1B Visa Program: Reforms Are Needed to Minimize the Risks and Costs of Current Program, Government Accountability Office, GAO-11-26, January 2011, Table 1. Salaries are 2008.

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The CHAIRMAN. Thank you.

I will start with the questions. And it is sort of a human question.

I mean, you talked about waiting for 10 years, and you got a green card, but what good does that do you.

And you have indicated the same thing, just the years and years of waiting. And I am trying to figure out, why is it that you put up with all that waiting?

And do you ascribe it to sort of typical government bureaucracy in America, sort of the unfamiliarity with the whole concept of immigration law, which is, you know, definitely a new subject for most Americans? Or do you think it is sort of a statement that we don't want you here, hidden, masked by law?

I mean, I am really interested in how you have—you said 10 years, and you just roll it off as if it was 10 months. And yet your whole career is—you know, the future gets dimmer if you don't end up as a citizen, but that is a long wait. And I am just wondering what your emotions are about why it is that this happens. Is there any other country in which this does happen?

Ms. SANGHVI. So I came to the U.S. because I wanted to study at one of the premier institutions for computer science and computer engineering, and that was Carnegie Mellon. I stayed because it was only here that I could find the opportunities that I was looking for.

When you ask me about how I feel about these things, a lot of the wait is about uncertainty. And as I mentioned in my testimony, it is not just uncertainty about my professional life but my personal life as well. And there is a lot of anxiety associated with that uncertainty.

Sometimes it is frustrating. Despite all my hard work, all my contributions, paying taxes, et cetera, I do sometimes feel like an outsider. But I have struggled because of the opportunities that were available here, and the tech industry.

The CHAIRMAN. What about you, sir?

Mr. BUSSGANG. I see this through the lens of the companies I invest in and through the lens of my students at Harvard Business School. Forty percent of Harvard Business School are students that come from outside the country. I also do some work at MIT; 40 percent of the MIT students also come from outside the country.

And the reason they wait, the reason they are patient, as frustrating as it is, is because they know this is the absolute best place in the world to start a company and they love our entrepreneurial ecosystem. They want access to our capital, they want access to our teams, they want access to our people. They love the culture that America represents and the symbolism of America. These are probably the most patriotic people we could imagine, in terms of what they go through in order to come here and build companies here.

So it is very frustrating, but the carrot is so appealing that they are willing to go through it.

Now, you mentioned, Mr. Chairman, that other countries are pursuing other activities to try to lure those great engineers and those great entrepreneurs away. And I see that on the ground. I see what the U.K. has done, and the U.K. has put some provisions in place to attract entrepreneurs. I see what Canada is doing. I see what Ireland is doing. Start-Up Chile was recently created.

So it is a very competitive world, and the competition for talent is brutal. And that patience of the great entrepreneurs that we see here today will only last so far in the future.

The CHAIRMAN. All right. Thank you.

Senator Thune?

Senator THUNE. Thank you, Mr. Chairman.

Mr. Anderson, there is a Kauffman Foundation study on immigrant entrepreneurship that suggests that the growth rate of immigrant-founded companies nationwide has plateaued and appears to be declining. You note in your prepared testimony that the comprehensive immigration bill adopts, and I quote, “nearly every restrictive measure ever conceived,” end quote, for the H-1B program.

And I am wondering, do you believe that these proposed restrictions to that H-1B visa program would worsen the apparent decline in immigrant-founded companies?

Mr. ANDERSON. I think it would have to, because one of the sources of immigrant entrepreneurs are the H-1B and L-1 visa holders who later come into our system.

The bill does have some pretty good provisions on immigrant entrepreneurs. It gives a 10,000 green card allotment. I believe there are other bills that have a much larger provision.

But the other thing is that startup companies, as we have heard, need talent. And to the extent that they aren't going to be able to hire some of that talent because of all the different rules and restrictions, it is going to make it much harder for them to grow in the United States. It really is impractical.

And I encourage any of the members to talk to an immigration attorney in their state about how many circumstances there are going to be where sponsoring someone directly on a green card is just not going to be practical as their first way to start working in the United States.

Senator THUNE. You have suggested striking the H-1B restrictions in the comprehensive bill and replacing them with the I-Squared provisions.

I guess, other than a complete strike-and-replace approach, do you have any other specific changes in the comprehensive bill's provisions that you might recommend?

Mr. ANDERSON. Well, again, the green card provisions are very good, and hopefully they would stay in throughout the whole process. But, certainly, the L-1 visa holder restrictions and the recruitment and nondisplacement restrictions are probably the biggest priority, I think, to remove from the bill and to become more realistic in terms of how companies actually operate.

I mean, for example, to have your customer have to make a legally binding attestation about their future workplace practices if you are going to transfer someone to work to help install a product or a service just doesn't seem to have any relationship to how the real world works.

Senator THUNE. You mentioned that some of our foreign economic competitors have begun to take actions to lure highly skilled immigrants to their countries. Could you provide a few specific details about those, what countries are doing, and some examples of high skills immigration policies that we might want to seek to emulate?

Mr. ANDERSON. Well, Canada, you know, has a startup visa that they are putting in place. Chile is actually attracting entrepreneurs, as well. Australia and some Canadian provinces also have a type of provisions in which they make it much easier for someone to become a green card holder right away.

I know in the past there have been Canadian commercial officers who have had—*Maclean's* magazine had a leaked memo about how they were coming to the Los Angeles area and trying to recruit to Canada people who wanted to get H-1Bs but couldn't get them because of the cap being reached.

So, you know, I think other countries are seeing that really the most valuable resource that there is out there is a human resource, and they are trying to take advantage of that.

Senator THUNE. Ms. Sanghvi, are you personally aware of other immigrant entrepreneurs who have left the United States due to current immigration law and are competing against U.S. technology companies?

Ms. SANGHVI. Yes, I know a few people who have left the U.S. after getting an education here. And I also know of a few people who just didn't want to put up with the hassles of getting an H-1B. These people have gone on to lead businesses, to manage businesses elsewhere.

I agree with Mr. Bussgang that things are getting competitive. A lot of people come here to get educated, and it is going to be up to America to figure out a way to keep them here.

Senator THUNE. Let me ask, if I might, Ms. Henricks, in terms of all the things that you deal with as far as keeping America competitive in the global marketplace, where does the access to highly skilled immigrants fall in terms of issues that affect your ability to continue manufacturing here in the United States?

Ms. HENRICKS. I would say it ranks very, very highly, because the reason that customers anywhere around the world take our products, buy our products, is because of the value that we create in them. The way that we create value in those products is by the way that we produce the designs of those products to create extra value.

So without having access to the right talent around the world, we will not be able to remain competitive around the world. So, certainly, how we build our talent pipeline, particularly in the STEM fields, is one of the top strategic issues that we work with and that I am charged to work with.

Senator THUNE. All right.

My time has expired. Thank you, Mr. Chairman.

Thank you all.

The CHAIRMAN. Actually, you had a few more seconds.

Senator Heller?

**STATEMENT OF HON. DEAN HELLER,  
U.S. SENATOR FROM NEVADA**

Senator HELLER. Mr. Chairman, thank you.

And I want to thank those who are here as witnesses today, and thanks for your time and energy, and those that are here, also, listening to the testimony.

I am one of the original cosponsors of the I-Squared proposal by Senator Hatch and also a member of the Senate Republican High-Tech Task Force. So I think this is an important issue. Skilled immigration I believe is important, and I want you to know that I am very supportive of the concerns that you have shared with us today.

So, Mr. Chairman, thank you very much for this discussion. I am encouraged by what I am seeing.

But I would just raise a question to you, Ms. Henricks at Caterpillar. Are you saying that there are not enough U.S. citizens that are being educated today by American universities, that you have to go outside what we are producing here in America?

Ms. HENRICKS. That is absolutely the case.

Senator HELLER. Do you have any numbers?

Ms. HENRICKS. So the way I could bound this—I can give a specific example, but starting generally, I would say, you know, the rate at which STEM-related jobs have been created over the last decade is three times the rate at which non-STEM-related jobs have been created. At the same time, since 2003, we have been graduating fewer and fewer U.S. people in STEM-related careers from our universities. So while the job opportunities increase, the number of students graduating with these has been decreasing.

So I can give you a specific example, and this is just one of many. We had need of some people to do very highly analytical modeling requiring mechanical engineering and some high skills areas. We initially said we want to not sponsor someone to fill this position. We put those jobs out there and advertised. Eight months later, we gave up because we couldn't find a candidate.

We decided, OK, fine, we will sponsor someone. And within 3 months, we found someone who had graduated from a U.S. university with an advanced degree who could fill that role. And that is just one of many examples that we would have.

Senator HELLER. You talk about mechanical engineers. How about civil engineers? Are they considered STEM?

Ms. HENRICKS. When I say STEM, I am speaking of all kinds of engineering—metallurgical, electrical, mechanical, civil, mining.

Senator HELLER. OK. The reason that I raise this question, you know, the recession has hit a lot of states pretty hard, but particularly the state of Nevada has been hit pretty hard. And today at least 50 percent, maybe closer to 60 percent, of the engineers in the state of Nevada are either unemployed, underemployed, or, frankly, have left the state.

And so the argument is always made that, why would we go outside if you see that kind of unemployment with engineers? I would argue that most of them are related more to commercial building, more to housing and those kind of engineering issues.

But how would you argue back? Not related? Apples and oranges? Not trainable? Retractable?

Ms. HENRICKS. Yes. So I would say, apples and oranges.

You know, to put this in context, we have hired 400 engineers out of college over the last 3 years. Three percent of those have been on H-1B visas. So we are hiring American people wherever we can. But often when it comes to specific job requirements in specific skills areas, we cannot find the people that we need with those skills.

Senator HELLER. OK.

I do have a son graduating with his engineering degree this fall. Thank goodness we are finally getting him out of school.

[Laughter.]

Senator HELLER. And I am not asking you to recruit him because he did find a job, but thanks—

Ms. HENRICKS. Good. Good.

Senator HELLER.—thanks for your information.

Mr. Anderson, let's go back to some of the questions Mr. Thune was asking, specifically, do you believe that the caps set on this comprehensive immigration proposal will sufficiently meet our nation's growing technical needs?

Mr. ANDERSON. Well, I think the caps in the bill for H-1Bs are not going to be enough. I mean, right now they come to about the total that was used up in the first week of this past April. So I think, clearly, the numbers aren't enough.

But I would say that it is really, in looking at some of these visa categories, what we have seen historically is it not just the numbers; it is the rules.

In H-2A, agriculture, as many members know, there is actually no quota on them. There is an unlimited number, potentially, of agricultural workers that could be sponsored each year, or petitioned for. And the numbers often are 40,000, 60,000, 80,000, even though there are hundreds of thousands of people working in the country illegally, as we know, in agriculture. And the reason is, the rules are so bureaucratic and so difficult to use.

And so it is ironic that in the way the current bill is before Congress is actually making good efforts to improve the agricultural program for immigration, but then moving the H-1B program toward the way the agricultural program works.

Senator HELLER. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Rubio?

**STATEMENT OF HON. MARCO RUBIO,  
U.S. SENATOR FROM FLORIDA**

Senator RUBIO. Thank you for holding this hearing.

Thank you for being here.

A couple of points. One of the things in the conversation as the bill was being negotiated is the argument about two separate things about the programs businesses use.

One is the structure of the program, and the bureaucracy and the costs associated with complying with it. And our goal was to try to simplify that, balanced with a desire to protect American workers, in essence, to make sure jobs are offered to Americans first, hence some of these advertising requirements.

The other is an argument toward just the sheer numbers. And we had a pretty vibrant debate, and I think that will continue through the Judiciary Committee and beyond. And that is why I thought it was so important this committee had this hearing, because those numbers in some of the industries that utilize these programs are probably too low. And we are hearing that everywhere we go, and they need to be adjusted.

Here is the resistance that we get, and I want all four of you to address it. The argument that we get back—two things. One is that immigration reform will only work if it is good for the American economy.

And from what I am hearing from the testimony you have given today, but also from everyone we have spoken to before, is that if we can get a legal immigration system that works, in particular one that allows our job-creating industries to attract and retain, not just attract, but retain the world's best talent, that will have an exponential effect throughout the economy. One of the figures I have heard cited is, if we are able to keep people in the STEM field, for every one STEM worker that we attract or keep in the U.S., X number of jobs are created.

So I guess what I am trying to get for purposes of being able to share with others, so for people either so bored that they are watching C-SPAN right now—

[Laughter.]

Senator RUBIO.—or we can send this later in a YouTube video, explain to someone back in Florida or Nevada or anywhere else how exactly that works.

In essence, why is having a world-class immigration system, how will that help create jobs for people that are here now, who may not be the direct beneficiary of that visa or of that green card or of that what-have-you program, but will benefit from the jobs and the prosperity and the growth that is created as a result of that talented individual being here?

As part of that—I know this is a long question, but they are related—as part of that discussion, in particular what I have heard is that these are jobs that are being created anyway. In essence, you are in business; you have X number of jobs you need to fill. You would prefer to fill them in the United States because of doing business here, our workers are productive, et cetera. But you are going to fill that job somewhere, and if it isn't here, then that job could potentially be opened in a facility or operation you have elsewhere, because that is where the talent is.

In particular, I have heard stories of people going to a college, recruiting workers, and as they sit down and interview these graduates, they realize most of these are foreign students that will not be able to stay in the U.S. unless there was a program in place to allow them to stay.

So I think that is related to my general question, which is: How does this, by creating economic growth, lead to job opportunities for people who are in the United States today?

Whomever wants to go first is fine.

Mr. BUSSGANG. I can take a crack at it, Senator.

You know, as a venture capitalist studying the entrepreneurial ecosystem, what you learn is that entrepreneurship is not a zero-sum game. Entrepreneurs create businesses and entrepreneurs grow businesses, and when you grow and create a business, you create jobs.

So at my venture capital firm, we have invested in over 70 companies, and those 70 companies have created over 3,000 jobs. That is 70 entrepreneurs who have created companies from nothing and thousands of jobs from nothing.

And if those entrepreneurs were kicked out of the U.S., as many of the stories that I told is happening, or as those entrepreneurs don't have the ability to start their companies here, they don't create those companies, they don't create those jobs. We have talked about eBay and Google and Intel being companies that were founded by immigrants. If those companies didn't exist, those jobs wouldn't exist. And there is a huge multiplier effect therein.

Mr. ANDERSON. Go ahead.

Ms. HENRICKS. If I could add to that, from Caterpillar's perspective, we are a huge net exporter, and so about 70 percent of the products that we produce in the United States go overseas. And yet about 80 percent of the product development work that we do is done here in the United States.

So when we hire an engineer to design a new manufacturing process or design a new component or design our equipment, that creates jobs here in the U.S. because when we manufacture that component, when we assemble that large mining truck and export it somewhere else in the world, we are creating not only the manufacturing jobs but all the support jobs that go along with that.

Mr. ANDERSON. And as I mentioned earlier in the testimony, that about half of the top 50 venture-funded companies had an immigrant founder, but I thought more importantly that about three-quarters of them had an immigrant or foreign national who was in a key product development position.

And for the smaller companies especially, they don't necessarily have the same options of pushing work outside the United States. And so particularly when you look at some of those restrictions in the bill, for example on recruitment, if you are going to say that the company has to offer a job to someone who is equally qualified, you know, you might get a situation where an employer is not sure, are they going to be able to meet that legal standard 2 years after the fact from the Department of Labor, particularly if they are interviewing someone maybe 20 times. Is the Department of Labor going to come back later and say, well, you know, this person has a master's, that person has a master's?

And I think startup companies or even established companies are going to, you know, think twice about some of the growth in the United States if they find that many of their decisions end up being questioned after the fact and they become in legal peril, essentially, from simply making personnel decisions.

Ms. SANGHVI. Senator, I don't have much more to add than the panel have already said.

From my own personal experience just starting a company myself and working at other companies, we are constantly, to build the best product, we are looking for the best people. And it is only possible to build a great company if you have the best product.

So when we do hire that one STEM person or that one engineer and you start building toward this product, you are creating opportunities for everyone, not just those in STEM. And then, additionally, you are contributing back to the economy, and that just goes to say they are increasing spending power.

The CHAIRMAN. Thank you, Senator Rubio, very much. I wanted to give you extra time because you—he is such a critical person in this whole debate, which I hope and pray will lead to a bill.

Senator Klobuchar?

**STATEMENT OF HON. AMY KLOBUCHAR,  
U.S. SENATOR FROM MINNESOTA**

Senator KLOBUCHAR. Thank you very much, Chairman.

Thank you, Senator Rubio, for your work, and also a number of people in this room, Senator Warner and Senator Heller and everyone that helped us, Senator Nelson, that helped us with the I-Squared bill that Senator Hatch and I introduced, which was really important, as you have all noted, in terms of making sure our economy keeps running.

We are a country of immigrants. I have loved the examples you have all used. I will give you numbers to use with them, and that is that 90 of the Fortune 500 companies that exist today were formed by immigrants, were started by immigrants. Two hundred of them were started by immigrants or kids of immigrants. And 30 percent of U.S. Nobel laureates were foreign-born. So we have to remember back through history how important this has been to our innovation economy.

Ms. Henricks, I loved your stories. I have a very happy memory of speaking on the Caterpillar factory floor in Minnesota, where they gave me a pink hat. And I talked to all of the factory workers, and I remember being all ready with all these answers about manufacturing, and the first three questions were about fishing in Minnesota and whether the Asian carp were going to destroy our fishing of walleye.

[Laughter.]

Senator KLOBUCHAR. So we had a great discussion, and they were a great group of workers.

I also am aware of the problems in our state, where we have a 4.6 percent unemployment number. We have had issues with job openings at many of our factories, including one of your competitors, AGCO, that couldn't find a welder for a long, long time.

And that is one of the reasons why I believe so much in this bill, with the H-1B, obviously those things, but also the green card piece of it.

And hearing Ms. Sanghvi's story and knowing how hard it is, knowing students at our own university, who, when they were interviewed for a story by the University of Minnesota daily newspaper, the college reporter told me that they could only talk to her off the record. I thought, "What are they hiding? They are all here on student visas." She said they couldn't say they wanted to stay in the United States because it would have violated the provisions about not showing a dual intent.

And that was just a shocking minor thing to me, that that is where we are right now, where you have students at our universities that are afraid to say they want to stay and work here. It doesn't mean they can't apply for jobs and try to find some other way, but it is a crazy situation when you look at what has made this country great.

So one of the questions I had is, Senator Hatch and I have introduced an amendment in the Judiciary Committee—as you know, we are having our markup tomorrow, and we both serve on that committee—to bring back one of the concepts that Senator Rubio had supported in our bill, to make sure some of the funds coming out of H-1B visas go to educations for our students in this country.

And I wondered how you felt about that, if you think that would be helpful, at the same time we are running the track of the green cards, the H-1Bs, the path to citizenship, that we are also working on this issue of doing a better job of educating our children in science, engineering, technology, and math.

I don't know if, Ms. Henricks, if you want to answer.

Ms. HENRICKS. Yes, absolutely. We strongly support allocating some of those funds to reinvest at the state level to help us with encouraging American children to become excited about science and math.

This is something that we do a lot at our company anyway. Just last year, 800 of our engineers were out working in the schools and touched over 2,000 young people, just helping to transfer to them their passion for the great things that can be done with innovation if you pursue careers in science and technology. And this is absolutely what we need for the long-term health and success of our country.

Senator KLOBUCHAR. OK. Very good.

Anyone else want to answer?

Mr. ANDERSON. Well, you know, the current H-1B fees have actually gone—some of them have gone toward scholarships and I think have funded about 63,000 scholarships, according to the National Science Foundation, since 1999. So anything additional would obviously, you know, to the extent that on the margin you could make it more affordable for someone to go into these fields, it seems like a great reform.

Senator KLOBUCHAR. We have some students back there in their graduation caps that I am sure would like one of these scholarships. I see them back there. Very good.

Ms. Sanghvi, I just had a question about, under current law there is no transition period for H-1B holders—Senator Warner

and I have talked about this before—if they want to change jobs. And this means that many highly skilled foreign workers are unable to leave their employer because they are fearful of losing their visa status.

The I-Squared Act included a 60-day grace period, which we didn't have before, that has been incorporated in the immigration bill. Could you talk about why that is an important worker protection?

Ms. SANGHVI. Yes, Senator. Thank you for asking that question.

As I said in my statement, where you work, where you live, choosing a profession should be choices that everyone should have, and they are all fundamental choices. I didn't want to work on Wall Street, but I had to look for a new job before I could quit my old one. It is really difficult as an immigrant to be able to make those choices. So I do believe that the grace period will help significantly.

Senator KLOBUCHAR. Thank you very much.

The CHAIRMAN. Thank you, Senator Klobuchar.

Senator Fischer?

**STATEMENT OF HON. DEB FISCHER,  
U.S. SENATOR FROM NEBRASKA**

Senator FISCHER. Thank you, Mr. Chairman. And thank you for your leadership in holding this committee hearing today. I appreciate it.

Ms. Henricks, you stated in your testimony that our education system in the United States is currently not producing a robust pipeline of students in STEM-related fields.

I can tell you, in visiting with people at the University of Nebraska, they are looking at offering veterans the opportunity to come and receive advanced degrees in this area to try and produce more graduates. You mentioned having individuals attend schools and to spread the good word about science and the benefits of science.

Do you see more positive trends in that area?

Ms. HENRICKS. Absolutely. And I applaud the concept of encouraging veterans to pursue degrees in these advanced fields. We do hire a lot of veterans of the military where we can because they already have great leadership skills that they have developed.

So far, we do, in our work at the younger ages in the schools, we do find a lot of enthusiasm, but we have yet to see this work all the way through, such that high school students are choosing STEM-related studies at the college level and such that, you know, we see college graduates coming out the end of the pipeline.

Senator FISCHER. Do you see a move toward companies trying to help direct students into the areas of science by offering scholarships and job opportunities, internships, in order to keep them focused in that area?

Ms. HENRICKS. Yes. Yes, absolutely. A number of our peer companies do those kinds of things, as do we, offering internships. We do sponsor scholarships, and they do, as well. We also do research with the universities in partnership. Many of us will even establish work centers near the university campuses so that we can give stu-

dents the opportunity to see and experience what it is like to do the work related with engineering.

Senator FISCHER. Thank you.

And, Mr. Anderson, in your testimony, when you were discussing different countries and their immigration systems, many of those countries have employment-based immigration systems, where here in the United States we have more of a family based immigration system.

Do you believe if we would move toward more of an employment-based system that that would make immigration easier and help with these industries that are searching for STEM graduates?

Mr. ANDERSON. Well, I think it is possible to have both. I think, largely, the bill does that, S. 744. I mean, it does eliminate the siblings category, which is a concern for a lot of people. It does retain the other categories. And it significantly expands employment-based immigration in a way that I think is very positive.

Again, the main concerns are not the green card sides, which are really terrific and have as many reforms as I think businesses expected on the green card side, but it is whether or not it is practical to have a system where only people would—you might end up with a system where you are encouraging almost everyone to get permanent residence to work in the United States. And I don't think that is really what I think a lot of members would intend to have, and I don't think it is really practical for mobility purposes in a global economy to have such a system.

Senator FISCHER. On the countries you mentioned, do you have any specific examples of their employment-based immigration system and if that has an effect on the workers in those countries? Has it been disputed by native born workers in the country?

Mr. ANDERSON. Well, I would imagine in every country there are always some concerns under the belief that there is a fixed number of jobs, which we know really isn't the case economically.

But, I mean, it is interesting, in Canada they have a point system, and they have, actually, on a percentage basis, a higher percentage of immigration on an annual basis. They don't seem to have the same political controversies exactly that we have here. I am not sure why. It is something unique about the Canadian culture, maybe, that they have developed or they are coming from a lower population base, I don't know. But I am sure there are still complaints there, but they don't seem to rise to the same level that we sometimes hear.

Senator FISCHER. What percentage of workers do they have that are immigrants compared to citizens in Canada? Do you know that? I heard percentages earlier when I came in.

Mr. ANDERSON. I don't have the exact percentage. I just know on an annual basis their flow, I believe, is somewhat higher as a percentage of the population than the U.S. flow.

Senator FISCHER. OK. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Warner?

**STATEMENT OF HON. MARK WARNER,  
U.S. SENATOR FROM VIRGINIA**

Senator WARNER. Thank you, Mr. Chairman. Let me thank you for holding this hearing.

And I want to pick up where, actually, Senator Rubio—some of the questions he asked. As somebody who spent a career in venture capital before coming here, the economic growth potential that immigration offers—and I think Senator Thune mentioned this as well, the recent Kauffman Foundation study that showed 80 percent of all net new jobs created in America in the last 20 years have not come from large entities or even traditional small business but from startups.

So the fact that the legislation that has been proposed has got both an expanded H-1B program, a STEM program, and an entrepreneurs visa—and I would add one other piece that I know we have some representatives in the room. You know, some of those entrepreneurs, some of those STEM graduates are dreamers right now and people who are trying to further their education here in the United States, perhaps here undocumented. And the fact that there is going to be a legal path for those individuals, as well, is, to me, so obviously additive to our economy, to me, that it seems almost a no-brainer.

And I think the best evidence, and I know Canada has been cited, but what is remarkable is that if you look at Canada, Australia, and the U.K., they have all changed their immigration policies in the last 5 years to take advantage of our anti-growth immigration policies we have in America.

We have policies right now where we train the world's best and brightest. Or if they are here on an H-1B that, until Senator Klobuchar's good work, and then they wanted to go become an entrepreneur, they couldn't leave that job.

So they have all opened up the opportunities, and we have been funding our economic competitors because of our broken immigration system. And, again, as a business guy, you know, extraordinarily frustrating, extraordinarily shortsighted in our country.

And, again, I want to commend the Gang of Eight for their efforts. We may pick at different pieces, but anybody that believes that this isn't going to be done in a comprehensive way or that it can be done piecemeal I don't think recognizes the reality and the totality of what an enormous drag this has on our economy right now.

So I commend the work that has been done and am hopeful, like I think so many of our colleagues, that we can show the rest of America, we can show these dreamers, but, frankly, we can show our economic competitors we are going to get back in the game in terms of continuing to be a magnet for both capital and talent. Those are the two determining factors for any business in a global economy.

I am going to get to a question. You know, the one challenge I would have—and I, again, want to commend the work—I think Mr. Busgang mentioned the work that Senator Moran and I have done on the—and Senator Rubio has been part of this—on the startup legislation we have had that builds upon the H-1B program with a STEM program and with an expanded entrepreneurs visa.

I do have one question on the entrepreneurs visa. And I know there were tradeoffs made, so, again, I am very conscious, having been involved in previous gang efforts—the only place in the country where being a gang member is a good thing is right here in Washington, D.C.

[Laughter.]

Senator WARNER. But the fact that there were only 10,000 entrepreneur visas and the fact that the first crack was that those entrepreneur visas would have to create jobs that pay 250 percent of Federal minimum wage.

The challenge I feel—and I guess maybe we will start with Mr. Bussgang and then any that want to offer this—because the nature of a startup is it is tough to find the financing, you know, there may be other ways that we can demonstrate that we are paying more than a minimum-wage job for these startup ventures with either stock options or deferred comp or other things that might be criteria so that we really try to get these entrepreneurs—most of the ones that I have funded, the most aggressive were the ones that were the poorest, oftentimes.

So perhaps you might want to comment on how we could make sure we make this program successful.

Mr. BUSSGANG. Sure. Thank you, Senator.

I think you are right that the INVEST visa program needs to be as unrestrictive as possible and as flexible as possible, both in terms of how much capital represents a qualified investment from an angel or a venture capitalist, what the wage is that is paid.

Many of our entrepreneurs—and I am not proud to say this, but many of our entrepreneurs don't pay themselves anything because they want to put all the capital we give them into their company and they want to hire as many engineers as they can and as many salespeople as they can.

So I can't give you the specifics with regards to a recommendation from a policy standpoint; that is not my area. But I can tell you that, on the ground, as an investor, the most flexibility that we can allow for these entrepreneurial companies with the Invest visa program, the better.

Senator WARNER. And I would simply just add, and I know my time has expired, but there may be ways to get at the same goal so that we are not—again, I think the group has really tried to balance making sure that we can rebut the arguments, I think fallacious arguments, that we are taking jobs away from Americans. But there may be other ways, in terms of deferred comp or stock options or others, that could be part of the criteria.

Thank you.

My time is up, I can see, but Mr. Anderson was anxious to answer.

The CHAIRMAN. Be cool.

[Laughter.]

The CHAIRMAN. I ask unanimous consent to insert—this is, of course, before I call on Lord Nelson here. I ask unanimous consent to insert in the record the written statement of Mr. Luis Arbulu.

He was born and raised in Peru. Mr. Arbulu came to the United States with a Fulbright fellowship to study at the University of Kansas. He stayed in the United States to work as an engineer at

Google and other companies. He currently runs an investment fund and innovation ideas lab in San Francisco, California.

Mr. Arbulu was invited to appear but could not appear at our hearing today because of a family obligation but wanted to share his views. And I assume there are no objections.

[The prepared statement of Mr. Arbulu follows:]

PREPARED STATEMENT OF LUIS ARBULU

Dear Chairman Rockefeller, Ranking Member Thune, and Members of the Committee, thank you for the opportunity to submit testimony to the Committee.

Born and raised in Peru, I came to the U.S. to study engineering through the Fulbright program. I worked as an engineer building large scale infrastructure projects in the U.S. and abroad, was the head of engineering operations at a startup and then held a number of senior roles at Google. As a founder and managing director at Hattery, a seed stage investment fund and ideas and innovation lab based in San Francisco, I work with entrepreneurs from all around the world who have come to the United States to start their businesses. Recently, I was appointed as an Entrepreneur in Residence with the U.S. Citizenship and Immigration Services in order to help the agency understand the realities and nuances of high impact entrepreneurship when they look to adjudicate visas. I understand the trials of these struggling entrepreneurs because I have lived them; that's why I support the Senate's efforts to pass comprehensive immigration reform.

**Startups—the Drivers of Our Economy**

As a result of my experiences, I joined the Board of Engine Advocacy. Engine's mission is to create an environment where technological innovation and entrepreneurship thrive by educating and working with startups and lawmakers to construct smarter public policy. Engine has more than 500 members, from young companies making products ranging from semantic search tools to heart scanning technologies, to MIT physicists building satellites and thriving businesses such as Yelp. Across the country, Engine members are driving our economy.

“High growth entrepreneurial companies” are responsible for all new net job growth since 1980, according to research from the Kauffman Foundation. Our own Tech Works research<sup>1</sup> has found that employment in the STEM occupations of science, technology, engineering, and mathematics, has been continually robust, gaining 27 jobs for every 1 job gain in all other occupations between 2002 and 2011. These jobs have also boosted local communities; for every job created in the high tech sector, 4.3 additional jobs are projected to be created in the local goods and services economy, including barbers, lawyers, and health care professionals.

**INVEST Visa**

As risky investments, startups are unlikely to receive, or even investigate the possibility of receiving, conventional bank loans. Instead, startups rely on angel investors and venture capitalists who are willing to take the financial risk in exchange for equity. To ensure that these fledgling businesses can prosper, angels and VCs will often offer advice and mentoring in addition to financial investment. Investors steer companies toward success by literally being present as the startup grows. These interactions, together with hard work and late nights, grow truly innovative companies.

These networks and access to capital and talent are the reasons why so many of the world's entrepreneurs flock to the U.S. to start and grow their companies. Unfortunately, our current immigration system makes this prohibitively difficult. Fabien Beckers, for example, has created a 3D heart imaging system that could revolutionize the way we diagnose and treat heart disease. He has a PhD from Cambridge and an MBA from Stanford. Despite having funding contingent on his ability to stay in the country Fabien was not technically employed and so did not fit the requirements for an H class visa. Instead of working on his product, Fabien had to spend months being rejected by visa category after visa category. Finally, he proved he was “exceptional” enough in his ability (as defined by the visa class) to receive an O visa that allowed him to stay in the country.

Columbia business school graduate Sumit Suman, on the other hand, has not been as fortunate. His online mentoring startup Mentii is being used by universities around the country to help better connect alumni networks. In order to qualify for

<sup>1</sup>[https://s3.amazonaws.com/engineadvocacy/TechReport\\_LoRes.pdf](https://s3.amazonaws.com/engineadvocacy/TechReport_LoRes.pdf)

an H1B visa, Sumit had to relinquish control of his company to a member of his Board. But Sumit lost out in this year's visa lottery so was forced to return to India. Though still building Mentii from Delhi, Sumit is no longer able to meet possible clients and actively build the community.

Foreign-born startup founders continually struggle to stay in the country. Some, like Fabien, eventually find a visa category that fits. Some, like Sumit however, relinquish control of their companies. Still others use L visas to travel back and forth from their home country as their business demands. But this is one of the costliest visas because startup founders must incorporate their business, and maintain staff and offices, in two countries.

The INVEST visa remedies this problem by allowing startup entrepreneurs with funding to stay here and grow their businesses. We believe that the requirements in S.744 are reasonable: an investment of \$100,000 in the previous three years for a nonimmigrant visa. This investment can be easily verified by the regulatory and enforcement agencies.

### **High Skilled Workers**

As startups grow, it is also important to make sure that they are able to hire the right talent. A recent study by Engine Advocacy shows that STEM workers continue to be in high demand. Inflation adjusted wages for STEM workers have grown faster than for non-STEM over the last two decades, despite the recession. The number of computer and math and science jobs have also increased by 5.2 percent annually over the last decade, with an unemployment rate below 1 percent and a job openings rate of around 8 percent.<sup>2</sup> Moreover, despite claims that foreign workers are paid less than their American counterparts, foreign born IT workers earn 6.8 percent more than those with U.S. Citizenship.<sup>3</sup>

According to USCIS data, the number of H1B applications correlates with economic growth; in good growth years, there are more applicants than during recession years. It is for this reason that Engine advocates for an H1B system that is responsive to the needs of the marketplace rather than arbitrary caps.<sup>4</sup> While the comprehensive immigration bill makes great strides toward reducing the burden on the H1B system, the existence of a cap, and the preference for workers with graduate degrees will continue to cause difficulties for startups. For startups, the right talent is not defined by what degree they have.

As startups struggle to find highly skilled workers who can lead the technology revolution, each H1B worker makes a substantial impact on the growth of the business. According to a 2011 GAO report, the H1B caps did not impact larger firms who were able to move workers to a foreign office and then use L visas to join their team in the United States as needed.<sup>5</sup> Startups, on the other hand, do not have the flexibility to locate their workers around the world. The same GAO study noted that for startups, being denied a H1B visa could mean moving the whole company abroad, or abandoning the startup entirely.

### **Conclusion**

S.744 makes great strides towards reforming the current immigration system. The INVEST visa allows entrepreneurs from around the world to start their businesses in the United States. Reforms to the H1B system, however, stop short of allowing these businesses to prosper. Startups can power the next generation of growth in the American economy if we let them. Entrepreneurs and innovators need Congressional support to continue to build the businesses of the future. We hope that you will consider these measures that will allow for that future, our future, to be prosperous.

The CHAIRMAN. Senator Nelson?

### **STATEMENT OF HON. BILL NELSON, U.S. SENATOR FROM FLORIDA**

Senator NELSON. I want to note the presence of Dreamers from Florida who are in the audience and just state that this past week I was—there they are.

<sup>2</sup> <http://engine.is/blog/posts/its-all-relative-stem-workers-are-in-high-demand>

<sup>3</sup> <http://www2.itif.org/2010-h1b-visa.pdf>

<sup>4</sup> <http://www.engine.is/blog/posts/how-the-gang-of-eight-immigration-bill-impacts-startups>

<sup>5</sup> <http://www.gao.gov/new.items/d1126.pdf>

I want you all to know, last week I was at Immokalee High School and met with students. And all the students, this incredible poverty and sacrifice they have come through and where they are all going to school under a tutoring program there. And then we came to this one young lady. She is the valedictorian in the class. She has been accepted at a number of major universities. But because she is a Dreamer, they cannot give her a scholarship. And so she is having to put off. And, of course, we are in it now.

And I will work with your office, Senator Rubio, to see if there is any way of getting her any financial assistance. She is the valedictorian of the class.

I wanted to ask Mr. Bussgang, what is being proposed in the immigration reform is a compendium of these things: the Invest visa, the new EB-6 visa, and the current EB-5 visa, trying to capitalize on every bit of investment and entrepreneurship and startup potential that we can from foreigners. Have we left anybody out?

Mr. BUSSGANG. I don't think so, Senator. I think if the question is implying, have we left out elements of the policy or have we left any people out with respect to our consideration of the bill—

Senator NELSON. Both.

Mr. BUSSGANG. No, I think the bill is well-constructed. I think the comments made by Mr. Anderson are well-taken with respect to making sure that we don't have too onerous a set of regulatory burdens on the businesses that are trying to comply with the new bill that want to hire the additional workers.

I think with respect to Senator Warner's comments, making sure that the Invest visa bill is flexible in the language to allow for investors to come from angel investors, incubators or accelerators that may exist in all of your states that may not be normally characterized as qualified venture capitalists but in our world are becoming important sources of capital and important sources of knowledge.

But I think it is a very—with those provisions aside, I think it is a very well-constructed bill.

Senator NELSON. The EB-5 program has been around for a while. Give me your analysis of whether or not it has been successful. And working in tandem with these other new programs, will that cause it to be more successful?

Mr. BUSSGANG. Senator, I am not an expert on the EB-5, but I do know that the backlog has been very detrimental to the success of entrepreneurs. Senator Rockefeller earlier made reference to how is it these entrepreneurs are hanging around for 8 years, 10 years, 12 years and still seem to want to pursue their green cards.

I think if we can eliminate that backlog and streamline that process, in addition to the work in the law that is being put forward—and I know that is an administrative point, maybe not a legal point—from a bureaucratic standpoint, I think that would be incredibly important and valuable.

Senator NELSON. You are talking about the backlog in granting them the EB-5 in the first place?

Mr. BUSSGANG. Yes.

Senator NELSON. Well, that is an interesting thing, because, you know, we are in an era that we have to worry about our national security. And in a number of those backlogs are the extensive

checks that they have to go in to see if somebody is trying to enter for some purpose other than legitimate investment.

Mr. BUSSGANG. Yes, coming from Boston, I am unfortunately painfully aware of that concern, and I think it is a very valid one. And so I can't tell you the tradeoff that needs to be made by the bureaucratic system to make sure that we streamline as much as we can those checks while at the same time preserving our security, but I think it is a very fair point. We have to keep that balance in mind.

Senator NELSON. You are an immigration specialist. What do you think about the people who wait in line to get a green card and someone can come in and buy their way in, as a matter of policy?

Mr. BUSSGANG. I am not sure if I understand the question, Senator. With respect to whether it seems fair? Is that a fairness question?

I know that some of the provisions being considered are merit-based and skill-based. And I think we have to do what is in our economic interests, and we have to do what will generate the greatest amount of entrepreneurial activity. And so I am, as a capitalist, quite in favor of merit-based systems and putting in place a structure that rewards people who are from backgrounds and have skills and academic backgrounds that we want in this country.

I can't speak to the actual financial equation, but more in terms of the philosophy, I do believe in a merit-based system.

Senator NELSON. And do you think the present standards for the merit-based system on EB-5 are what are fair?

Mr. BUSSGANG. Senator, I am not an expert enough in that area and in the intricacies of the EB-5 standards to comment.

Senator NELSON. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Nelson.

I want to ask two questions. One will appear not to be germane, but I sorely hope that it is.

I had mentioned in my opening statement how it took me 12 years after I went to West Virginia as a VISTA volunteer, being brought up in that City of New York, which West Virginians just don't like, and having a last name which most West Virginians didn't like, and it took me 12 years. And it is no equivalency whatsoever to what we are talking about here, but for me it was. It was a sense of having a temporary visa in West Virginia to live but not necessarily to prosper or get into what I wanted to do.

It is curious to me about the American people—why is it? Is it the two oceans, these large bodies of water that separate us from most of the rest of the world?—why we are so suspicious of people who come from afar to try to do good, when that is what all of us are trying to do here. But if somebody else, somebody of color, somebody not of color, tries to do it, somehow we sort of get agogged.

And, you know, you talk about immigration reform. In West Virginia, it is not very popular. I, frankly, don't care. It has to happen. It has to happen. And it is the Scotch-Irish tradition of West Virginia. So many of those folks are, you know, from Scotland and Ireland and from Italy and all over the world, and they come to work in our coal mines or wherever.

But then I note in India that you have those marvelous national institutes. And I am trying to think of, how is it that we lift up the whole subject of immigration to a higher plane, to a less threatening plane, by simply suggesting that STEM, in this case, is something to be sought after, is like a guaranteed ticket to success, whether you are American-born or not? And it really works, I think, in India and other countries where you have, you know, in the process of education, the highest thing you can get to is a national institute. And if you graduate from that national institute—you know, you have to be really smart to get in and to get out—you are on your way. What that does, it certifies to all the people in any other countries where this may be going on that this is a high-order priority and excellence.

And so, therefore—and then I look at America, and I look at the absolute appalling power of sports and all the television time it takes and all the money that is involved in it and how, you know, kids go to college and spend 1 year, then they are off to the professionals, where they get cut after 2 years and they have nothing left, which I referenced in the opening statement. But it is really partly an attitude.

And, Senator Rubio, actually, I would be interested in your view on this too.

But I think the whole question of doing immigration reform would be much easier if we could think of it as in all of our interests, in all of our interests. This is not a threat. This is an addition.

As it is today, if we are—the government could very well be funding, probably is funding, \$250,000 to help somebody get a Ph.D., and then the person goes back home. As I said, there is nothing wrong with that, but that should not appeal to the average American as a good return on American tax dollars.

So what I am really asking is, if—I am just positing that if we lift the whole subject of sophisticated education, STEM, to a very much more visible level, we didn't have TV programs called "Law and Order" but we had TV programs called "Science and Engineering and Math and Technology"—now, that is a stretch, but—

[Laughter.]

The CHAIRMAN. I think it really comes down to some of those human factors. So what is it that holds us back?

The two of you, and the two of you. And I may try to get Senator Rubio at the end, too.

What is it that holds us back? Why are we so reluctant on this subject when it is so much in our self-interest, when it screams out to be dealt with, and in the dealing of it, all it does is help everybody?

Mr. BUSSGANG. Senator Rockefeller, I think you are 100 percent right, it is all of our interests. And it is also a social justice issue.

I think what we could be doing better as a country will be achieved through this bill, because I think, through the passing of this bill, you are sending a symbol to the world that America is open for business, that we want the best and the brightest to come and stay here and that we value the know-how and we value the entrepreneur.

Right now, the entrepreneurs I spoke about earlier in my testimony, the entrepreneurs I invest in, the signal that we give them

is that we don't value them, that they have to scratch and claw to stay in this country. And that makes no sense. We want to be attracting them and fighting for them just like the NCAA Division I recruits. When the coaches come and visit the high schools, that is how this country should be when it comes to the best and the brightest.

The CHAIRMAN. Cash in hand.

[Laughter.]

Mr. BUSSGANG. Cash in hand. People joke about stapling a visa with every Ph.D. We should be stapling also a \$100,000 scholarship if they want to start a company and seed capital, which is what a lot of accelerator programs are doing around the country now.

So I fully agree with what you are saying.

I will also observe, though, that the culture is changing. As digital devices are in the hands of more and more young people, being a geek is more cool than it has ever been. And I think we are seeing a generational shift. That facility with digital devices and the Net-native generation is taking over. And as those young people take over, they are going to demand even more from this country in terms of facility with this technology.

The CHAIRMAN. See, I would argue—and then, actually, I really want to call on you, Senator Rubio—that you are not wrong but not necessarily right, that Americans are incredibly adept at all uses of technology, and 3-year-olds are, you know, inventing better moons than Mars is, but that it is not necessarily a commitment to the discipline and the follow-through of STEM education, which in turn is what creates the admiration among American people of this fact, which then in turn makes the whole question of how are we dealing with immigration, how are we really getting the best and brightest and keeping the best and brightest, you know, involved so we all move forward together. I mean, I feel so sad about it.

Senator Rubio, do you have some thoughts?

Senator RUBIO. Well, I appreciate the chance to comment. A couple points.

As to the point that you have raised about it being in the interest of the country, I actually have a letter that was delivered just a few hours ago from the Office of the Chief Actuary of Social Security. They looked at the bill and the assumptions that are in the bill as far as the restrictions and other provisions that are in it.

The chief conclusion of this letter is summarized in the last line, where it says, "Overall, we anticipate that the net effect of the bill on the long-range actuarial balance of Social Security and Medicare will be positive." And the point being—and I think if you look deeper into the subtext of it, it talks about 3 million jobs being created over the next decade, growth in GDP as a result of that growth.

We need to understand that what we are talking about, particularly in the realm of what you are outlining, is people that are going to be making significant salaries above the median wage in the United States, many of whom will be paying into the system in Medicare and Social Security but, because of their status on temporary visas, will never access that system for years to come. So just from that perspective, it is a net positive on the country.

And I would just say, Senator, that as far as the general view on immigration reform, the sense that I get is that the American people across the political spectrum are ready for immigration reform. And I think that is true even of the vast majority of people in my own party. There is a desire to ensure that the problem we have now never happens again. People are ready to deal with the issue that we have now of 11.5 million human beings living in the United States in violation of the immigration laws. They are prepared to deal with that reality in the best way possible for the country.

What they don't want to see is a second wave in the future. They don't want to see this happen again. And our argument to that is that there are a lot of things we need to do to secure the border and other measures. But one of the things that we can do to ensure that it never happens again is have a legal immigration system that works; have a system of legal immigration so that people can come here legally. Because at the end of the day, people would rather come here legally.

One of the underappreciated facts in this whole debate is how hard it is sometimes to legally immigrate to the United States. And 40 percent of the people that are here today in violation of the immigration laws did not enter illegally. They entered legally.

And you would be shocked at the number of people that have been victims of fraud. They go out and they hire someone who is a notary who claims to be an immigration lawyer, who claims to fill out their paperwork. The paperwork never gets filed. Now they are illegally here.

How many people just can't afford it? I mean, you have to get lawyered up sometimes for this stuff. I can't tell you the number of people I have met who would shock you, I mean, in terms of, they have been here legally, all of a sudden they are out of status, and they just didn't realize, because someone either didn't give them good information or it was so complicated to follow the law or otherwise.

So one of the best things we can do to prevent illegal immigration in the future is create a system of legal immigration where the demand for these jobs can meet the supply of these workers in an orderly way. What we have now is a very simple issue of supply and demand. We have a demand for these jobs in the United States, and we have a supply of people willing to fill them. And we do not have a way for those two things to meet in an orderly fashion. They will always meet; supply and demand will always meet. They will either meet through an orderly process, which is what I hope we can do through immigration reform, or they will meet in a chaotic process, which is what we have today.

So I think that if we can convince the American people that we are taking measures to ensure that this never happens again, we will have immigration reform this year. And if we fail to do that, I think it will be very difficult. So that is my hope, and that is what I hope we are working on.

The CHAIRMAN. Thank you.

Senator Thune?

Senator THUNE. Thank you, Mr. Chairman.

I am curious to know, just because we have talked a lot about the number on H-1B visas and each of the various bills attempts to address it in a different way, generally with some sort of a cap and some sort of an index, what you think that number should be of H-1B visas in terms of whatever legislation Congress ultimately approves.

Mr. ANDERSON. Well, I think the I-Squared bill has a pretty good framework in which they set a particular number and then it can go up based on how early the cap is hit each year.

So I think that is at least one that probably could get political support. The fact that about a quarter of the Senate signed on to the bill indicates that it has bipartisan support. So that might be a good way to start to look at what the possible number should be.

Senator THUNE. OK.

And I know the I-Squared bill addresses it through a market-based escalator, and I am interested if that is an approach that you think makes sense. The comprehensive immigration reform bill I think goes from 65 to 110, can go up to 180, but limited, I think, to 10,000-person increments per year increase.

Mr. ANDERSON. Right.

Senator THUNE. And just as a case in point, in 2013 we hit the visa cap in 5 days. In 2012, it took 10 weeks. But, you know, either way, that is a pretty—I mean, we are capping that thing out in a hurry.

So does a market-based escalator approach that is in the I-Squared bill make the most sense in terms of how you address this?

Mr. ANDERSON. I mean, I think so, but—

Ms. HENRICKS. Yes, I think from a business perspective, from our point of view, that that is what would make the most sense, market-based escalation.

Senator THUNE. OK. But nobody wants to say exactly what that number should be today?

All right. Well, good. Gives us a lot of flexibility there, Mr. Chairman.

[Laughter.]

Senator THUNE. One other question, and that is, one of the arguments against increasing that number is that people in this country, you know, are not going to get paid the same as a result of—if we get more and more people coming in here on H-1B visas, there is this sort of assumption that somehow there is going to be this wage gap.

But there was a 2011 Government Accountability Office report that compared median reported salaries of U.S. workers to H-1B professionals in the same fields and age groups. The report found that H-1B professionals generally earned the same or more than their U.S. counterparts.

And so I guess my question is, is this a case where you get a few of those anecdotes that are driving this debate? Because it doesn't seem like there is that gap there that we hear talk about all the time.

Mr. ANDERSON. I mean, I would say that, yes, that there have been actually two or three or four other academic-oriented studies that confirmed the same thing. And also the law requires that com-

panies pay the higher of the prevailing or actual wage. While there are always going to be some bad actors, of course, I think in general companies want to comply with the law. And you need to compare apples and apples, you need to compare workers that have the same relative experience.

And one of the things that is really not known in this debate, which has always surprised me, is that the U.S. Citizenship and Immigration Service has an incredible amount of oversight of H-1Bs that never gets mentioned. They have conducted over 30,000 onsite audits of employers of H-1Bs between 2010 and 2011.

And there is one company in particular that had said that they had had 100 site visits in a year. I don't know about your Senate offices; you may not want to get 100 visits from, you know, an investigator in a year. You know, it seems like a lot of oversight.

I don't think companies were complaining so much. They just weren't sure that even if they didn't have any problems, they just kept getting these site visits over and over. And, overall, in 2010, only 1 percent of those cases, of those audits, were referred for fraud investigation to ICE for further investigation.

So, again, there is oversight there. The bill that we are talking about would exponentially increase the oversight but would also do about a dozen other things, too, that would make it, you know, more difficult for employers.

Senator THUNE. OK.

Is anybody aware of examples where you have foreign workers, H-1B workers being paid less than U.S. workers would be and that being an argument for why companies want to hire lower-wage workers and why we ought to have some restrictions on the H-1B program?

Ms. HENRICKS. Yes, so that is absolutely not the case, at least with our company. We have a very structured approach to compensation practices, so for a particular job there is a particular range of salaries that are paid for that job. An entry-level worker might come in near the bottom of that range, but as their performance merits, they will get raises.

So, again, as we apply for H-1B visas or green cards, we definitely must demonstrate that we are paying the standard wage rates for that particular kind of a job. So that is not an issue in our company at all.

Mr. ANDERSON. I mean, I would say—

Mr. BUSSGANG. I would—

Mr. ANDERSON. I am sorry. Go ahead.

Mr. BUSSGANG. Oh, I would echo that. Across our portfolio, companies that are hiring H-1B visas workers, we are just trying to hire the absolute best talent into the company, and the wage is the wage. We don't see any evidence of H-1B visa workers being paid any less than green card workers.

Mr. ANDERSON. I would say there obviously are violations every year, and the Department of Labor investigates those, and people have to pay heavy fines.

But one of the things that is in this bill, it would actually require companies to pay much higher wages for H-1Bs. And what is interesting is, if that provision sticks in the bill, then it calls into question why you would need to also have recruitment requirements

and nondisplacement requirements. Because why would, logically, a company, if they have to pay someone \$10,000 or \$20,000 more than a comparable U.S. worker, would they, you know, not want to hire the U.S. worker or try to lay off a U.S. worker to hire someone that they would be paying \$10,000 or \$20,000 more?

So if you are going to have one of these provisions in, it seems not to make a lot of sense that you would need to have three or four additional provisions, as well.

Senator THUNE. Thank you.

Thank you, Mr. Chairman. I want to thank our panel.

The CHAIRMAN. Yes, thank everybody.

But now Senator Nelson.

Senator NELSON. Mr. Chairman, I just want to offer a concluding thought for you and Senator Thune.

Since the topic of this hearing is the role of immigrants in America's innovation economy, one of the great historical examples of the success of immigrants in the field of STEM—science, technology, engineering, and mathematics—is the fact that the Soviets beat us into space with Sputnik and then with Yuri Gagarin, first human to orbit the Earth. The fact that we were able to catch up and overtake them and then land on the moon in a feat that the Soviets could not do but tried very hard. We raced and got most of the German rocket scientists from Peenemunde right at the conclusion of World War II.

And it was when all of our attempts to get into space had failed that the President turned to Wernher von Braun, and the group of Germans ensconced in Huntsville, Alabama, and said can you get us into space with the first satellite Explorer, and he said, give me 6 months.

The CHAIRMAN. Wow.

Senator NELSON. And the rest is history on the American space program.

So there is, clearly, an example of a historical fact of the subject of your hearing today.

The CHAIRMAN. I want to close with a statement, but I have to point out that Senator Nelson was an astronaut. And he was so good that his spaceship, which was headed toward Mars, actually went right through the middle of Mars, wiped it out completely. So when he wants to get something done—this, of course, is a joke.

[Laughter.]

The CHAIRMAN. But I want to close on a non-joke. I was talking yesterday with a person who came to see me because this person has been put in charge of the best, the most likely STEM-related educational college in West Virginia. And she is just totally new on the job, and do you know what she has already done? She has abolished football.

So, with that thought dangling in the air, I thank you all for your courtesy and for your brains and for your creativity and for your effort to help us all.

Hearing adjourned.

[Whereupon, at 4:18 p.m., the hearing was adjourned.]



## A P P E N D I X

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO  
RUCHI SANGHVI

*Question 1.* We all want to ensure that the U.S. remains a beacon of innovation and growth. That requires striking the right balance between providing immigration opportunities for the best talent—both studying in our universities and abroad—and ensuring that we are not bringing foreign workers to the U.S. in order to reduce labor costs and displace American workers. How do you suggest our immigration policies best strike this balance?

Answer. Any immigration policy should protect opportunities for Americans while at the same time providing companies access to talent when there is a deficit in the labor force. The major problem all of us see is that there simply isn't enough supply to fulfill the demand for high skilled, qualified workers. Today's economy based on knowledge and ideas can only grow if we add more talented, skilled and hard-working people to it and if America is to remain competitive it needs to find a way to keep the best people here. The fact is that the current system results in more than 40 percent of math and science graduate students leaving the United States after educating them. The economic reality is that 40 percent of Fortune 500 companies are started by immigrants and their children. If we made it easier for the world's talent to stay here, we would be creating more opportunities for everyone.

*Question 2.* Some have suggested that allowing visa holders to switch companies without restriction would ensure that these individuals are not taken advantage of and those companies are not displacing U.S. workers in favor of hiring non-Americans at depressed wages. Do you believe that both Americans and visa holders are better off when portability is included in work visas?

Answer. I believe that everyone is better off if work visas are portable. Where you work, where you live are all fundamental choices everyone should have and having portable work visas will give non-Americans the freedom to make those choices. Moreover, companies will have to compete to keep their employees (both Americans and visa holders) and ensure they are happy.

However, I believe the real problem is the green card backlog. Employees have to stay with employers sponsoring their green cards for many years until the backlog clears. If they switch employers they lose their place in line and have to start the process all over again. If we cleared the backlog then the problem would go away. You would be able to get a green card quickly and change employers whenever you want. Any effort in clearing the backlog would greatly alleviate the problem.

*Question 3.* Do you believe that American companies have a responsibility to fill positions with American workers, if possible?

Answer. Any immigration policy should protect opportunities for Americans while at the same time providing companies access to talent when there is a deficit in the labor force. From my personal experience, there simply aren't enough high-skilled, qualified people to recruit. Each candidate probably has 2-3 companies competing for him or her. We can't build the best products without employing the best people to build them. Every company wants to hire the best people whether they are U.S. citizens or immigrants.

*Question 4.* Last month, the *Wall Street Journal* reported that "Indian IT professionals working in the U.S. are typically paid about 25 percent less than their American counterparts." How do you respond to the criticism that H-1B employees are paid significantly less than their American counterparts?

Answer. In my experience wages for people in the tech industry have only increased. The BLS data shows that wages for IT workers grew by 44 percent over the last 11 years, while price levels only increased 36 percent. Empirical analysis has also found that immigration does not decrease American wages. On the contrary, I believe granting H-1B visas to highly skilled immigrants will increase jobs, productivity and economic output.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO  
JEFFREY J. BUSSGANG

*Question 1.* We all want to ensure that the U.S. remains a beacon of innovation and growth. That requires striking the right balance between providing immigration opportunities for the best talent—both studying in our universities and abroad—and ensuring that we are not bringing foreign workers to the U.S. in order to reduce labor costs and displace American workers. How do you suggest our immigration policies best strike this balance?

Answer. Immigration is not a zero sum game. If we attract the best talent in the world to come to America, they will create jobs, not displace them. As a result, the U.S. policy should be to welcome as many highly talented immigrant entrepreneurs as possible.

*Question 2.* Some have suggested that allowing visa holders to switch companies without restriction would ensure that these individuals are not taken advantage of and those companies are not displacing U.S. workers in favor of hiring non-Americans at depressed wages. Do you believe that both Americans and visa holders are better off when portability is included in work visas?

Answer. Yes. The more portable the visa, the more likely the visa holder will be able to start their own business or join a start-up. We should encourage the most talented people to freely pursue the most promising opportunities.

*Question 3.* Do you believe that American companies have a responsibility to fill positions with American workers, if possible?

Answer. American companies have a responsibility to create wealth for their shareholders. If they can find American workers to do the job, they will hire them. If we restrict the flow of capital and talent to the best American companies, those companies are going to be at a competitive disadvantage to foreign companies who are attracting global capital and talent.

*Question 4.* Last month, the *Wall Street Journal* reported that “Indian IT professionals working in the U.S. are typically paid about 25 percent less than their American counterparts.” How do you respond to the criticism that H-1B employees are paid significantly less than their American counterparts?

Answer. We need more H-1B visas to fuel our country’s start-ups and fill in the huge gap that we have for technical talent. These additional visas need to be spread out across companies small and large, and not be concentrated in a few Indian IT offshore organizations who may be abusing the core intent of the system.

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RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO  
GWENNE A. HENRICKS

*Question 1.* We all want to ensure that the U.S. remains a beacon of innovation and growth. That requires striking the right balance between providing immigration opportunities for the best talent—both studying in our universities and abroad—and ensuring that we are not bringing foreign workers to the U.S. in order to reduce labor costs and displace American workers. How do you suggest our immigration policies best strike this balance?

Answer. Please note that many balances are already in place. As part of the H-1B petition process, we are required to file a Labor Condition Application (LCA) with the Department of Labor (DOL)—establishing that we pay the H-1B employee or recruit wages that are consistent with the market for that occupation in that geographic area. There is no incentive for companies to hire a foreign national if there is a qualified U.S. applicant. When a qualified U.S. worker applies for a position, we hire that applicant.

In addition to the balances already in place, Caterpillar is supportive of the provision that allows a portion of H-1B visa fees to be reinvested into U.S. STEM programs. This supports the development of a sustainable STEM talent pipeline in the U.S., while still addressing the critical skill shortage we face today.

*Question 2.* Some have suggested that allowing visa holders to switch companies without restriction would ensure that these individuals are not taken advantage of and those companies are not displacing U.S. workers in favor of hiring non-Americans at depressed wages. Do you believe that both Americans and visa holders are better off when portability is included in work visas?

Answer. After the labor market test is passed and PERM is filed, our current immigration laws allow for limited lateral mobility, upward mobility or ability to accept a position with another company. This significantly impacts Indian and Chinese foreign nationals in the EB-2 and EB-3 categories, who may spend four to ten years waiting for their green card after the PERM has been filed. As a result of the

current laws, these employees will likely spend this entire period in the same position at the same company. This stunts their careers, limits their ability to learn new skill sets and severely reduces their mobility both inside and outside of the company. Caterpillar is supportive of any provisions that would increase mobility of highly skilled foreign nationals.

*Question 3.* Do you believe that American companies have a responsibility to fill positions with American workers, if possible?

Answer. Caterpillar would prefer to hire Americans to work here in the U.S. The reality is the U.S. isn't graduating enough students in these fields to meet demand. STEM jobs are expected to grow by 17 percent during the decade ending in 2018, compared to just 9.8 percent-growth in non-STEM jobs. But at the current pace, the U.S. won't be able to produce enough workers to fill the jobs. In 2008, just four percent of all bachelor's degrees were awarded in engineering.

Caterpillar relies on immigration to fill these gaps.

We continue to be challenged to fill all of our STEM talent needs without sponsoring a limited number of hires. For example, we posted three openings for our high end simulation division in fall 2011. The posting required a Masters or PhD in Mechanical Engineering with a strong analytical, mathematical and simulation background. It was limited to candidates who did not require sponsorship. After eight months, no qualified candidates were identified. At this point, the job was re-posted for about a month with sponsorship allowed. A number of successful candidates were identified and three were hired. All three successful candidates required some form of sponsorship.

*Question 4.* Last month, the *Wall Street Journal* reported that "Indian IT professionals working in the U.S. are typically paid about 25 percent less than their American counterparts." How do you respond to the criticism that H-1B employees are paid significantly less than their American counterparts?

Answer. I can only speak to H-1B employees at Caterpillar. Caterpillar has a very structured salary schedule that is based on employee position, experience and performance. From a compensation standpoint, foreign nationals are treated the same as their U.S. counterparts.

There is already a safeguard in place with regard to compensation. As part of the H-1B petition process, we are required to file a Labor Condition Application (LCA) with the Department of Labor (DOL)—establishing that we pay the H-1B employee or recruit wages that are consistent with the market for that occupation in that geographic area. There is no incentive for companies to hire a foreign national if there is a qualified U.S. applicant. When a qualified U.S. worker applies for a position, we hire that applicant.

However, it is possible that flaws in our current immigration system would cause H-1B employees, on average, to be compensated less over time. Many H-1B employees at Caterpillar and other large companies eventually pursue permanent residency. After the labor market test is passed and PERM is filed, our current immigration laws allow for limited lateral or upward mobility for H-1B visa holders. This significantly impacts Indian and Chinese foreign nationals in the H-1B category, who may spend four to ten years waiting for their green card after the PERM has been filed. As a result of the current laws, these employees may spend this entire period in the same position while their U.S. peers enjoy unlimited lateral and upward mobility. Accordingly, the current laws are structured in a way that impedes foreign nationals to be compensated the same as their U.S. counterparts.

*Question 5.* You state in your testimony that there are provisions in the comprehensive immigration reform bill that would be onerous and more harmful than helpful. Please respond with the specific provisions that concern you and explain what about them is concerning.

Answer. As initially drafted, Caterpillar found the language regarding recruitment, non-displacement and outplacement of H-1B employees problematic.

*Recruitment*—The initial language did not reflect real-world human resources systems currently in use. It would require us to develop a new methodology and documentation system to prove position-by-position results for every job we fill with an H-1B visa worker. On campus recruiting is a good example. When we visit a college, we recruit for many specialized positions at one time. It would be challenging for us to go back and prove why we didn't hire an American.

There is already a safeguard in place with regard to recruitment. As part of the H-1B petition process, we are required to file a Labor Condition Application (LCA) with the Department of Labor (DOL)—establishing that we pay the H-1B employee or recruit wages that are consistent with the market for that occupation in that geographic area. There is no incentive for companies to hire a foreign national if there is a qualified U.S. applicant. When there a qualified U.S. worker applies for a posi-

tion, we hire that applicant. There are simply not enough qualified U.S. workers in STEM fields to meet demand.

*Non-Displacement of American Workers*—It was our understanding the bill initially stated we could not hire an H-1B worker unless we proved we did not displace an American worker somewhere else in the company. The language has since been clarified for us. After receiving clarification on that particular language in the bill, we now understand the bill states we cannot hire an H-1B worker unless we prove we did not displace an American worker in the same job category within the company.

*Outplacement*—The initial language stated we will be limited in using workers from another company if we reduce our workforce in any way. For example, we work with IBM to develop software. If layoffs occurred, we may not be able to continue this work. This type of language could have a significant negative impact on both hiring companies (Caterpillar) and third party companies (IBM in this case).

*Hatch Amendments*—Since the initial bill was drafted, the Judiciary Committee has amended these provisions to soften the language. This addressed most of our concerns and, while not perfect, strikes a reasonable balance to make the language workable for companies like Caterpillar.

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RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. FRANK R. LAUTENBERG TO  
STUART ANDERSON

*Question 1.* We all want to ensure that the U.S. remains a beacon of innovation and growth. That requires striking the right balance between providing immigration opportunities for the best talent—both studying in our universities and abroad—and ensuring that we are not bringing foreign workers to the U.S. in order to reduce labor costs and displace American workers. How do you suggest our immigration policies best strike this balance?

*Question 2.* Some have suggested that allowing visa holders to switch companies without restriction would ensure that these individuals are not taken advantage of and those companies are not displacing U.S. workers in favor of hiring non-Americans at depressed wages. Do you believe that both Americans and visa holders are better off when portability is included in work visas?

*Question 3.* Do you believe that American companies have a responsibility to fill positions with American workers, if possible?

*Question 4.* Last month, the *Wall Street Journal* reported that “Indian IT professionals working in the U.S. are typically paid about 25 percent less than their American counterparts.” How do you respond to the criticism that H-1B employees are paid significantly less than their American counterparts?

*Answer.* The best approach is to maintain a process that allows employers to petition for skilled foreign nationals, sponsor them for green cards, and ensure labor mobility for foreign-born professionals. Current law, while allowing a worker to move to another employer, could be improved by increasing portability for those waiting for employer-sponsored green cards. The wait times can last for many years for those sponsored for green cards. The measures in the Senate bill to increase the annual quota and eliminate the green card backlog will be important to both America and its ability to retain skilled professionals, as well as to many foreign-born individuals and their families.

Companies should hire the best person for the job and should not discriminate. In the vast majority of companies only a small percentage of employees are foreign nationals on visas. There are many reasons why an available and qualified U.S. worker would be hired over a foreign national, including language skill, cultural knowledge, lack of legal difficulty when hiring, and no delays in the hiring process. But sometimes employers find the best person for the job is an individual who was not born in the United States. This is not surprising given that on many U.S. campuses half to two-thirds of the graduate students in key technical fields are foreign nationals who need a visa to work in the United States.

Under the law, it is illegal to pay a foreign national in H-1B status in the same geographic area “significantly less” than a comparable U.S. worker for that job, as the question posits. As noted in my written testimony, several studies have concluded H-1B professionals are paid the same or more than their U.S. counterparts.