

THE BROOKINGS INSTITUTION

FOSTERING GROWTH THROUGH INNOVATION

Washington, D.C.

Tuesday, January 15, 2013

**Welcome and Introduction:**

STROBE TALBOTT  
President  
The Brookings Institution

GLENN HUTCHINS  
Co-Founder, Silver Lake  
Vice Chair, Brookings Board of Trustees

PROVEN STRATEGIES FOR BOLSTERING ADVANCED INDUSTRIES:

**Moderator:**

BRUCE KATZ  
Vice President and Co-Director, Metropolitan Policy  
The Brookings Institution

**Panelists:**

DOMINIC BARTON  
Global Managing Director  
McKinsey & Company

KLAUS KLEINFELD  
Chairman and CEO  
Alcoa

EMILY DeROCCO  
Former President  
Manufacturing Institute

THE HONORABLE GREG FISCHER  
Mayor  
City of Louisville

DEFICIT REFORM: RESOLVING UNCERTAINTY AND PROMOTING INNOVATION:

**Moderator:**

MARTIN BAILY  
Senior Fellow  
The Brookings Institution

**Panelists:**

LEWIS B. KADEN  
Vice Chairman  
Citigroup

MAYA MacGUINEAS  
President  
Committee for a Responsible Federal Budget

ROBERT McDONALD  
Chairman, President, and CEO  
Procter & Gamble

RALPH SCHLOSSTEIN  
President and CEO  
Evercore Partners

IMPROVING GOVERNMENT PERFORMANCE:

**Moderator:**

DARRELL WEST  
Vice President and Director, Governance Studies  
The Brookings Institution

**Panelists:**

ELAINE KAMARCK

Senior Fellow  
The Brookings Institution

PHILIP H. KNIGHT  
Chairman  
Nike, Inc.

ROBERT S. TAUBMAN  
Chairman, President, and CEO  
Taubman Centers

\* \* \* \* \*

## PROCEEDINGS

MR. TALBOTT: Good morning, everybody. I'm Strobe Talbott, and it's my pleasure to welcome you here to the Brookings Institution on a soggy day. It's not too hard to come in from outside on a day like this.

This is the fifth Growth through Innovation forum that we have held here at Brookings. I'll give you a little bit of a background in a minute. It's the third one that we are conducting publicly.

The phrase "growth through innovation" is an important part of the vocabulary here at Brookings. We have what we call four institutional priorities under which we try to cluster all of the work that our more than a hundred scholars do here. Those four priorities are energy and climate, opportunity and well-being, managing global change, and growth through innovation.

This is, I think, exactly the right moment to be having today's event. We're in a period of transition in our national leadership here in the capitol of course. We have a new Treasury secretary, new chief of staff coming in. We'll be having a new Commerce secretary, a Labor secretary. And, of course, the 113<sup>th</sup> Congress is settling in on Capitol Hill.

The forum is going to address the issues of how to reinvigorate our economy, how to strengthen competitiveness, and how to

create jobs. We're going to have three panels -- the first on advancing industry and manufacturing, the second on deficit reform, and the third on improving government performance. The participants here today include Brookings scholars, outside experts, and private sector representatives and leaders. Our discussions will reflect a lot of the research that goes on here at Brookings, and you will be able to find a number of examples of that research outside the Falk auditorium where you came in. I recommend, in particular, the work of our Metropolitan Program on ideas on how to revitalize manufacturing and also the work of our Governance Studies Program on how to make an innovation-based economy.

The Growth through Innovation project is an example of what we're doing increasingly here at Brookings, and that is undertaking both research and public events and outreach that draw from multiple research programs here at the Institution, and we have three of our research programs represented here today. The Growth Through Innovation Project is led inside of Brookings by Darrell West of our Governance Studies Program, Bruce Katz of our Metropolitan Program, and Martin Baily of our Economic Studies Program. The co-chairs of GTI, as we call it, Growth through Innovation, are three Brookings trustees: Glenn Hutchins, Klaus Kleinfeld, and Dominic Barton.

And my final note before turning the program over to Glenn

is to do something quite different than I did for many years, and it shows that there has been technological innovation and we live in a new era. I used to always end my remarks by saying will everybody please turn off their cell phones. I would ask you to turn them on to silent. You can keep them on, on the condition that you use them only to tweet out of this conference. And for those of you who are able to do that -- I'm not yet one of them -- the hash tag is #USinnovation.

So, Glenn -- you know all of that, so come on up here and talk to these folks.

MR. HUTCHINS: I'm sure that in an active widespread civil obedience you're going to do with your technology what you choose, and as someone in the technology business, please go ahead, because I like to make money while I'm talking.

I'd like to thank you, Strobe for having me here today, welcoming all of us to the Brookings Growth Through Innovation forum, and welcome to all of you. We've got a stellar group of panels organized today with some fantastic panelists. I'll get through my remarks very quickly, because I know you've come to hear them not me.

I did want to reflect that our first Growth through Innovation panel was over three years ago. At the time we were really in the depths

of the great recession; the unemployment rate was 10 percent; we'd lost 8.5 million jobs worth. We were pausing to remember that. A lot of us were very -- it was a moment of great national crisis.

Brookings, I think, under Strobe's great leadership, chose to point and lead the way toward the future: How do we grapple with then today's problem in order to create a brighter future. One of things we did was what you're here to witness, to be a part of today, the Growth through Innovation forum. We decided we would examine government policies that would help to unleash private sectorization. We weren't under any illusions that government actually creates jobs or creates innovation but can create the conditions under which those can be fostered, all right, because we view the need for growth on the heels of the great recession as a vital American problem. A huge loss of economic production, we're operating at about \$1 trillion below our potential, unacceptably high unemployment rate, representing vast loss of human potential.

Many people ask, why is growth so important? Why should we focus on more Washington-centric kind of problems? And it's really kind of a math problem. People don't understand the vital difference of the compounding of interest over the course of a very long time period in economic growth. One percent difference in economic growth; two to three percent represents a massive, massive outcome difference over

time.

I have just a few examples for you. If, for instance, between the period from the end of the Civil War to 1990, the U.S. economy had grown one percentage point less, our economy would have been the same size in 1990 as that of Mexico, that one-percent difference over that century creating a massive outcome difference.

Looking forward 10 years from now if we grow at two percent rather than three percent potential, we will have had an additional one trillion loss of outcome, which is about \$10,000 per household in this economy. That's a very, very big deal. But growth alone is also not important; it's also growth that is inclusive, that is broadly shared. And that's one of the things that Brookings is devoted to. We have a project called the Hamilton Project, which is focus-centered on that issue.

If over the course of the last 30 years, roughly 35 years, the average income in the United States household had grown at the same rate as the U.S. economy, .6 percent actual for the household growth versus two percent for the economy, the per capital GEP would be 50 percent higher than it is today, and it would be \$90,000 versus \$60,000. If you translate that into kind of what happens at the household American economy, that is vital, and what we do in Washington is really, really important.

I just came back recently from a trip to Brazil. I don't want to spend a lot of time on that, but Brazil essentially has gone to a potential zero percent growth rate. A lot of that has to do with the kinds of things that we've experienced from Washington that had been imposed in Brazil in an economy that is less resilient than ours. Fiscal uncertainty, slightly higher taxes, slightly more regulation, slightly more cost of labor, and all that has caused the economy in Brazil to go from an economic growth of potentially zero percent growth rate.

Now, we have an ability to withstand more of that in the United States than they do, but it's the same effect. Government can't necessarily create economic growth, but it can create the conditions under which the economy grows or create the burdens under which an economy struggles. And we need to understand that that's vitally important.

So, today you look where we are and you can see that the economy has been in recovery. Household net worth has recovered almost pre-recession levels. The economy is almost at pre-recession levels. We've added 4.5 million jobs. That still means we have four to go to get back to pre-recession levels. Unemployment rate has dropped to 7.8 percent, but it's not enough. Households have begun to restore their balance sheets. Housing sector's finally started to recover and contribute to economic growth. We're in the process of a slow, steady recovery.

The problems is that at about two percent it's probably not enough to reduce unemployment measurably from here, and getting above two percent is absolutely vital. So, we're going to talk about that today. And we're very, very hopeful that we can do that, because we're creating conditions right now to increase economic growth in the private sector.

Today, however, the big problem is the political failure in this town associated with the inability to solve our government debt problems. And now while our government debt is not a problem today, as trajectory leads us over the course of not that long of a time period, a decade, to levels that will further imperil our economic growth, we get to levels of debt that's projected or based on today's operating of the government. History shows that those countries that have experienced that level of debt grow another one percent less than they would have otherwise.

So, you can see a way to think about it is we're on the cusp of having an economy that can contribute the above two percent growth necessary to generate reductions in unemployment. We're also on the cusp of having a debt problem that can take that growth away and get us back to the sub-two percent growth that will cause unemployment to be very sticky for a very long period of time. That is a very, very big problem. It's a problem that we need to -- and that doesn't include the damage to

consumer confidence, the decisions that are taken as a result of those uncertainties in the corporate boardrooms and the spectrum of employment and capital spending and all those sorts of things that layer on top of that. So, that is a very, very big problem that we will next turn to focus on the resources of growth through innovation in coming years.

But, as we move to the panel today, one of the things that Bruce Katz, who's leading this next panel, has taught me is that while national governments can build up deficits and wallow in dysfunction, states and cities cannot and that the hope in many -- like (inaudible) the states of laboratories of the nation, the hope that we have for important parts of our future is that people at the state and local level continue to soldier on and do what's necessary where the rubber meets their roads to create the conditions for economic growth, innovation, and projects like advanced manufacturing that can generate the types of jobs that can get those per-capita median incomes up and generate the kind of growth that is shared and inclusive.

So, today we've got a great panel managed by Bruce. He'll introduce the panelists. The title of the panel is Proven Strategies for Bolstering Advanced Industries.

Bruce, it's all yours. Take it away.

MR. KATZ: Good morning, everyone, and thank you all for coming out on a rainy day, and hello to everyone watching on the Webcast and ultimately C-SPAN. I'm Bruce Katz. I'm Vice President of the Brookings Institution, Director of the Metropolitan Policy Program. I want to reiterate Strobe's reminder to Tweet under the hashtag #USInnovation, and I just want to thank Glenn for the support and the intellectual guidance for growth innovation over these years.

For those of you who have not picked up the three Metropolitan Policy Program papers on advanced manufacturing or linked to them on the Web, please do so, and we will describe those as we go forward with this panel.

Let me start just by quickly introducing the panel, then I'll set some context, and then we'll get into the conversation. To my immediate left, Klaus Kleinfeld, the CEO of Alcoa, I think well known to everyone in this room and watching the Web, also a Trustee of the Brookings Institution.

Dominic Barton, Global Managing Director of McKinsey, also a Trustee of the Brookings Institution, and someone that we've been partnering with at the Metropolitan Policy Program on moving advanced industry initiatives in Colorado, in Tennessee.

Emily DeRocco runs her own firm called E3, which is linking up economic development and skills training and workforce. Prior to that she was at the Manufacturing Institute, and prior to that she played senior roles in the Department of Labor.

And finally, the Mayor of the great city of Louisville, Greg Fischer, who actually has a background in manufacturing. But very interestingly, upon taking office, has been working with the Mayor of Lexington, Kentucky, on a dual metro effort, a regional effort, on advanced manufacturing.

Let me just set some context for the papers we put out today -- yesterday -- and for the conversation today. First, a very quick reality check: We still think about manufacturing in the United States as yesterday's economy as opposed to the vanguard of innovation in our economy: 9 percent of the jobs, 11 percent of the GDP, 35 percent of our engineers, 68 percent of private sector R&D, 90 percent of our patents -- we may be the only mature economy to somehow decouple production and innovation. Trust me, the Germans aren't doing it, the Japanese are not doing it, and the Chinese are not doing it.

Some bad news: Glenn talked about the Great Recession, a loss of 8.5 million jobs. Manufacturing led the loss -- 2.3 million manufacturing jobs lost during the recession -- more than construction,

more than business and professional services, more than trade and transportation. We think about the Great Recession as a housing recession, a recession of the finance sector. Manufacturing took the brunt of it. In the last decade, we lost 6 million manufacturing jobs in the United States. And once you lose those jobs, trust me, engineering, product development, technology skills, they leave the country.

Third point is some good news, right? Since the end of the recession, manufacturing has gained back about 526,000 jobs, right? Not enough to make up the loss, but some significant change. And there are trends out there right now -- the rise of wages in China, the shale gas revolution, the beginning of reshoring of production facilities, some disruptive technology, 3D imaging, digital fabrication -- that gives us the sense that this is not a blip, but the beginning of something big.

So here's the question that we have for ourselves and for the country, and these are essentially the topics of yesterday's papers and I think will be the topic of some of our conversation today. How do we begin to drive collaboration between our major companies, our universities, a series of specialized firms, so we can crack the code on product and process innovation, right, as they do in Germany? So we've recommended a series of advanced industry innovation hubs, not very

expensive, right, building on some modest beginnings of the Department of Commerce and Department of Energy.

How do we build a supply of skilled workers? Yesterday we recommended a Race to the Shop. Remember Race to the Top? Race to the Shop. I failed shop, but I know there's quite a few people out there who make things. How do we have a Race to the Shop so we can challenge states and cities to orient their skills workers to their distinctive manufacturing clusters, whether it's automotive in Louisville and Detroit, whether it's aerospace in Wichita and Seattle, whether computer and electronic products in Portland and San Jose?

And then last piece is how do we grow a supply of advanced engineers in the United States by creating a network of manufacturing universities? We've done it with land grants starting in the 1860s. This is the challenge of this generation, this century, this era. That's our final recommendation.

So we can get our act together in this country. And from our perspective at the Metro Program, because we see all this energy bubbling up from cities and metros and states, we can realize the full potential of this advanced manufacturing moment. But we do need to make some bets. We do need to have some smart public policies whether

in this town -- suspend disbelief -- or in the laboratories of democracy and centers of innovation -- our states, our cities, and metropolitan areas.

So with that context setting, let me start with Klaus. Do you think we have a manufacturing moment? I mean what's fueling it and what could hold it back?

MR. KLEINFELD: I absolutely do think, and then to the very effect that we are sitting here and debating it and the whole facts that you gave us show the debate is in full swing. And it's good that it is in full swing because there are so many factors that are changing. But let's get a lay of the land because I think you mentioned a couple of things, and I'd like to add a few.

First, job growth is back in manufacturing; 500,000 you said after basically the start of the recession. That's good, right?

Secondly, I mean basically you see the automotive industry as a large player in manufacturing. Who would have thought, I mean, after the debacle that we saw in 2008, 2009? I mean the projection for this year is it's most likely going to go back to pre-recession levels. It's a strong engine. It's a strong engine for growth.

And finally it's become innovative, and that's a second point. Why is that so? There's a big change there because of some smart government regulation. We see it directly affecting Alcoa. The thing

called CAFE regulation, corporate average fuel efficiency, what basically means finally we've decided to say the cars that we have here have to obey to certain efficiency rules. That drives suddenly a whole host of innovation thoughts. Light weighting comes into the game, right? So that's a new foundation, smart, smart, legislation.

In addition to smart legislation as a new foundation, you mentioned that, but it's a big one, is the change on the energy side where the U.S. has been given some gift, I would say, that is so big and it has so many implications that we are just starting to understand what that means. Because we're suddenly seeing already happening today a decoupling between gas, natural gas, and oil happening here. What used to be very highly coupled, today it's decoupled and it's cheap. And it's going to be cheap for a very, very long time if we don't screw it up, which I don't think we will.

So this is a fantastic opportunity for many manufacturing industries, and that alone -- I'll give you three examples directly out of the Alcoa area. We are currently putting \$300 million investment into Davenport to build an automotive expansion. And the interesting thing is we're already thinking about Phase 2 of the expansion because the capacity, even though it's not yet on line, is sold out.

We are building another part of the expansion also off capacity for a new alloy that we've developed for the aerospace industry, and we're putting that into Lafayette. And aerospace, by the way, another fantastic industry where the U.S. continues to have a very, very strong position, and it's a nice market and has a lot of manufacturing implications in there.

And a place that we used to treat as a swing plant, which is down in Texas, at Point Comfort, is a big refinery. The only refinery we have here in the U.S. We used to treat it as a swing plant because energy costs here in the U.S. were outrageously high. Guess what? This is now one of our lowest cost refineries. So we're bringing it back up to play a full load--play a full load role.

So that's all the good things that's happening. But then what is the risk or opportunity? I mean if you look at the numbers in the next years until 2018, 2.7 million manufacturing jobs -- of people that are in manufacturing -- will retire. So we have and you can see it, I see it as an opportunity. I mean you have a lot of people with a lot of experience that are leaving the workforce. At the same time currently we have about 300,000 jobs open in the manufacturing space here in the U.S. alone. So the whole -- and then the question is what is the new job going to look like, and pretty much everybody projects -- and I would agree with that -- that

about 40 percent and even more of those jobs in the future in manufacturing will require a postsecondary education.

So that gets us straight into the other discussion is how do we deal with the educational side, and I don't want to go into that. We'll probably do it in the second round. Then you come to the question of how do you -- how do we make it more flexible? Currently we -- I don't know how it happened, but we started with a history in the U.S. that was very flexible in education. And where we are today is everybody basically is back to the Ford model. I mean you have kindergarten to 12th, then you go to college, and if you haven't achieved that you're really worthless. So that's not working. I mean I think we have to go back to our origin and say, let's make it more flexible and let's also bring the vocational element in.

You asked early on where are the opportunities for cooperation? I think that is where the most natural opportunity is for cooperation; in fact, it's happening already. We have a number of programs underway very successfully because you suffer from the lack of getting good people if you don't take it into your own hands. There's a big challenge there, and that is the challenge that most people today that go through an education system don't even understand what a manufacturing job looks like. The image that they have of a manufacturing job is that you

come in early in the morning with a white shirt, and you leave in the evening with a dirty shirt, right? That's so far from reality. And your hands are oily and your fingernails look dirty. That's so far from the reality today that we've got to make manufacturing sexy again. And I think it starts with bringing people into our plants, having them look at what's really going on there, how high tech these things are, so that young people get a feel for it. And there are a couple of things that we're doing, and I don't want to --

MR. KATZ: In the first round --

MR. BARTON: Just one quick thing. I detect a slight German accent here.

MR. KATZ: Just two seconds on the German model of apprenticeship, if you can, and then we'll move on to Dom.

MR. KLEINFELD: The German model of apprenticeship, well the model goes like this. I mean you basically -- it's societally accepted for as long as I can think that a manufacturing job has a high esteem in society. I think that's what it starts with. And the education, the vocational education, and the trainers are seen with an equally strong social respect. That's really important. So there's not a stigma. In fact, there's a counter of a stigma.

If you have a kid that decides at the age of 14 or so that instead of going to 12 to leave after 9th grade and then go into a

vocational training job, the way this works is you basically start working. You work most of the time during the year and then you have courses at a vocational school. These courses all are extremely practically related to the job that you get educated in. And then you -- at the end you have a nationally recognized test. So if you pass this test, no matter where you want to go, you have a degree. This degree is I would say very, very highly regarded. The big advantage it has -- and I've seen that in families and friends, I don't know how it is with your kids. There are kids, obviously ours are excluded, that don't have that much of a temptation to learn math. And particularly when they get into the age of 13 to 15 or so because suddenly hormones creep up and they have other interests and then math kind of is not the most attractive thing to learn in the afternoon. The dynamics change tremendously -- and they regret it later in life. That's the sad thing.

The dynamics change tremendously when you tell that kid that the car that you just got from the junk yard that you gave the kid and said well, do with the car whatever you want, repair it, and you can pick up some good looking girl. But to tune that motor you need to know how to handle a computer because these days I mean tuning a motor you have to understand how to wire certain things. To understand that you need to understand the sine function and that's where applied math suddenly

comes in. I tell you, this kid is going to learn that type of applied math because that means something very different to that individual than what it would have meant if you would have taught that in a classroom environment which is just a discussion. So that's very important dynamics there.

MR. KATZ: So game changer -- shale gas, smart regulation, barriers, culture, skill -- I won't talk about the hormones. Dom, McKinsey is really sort of at the cutting edge of looking at not only global manufacturing trends, but also trends in what you're describing as advanced industry and this really interesting interplay of production innovation. How do you see the landscape?

MR. BARTON: Well, I think very much as what you said at the beginning and the context of what Klaus is saying. I think that there is a shift going on. I think maybe we should start by saying that too many of us lump manufacturing into one big category, and I think there are at least five categories. I won't bore you with our own view of it, but I think at the tip of it is this advanced manufacturing, which is more of the -- it's using big data; it's advanced materials; it's nanotechnology; it's the combination of many of the things, the innovation, the capabilities that this country is superbly good at; the cross-functional capabilities. And as you said, it only is roughly around 11 to 12 percent of GDP, but it's an extremely important

flywheel. It accounts for, we think, a third of U.S. productivity growth. So that small, that 12 percent of GDP is accounting for a third of our productivity growth. And if we go back to what Glenn said at the beginning, the difference of a 1 percent shift, this is a very big deal for us to be able to get right.

The other thing I would say is that this advanced manufacturing sector has actually been doing quite well. It was doing obviously very well before the Great Recession at about 2.6 percent growth. It has continued to do that in spite of all of the challenges and changes that's going on, and we think that there is an opportunity for it to grow at a much more significant rate.

And this is where doing actual work with Brookings, the work in Colorado, the work that's being done in Tennessee, the work that's being done in cities in Colorado with the space program. The areas where I think we could really advance advanced industries is by doing some of the things that the country does very well. If you look at the Silicon Valley, if you look at what's happening in Austin and Texas, if you look at what's happening in Cambridge; everyone else in the world tries to replicate these, but it's very difficult to do. I could reel off a lot -- Russia's trying to do it, Malaysia tries to do it, China's trying to do it. There is something that we have and it's in the -- I don't know, it's in the air, I don't know

where it is, but it's a collaboration. And I think if you look at what's happening in Colorado with the space group, we've got 370 companies. They're not all in one sector; they're multiple sectors because health care companies can learn a lot from space manufacturing companies. The video technology that's being used, the interface that's done in the space program is very applicable to -- if you're a young doctor doing diagnostics and so forth and medical device companies, you want to be together.

And the role that government can play, especially state governors and mayors, I think, play a really important role in getting these clusters together. And I think that we see huge potential.

The last thing I'd just say is that where there's momentum -- you know, we lost a lot of jobs and we lost a lot of jobs in the broad sector of manufacturing overseas. We are seeing more reshoring. I mean there is -- I could bore you with quite a long list of companies that have actually been coming back to the U.S., particularly on the advanced manufacturing. Just to rattle off a few, G.E. with their geosprings water heater coming to Kentucky; Nissan for the first time is doing one of their luxury vehicles, the Infinity SUV, in Tennessee; Apple is actually bringing some of the Mac production line back here; Emerson is bringing a lot back from Asia to Mexico and here; and part of it is also the shale gas issue.

You know, labor cost is only about 3 to 4 percent of the cost, right? When you talk about energy costs coming down the way they have, just in the last 6 years natural gas prices have dropped by about 67 percent. That is a far bigger driver -- and, by the way, wage costs have been going up -- so we've got some momentum. Emerson, BMW, Electrolux has built a -- this may seem like a strange thing to put in the advanced industries -- a cooking center. But there's a hell of a lot of technology in cooking that actually goes on, again with data, the various different materials --

MR. KATZ: You're not talking about my household.

MR. BARTON: Even Wham-O, you know, the guys that make Frisbees and hula hoops, they brought back that. So there's more technology, believe it or not, going into play items and so forth. So there's actually a lot going on. I think what we need to do is sort of take a competitive advantage we have around collaboration and scale it. And then I think that's going to create more business opportunities, and it's going to create this productivity effect, the flywheel effect, that we can get.

MR. KATZ: It strikes me, though, that what you're describing, though, is an economy that we just don't quite understand. I was looking at two statistics yesterday. Silicon Valley, San Jose, remember 9 percent of Americans are employed in manufacturing; 17

percent in San Jose. We tend to think of it as Facebook and social media, a big manufacturing power house. Then you look at Portland. I don't know what people think of Portland, Oregon, but I mean obviously it's a sustainable metropolis of the world, but about 20 percent of their gross metropolitan product is in production compared to 12 percent for the country as a whole. It sounds like we don't even understand our own economy.

MR. BARTON: We don't. The other thing I'd just say, just building a bit off what Klaus was saying about, say, making manufacturing sexy. Machinists, right? We should be celebrating the hell out of our machinists union. There's 110,000. I worry about the aging of that group. But you think about what's being done in aerospace and the capabilities and the training we need. This is a -- these are superstars, right? You think of a machinist as again, it's -- I love your white shirt, black shirt -- these people are highly skilled, the technology.

The other one I'd just say is AG food, which I happen to think is a big industry. If you go to Brazil right now and you look at the farming that's going on, the technology required. They're using drones because the farms are so big that you can't -- there's no roads -- you have -- so that's a big export source for what we do.

So every industry needs this advanced manufacturing. And, again, I think we have to somehow get it to students to see this, that this is -- it's a very prestigious role to be played and a lot of opportunity and so forth. But we have -- we're kind of in a --

MR. KLEINFELD: A lot of that requires robotics. That's the other thing where we have a leg up because let's face it. I mean we are reaching, for instance, when we go to our aerospace, we are number one when it comes to aerospace blades manufacturing, right? We are reaching levels of precision that are impossible to reach through manual work. You need the finest technology and the best computers to do it and that's what the machinists do. So the job is super clean, the person they see operates a number of numeric controlled machines.

That's a big advantage also on bringing jobs back because -- but it's fewer jobs and very, very different skills, very different skills.

MR. KATZ: Emily, how do you think about the cultural barriers, the continued stigma, and then some very big numbers that Klaus was putting out there about the kind of skilled workforce that we need to build? And we could rattle off numbers about educational deficiency and the fact that we're not really investing sufficient in STEM. How do we overcome this?

MS. DeROCCO: Well, it just warms my heart. I do revere machinists, and I've spent most of the last part of my career helping to find things that work not only for our manufacturing employers, but for workers that, quite frankly, are very attuned to the hard skills needed in the manufacturing economy.

I would venture to say in agreement with both our prior panelists that it is manufacturing that we don't understand today, and that does require a cultural shift. But in terms of our education and workforce system approach to supporting the growth and sustainability of manufacturing in the U.S., we actually do know what works, and we're just not doing it everywhere and in all cases.

There isn't a manufacturing discussion that occurs in this country or, I think, globally where the development of talent doesn't become a huge priority issue for all of us to address, and I'm really pleased about this. Quite frankly, with the U.S. falling behind in its educational attainment and in its understanding of and promotion of what you and I might call vocational education, nowhere is reform needed more than in support of our U.S. manufacturing capacity.

So first, I do want to say kudos to Brookings for the Race to the Shop! It points to many of the shortcomings that we need to address even if there is not such a race. But the cultural and image issues that

Klaus raised actually I guess I'd have to now say we probably need to change the shop title because manufacturing is so very, very different today. But thank you for that paper.

So what do we know about what works? I think in large measure, these points are represented on this panel today. Number one, we know that our focus in developing an educated and skilled workforce for manufacturers needs to be within the regional economy, not against political jurisdictions where all of our policy systems and investments from the federal government now reside. It is in these regional economies where clusters are developing and manufacturing can become the anchor or is now the anchor where we can really stabilize and grow those current industries. And I think even more importantly, create the talent asset that in many instances is the number one asset to attract new manufacturers who are either reshoring and bringing jobs back and/or moving from new technologies and innovation to production capacity within regional economies. So remaking federalism around the policies and investment in workforce development is absolutely critical to supporting our regional economies that will be the anchors of our manufacturing growth.

Number two, and I'm just going to say these in a very different way because these two gentlemen actually touched on some really important points. We need much better defining information about

the jobs, occupations, and skills in manufacturing today. It's just a travesty, quite frankly, what we work with. In our national database is related to occupations and skills, many of the jobs, careers, occupations in advanced manufacturing today aren't even in there. They're not counted. They become service jobs in national databases that drive policies and investments. And we just can't rely on -- forgive me -- Bureau of Labor Statistics' retrospective data about what kinds of jobs and careers are in manufacturing today. We need the power of that national database, but fueled by the transactional real-time data coming from organizations like Manpower, for example, coupled again with industry-driven input to the kinds of jobs and skill and competency requirements being created and needed today and into the future in manufacturing. This is a big data task that is going to impact our success in education and skill development.

MR. KATZ: This is "Moneyball" for manufacturing.

MS. DeROCCO: It is "Moneyball" -- exactly. We just had that conversation yesterday. So, as we gain better knowledge then about those jobs and careers, then we need -- I hesitate to use this word -- but we need that campaign. Young people today still look to their parents as their major influencer in what educational pathways and careers they're going to pursue, and our parents today don't have a clue what the opportunities in manufacturing are. Most of them will say "We don't

manufacture anything anymore,” and they will not define the very exciting fields of robotics and the high-end machining and the high-end applications joining welding as others do, the materials joining. Now, they won’t define those jobs into a young person’s future, neither will educators. So an informational campaign based on real jobs and career opportunities with real payout because manufacturing continues to be the highest paying, wage and benefit combined, industry broadly, nationally, than any other sector.

The other big ticket item, which we have successfully implemented in manufacturing, but not completely, not comprehensively in the U.S., we’re at the frontend of this, and it is applicable in our education and workforce development reform efforts, and quite frankly, in other sectors as well. It really gets to addressing your question to Klaus about the German apprenticeship model. We can’t replicate, nor should we replicate, that model exactly in the U.S. But what we do need to do is end the false dichotomy that our federal policies and investments have created between educational pathways and workforce development. That’s absolutely bizarre. We can and have built integrated educational pathways from secondary through postsecondary education that allow for alternative paths to high school graduation and the pursuit of postsecondary skills development and credentials that, in fact, relate to

over 60 percent of the jobs in our economy that require postsecondary education, but not necessarily a baccalaureate or graduate degree. So in manufacturing while I was with the Institute, we developed a system of nationally portable industry-recognized credentials in machining, welding, manufacturing, and logistics processes, built on a foundation, an academic foundation, of applied math and reading, translated that to the credentials and the curriculum which could and, in fact, were integrated into secondary and community college programs of study, leading to stackable credentials with real labor market value along the way to an associate or baccalaureate degree and as a feeder system to our engineering technology and engineering graduates. Progressive companies like Alcoa -- I hope you knew this, Klaus -- supported the integration of those certifications in the community colleges within their footprint, moving to the pipeline of workers, skilled workers, that they would need today and into the future. When I left the Institute, we were active in 36 states; that's in a four-year period. It shows you we can reform the education system by integrating from the needs of the employers.

And then very quickly the other things we know that work that we need more desperately in manufacturing is more business-driven partnerships with higher education. We need the clinical experience

opportunities that you get in health care as part of your learning in manufacturing, and internships are an important part of this. Jeff Immelt and I actually illustrated this in the Right Skills Now Initiative around CNC machinists in the Minneapolis area. You can get to an integrated curriculum, workers with credentials that are valued by manufacturers, coupled with a paid internship which is so helpful, to working learners today and ultimately a direct connection to the employment opportunity. So we've done all this in the U.S., we just haven't done it broadly. And we have not changed the federal systems, the federal policies, and the federal investments that will allow us to go regionally, have the right data, integrate educational pathways to credentials that have value in our labor market, and engage business as the driver to make these things happen.

So last, but not least, I would say this has huge impact federally and in our new federalism definition because many of the entitlement or benefit programs that are going to be the subject of great debate are actually the intake operations for an integrated educational workforce system that leads to employment if we do this right. Every unemployed worker in the UI system, every TANF recipient in the welfare system, all of our disconnected youth in youth development programs, if we can link them early with the right information to a pathway that leads to a credential and doesn't cost \$60,000 a year for a baccalaureate degree,

but instead is right skills now for skills that lead to employment and a good salary, we're going to be able to address in a very positive way the entitlement reform efforts as well.

MR. KATZ: Thanks, Emily, and I think that's just a great recitation of the fact that we know what to do.

MS. DeROCCO: We know what to do.

MR. KATZ: So now we get to the person who's actually in charge. He ran to be Mayor of Louisville. It's the 16th largest city in the United States. No one told him that in our new federalism the whole pyramid has been flipped. You're in charge. You're a pragmatic. You're affirmative. You're nonpartisan. You get stuff done. And then you come to Washington and --

Describe what you're doing in Louisville with Lexington, with your business community, with your university community, with your skills and education system, because I think it really is a model being built for the country.

MAYOR FISCHER: Thank you. So I happen to be a business guy and an entrepreneur that's mayor right now, so I speak more as a businessperson. I cofounded a manufacturing company in 1980, and we grew it into a nice international manufacturing firm. So I've been able

to kind of see it on both sides and really see this interesting transition as well.

So we've talked a lot this morning already about what I would say the hard skills, the credentials that are involved, but universally whether it's an assembly line worker or an engineer, there's as much emphasis on the soft skills that are required to be a world-class player as well as an individual no matter where you are. And by soft skills, I mean just the ability on one side to show up regularly. Two, are you a problem solver? Three, are you a team player? Can you lead? Can you follow? And it's these types of skills that I really see in high-performance companies that have higher productivity than their competitors because the teams know how to get together, identify the problems whether they're big innovations problems or just small lean problems they need to work through, and they can innovate more rapidly than their competitors.

So these are skills that we can teach, starting in grade school and high school, basic things like data collection and analysis and how to be members of a team. So I don't want us to forget while we go through all this technical stuff that at the end it's people working together, and it's the teams that are really getting things done.

We have two great multinationals in Louisville that kind of define our manufacturing base and that's Ford Motor Company with two

plants -- one manufactures the Escape, the other is the Kentucky truck plant -- and then General Electric Appliances as well. So those are large employers. They invested over a billion dollars two years ago in the modernization of their plants; as in GE's case, reshoring business -- two product lines from Mexico, one from China -- after being out of intensely U.S.-dedicated manufacturing for 10 or 15 years. And so they realized it's better to have the whole supply chain closer together and particularly to have R&D closer together, bring back the products to America, and now they're in the process of saying what did we lose in that 10- or 15-year period?

As has been mentioned up here, a lot of the manufacturing workforce is aging. One of the rock star positions in a manufacturing plant would be an industrial maintenance technician. These guys -- and they're usually guys -- they can fix anything. Whether it's a hammer or a computer, they can fix anything. Very highly skilled and absolutely necessary to keep manufacturing plants running. This was lost a little bit when America offshored manufacturing and so those skills absolutely require the kind of meat and potatoes of keeping factories running.

So the aging workforce is a challenge as well because we've talked about how manufacturing does not have the cultural attraction that it should have, and we need to get it back so that that young hotshot in

high school is saying, "I want to be an industrial technician. That's a really cool career path. I can make \$80,000 to \$100,000 a year, make a good living off that as well." So we're in transition of that.

So solution wise, we start with some high schools that have magnet programs around manufacturing. Our junior and technical colleges obviously have everything from a certificate to full degrees that can be focused on manufacturing as well.

And I want to emphasize -- Emily talked about these stackable credentials that are out there already, but are not being taken advantage of by manufacturing in the U.S. to the degree that they should. And I don't know if it's because people want to have "we didn't invent it in our company so we can't use it" syndrome, but these stackable credentials are a fantastic way to prescreen when you're hiring people. And there are a lot of people that want jobs. When GE was hiring 1,000 new people, 12,000 people showed up for those jobs. Now of those 12,000, probably about a quarter of them were eligible, were qualified, for the jobs, which is a whole other commentary about this lost massive wave of tens of millions of people that we have that don't have the skills in our country right now to compete in a global society. So the stackable credentials, I think, are something we really need to focus on.

That leads to another area that I think as a country we need to figure out because we're trying to figure out independently locally, and that is what is the power of a workforce intermediary in today's world that has so much more data -- we're calling it big data right now. So we can go out now in Louisville and scrape all the job databases and come back with precision and say well, there's 800 sales openings this week in the community, there's 400 coder openings, there's 600 nursing assistant openings. We didn't have that capability just a couple of years ago. So what does that mean, then, for the universities, the technical colleges? Are they nimble enough to respond to the needs of this workforce that's changing ever faster in this rapidly changing world that we're living in?

So that's a really interesting process we're in the middle of right now. As I talked to my colleagues at the U.S. Conference of Mayors, this is a national problem. It's not like just we have this in Louisville. And so we really haven't figured out how to quite do this yet. But it does require a business partnership, and I'll be frank. As a business guy that now just happens to be mayor, businesses are busy. And if government can't respond efficiently and quickly in a way where they've got their act together, guess what? We've just got to move on and do our own things.

So we talk about how government can enable and there is absolutely a critical role there, but it has to move at the speed of business

for it to be relevant. And, unfortunately, for bureaucracies, the speed of business and the speed of the world is ever faster right now. So how do we catch up and break through all of that?

And last point, we just talked about the culture. Number one is embracing the fact that if we want to compete at a manufacturing level, global levels of quality, productivity, safety, must be givens. Then how do we get that done with this global wage structure that's out there and result in good, middle-class jobs for American citizens? This is something that I'm very concerned about. When we see a kind of erosion of the middle class over the last decade or two, it parallels pretty closely with the erosion of manufacturing in the country as well. But what's changed since the offshoring is this global wage sector. So how do we bring the manufacturing jobs back that result in middle-class American wages? Because one of the reasons why manufacturing is growing back in America is a two-tiered wage system where the jobs before used to be \$20 to \$30 an hour jobs; now they're \$15 an hour jobs and so a cut to two-income families, et cetera. So this is a big issue, I think, for our country because we have to have a healthy middle class to have a healthy country. And we've got to figure that out while we have this manufacturing renaissance in the country.

MR. KATZ: So just trying to summarize what I'm hearing here and then we can open up for some questions. I mean if I had a ledger, on one side of the ledger this is the positive side, which I still don't think is completely understood in this town for sure, but even throughout the country. You've got some of the smart rules that are coming out of the federal government, frankly, around auto or some other sectors that are fueling innovation, so to speak. We've got the best network of advanced research institutions in the world. We still have to work on commercialization of innovation, but we can crack that code. We've got the natural gas gift and the move toward energy independence. We seem to know what works on skills that we haven't quite scaled it up yet. We do have some smart proposals, I think, coming out of the Obama Administration that would sort of move this along.

On the other side of the ledger, culture. When you look at popular media, you still basically see the repetition of the old stigma. And I would put on the other side of the ledger some of these really worrisome issues about some of the wage trends.

So in theory what you'd want is you'd want a national campaign here, right? I mean you'd really want the federal government to basically seize the moment, carpe diem, let's move ahead. If we don't have that, how do people perceive the next 3 or 5 years? Let's say we get

seven states, ten states. We get dozens of mayors and county leaders to do what matters with their business leaders, with their university leaders, with the skills. Can we have a true renaissance lacking a center? I mean how do you think this plays out?

MAYOR FISCHER: I absolutely think so because look, the action is at the local level. People aren't waiting around for Washington, D.C., to figure things out. I try to sneak into town and get out of here as fast as I can.

The other thing in that plus and minus is to talk about regionalism. In our case, Louisville, the number one city in Kentucky, about a million and a half metro population, we teamed up with Lexington. So combined -- they're about an hour away from us, it's our number two city, about two and a half million people -- we said let's figure out how to make more pie together rather than steal pie from each other. Our universities are collaborating. Our big companies are collaborating with each other. So we can figure out on a regional scale how do we improve workforce readiness? What's the innovation cluster that we need? How can we increase our exports, et cetera? So there is so much to be done at the local level. There's a lot of work to be done, and I think regionalism between the cities is a big part of that.

MR. KATZ: Right. Emily?

MS. DeROCCO: Yeah, I guess I'd make three points. One, a national campaign, yeah, but I'm with the Mayor. It's not as much about what is said from Washington as what we free up the regional economic leaders to do.

So that gets to if we can't -- we don't seem to be able to positively legislate these days. Can we just get waiver authority to waive the restrictions that we have imposed on our regional economic leaders and, quite frankly, on our governors; and then give them an opportunity to respond, as they will because it is their constituents who need those jobs and that's primarily how they're elected, so they're going to want to attract businesses in.

And then the last point is what the federal government should focus on is the underlying business climate for manufacturers. I'd be remiss if I didn't say, representing manufacturers for 5 years, that the corporate tax rate and the cost, sometimes unknown the cost by the time they're passed of our regulatory structure, still need to be dealt with, again freeing up the governors and mayors to create the best business climate possible for manufacturing jobs.

And finally -- there's always one more, isn't there? I think we have a huge failing in our education system. Yes, it is world class, but the land grant colleges and universities have lost sight of their Morrill Act

vision. They're still operating on the original one, and it's all about how they can change. Our K-12 system is producing graduates where one of our primary manufacturers in the U.S. told me just a year ago 54 percent of the people who walk in his door can't read the employment application to fill it out. So hard skills aside, our basic academic foundation is floundering. We've got to address those, and there's a role for the federal government. Otherwise, let's waive what we can and let the state and locals take it.

MR. KATZ: Got it. Klaus?

MR. KLEINFELD: Yeah, I'm a big fan of the American philosopher, Michael Jackson, who once said if you want to have change, look at the man in the mirror, right?

MR. KATZ: I was thinking of another song, but anyway we'll talk later.

MR. KLEINFELD: So because there's a lot of good stuff happening and if you don't put your money where your mouth is and the word's going to spread. I mean I'll give you a few examples. This summer I went over to Whitehall, Michigan, and visited. We have a big facility there. And here I run into this group of young girls. It's summertime. They are on vacation. So I'm asking what are they doing here? They're working. They're doing something. And they say oh, we

have a program here with the local school where we select the best younger women and we give them an opportunity for two weeks to do kind of a guided internship. And then I say oh, that's interesting. So why are you doing that? Because they have no idea what's going on here. They only see the hall from the outside of the glass facility. They have no idea what's going on. Then the lady who runs the program tells me you know what? You wouldn't believe how many of those girls, because we track them, then decide -- I think this is 9th grade -- then they decide to learn more about math and they go into a STEM path in the college. It's those deciding moments, those deciding moments. So that's one thing.

We have programs locally here in the U.S. around in many, many places where we cooperate with the community colleges to help them build their respective curriculum in a way that it comes with the opportunity if you do that, you get a job. And we offer it to our own employees as an upgrade, and we pay for it. And we give them the time. There are thousands of things. I encourage everyone who runs our facilities to do a family day a year. And the reason why I think so, multiple reasons, because in my view it's the best way to motivate the family, bring them back in, but also to change the way people see what's going on. It's a mystery when you stand outside. There's a fence or something going on there and something comes out there. But what happens behind there

people don't understand. Once it's introduced to you by your own family member, there's an emotion attached to it. You suddenly see what great things are going on there.

So I think that level is essential. You can do whatever campaign you want to do; if that level doesn't happen, nothing's going to happen. That's where the mayors come in, and I think they get it instantaneously. If we can get support also from a national level, starting to stir more of a national debate, this event, I think, is very important for that. Understanding the importance of shale gas, this is gigantic, gigantic, what we have there.

It's gigantic also when you talk about advanced manufacturing, Dominic, what you said. Because most people when they think about manufacturing, they think about labor costs. That is so old school. That's so not true anymore. You know, the labor costs in most cases are going down and down and down and down. It's much more about the level of sophistication in which you can do that, the rate of innovation, the proximity to your R&D center, the opportunity to your most advanced customers. So these factors are all much, much more critical than the labor costs per unit.

MS. DeROCCO: First, could I -- just to supplement one little point that Klaus made, the National Academy of Sciences shortly will be

issuing a report on the nation's energy workforce. And the 7 or 8 sectors across energy are experiencing much higher levels of retirement, much greater shortages in exactly the same skill sets that we found in the entry level jobs and early jobs in manufacturing. So that competition across sectors for a minimal pool is only going to increase, putting more of a burden on your efforts in the regions. But I think it's important to see how this is a growing problem.

MR. KATZ: Right, right. Dom?

MR. BARTON: I was just going to say two quick things. One is this big data idea the Mayor mentioned and you mentioned it. I think that's where we should just leverage that. That's a capability we have to talk about, where these job needs are. We talked about the machinists, right? That is an aging talent, a really vital talent pool that we need to -- so I think getting more transparency because students just don't -- we aren't aware of what these opportunities are, and we can get that quickly. I really think that's a key element.

The second is related to that. There are these sectors -- you mentioned energy. Brazil right now -- and I'm not saying this is a look in the mirror in a different place or -- Brazil -- there's a group of business people and regional government leaders who got together. They basically said look, we need -- energy's become a huge opportunity for us. We

don't have the skills to do it. We cannot wait for the education system to change. We get that. So that got together. They've set up their own vocational programs, and they literally went -- there was someone who went around to every single company and said, what's your pipeline for the next 5 years of capital projects and what do you need? And they defined that then in 190 job types. And they've now trained and employed 90,000 people. And that's a pretty -- that's just a bootstrap thing.

And we've got in this country -- you talk about the shale gas; there's huge advanced manufacturing opportunities in that area. As I said, AG food, people think that's probably the -- who wants to be a farmer or whatever that is? That is -- I honestly think you have a choice. You want to go to NASA or do you want to work in the farming industry? That's where it's going if you look at the technology that's being applied in that area. And I think if we can identify these areas and then get at the regional -- I think it's a local regional level area -- we can get a flywheel going.

MR. KATZ: Let me ask you all this question because I find going around the country there's unbelievable energy and enthusiasm around advanced manufacturing. But then there's this other parallel path around really small boutique manufacturing, which is happening. There's a group out of Brooklyn called Maker's Row. And it's like a matchmaking

technology where on one side you have people designing new clothes, new apparel, and on the other side they match up to companies still in the United States that are probably at a little bit higher cost than you would find at certain big-box retail. But they match up through the Web these designers with Made in America factories.

You see a desire for this. ABC had a piece called Made in America last year. I don't know, it's like a series that they've done. A classic series where they went to two people in Grand Central Station and said please take off all the clothing that's not made in the United States, and two people agreed to do it. And then at some point they stopped because this is family television, right?

But you do see a sense around the country that it's time to make things again. It's time to rediscover a craft both with regard to advanced manufacturing, but also with other kind of manufacturing. Is that a real movement? How do we think about it compared to this?

MAYOR FISCHER: I think it's because it's sexy now, right? Think about the tools that you have now compared to 20 or 30 years ago. You've got very powerful software. You've got less expensive robots. So it's not like I've got a press break in a manufacturing shop and it's the dirty, gray T-shirted spot that Klaus talked about. It's this convergence of all these technologies, and now I just happen to be making something. So

it's a lot cooler to do that. And I think it shows you the strength of the American entrepreneur and the American economy because when you think about all the ways that Washington, D.C. has attempted to screw up the American economy over the last 5 years, and we've pulled out of it. And granted Washington did some good things. But it was the American ingenuity that says we're going to figure out how to do this. It was leveraging the power of technology and people just figuring out new companies.

So if we can get our act together with a federal industrial policy, I mean just think how America can shine right now. Now, that takes a little humility. We've got to say what can we learn from Germany? What can we learn from Japan? What can we learn from China? But we've got to have time to talk about that type of thing rather than fiscal cliffs and dysfunction.

MR. KATZ: Unfortunately, many of their companies are here. So they come here and they basically bring those practices to the United States, which has an enormous effect on the skills piece.

MR. KLEINFELD: Related to that is also the innovation part. We've got to have the innovation and ramp the innovation up because if we just do something that's already there for 5 years, that's not going to make the cut. We've got to get it to the next level, the next edge, right?

And this cannot be addressed without addressing intelligent immigration reform.

MR. BARTON: Impossible, impossible.

MS. DeROCCO: Two other points. One, I think many of our manufacturers when production was in large measure moving offshore, they actually changed their mindset from mass commoditization to mass customization and that was very purposeful on their part in order to keep their market vibrant. So that was one reaction to what was happening in the broad manufacturing sector globally.

But secondly I would say this is where the critical gap we have in our innovation research infrastructure in this country I think has a huge impact. We fund a lot of basic R&D, maybe not enough, that's subject to discussion. But after the -- let's take the SPIR programs in manufacturing. After the basic research and before the traditional venture capital is available to get to beta testing and early-stage production or manufacturing, there's absolutely no financial help. And we are seeing our innovators with great new technologies not being able to figure out how to get to beta-level production capabilities. And meanwhile we're letting great assets, like Kodak Eastman's Business Park where there's equipment and talent to do that, go wanting or be sold off.

So that's part of that gap in our continuum from research to development to be able to take advantage of our great innovators and actually move to mass production again. I wonder if we can.

MR. BARTON: I don't want to broaden it up, but the other areas you were talking -- I was thinking about health care again, too, which is one of the most technically retarded industries on the planet in terms of applying what could be done.

MR. KATZ: Tweet that!

MR. BARTON: You look at how a hospital works, and this is a very micro thing, I'd say. The amount of time that's spent because tools are lost, the scalpels and medicines and where things -- this sounds like a very basic thing. And I just think that if we can, again, use the data, we make more transparency on industries and how they work for people to then innovate and say my God, there's a -- if we could take some of that Silicon Valley capability and apply it to health care, what productivity improvements would be there? And I just think there's 21 sectors out there that could use this.

MR. KATZ: But this whole conversation, I think what's so fascinating --

MAYOR FISCHER: Could I come real quickly on small- and medium-size manufacturers? We think about the big global multinational

corporations out there, but there's more people that work for companies with fewer than 500 employees. Most of them are out there duking it out every day, focusing on cost reduction. One of the things that we've learned with our Blue Grass Economic Advancement Movement between Louisville and Lexington is the lack of innovation capacity with the small- and medium-size manufacturers that are feeding the big guys. So this is an area of concern for us as we look at how cities and states, maybe the federal government, can help with creating this innovation capacity with the small- and medium-size manufacturers.

MR. KATZ: The common theme here, and then we'll go to questions, is convergence integration, the mash-up of sectors. It's not manufacturing in a little corner over there. Oh, that's what we used to do. It really sort of connects to, relates to, so much of the rest of the economy question.

Right over here -- and here comes the mic.

SPEAKER: What a fabulous morning! Thank you. I'm Mitzi Wertheim with the Naval Postgraduate School, but I spent 13 years at IBM and was very much involved in their getting out of the manufacturing world, but I was playing in the manufacturing world. I'm struck by the importance of the narrative for the nation. You need to have TV shows. You need to have movies. You need to have heroes. You need to have

children's books. I'm trying to get people to write children's books about process. How did that happen? And we don't build into education. How did that happen? Its structure, its process, all that's missing. And I think you need to build collaborative groups. I'm willing to help on any of this because it's a really burning issue for me about getting the narrative out. You have to make it simple to understand. I've worked for think tanks. They produce huge reports nobody reads. Nobody has time to read.

MR. KATZ: Except for the Brookings Institution.

SPEAKER: Maybe, maybe. But nobody has time to read all this stuff, and so if you don't get it out in simple narrative statements -- I kept sitting here thinking about a Website I would build with each thing that you're doing and the primary statements to make it easy for the public to understand because if they don't understand it, not much happens.

MR. KATZ: We have a communications problem here.

MS. DeROCCO: Thank you. Two real quick things, one when I was at the Department of Labor, of all the work we did and spent billions and billions of dollars when we spent virtually nothing on with McGraw Hill was a little magazine called *In Demand* that showed young people in a whole array of manufacturing jobs that went to every elementary school. And we got more positive feedback from that than anything else we've done, and I think that's absolutely critical.

I also think we have to -- in every one of these conversations, somebody stands up and says we need another Sputnik moment. I think we need to continue to quote our friend, Rob Atkinson, and recognize the mini Sputnik moments that happen every single day in this country with our innovators. So I'm with you.

MR. KLEINFELD: But on the Sputnik moments, I once did in my past life I looked around the executive room on that debate. And I said when -- and pretty much everyone was an engineer around the room -- so I said when did you decide, when was the moment that you decided you have this spark and you want to go there? Funny enough everybody mentioned a moment that was early on in their childhood, early on in their childhood, and it was a very personal thing.

Out of this came an initiative where we at that time created two boxes that we gave to kindergartens -- actually that retirees could choose and gave to kindergartens. One box, a very simple box on basically electrical experiments and another one on chemical experiments, because what we saw is that in kindergarten the kindergarten teachers are shying away from even coming close to anything that has to do with natural science because they don't understand it. They are not trained enough.

So we use the great capabilities of retirees who really -- and their personal relations to the kids there -- and they could give those away for free. You were successful. You did the same thing, Dominic, over in Europe, where you had -- also in Germany, yeah -- where you had a big campaign very successfully.

MR. KATZ: Question, and then we've got a whole bunch lined up.

SPEAKER: Thanks very much. I'm Garrett Mitchell, and I write the Mitchell Report, and I want to say that this has really been a fascinating panel. And it occurs to me that the next time around it would be a fascinating panel to have the kinds of people that you're talking about bringing into this, talking about how they made their decision and what they're doing, and if we had some pictures, if it was visual. We know what law firms look like. We know about mad men, but we need to see the shop.

I want to ask if you could perform a sort of thought experiment, which is you have a sort of magic dollar that could have as many zeroes behind it as you want, but let's stay with a dollar. And your job is to determine which of the many priorities that are necessary to attack the set of issues that you've been talking about are the most logical places to invest. So it could be in communications. It could be in K-12. It

could be in this data component that you've talked about. It could be in the linkage between universities and research. Where -- in order to deliver on the promise of this new technology, what are the priorities and where would you put the components of that dollar?

MR. KATZ: Thoughts on this? Who wants to start?

MAYOR FISCHER: Well, I think one area we haven't really talked too much about today is engineering and the importance of engineering. We're not a culture that looks at engineers predominantly and say you're a rock star, we love you. I want to grow up and be an engineer. It's part of the cultural manufacturing thing. So I don't know if we can have a PR campaign that gets people to think they want to be engineers, but it goes back a little bit to what you said, ma'am, about kind of looking at manufacturing and engineering as being careers of dignity and respect and worth. While manufacturing has been offshored, we've got to remember that's when the technology revolution was taking place, entertainment revolution, and our country's psyche kind of shifted to boy, there's a lot easier ways to make big money faster in much higher profile industries. And this blocking and tackling and making things one piece at a time just really doesn't seem to be an attractive way to do things.

So we have to regain that, but that seems awfully shallow to say it's a PR campaign. But then we have to bring back in the talent of the

engineers, the innovation, the R&D that's going to fuel this growth for us as well. So I think a lot of it is communication and workforce and restoring dignity to these positions. I know Mr. Jones down the street, and he works at GE. He's one of their engineers and that's what I want to grow up and do.

MR. KATZ: Dom?

MR. BARTON: I'd put \$.50 in data at the beginning just to get -- and then maybe you could -- I hope you'd give me some dollars after that or a year after that -- but I would put it in the data and just a bit, too, on the -- here are the opportunities because there's such a gap. People don't know. And I think once people know, they're entrepreneurial enough to figure it out to start moving it forward. So I just think the data of the opportunities and maybe with a bit of glitz or excitement about what these roles are would be something because I think people just don't -- are not aware of them, the talent.

MS. DeROCCO: I'm actually working with McKinsey in the hopes we can creep up on that big data issue. So he's spent his \$.50. I'm going to take \$.50 and say we ought to create those alternative pathways to high school graduation that are integrated. If you look at educational expenditures -- I'm going to get the high end wrong because it keeps going higher -- but over \$600 billion in public education, only \$1 billion that

we attribute to vocational education in this country. That's bizarre. And then we have this separate workforce development system that really doesn't contribute, so my \$.50 is there.

And then it is on dealing with that gap between basic research and the early stage production for which we can't get venture capital, and as a result we're losing all the new technologies to overseas producers.

MR. KLEINFELD: I would be very happy with how Dominic and Emily have just spent the dollar, really happy. I would specify the first \$.50. I feel that we need the data on U.S. competitiveness, not just on U.S. jobs, because in the end I mean the jobs will go away if they are not built on a solid foundation.

And it was in the '80s when we had a similar challenge. And I still remember the first time that I read the Porter book on competitiveness of nations, which I thought was a very, very good diagnosis on where we stood and what opportunities we have, and I couldn't agree more. If we had something like that today, which was forward looking, we would have some of the elements that we could talk more educated about.

And the second \$.50, I'm excited about that. And the point that you said, Emily, before to also have national standards because you

want to have this portable. I mean it's great to have these kinds of initiatives on the ground, but you want it portable.

MS. DeROCCO: Very important.

MAYOR FISCHER: There's one other thing real quick. Think of how little money we spend as a country on lifelong learning. Okay, we spent all this money on pre-school, K-12, postsecondary, and the most important thing we know right now is we've got to keep learning every day after we get out of formal education, yet we spend -- we really don't understand it very much as a country, and we spend a miniscule amount on it. It's very important that we address that.

MR. KATZ: Yeah, I would just say for all of you in the room and for people on the Web, these are the questions to ask the deficit panel, right? We put out proposals yesterday. A billion dollars. We have a \$3.5 trillion budget. We can find the money. We can cut to invest in what really matters. So let's not separate out the conversations, and we're going to talk about the economy over here and then we're going to be like little accountants over here to sort of cut the debt. We have to join up these conversations.

Question here and then question there.

SPEAKER: Helmut Wodrich, Siemens Industry North America, another slight German accent. And Bruce, in your introduction

you mentioned before software. You mentioned real and virtual -- Greg, you shortly touched on it -- and I really believe and we talk about manufacturing renaissance, it's a software revolution. And Klaus, you mentioned it, it's your call. We don't use a drill anymore, we use a PC. It's where we send a Mini Cooper heavy rover up to Mars and the only way to do it is really to test it virtually a thousand times and then it really happens.

Now, what does that really mean? What does it mean for corporate leaders? But what does it mean for educators? How do we get this into their brains? I think if we find this answer, manufacturing is super sexy.

MR. KLEINFELD: I tell you, we're just building a gigantic complex, manufacturing complex, integrated companies in Saudi Arabia. So -- and this is the first time that they have a full bauxite mine, alumina refinery, smelter, and then a rolling mill, and they can ship it right from there. So one of my big scares was how do we find local people and how do we educate them? So on 12/12/12, the 12th of December, we had the first metal. And so we are already manufacturing there, and I saw how we ramped this up.

Now, it's highly automated also, but it's a very tough job still, right? So the interesting thing was we now had to do it all from scratch,

the occupational training. The thing that was most attractive was a crane simulator, a crane simulator, which we originally thought we're going to have onsite. But when we saw how hugely motivational that was, we basically took that crane simulator and put it right into the occupational school so that it could be used basically 7 days a week, 24 hours. And the answer is right there.

I mean when you see what attracts the kids -- they are sitting in front of their PCs and playing games. You can turn that into a positive with these things, right? It's actually much easier than I thought it is to be honest.

MR. KATZ: Very interesting. Question here and then question back there, and then we may have to have other questions just set to the mysterious Website.

SPEAKER: I'm Marc Brodsky. I grew up to be a physicist and an engineer. In the last 25 years I've been struggling in various roles in industry, government, and not-for-profits to manufacturing in the United States.

One of the things that bothered me about this whole conversation and reading the report is all this emphasis just on events, manufacturing events, industries. It's all very important, but the reason the public doesn't connect with that is the public thinks of commodity

manufacturing. That's what's in their minds and that's what we have lost over the last few decades. Capital-intensive used to be labor-intensive commodity manufacturing. And that's something that just doesn't happen very easily without, I think, some sort of government help in some way, for example, by roadmaps, finding missing ingredients, the missing floor technician to fix the machines -- well, nowadays the missing machines -- in the United States. Could you address that specific area of what might be done to enhance commodity manufacturing?

MR. KATZ: Thoughts?

MR. KLEINFELD: Energy is a big part of it, energy, because many commodities -- I mean we are in a commodity business. I mentioned the refinery part. In the refinery part there's nothing special about a refinery -- my people will kill me with that sentence -- but in reality you can do it anywhere on this planet. So what is critically important? It's not the skills. I mean if you don't have the maintenance people, I can't do it, but I can educate them, right? But energy is a huge point there.

What is the reason why we are now running it as a fuel plant? (Inaudible), who was on this panel a year ago or so, is now putting huge amounts of money behind to build it I think in Texas and someplace else, in Louisiana I think it was the second place, where he's building a new refinery also. But at the same time the normal commodity business, I

mean a normal no-differentiation job will not come back. It will not come back. Why would it come back? We have to have differentiation. We have to have innovation. That's why I think this debate about competitiveness is so important that we are not falling into the trap and wasting national resources.

MR. KATZ: I have a question over here, right there in the middle.

SPEAKER: Thank you. Susan Lund from the McKinsey Global Institute. I'll try to keep it short. It's been a fascinating panel. I'm surprised that I haven't heard one word all morning, which is exports. So my question to all of you is, is this manufacturing renaissance for domestic consumption or do you envision the U.S. eventually as an export platform to the rest of the world?

And then a second related question is if you put on the hat of a multinational corporation, whether U.S.-headquartered or foreign, and you're considering where to put in your next plant, what would be the number one barrier you would point to in U.S. competitiveness? So this is a little bit different from the earlier question, which is if you were considering a corporate investment, what would be the number one thing you would point to? I've heard immigration, taxes, skills, infrastructure -- I'd love to hear from all the panelists.

MR. KATZ: So first, are we producing for a domestic or global market?

MAYOR FISCHER: Well, in our case in this Blue Grass region of Kentucky, we have a specific program on export assistance for small- and medium-size companies. The big guys know how to do it already. So part of this American renaissance is creating a culture of exports -- it's just what you do. And if you're an industry that has an international competitor and you don't export, I'd say to people you're probably going to be out of business in 5 years. So there's all types of reasons to figure it out, and the smaller companies need some assistance. But I think you'd see that's ongoing throughout the country.

MR. KATZ: Dom?

MR. BARTON: Yeah, I'd just say to sort of tease my colleague, you obviously weren't listening to what I was saying in the beginning, but I think I did make one comment that it was -- with 11 to 12 percent of GDP, but it's 45 percent of exports. So I think it already is a big driver of it. I'd just say a couple of practical examples. I think Ford now is going to be manufacturing the Lincolns and some of their SUVs globally for China will be done in the U.S.

So I think if the -- I think that there's a huge export with the space side. We learned this in Colorado. I think there's something like 30

countries that are now with space programs, right, that are moving. Some we may want to support; others we may not. Argentina, believe it or not, has a space program that's out there. And I think these are areas where - health care will be another one where people will do it. So I think it's a vitally connected part of exports.

MS. DeROCCO: And I think most of our research at the Manufacturing Institute for the past 3 to 5 years has shown that the lack of an educated and skilled workforce is always one of the top three pain points of manufacturers who want to stay in the U.S. and/or choose a new location in the U.S. But it vacillates with the business climate, which goes back to taxes and regulatory structures and the skilled workforce. But they're always in the top three of where they're going to choose their next siting.

MR. KATZ: Any other thoughts on barriers?

MAYOR FISCHER: All these sites come down to point out that the best place to locate a new company in the United States of America is in Louisville, Kentucky. I will save all of you a lot of work and just we're happy to have you.

MR. KATZ: No, I think you should say that again and stare into the camera.

MAYOR FISCHER: In Louisville, Kentucky.

MR. KATZ: It's clear that you were a businessman in a prior life.

First of all, I just want to thank the panel because I think what is so critical, particularly in this town, is to have an affirmative, positive, conversation about where our economy can go. Not delusional, right, based on what is actually happening on the ground because above global dynamics and because of some very, very, very, smart policies and practices being invented at the city, at the metropolitan, at the state scale. Thank you very much.

MR. BAILY: All right, should we get started again? Either I'm losing my vision, or that clock is way off. But I'll use my watch.

Okay, so if everybody could come in from coffee and sit down, we'll get started on our second panel. And we're delighted to welcome a really terrific set of panelists: Lew Kaden, Vice Chair of Citi; Maya MacGuineas, who has been one of the most stalwart leaders here in Washington on dealing with debt problems, and is now involved in, or leading the fix-the-debt campaign; Bob McDonald, who is the CEO and President of Procter & Gamble; and Ralph Schlosstein who's the CEO of Evercore -- so, really, terrific, group.

Let me just give a little bit of context, at least while everyone's filing into the room. I'm Martin Baily. I'm with the economic studies program at Brookings.

If we cast our minds back to the 1960s, the 1960s, obviously, was a troubled decade politically, but economically, growth was pretty strong -- productivity growth was strong, economic growth was strong, unemployment was low -- for really almost all of that decade. And then that was followed by, I don't know if you'd say a "lost decade," but much more difficult period economically, in the '70s and the early 1980s. And the thing that hung over the economy at that time was inflation. We just couldn't seem to deal with the inflation problem. And so, we had the deep recession in '74, '75. We had another recession in 1980. We had another recession in 1981, '82 -- so a double-dip recession.

And then, finally, Paul Volcker, who was Chairman of the Federal Reserve, and his colleagues decided the whack the economy over the head really hard, and take the inflation out of the system. And finally it did, although it took awhile -- it wasn't really until the fall in oil prices in '86 -- but we really got rid of the inflation demon and, I think in some ways, laid the groundwork for the period following that in the 1990s, when we had strong productivity growth, we had strong markets really starting in the mid 1980s.

So the analogy in my mind is we have this deficit that's now hanging over us and, for some of the same reasons, it's a really hard problem to solve. It lacks a Federal Reserve, so we don't have the equivalent of an actor like Paul Volcker who can come in and say, "Okay, we're going to tackle this problem. And this is unpopular, but we're going to do it." Instead, we have, obviously, the decision being made by Congress and the administration, and the two different parties, and we're just caught up in the political gridlock trying to deal with this very difficult problem.

Now, even if we had sort of unity of purpose, it still would be a hard problem to solve. We are still in the process of recovering from a really deep recession that was brought about by the financial crisis. There's still a lot of slack in the economy, so from, you know, a standard economics, Keynesian, if you like, we still want to get more demand growth in the economy, and so fiscal consolidation goes in the wrong direction, in terms of getting us back to full employment, but clearly it is necessary over some time-horizon, because the deficit path really is not sustainable that we're on.

So, we need to sort of deal with the deficit but not kill growth.

Now, this panel is part of our Growth through Innovation, as you've heard several times. And I do want to mention one sort of hopeful note along with the problems that I've just outlined.

There are a set of folks -- Bob Gordon, Tyler Cohen, and I think there are others -- who sort of say, "We've seen the end of growth. No more innovation, no more growth. Now we've got just to sort of settle down and deal with the fact that we're not going to have any more growth." And I think the evidence is really strongly against that. There is, in your pack -- and I'm doing a little bit of a plug here -- James Manyika is a senior fellow, external senior fellow here at Brookings, as well as a director at the McKinsey Global Institute, and he and I are working on a project, with the support of others, looking at this question of what are some of the game-changers, what are the ways in which we can get innovation, and, actually, as we get out of this mess on the deficit and the recession, really start to get stronger growth in the economy.

And the thing that's really needed, the thing that we didn't have in even the first seven years of this century was sort of innovation-driven, output-driven growth. We had a lot of restructuring productivity, but we haven't really had, for some years now, real output-driven innovation and growth, and that's part of what we're looking for, and part

of what this project at Brookings, and working with the McKinsey Global Institute, is what we're looking for.

So that's my plug. That's in your -- some beginnings of that are in your packet.

All right, now let me turn to the panel. And I'm going to turn to you, Lew, first.

Now, how do the responses to this budget deficit, and the reforms, and what's going on, how do they impact the broader economic policy challenges as you see them from your vantage point, having sort of ridden the roller coaster of this recession?

MR. KADEN: Thank you, Martin. Let me just make two or three points on that.

First of all, it's obvious to anyone who's followed these debates in the last year or so, or watched events in Europe, that political uncertainty is the enemy of economic growth and investment. And we've seen the effects of that on the pace of recovery in the United States, and we've seen it even more, in start relief, during the last year, in Europe.

At the same time, the dynamic qualities of the U.S. economy, also when contrasted with Europe and other parts of the world, suggest -- and demonstrate on a regular basis -- that notwithstanding the political uncertainty, there's a great deal to be optimistic about. There are

a good many positives when you look for signs, in terms of the prospect of a faster pace of growth and recovery, if only the political uncertainty were changed by progress on fiscal balance.

And those signs are more apparent every day. If you look at the positive changes in different segments of the housing market and housing finance, notwithstanding remaining challenges, if you look at the pace of recovery in the auto industry, a market with 14-1/2 million unit sales last years, and the prospect for more this year, notwithstanding the overall economic conditions in the country still in a slow recovery, is very encouraging. And I think most important of all, you see the dynamic qualities of the entrepreneurial and venture community in this country, and contrast that with the lack of any counterpart in Europe, you see tremendous benefits, has always been a source of -- the entrepreneurial spirit has always been a source of strength in this country in comparison to others.

And it's in stark relief today, as the venture community spreads from its concentration in California to more and more metropolitan centers around the country, and the strength of the capital markets at every level of private and public capital-raising is very positive. And even in the jobs market, which is the most stubborn negative in the picture of the U.S. market, as you saw in the discussion of the last panel, there's a

good deal to be more optimistic about in the revival of manufacturing jobs and the increased productivity, and the re-shoring, and the other issues that were discussed.

But the bottom line is that confidence is everything in patterns of investment, as indeed it is -- as I know only too well -- in international services and banking. And at the moment, confidence levels remain low, and that's a discouragement to certain kinds of investment.

The levels of liquidity or investment standing on the sidelines ready to be put to use are very high across the business community and the financial community in the U.S., and the spotlight is on this town, and whether our political leaders are capable of resolving this.

Now, also on the positive side, I think, while many of us would have preferred a broader framework -- and there will be more discussion about that from the other panelists here, as well as from me -- the practical reality we know, we can dissect why that was, and why they missed an opportunity when it came down to 24 or 48 hours and were able only to deal with the tax issue, but for the most part that's history at this point.

And the fact that they were able to do that is, at least, a step forward. It added, as you know from the summary of the state-of-play that the President gave yesterday in his lengthy press conference, it added

\$600 million to the billion-four of spending cuts that had previously been enacted and put into effect in the last two years, and the interest savings on top of that come to a total overall of 2-1/2 trillion over the 10-year period that we all have gotten familiar with as the measurement period for deficit reform. And 2-1/2 is not all the way to the target of 4 that almost every independent group has adopted as a reasonable way to stabilize the debt in relation to the growth in the economy -- you can make an argument that a little more, or a good deal more, would be helpful too. But 4 trillion over 10 years is not a bad target, and 2-1/2 is a fair bit there.

And so we move to the next chapter, which promises to be messier, uglier, nastier than the first one. But I think there is some room for optimism, because as we saw the first time around, I think, after the election, both parties at the leadership level recognized and came to a conclusion that it was in their interest -- in their political interest, longer term -- to resolve this.

That doesn't mean that they like each other. It doesn't mean, necessarily, that they communicate effectively every day. It doesn't mean that the process is neat and clean. But it's a fundamentally important starting point. If the politics can be neutralized short term, which is very difficult in our government, I think it remains true that the four or

five people who count the most have come to a conclusion that it's in all of their interests to resolve this.

So, my own view is to be a bit on the optimistic side as we go into the next period.

However, to put in the context of broader economic policy challenges, as Martin's question did, I would start with the proposition that necessity does not equal sufficiency. Deficit reform is critical at the moment. We all know that. Everyone talks about it or writes about it on a daily basis. But it's not sufficient to meet the economic challenges we have, because the fact is, we have a fiscal deficit, but we have many other deficits, some of which were discussed in quite effective fashion in the last panel. So I'll just list them for now and we can go back to them later.

We have an education deficit. We have a skill-development deficit that is closely related to education. We have an infrastructure development and repair deficit of enormously important proportions. And you need only look at the experience of other countries coming out of the recession, including countries with very different political systems than ours, to see the close relationship that infrastructure investment and development has on the likelihood and the pace of recovery from a severe global downturn.

We also have, if not a deficit, an important and urgent need to address the issue of energy independence -- an opportunity that more than ever before is sitting right in front of us ready to be advanced in the United States in the next year or two. But, again, it requires leadership and initiative in Washington. And immigration reform -- again, a subject that was discussed before.

One more word, finally, about the process. And for this I kind of go back to a much earlier part of my life as a professor of law at Columbia. And one of the subjects I taught every year was negotiation -- negotiation in a variety of contexts, from international to commercial, from transactional to labor-management disputes. And I came out of that experience, and the practical experiences accompanying it before and after, believing that it's a mistake to keep score on a daily basis in difficult negotiations, especially in the political environment where each participant has multiple constituencies to which they're accountable in some fashion and paying attention to.

And so, you take the last few days, we're clearly in a state of play that involves positioning. And, we can be critical -- it's easy to be critical -- about why. That's kind of the reaction that everybody always has in a labor dispute: "Why can't they just get in a room. They know the range of substantive outcome. It's not a secret, it's not hard to find. Why

can't they do it this afternoon?" And similarly, on observing events in the fiscal negotiations, everybody looks at it and says, "Well, why can't they get those four or five people around a table in the Roosevelt Room this afternoon and resolve it?"

The substantive outline has always been there. It's been there in every public and private group. It's been there in every private conversation with small groups of members of Congress from both sides. It's not elusive. The details can be complicated, especially on issues like health care costs, but the broad outlines of a resolution of these problems are not hard to define. And we know that if we look at the results of the discussions in the summer of 2011, or the results of the discussions in December. It was barely 100 or 200 billion dollars over a 10-year period separating the principals, but they couldn't quite bring it to a conclusion.

I think it's preferable not to keep score that way, not to look at "They like talking to each other," or "Why haven't they met more often in the early stages?" -- but, rather, to see this as a messy process that's going to unfold over the next six, eight weeks. And the important thing is whether they get to the finish line this time, not how -- it's unfortunate we have to go through that process. It will take its toll, in terms of economic activity, but the price of not reaching an agreement is far more significant than that process.

So I take some heart, once again, in the fact that in every conversation I have with anyone who matters more than most of us do in this process, they see both political and national interest advantages to their side of the debate in reaching a resolution. One has to hope that they do in a timely fashion.

One final comment, I think probably all of us would agree -- and at some point in the future we'll get a consensus on this in the political process -- that the debt ceiling has no rationale place in this. The President addressed that yesterday. But the fact is, playing Russian roulette with the U.S. economy, and the well-being of our population, has no place in an honest debate about how much spending should be cut, how much investment should be made to address these broader economic and social deficits, and how to resolve this and get on to other parts of the national agenda. Sooner or later, I think, the Congress and the President will agree.

We saw approaches to this in Senator McConnell's comments in the last couple of weeks and, obviously, in the President's. The key control is in the authorization and appropriation process, and the ability to pay those bills, through either revenue sources or borrowing ought to be attached to the decision to spend, not used as a point of leverage in broader and more important negotiations.

MR. BAILY: Thank you, Lew. Can I just follow up -- and I don't know if this is a little bit of a tangent, but I think I just want to ask you, because of your position in the financial sector -- you say that uncertainty is holding back recovery, and I agree with you completely. Do you think funding is also?

I mean, we know that a missing piece of this recovery is business hiring and business investment. The large businesses generally have fairly favorable access to capital markets, but a lot of small and intermediate businesses do not. Do you think lack of funding -- and is this a legacy of the recession? Is this something that's come out of the financial regulation? Or -- do you see that as part of the problem also?

MR. KADEN: Yes, I tend, unlike some of my peers and competitors, not to put much weight on regulatory -- all of us have specific issues, definitions, that we would do differently, and opinions that we voice every day. But the core elements of the regulatory reform that are common around the world, I think were necessary, coming out of the experience we had in the reform, and should not -- so long as the playing field is level the U.S. institutions will be strong and capable of responding to that.

On the funding issue, I think it's a question that has more parts to the answer. Our capital markets are very strong. Those

borrowers who have access to them, larger enterprises, have multiple options to choose from in funding investments that they choose to make, assuming they're credit-worthy. And the same is true of bank lending, particularly for larger enterprises. The major banks have stood by their large customers, systematically, through the crisis, and certainly in the recovery period.

The problem comes in, as you go down the chain, through medium and smaller enterprises, and as you get into households, where the experience, particularly in housing finance and consumer finance, we're in a transitional period where we haven't yet figured out what takes the place of the consumer-finance industry, which has been largely destroyed. It's a decent business, and you can see examples that have survived. There are basic decisions to be made about how much it should be regulated, and how much it should be supplied by a shadow financial-service part of the industry.

And in the middle, in smaller business, small and medium-size business enterprises, the financial system is weaker.

MR. BAILY: Yep.

MR. KADEN: There's less capacity coming out of the crisis.

There's a credit deficit in the community and some regional banks that,

again, is a serious public policy (inaudible) to address in the next couple of years.

MR. BAILY: Thank you.

Maya, we want to get your perspective both on the short run and the long run, but let's start on the short run, because we are right in the middle of this mess -- or at least we've sort of avoided the fiscal cliff. So, how do you see things evolving over the next couple of months? And are these going to play out?

MS. MacGUINEAS: Okay. Well, if anyone knew how things were going to play out, I would be thrilled to know that answer, because it is one of the more confusing moments.

But let me just start by saying, sort of, it's a moment which feels like there's an awful lot of good news and an awful lot of bad news. And I think as your conference today is focusing on the overall economic picture, and the pieces that go into really fueling economic growth and innovation, there is so much good news to be had. There are so many different ideas that we have when you're sitting in a think-tank, where so many of them are developed, about what can help with growth. And our country is in a very good position to use those and really have a very positive outcome.

If, one, the whole fiscal issue sort of feels to me like it's kind of sad to be involved in an issue, feels like this, but it's the issue that feels like it's gumming up the wheels of everything else. And right now, there's basically no oxygen left for any other issues. So as we want to think about education, and immigration, and energy policy -- this one is going to have to get resolved in one way or another before we can kind of go back to the exciting ideas that can lead to the next waves in the economy.

And the other one is the political environment, where we actually -- oh, sorry--

MR. BAILY: Now, I can't blame the audience --

MS. MacGUINEAS: Ignore that. It's really hard to ignore it, but we're going to do it.

So, the other piece of it is the political environment, where we have the ability to fix the situation. We basically know what the fix is. We know that you need a comprehensive debt deal that's big enough to stabilize the debt. And I think we all remember the period when we were actually trying to balance the budget. We're not there. We're not going to be there anytime soon. But you certainly want to make sure the debt's not growing faster than the economy, and that it's actually put on a downward path. And we know that the problem is so big that, to accomplish that, you have to look at every part of the budget. You have to look at defense

spending. You have to clearly, and focus on, look at health care costs, which are growing faster than the economy.

We have to fix our Social Security system which makes promises that are bigger than what we can pay out down the road. We have to raise revenues. We've started down that path, but what we haven't done is look at how to do it while overhauling the tax system -- which, when you want to raise revenues, you can do it in a way that's bad for the economy, or you can do it in a way that's good for the economy and helps increase competitiveness, and modernizes our tax system.

So, we kind of know what the answers are. We're going to fight about the specifics of all of them, but we know what a big deal that would fix the problem would look like. But we don't know at what point the political system is going to be willing to make all of those choices which are difficult, compromise on both sides, and sort of put this issue to rest so that we can go back to fighting about all the other things that we're going to fight about.

But I think the fact that you can see what the policy solutions are, and that we're past the era of kind of pretending this doesn't matter, but everybody recognizes the threat it puts out there in the economy, in that you can't possibly imagine real growth coming without a sense of stability that would come from knowing what these changes will be, so that

you can have planning, so that you can have investment, so that you can have job creation -- all the necessary pieces of moving the economy forward.

But, you know, the big wild card is when people are going to be willing to make these tough choices, instead of using them to kind of fight in the normal political boxes.

What do I think is going to happen next? It's already off on a different path than I would have thought was the best. If you think about prospect theory, which basically says when you're delivering good news, you want to do it in lots of little pieces -- like, first, you want to tell someone that they've gotten a promotion. Then you want to tell them that they've gotten a raise. Then you want to tell them that they got a bigger office. And each piece of good news is good, and makes people happier.

If you're doing bad news -- and just think, if you're waiting for an airline and it's going to be delayed -- you just want the bad news in one big piece. And that's true of so many things, I think it really applies to a budget deal, which is what we're doing is we're breaking out the way that we're going to fix the budget, and we're doing it in little pieces. We had some savings early on, a couple years ago, in continuing resolutions. We had some savings that came out of the Budget Control Act. We talked about the sequester, which I think is not likely to hit, although it's starting

to look like they might leave that in place for awhile. But when the Super Committee failed, sequester was put in place. We just raised tax rates on the well-off.

So, we're sort of doing this in pieces. Each one is a bloody political battle. Each one leaves the parties, instead of kind of declaring victory, more angry at each other than they were before, making it harder to do the remaining harder policy pieces.

So we know what we have left, right? We have to deal with health care costs, which, the truth is, we don't know how to fix the system in its entirety. We're going to have to keep looking at ways to control health care costs to get in control of our costs in our government programs and Medicare. And we're going to have to go back and do this every couple of years. But we have to study what works, and then we have to put more of the policies that are working in place.

We have to deal with our other entitlements. Social Security reform is an incredibly contentious issue in this country. It's always a political tough battle. But the longer we wait to make these changes, the more difficult it is for the people who depend on these programs. There's no question about that.

And we have to go forward with tax reform -- which is great, when you talk about it broadly, because we all the tax code is a disaster.

None of us like the tax code. When you talk about the ability to broaden the base, lower the rates, and raise revenues, that's a pretty good system. It's pretty desirable to think about how to reform the tax code. But there are a lot of tough things in there. When you start talking about the specifics, or the fact that we need to deal with the home-mortgage interest deduction, or the health care exclusion, or state and local taxation, then it gets more difficult.

So what we've done is we've done the easiest pieces. Capping discretionary spending is easy. You don't even have to talk about a single specific policy. Taxing the 1 percent is pretty darn easy. Even if you're in the 1 percent, it's not the hardest thing in the world. But it's going to take more than that to fix the problem.

Now what we have left is the hardest parts. And so it's how we're going to unravel those next bits.

So, clearly, the next piece is going to have to focus on entitlement reform. That's the biggest fix that has yet to be addressed. We have three action-forcing moments coming up in the next couple of months: the sequester, which they extended for two months -- and it has broad-based, across-the-board spending cuts, which is just the wrong way to do policy. Some of those spending cuts might need to take place, but you don't want to put them all in place abruptly, because we're dealing

with a very tepid recovery. You want to phase in all of these changes gradually. And you want to pick and choose. And you want policy-makers to pick and choose, instead of saying, "This is too hard. We're just going to let an across-the-board cut go in place, and not do our jobs," which really is unforgivable as the way to make these policies.

Second, you have the debt ceiling. It is the wrong thing to hold the country hostage. It is also going to be a play. We know there's going to be fight over the debt ceiling.

In the past, the debt ceiling was kind of a speed bump that reminded folks that we were borrowing too much and we needed to make changes. It could be a useful reminder -- not if it goes as far as where people really start to worry about the faith of the U.S. Government, and it starts to do economic damage, which is what we saw last time.

The third piece is the continuing resolution, the fact that government spending is going to expire.

And the sort of the triple witching hour of these three issues is another kind of fiscal cliff. And the question is, is it going to force action with the hardest pieces that are still remaining? Or, the fact that when it when it came to the fiscal cliff, they still, for all intents and purposes -- listen, it's good we didn't go over the fiscal cliff. It's good we raised some revenues. But we basically punted. We did what we always do in

Washington, which was we punted all the hard choices, and they sort of tried to declare a bipartisan victory. But it wasn't there.

And so the question is, what's going to make these next action-forcing moments more effective in getting us to really take on the policies -- and this was part of your question -- that will deal with the necessary savings for the next 10 years. But just as important, or perhaps more, put the policies in place that are going to bring savings down gradually over time in the next 10 years. Because it's the long term that really is a threat to this budget. If you look at any of these charts -- this chart -- I probably should have brought something better than that -- but the (inaudible) spending line --

MR. BAILY: We get the idea.

MS. MacGUINEAS: -- over time, I mean, it's the growth in spending that come from health care, our aging of our population, interest, because we're borrowing too much -- which really blows up the budget. And making gradual changes now, whether it's through fixing the way we measure inflation, or promising to gradually raise the retirement age down the road, those kinds of small savings that compound -- wouldn't save you so much money in the short or medium term, but do an immense amount of good in terms of bringing our long-term imbalances back into place.

And so the question is how you can help the political system, which is not in great shape, be forward-looking enough that it's willing to make a lot of those changes now, which will do a great amount of good down the road.

And I am -- it's hard to be overly optimistic right now. The fiscal cliff deal could have been so much better than it was. I believe these changes will happen because they have to happen. And we are the luckiest country in the world dealing with this, because of the gift that markets give us, as us being a safe-haven, of us having more time to put these changes in place than any other country. We don't have to do them quickly and abruptly. We can say we're going to do them, and start them down the road, which buys us more time for an economic recovery.

We'd be so foolish to walk away from that opportunity to do this in an easier way, by waiting until markets push us to, that I just hope, and I continue to believe, that we wouldn't do that to ourselves or the country. We'll make these choices in a way where they're in advance and they give us some planning room.

But the truth is we've already waited longer than we should have. The political system is willing to focus on whether it's the next election cycle, or partisanship, instead of sort of the public interest, has already taken an economic toll on what could have been. Because the

bottom line is, not only do we have to put these kinds of saving policies in place, we have to be thoughtful about how we do them. And when we're talking about spending, we have to think about how we not only bring spending down, but we readjust it, and re-prioritize it. Right now our budget completely emphasizes consumption instead of investment. We need to turn that on its head.

And when we talk about revenues, there's no question that, with an aging population, you're going to have to bring in more revenues than you have in the past. But if you do that in the same outdated, anti-competitive tax system, you're going to choke your economy. And yet, if you used this opportunity and were really bold about the tax reform that we need on both the individual and corporate side, kind of open up our economic system to a globally competitive system, you can do this in a way that's actually good for the economy.

So we have hard choices to make, and we should give ourselves the time and thoughtfulness to actually put the policies in place that both deal with the deficit, but also help, in addition, to adding stability of knowing what's going to happen in terms of promoting economic growth.

MR. BAILY: Let me pick up on one piece of that, around health care. As you know, government spending on health may not be

necessarily the biggest cause of the deficit right now, but if you look out 20 years, 30 years, it's the alligator that's going to swallow everything.

I was on a panel last week, and there was a lively argument around should we raise the age for Medicare? Should we just try to change the system and move away from fee-for-service? Has the Obama administration actually done a lot to lower the cost of health care going forward so we don't need to do much more?

What do you guys think is, in practical terms, what needs to be done on health care? Because it's a really unpopular issue. I mean, if you poll people, they say, we don't want to cut Medicare.

So where do we go in dealing with that piece of the puzzle?

MS. MacGUINEAS: Yes, that reminds me how, when I was in graduate school, I went to graduate school to study fiscal policy, and it was right around the time they balanced the budget. And I thought, oh my gosh, now what am I going to do? You know, jump-changed careers, and now the problem is solved. And so I realized the long-term problems were still there, and I had to make a choice whether to study Social Security or health care. And it was easy. Social Security is easy. So I jumped right into becoming Social Security expert, because health care is so hard.

Now, that's not to say that I haven't been studying health care over the past years, because there really is no other issue at the core

of all of this. And the problem is that we don't know the answers. And the best thing that we can do right now is to be putting in place as many different attempts to control health care costs and evaluating what works.

So we don't know whether the new health care reforms have worked yet or not. We've seen health care costs coming down, and that could be in anticipation about what's to happen. That could be temporary and it could be permanent. So one of the things in all of this, in fact, is better data, right? Gathering the information, analyzing it, and then figuring out what's working and doing more of it.

I think one of the important things that happened in the changes that we just made were the exchanges on health care. That does give you the room to put in an increase in the Medicare age which you wouldn't have had before. That would have been very devastating to a number of people before. Now, because we have health care exchanges, it certainly makes sense as a policy to think about increasing the retirement age for Medicare so at least it lines up with Social Security.

As we're living longer -- we all know this -- the huge health care costs aren't the biggest one right now because the costs of aging are the biggest costs right now. And it's an incredible cost on society as we're aging as we are, and we need to find productive ways to keep people who

can in the workforce longer. So, creating those incentives is certainly an important one.

But I think the bottom line with health care is that the most important area is in the incentive structure, and the cost-sharing structure, and how we set up the delivery system so the incentives in the delivery system, and the incentives for the consumers of health care -- none of them make sense right now from just any basic economic perspective. And we need to switch those.

And you can do that while protecting people who depend on these systems, and not shifting the cost to people who cannot afford it. But if you have a crummy incentive, payment incentive, incentive structure, you're going to have a crummy system. And while that's not going to fix all of it, that's certainly one of the biggest starts.

MR. BAILY: Let me turn to Bob McDonald, who is, as I said, the President and CEO, Chairman and CEO of Procter & Gamble.

Can you tell us a bit -- you have a very successful company. You've got a lot of operations in the U.S. and around the world. What do you see as some of the most important growth-promoting strategies that can be followed here?

MR. McDONALD: Thank you, Martin.

I'd like to talk about two important components that I think are important for economic growth-promoting strategies. The first, which has been discussed already in some length by our panel, is addressing our deficit trajectory so that our public debt doesn't crowd out our private investment. That will require reforming the entitlement programs -- as Maya and Lewis have already talked about -- because they're the primary drivers of the spending growth. And if we don't get them under control, they won't be secure for future generations. So that's critically important.

The second thing -- and I, I think, equally important -- is improving our country's global competitiveness, and doing that through free and fair trade, as well as through a more competitive and comprehensive tax reform, as Maya was referring to.

The recent Congressional action on the fiscal cliff is a short-term fix. It avoided us falling off the cliff and sending the economy into recession, but it really failed to address the larger issues affected the deficit, and also the economic competitiveness of the United States. And those of us who run global companies obviously care very deeply about that.

Preserving the opportunity for comprehensive and revenue-neutral tax reform is critical and very important to creating pro-growth tax law that will enable American companies to compete effectively against

companies that are domiciled in other countries around the world. We need a level playing field. We don't have a level playing field today. The United States has the highest corporate tax rate in the world, and also the United States is one of the few countries in the world with a system that is called a "global" tax system, rather than a "territorial" tax system.

During the 113th Congress, we're going to continue to advocate for comprehensive tax reform that broadens the base, that reduces corporate tax rates, and that moves to a competitive territorial system. Procter & Gamble pays income taxes in over a hundred countries around the world. Business tax reform should provide a level playing field, so that each business has the confidence and knowing that it pays roughly the same amount of income tax as its competitors in markets, both and abroad.

In terms of deficit reform, the obvious problem that must be addressed is the fact that currently the United States has been spending at a rate that far exceeds the rate of revenue that we're receiving. This situation often occurs during recessions, as the lagging economy produces less revenue from income and payroll taxes, while government spending programs continue to expand. The longer-term problem isn't related directly to the recent recession, despite the unprecedented amount of fiscal stimulus through new government programs. For example, some

economic literature suggests that when a country's debt-to-GDP ratio exceeds 90 percent, the country's long-term GDP growth rate, structurally, slows down. Now, this adversely affects everyone's potential standard of living.

The U.S. deficit now exceeds 100 percent of debt-to-GDP ratio. So we already may be experiencing the initial impacts of extended deficit financing.

The longer-term problem is, to a very large extent, the product of key entitlement programs that are an important part of the nation's safety net for the elderly. Slowing the growth of spending in the nation's entitlement programs can help make these programs secure for current and future workers. And we think that's very important.

By 2035, there will be only two workers per beneficiary. And a typical 65-year-old retiree will have about a 50 percent longer retirement than occurred in 1995. So this is a very serious issue. Currently, the Social Security retirement is a pay-as-you-go system that provides more annual benefits than the payroll tax collects. If left alone, this eventually will lead to insolvency, particularly with the rapidly increasing number of baby boomers who are retiring every day -- as was referred to by Maya and Lewis.

While there's neither the time necessary today, nor do I have the programmatic expertise necessary to suggest specific solutions, it's important that the Congress and the administration analyze acceptable methods to assure that these programs can be available to future retirees. Reforms can and must be adopted that don't undermine the benefits of current retirees or, obviously, they won't be accepted.

Medicare and Social Security retirement programs and benefits must be preserved for the millions of Americans who are now participating in the workforce. It can be done. And if we act sooner rather than later, we'll have an easier chance of getting it done.

In terms of innovation, innovation has been the core to Procter & Gamble's success over our 175 years of doing business. We spend about \$2.5 billion a year on research and development. That's 40 percent more than our next largest competitor. We spend about \$400 million a year on consumer research, trying to understand the unarticulated consumer needs that we can design products to solve.

Innovation is our lifeblood. It's the primary way that we accomplish our purpose of touching and improving lives. And innovation is what prevents commoditization of categories. It's what helps us reduce cost, it's what helps us deliver products that are affordable for consumers

around the world. And we serve over 4 billion consumers every single day.

Over decades, our company has demonstrated the capability to innovate, consistently, reliably, and successfully. We've got a robust multi-year innovation program in our core business, and we've increased our focus on discontinuous innovation -- think of that as innovation of wholly new categories that haven't been thought of before, such as when we introduced Swiffer as a way to quick-clean your floors or blinds. Or think of discontinuous innovation as Tide pods, our new single-use laundry detergent that can be put right in the machine, that's the most concentrated form of laundry detergent available today.

We transfer innovative ideas around the world, and that leads to growth around the world. For example, this pods technology that we've invented, we're now in the process of expanding around the world, and that's leading to jobs overseas, because our plants have to be near the consumers we're trying to serve. We can't export a Papers disposable diaper from Mehoopany, Pennsylvania, to China and make money on it. So we have 150 factories around the world.

But, nevertheless, that business that we do internationally results in jobs in the United States. Twenty percent of our jobs in the United States rely on international business. Forty percent of our jobs in

the State of Ohio, our home State, rely on international business. So that international business, and being globally competitive, is incredibly important to the growth of our company, and to the growth of the economy in the United States.

We have the world's best global companies in the United States. But right now we're putting them at a disadvantage with our tax policy, with our fiscal policy, and with many of the things that I've already talked about.

Thank you.

MR. BAILY: Thank you.

I actually agree with you strongly that we have to do a tax reform, and we can't have taxes that make our companies un-competitive. And I agree with you that we've got to reform entitlements, and bring down the cost of entitlements.

But as a leader in the business community, you have a bit of a PR problem, don't you, in selling that message? So I'd like you just to sort of face that a little bit.

How does the business community sort of frame its message to be part of the debate about what to do?

MR. McDONALD: Well, I think any American who knew that we had the highest corporate tax rate in the world -- second to none --

would agree that that's probably not a good idea, particularly since, you know, the American people are the workers in our companies.

It gets back, I think, Martin, to global competitiveness. Having the highest corporate tax rate in the world is not globally competitive. Having a worldwide system that prohibits U.S.-based multinationals -- and we have the best ones -- moving money from one country to the other, or even moving it back to the United States to make an investment here, and having to pay double taxation on it, that's not a level playing field. And I think we want our American companies to have a level playing field with the international companies they compete with.

It's interesting, I was in China not too long ago, and I'm the Chairman of the U.S.-China Business Council, and the government of China was asking our help to help them understand how to create globally competitive companies. And they were asking American companies, American CEOs, to help them create globally competitive companies.

I think we need to reform our system to allow our companies to be competitive, before international companies, who have advantages given to them by their government and by their systems, become fierce competitors.

MR. BAILY: I'm involved at the moment in a project on financial regulation, and one of the things we're looking at is do we need to

change the architecture with the different numbers of regulators. And I was told that the Chinese are in the process of setting up their regulatory system, and they came to the United States and said, well, should we do it the same way as you do it? And I think we said, no --

MR. McDONALD: No.

MR. BAILY: -- maybe not.

SPEAKER: I'm sure Ralph wants to talk about that one.

MR. BAILY: Ralph, you're really part of a very -- part of a private equity company, investment company. What do you see as the significance of this fiscal debate for innovation in the U.S., and the economic performance here in the U.S.?

MR. SCHLOSSTEIN: Well, I think -- I agree with a lot of what has been said, and I think this whole fiscal issue centers around the competitiveness of American business and American companies, and American production in the global economy. Because we can't go back 10 years or 20 years and hope that, one way or another, through trade protection or other means, we will insulate or protect our businesses or our workers from winning globally.

And so the only path to America winning economically is that we create a regulatory environment, and a tax environment, and a

competitive regime here in this country that actually allows our businesses and our workers to win in that global competitive game at the moment.

Now, we have some extraordinary assets in this country. We have a highly educated and motivated work force that, in many respects, outperforms -- not always out-educated, but seems to outperform, from a productivity point of view, workers in virtually every other country.

We have the most efficient capital markets in the world. Our companies have the lowest cost of capital of any companies anywhere around the globe. It was alluded to earlier; we have a spirit of entrepreneurship and innovation, and a capitalist system, and commitment to a capitalist system that is really the envy of virtually every other country in the world. And we also have, increasingly -- it was alluded to in the earlier panel -- and have always had, very strong natural resources, but with shale oil, shale gas, and the incredible strength of our agricultural industry, we have great natural resources, as well.

So there's a lot to be bullish about in this country, in terms of our economic opportunities. But this fiscal deficit, our fiscal policy, is an enormous cloud, or "retardant," on us reaching that potential. You know, I work in the investment banking industry. I used to be in the money management industry. And there's a phrase that sometimes gets applied

to companies, and you would say about the company, "Good company, but bad capital structure, and maybe bad management, as well." And that was used to describe a company that had, you know, great products, highly motivated workforce, was winning in the eyes of the consumer or whoever the purchasers of their products were, but they maybe had too much debt, or they had a management team or structure that just didn't take advantage of the enormous opportunities that they had in front of them.

I think we're perilously close, in this country today, to the phrase, "Great country, but with a bad balance sheet and a bad managerial structure." And, you know, that is the core of the fiscal issue that we face here in this country today.

And why is that a concern? Because if we don't address this, we will be effectively prevented -- just like an over-leveraged company is -- from making the investments in, you know, infrastructure, in education, in R&D, that are the key to us winning 10 years from now, 20 years from now, 30 years from now, and which ultimately are critically to sustaining a high level of growth and a high level of employment in this country.

And we'll do a second thing, which is even, in some respects, more venal, we will saddle our children and our grandchildren

with the responsibility for paying off or paying down the debts that we incurred because we wanted a level of government, but were not prepared to pay for it, that level of government.

And so this is a really critically important thing. And as I think Maya and Bob said, and Lew as well, I haven't met a single, you know, Democrat, Republican, even Socialist -- we have a couple of those in the Congress, as well -- or Independent who doesn't have a pretty clear idea of how this should -- what the answer is. And it's very frustrating for, I think, many of us who don't spend a lot of our time in Washington, that we're not getting to the point where it's so clearly we need to get.

Because if we don't get this behind us, there are three, you know, massively important issues to addressing our competitiveness: corporate tax reform, individual tax reform, and entitlement reform. And if we don't get a big start at addressing our fiscal issues, I think we're going to miss an enormous opportunity to address all three of those issues.

Let me just close with one comment -- and Lew referred to the importance of confidence in, you know, growth, and investing. And, you know, you run a business, like Bob does, and you have the uncertainty of the fiscal cliff, and the uncertainty about the direction of the economy, it makes you a little bit more cautious about investing, it makes you a little bit more cautious about hiring people, because if we actually do

go into a much weaker economy, then you have to reverse course, and you have intense pressure on your earnings.

So, this whole issue of, you know, confidence in our government structure, and confidence in the ability of Washington to address these critically important issues is pretty fundamental to, you know, our economic growth, and to the success of the real economy. And, certainly, it gets reflected very quickly in the capital markets. But we saw in July and August of 2011 that a sloppy job here in Washington has pretty profound effects on the performance of the real economy.

And, you know, hopefully -- I mean, I must say, I look at some of the discussion around the debt ceiling discussion, around the debt ceiling extension, and I share Lew's view that, you know, this is really the height of irresponsibility, that we're sitting here discussing whether the United States should default or not on its debt -- which is debt that has been incurred as a result of spending that has been approved by both bodies of Congress and signed by the President of the United States.

I mean, there are 535 members of Congress. I assure you that not a single one of them, if they were confronted with a credit card bill that they didn't like, would simply say, "I'm not going to pay that," because they know that the implications for their credit rating, the access to future bank loans, would be affected for 10, 15, 20 years. And so it's kind of

appalling that we're sitting here discussing whether we would do that with, you know, this country that we're all so incredibly proud of.

MR. BAILY: Let me -- my last question -- try to be a little bit provocative here.

There are folks like Alan Blinder, a very well respected economist, Peter Diamond, Nobel Prize-winning economist, and -- I'm blanking -- the *New York Times* economist Paul Krugman, who is clearly identified on the left but is quite influential. Now, they basically say you're just seeing the problem wrong. We've got to get this economy going again. If we could get the growth, we need demand, we need growth, we need to do something about our infrastructure, we need to spend more on infrastructure. All this worry about the deficit, at least for the next two or three years, is a mistake. And business would respond if we could get that going again.

So what do you say in response to that?

MR. SCHLOSSTEIN: Well, I say, like many things that I don't completely agree with, there's a kernel of truth in it.

MR. BAILY: That's interesting.

MR. SCHLOSSTEIN: I think the answer here is that -- you know, I've said it a number of times -- that I think what we need is the three Bs: It needs to be big, which means 4 trillion or more. It needs to be balanced, which means, you know, I think the consensus is \$1.2 trillion of revenues, and \$2.8 to \$3 trillion of expense reductions. And the third thing is back-end loaded, which is sensitive to the fact that we're still performing well below potential, and that we need to make some investments to stimulate our competitiveness.

I mean, it's embarrassing as a country that we're, you know, somewhere in the 20s in educational achievement. It's embarrassing, you know, the degree to which -- I mean, you go to many other countries that we used to think of as developing countries, and their infrastructure, you know, roads and train systems are better than ours. So, that's the kernel of truth.

But there is no road to a competitive, successful United States, 10, 15, 20, 30 years from now, that does not strongly address the deficit issue that we have.

MR. BAILY: I've shortchanged the audience a little bit, but let me try and remedy that by at least taking one or two questions from the audience.

Yes, can we get a mic there. Could you identify yourself, please?

MR. WILLIAMS: Good morning. I'm Ron Williams, I'm retired Chairman and CEO of Aetna. A couple of comments and questions.

In business, strategy follows your budget. And I'd be interested in comments around getting the strategy right and then getting the budget.

The second question really is a question about alignment. And the question is, is there any combination of structures that make it so if we don't have a budget, and we don't have an approved deficit level, we don't pay Congress or the President? It's pay-for-performance.

(Laughter)

So I'd be interested in your comments on that.

MR. BAILY: Anyone like to tackle that? That's kind of an intriguing thought.

Maya, do you have any comments?

MS. MacGUINEAS: I'll jump in on the first one, because I think it's so important, which is when you think about what we need to do - and we know, we use "4 trillion" as shorthand. We know that we need a deal around \$4 trillion or something that would stabilize the debt and put it

on a downward path. And that's really hard to do, but it's not sufficient to fix the problem. And I think you've kind of heard that through this whole panel, and you hear it whenever you hear policy people talking about "It's not enough to get the fiscal situation under control, you also need the right fiscal policies, or the right budgetary policies."

And what's kind of astounding in this country -- well, let's just start with the fact that we don't have a budget, right? The way that the federal government operates without putting a budget in place is beyond any of us.

But the fact that we also don't use it as the opportunity to pick our national priorities -- what are the most important things for the country to do? What are the best ways to do them? Should government do them? Should it be at the federal level, should it be at the state level? You can tell I went to public policy school: These are the things you do in public policy school, and then you come out and you realize that's not how it works at all. You don't go through this exercise of national priorities, figuring out how to do them, and then, assuming they're important enough to do, you pay for them.

I mean, I think Ralph's point is just so clear that you need to pick priorities that have long-term growth and competitiveness, among other values, that are leading them. And then you need to pay for them.

Because it's absolutely unacceptable to, one, pick spending policies that don't even achieve those goals and, two, then hand that bill off to your kids. I keep trying to explain to my kids that's what we're doing, to try to make what I do interesting -- unsuccessfully. But you can't explain it in any way that makes it acceptable.

And just quickly to your second point, you know it's obviously a gimmick, but it sort of feels like this is this moment where we need these gimmicks, where we have such frustration -- and particularly those of you who have run companies, have such frustration that we hired a group of people to come to Washington, and the amount of energy that goes on two teams beating each other up, instead of solving a problem that -- no matter how much we might disagree on the role of government, or the perfect way to solve it -- we all know has to be solved, just seems completely unacceptable. So there are sort of those moments where you need the no-budget-no-pay, or the other kind of gimmicks, if nothing else just to focus attention on: We have to work on this until we get it done.

MR. BAILY: I kind of like this idea: Lower the base pay, and get a bonus that depends upon performance. That's kind of attractive.

Yes.

MR. MITCHELL: I'm Garrett Mitchell, and I write The Mitchell Report. And I want to follow on that with another thought.

Ralph Schlosstein, I think, captured it when he said "Great country, bad balance sheet, bad management" -- i.e., bad governance. And it seems to me that if there's any lesson that we get from this panel, and other discussions, is there is a way to fix the balance sheet. It's not clear that there's a way to fix governance. In the first panel, Mayor Fischer talked about moving at the speed of business.

And so this is a question for Mr. McDonald. In an earlier life, I competed directly against your company in the advertising business, in a category that at that time we were pretty successful at, which was the mouthwash business. But one of the things that I learned about Procter, among many others, is that marketing plans were three pages long.

And it occurred to me that if, arguably, the words largest, most successful consumer products company can direct its product managers to put their annual market plans in three pages, that we might be able to take some of that magic, and instead of having 2,000-some-odd-page health care bill, or other bills of that length that nobody reads, that there's another place where the business community might be able to have some influence on this third problem that Mr. Schlosstein talked about, which is bad management and bad governance.

MR. McDONALD: I think, Gary, you're raising a very interesting point. We spend a lot of time training our new hires in thinking

up front so that they can distill their thinking to those one-page, two-page, or three-page memos.

I'm interested in asking Maya what she learned in school about creating policy. Because I almost think that there's some pride taken in the longer and the more complex, the better. I don't know.

But certainly, the longer and the more complex, the less principled, because if you can deal with principle, it can be shorter. You don't have to think about every single executional detail. And I think kind of what we miss -- because as Ron suggested, we don't really have a strategy, and the budget's not following that strategy, we're dealing with execution rather than principle.

So I agree with your point very much. I don't know if Maya would like to comment.

MR. BAILY: I was going to ask Lew to respond to --

MR. KADEN: Well, I guess I would add two points.

First of all, I think more attention to the quality of management, the training and development of public managers in government, especially people who devote a large part of their careers to public service, I think is an important subject. I think some of you may be familiar with Partnership for Public Service, which is devoted to that cause, but is essentially the only organization that I know of that is.

We have many talented career public servants in this government. We happen to have had, in this administration, both the first Treasury Secretary and the nominee to be the second, both of whom have essentially spent, with brief interruptions, their entire career in public service, and match up with the best public servants I think you'll find anywhere in the world in their field. And I would say the same thing about the current Deputy Secretary of State, Bill Burns, who is completing 30 years in public service, who is one of -- when I think of only a couple of career foreign service officers to rise to the rank of deputy secretary.

But we need to put more energy and resources into the development of those public sector careers.

I think the other point, which is more troubling -- and there has been a lot of commentary on this -- is we have to recognize that there have been changes in our political demographics, partly as a result of districting, partly as a result of changes in the country, that have pushed more of our elected legislators toward the extreme ends -- more concern about the challenge coming from them because more and more districts are essentially single-party districts. And so the political threat to an incumbent comes on their right flank or their left flank, depending on the party. And that creates a foundation for the kind of intense partisanship

and divisions that we see -- technology, money in politics, the transportation availability, all of that adds to it.

My first job after graduate school was on a Senate staff, and then a presidential campaign that came out of it in 1967, '68 -- it was for Robert Kennedy. And the first thing that Senator Kennedy said to me, on the first day I started, in May of 1967, as the most junior member of the legislative staff, was -- and he was hardly someone who had grown up in the Senate or was devoted to its internal process. But the first thing he said to me was he was going to set up a series of meetings with some people with whom he disagreed about a lot of subjects, but who knew and loved the Senate and its process. And so for that first couple of weeks, I got to spend time on the Democratic side, with Senator Long and Senator Russell, and on the Republican side with Senator Dirksen and Case and Javits. I think that kind of thing, that kind of experience doesn't happen very much anymore. And it's just one anecdotal indication of the change.

Somehow, we need more people, more thoughtful forums where those kinds of issues that affect our political process are discussed, as well as the substantive issues that we've been discussing today.

MR. BAILY: Yes, at the back there. Let's have one question from the back, and then we'll have to wind it up.

MS. LEE: Thank you. My name is Paulette Lee. I'm a communications and marketing consultant.

And the name of this panel is "Deficit Reform: Resolving Uncertainty and Promoting Innovation." And I've heard a lot of discussion of resolving uncertainty, vis-a-vis what the government's responsibility is, what Congress should be doing, what the President should be doing.

But I haven't heard very much about what business should be doing in terms of innovation. And so I would present that question to the panelists.

Thank you.

MR. BAILY: Well, I'm not sure that's right. I think the panelists have commented on that. But -- so let me go and make this the final words from the panelists.

We'll start at the far end --

MR. SCHLOSSTEIN: Let Bob go first, because he runs a much bigger company.

MR. McDONALD: No, I tried to talk about that, but I couldn't agree with you more, that innovation is, in many ways, the solution to many of our problems.

There was a wonderful book written by a man named Matt Ridley, called *The Rational Optimist*. And Matt is British. And in the book,

he talks about innovation really solving the majority of the world's problems, what has gotten us here today. And he reminds us that back in the mid-1800s, those people who lived in the U.K. at the time thought that we were all going to die under heaps of horse manure because of the number of horses we all needed. And, of course, that didn't happen because of the invention of the automobile. And the invention of the automobile has brought other problems.

But I do think innovation is the solution. And it's why we spend so much money trying to improve people's lives through innovation.

The way to get that done is by having the best schools, by having competitive schools. We've got to have competitive education. Most of our international partners are educated in the United States. Some of them would like to stay here but, unfortunately, when they graduate, they can't get the visas to stay, and they have to go back.

So, education and the infrastructure is certainly one thing. And I'll stop there so the other panelists can comment.

MR. SCHLOSSTEIN: Yes, I couldn't agree more with what Bob said, and the gist of your question, too.

At the end of the day, you know, as I said a little earlier, for America to achieve what it is capable of achieving from an economic point of view, it's fundamentally dependent upon our ability to continue to

innovate, and to create, and to invent. And I think we want a governmental system, I believe -- and I don't mean that as "business," I mean we should all want that -- that effectively allows business to do that, because ultimately that's how we will create more jobs, and more economic output here in the United States, but that does that in a way that's respectful of the populous as a whole. So we do need the environmental protections, we do need the safety protections, we do need the licensing approval of drugs, because, you know, none of us individually are capable of, you know, ascertaining the safety and soundness of those individual products.

But, having said that, we win as a country if we are using government to play the role as a protector of those things where expertise is required, but that we then allow a more unfettered investment in our people and in our innovations to win. I mean, if you look at the industries where the United States is winning globally, they are almost all industries where, you know, technological or, you know, sensitivity to consumers, deeply researched consumer needs -- I would say our financial industry is an industry where, you know, we are winning globally. And I agree generally with Lew's comments about the regulatory environment, but I think we have to look at that also to make sure that we're not rendering an

industry that we're winning in around the world today, to be less competitive.

MR. BAILY: Maya, any last comments?

MS. MacGUINEAS: Sure. So, I was sort of thinking about all the questions that came up, and the comparisons about business, and public sector, and what either could be learning from the other.

And I was thinking about, in the public sector, how we just don't -- back to your first point -- we just don't start with sort of what your objective is. These are all things you would do if you were running a business -- but what your objective is, sort of how you're most efficiently going to achieve it, building an operation that works to achieve it. If you look at how government is organized, it doesn't make sense in so many ways. It's complete compartmentalized on so many issues where we need to be problem-solving -- so, the operations that you use to achieve those goals. And, then, kind of the evaluation piece. We just, we never spend any time figuring out what works and what doesn't, and then using that and funneling back into changing things, or redirecting our resources.

But you don't want to overstate the comparison, right? -- because there's a bottom-line in business, and there's not a similar bottom-line in government. And it's not as though you can run public policy in the exact same way. And these are public-interest things -- non-

liable, non-divisible. They're things that the private sector can't do, in many ways.

So, I think there are so many useful lessons about how we can improve government, but you also don't want to overstate them.

But then I was also thinking about the fact that this innovation problem is so true in government, as well. And I think the same broken system in government that is keeping us from solving problems that we know are there -- and I always come back as seeing partisanship as a big part of this problem, the fact that two sides would rather beat each other up than come up with the answers -- also, I think, is affecting our innovationalism in government, which is there are public sector problems which we need to solve. And if we were able to find a way to be more entrepreneurial and innovative in government -- which, again, is a lot of what you do in a think tank -- but to actually have that work in our political system, and have more partnerships with the private sector in solving those problems, this country would be moving forward so much farther, and so much faster.

And so I'll come back to where I started, which is this fiscal problem just seems to me like it's gumming up the wheels of everything, and that there's absolutely no reason it's not okay to disagree on what the priorities are, or how best to get them. But if we are breaking our system

that allows government to financially function at all, we will not get to any of those discussions. And shame on us if we end up not, being poised where we are for such a tremendous next couple of decades, and we choose not to make the choices that allow us to go forward with those.

MR. BAILY: Lew, last words?

MR. KADEN: Well, I think the point about the value of investing in innovation, and then I would add talent and talent management to that. Nothing is more important. Procter & Gamble obviously is one of the leaders in the global business community because of the priority Bob and his predecessors have attached to that.

At Citi, coming directly out of the financial crisis, we established innovation centers patterned after the kind of skunk-workers, or a lab that some technology companies have -- one in Palo Alto, and one in Singapore. And although it's only three or four years, we're already seeing an extraordinary value in that.

And the other, I think, lesson of the time I've spent in and around the business world is that every investment you make in talent, at every level of the talent chain, every aspect of talent management is about the best thing you could do with that amount of resources.

MR. BAILY: Thank you.

You've made a great segue, really, that gets us to our last panel, which was you talked a little bit about innovation in government, and improvement government performance, and that's exactly what we're going to talk about, with Darrell's leadership, after lunch. And so we'll look forward to that panel. I'm certainly a big believer you can get productivity gains and efficiency gains in government.

This has been a terrific panel. My thanks to everybody on the panel, and to the audience for coming. (Applause.)

And we'll see you later.

(Recess)

MR. WEST: I am Darrell West, Vice President of Governance Studies and Director of the Center for Technology Innovation at the Brookings Institution and I'd like to welcome you to this panel discussion on improving government performance, and we are webcasting this panel live, and we also have a CSPAN broadcast. We've set up a Twitter hashtag at #USInnovation, so people can either post questions or make comments through that hashtag.

Those of you who are here this morning for the panels heard a lot of complaints about government. In fact, one speaker even raised the issue of horse manure which I thought was an advertisement for our panel on improving government performance, but obviously there have

been great criticisms about the inefficiency and the costliness of the public sector. Many feel that government gets in the way of economic development. Nearly everyone agrees that we need to think differently about the role of government and the political process.

Our Center for Technology Innovation this morning put out a paper entitled "Smart Policy: Building an Innovation Based Economy." We propose a number of different ways in which we could use technology to improve education, health care, and government performance, so if you didn't get a copy when you came in, there are copies out in the hallway outside the auditorium.

In this particular session we're going to discuss how our political leaders can better address the problems that we face. In particular, we're going to look at ways we can get Congress, the White House, and federal agencies to perform at a higher level. What are the new ideas to change the manner in which government functions? Are there responsibilities that can be transferred to other levels of government, the private sector, or non-governmental organizations?

To help us understand the benefits and barriers to government performance we have brought together an outstanding set of speakers. To my immediate right is Phil Knight who's the chairman and co-founder of Nike, Incorporated. In 1964, Phil and his former University

of Oregon track coach, Bill Bowerman, founded what was then called Blue Ribbon Sports, which was later named Nike after the Greek winged goddess of victory. And Phil, I like the optimism of that name. Great choice there. The first line of Nike debuted in 1972, but there are two things that you might not know about Phil. That before Blue Ribbon Sports, Phil was a certified public accountant. Is that really true?

MR. KNIGHT: True.

MR. WEST: With Price, Waterhouse, Coopers. I think most people didn't know that. And even more shocking, I didn't know this. He was also an assistant professor of business administration at Portland State University. That is amazing.

Robert Taubman is president and CEO of Taubman Centers, Incorporated. He has headed Taubman Centers since the company's initial public offering in 1992. He serves as a member of the board of directors of Comerica, Incorporated and Sotheby's Holdings. He also has served as a director of the Real Estate Roundtable in Washington, D.C. and serves on the board of the Beaumont Hospital in Detroit and some other non-profit organizations.

Elaine Kamarck is a senior fellow and director of our Management and Leadership Initiative Program here at Brookings. Previously she taught at the Harvard Kennedy School. In the 1980s,

Elaine was a principal founder of the New Democrat Movement that helped elect President Clinton. From 1993 to 1997 she served in the White House where she oversaw the National Performance Review also known as reinventing government, so we're coming up on the 20-year anniversary of that. Her research includes management, 21st Century government, government reform and innovation, and she is the author of *The End of Government...As we Know It*, implementation of the 21st century, and also a book on primary politics and the election process.

So, Phil, I want to start with you. You have tremendous experience in the private sector. What do you see as the government impediments that keep businesses from growing faster and creating jobs?

MR. KNIGHT: Oh, how long we got?

MR. WEST: Plenty of time. As long as you need.

MR. KNIGHT: Well, first of all, I'll point out that Nike was not only the Greek goddess of victory. It's a missile that goes really fast. That the bad news about me coming to a Brookings meeting for me is that it's a five-hour airplane flight. The good news is that it's a five-hour airplane flight; that I get to sit at 40,000 feet and think. And thinking on the way over here, I said government performance, Elaine and Darrell are really expert in that and I am not. That I've never spent any time in government, which is good for me and for government, and really, am not expert in that.

But the word performance, performance is sort of where we live. We make products that if they have any reason for being, allow people to perform better, and that's been part of our DNA and culture from the very beginning. That our mission statement is to provide products that inspire and provide pride, innovation, and inspiration for every athlete in the world, and if you have a body, you're an athlete. So, performance is very important to us.

That we've been number one in our industry for about a quarter of a century, through generations of managers and managements, and the key thing, I think, during that period is culture. And the older I get, the more important culture is to me and to the company's performance and to other company's performances. And I would say that the culture in government today is very unhealthy. And culture is made up of lots of different parts, lots of different people, lots of different actions, so I would certainly say that both sides of the aisle contribute to this unhealthy culture.

And there's lots of things that have gotten in the way of or provided handicaps for Nike doing business in the world. The Dodd-Frank has a whistle-blower provision that took 2 years for our person in charge of interpreting that, who is a graduate of Harvard Business School, to explain to us what it meant. And he finally said that even though we were

quite proud of the implementation of whistle-blower things for our own company; we have code of conduct. We have a handbook. For every new employee we have a class on the subject, and we've never had a whistle-blower incident. In spite of all that, with the Dodd-Frank implementation, we would have to add \$3 million in expenses to make sure we had standing in court if there was ever a whistle-blower incident. So, that's \$3 million that we took out that we could have invested in people, could have invested in jobs, could have invested in research, could have done a lot of different things with. So, there's one.

The second one is that there's another provision, which we didn't find out about until November. If I can get this one right: The Conflict Minerals Reporting Requirement. Conflict minerals apply to gold, tin, tungsten, tantalum, made in the Democratic Republic of Congo. What the hell does that have to do with shoes and clothes? Well, we have a fuel ban) that has metal in it that applies, and we have a golf driver that has metal in it that applies, so we have to report every year to make sure that those metal pieces did not come from Congo. So, how in the hell do we figure that out because it goes from a wholesaler to an exporter to an importer to an agent to a distributor? There's probably eight or nine layers between those small amounts that we have to do, but we have to take a couple valuable employees a couple months a year to trace down where

these metals come from.

There's, going clear back to Sarbanes-Oxley, requiring the CEO to spend 16 straight hours reviewing financial procedures in his company. Any CEO worth his salt already knows that without spending those 16 hours.

And then what Bob McDonald talked about today and said it much better than I will. In fact, maybe if you have it on tape we'd show it, but is tax policy and trade policy. Obviously, as the recession hits the world, trade policy gets more difficult and we have troubles getting products into two of our most fast-growing markets in Argentina and Brazil, which we could use some government help in keeping those markets open.

And of course the big one, tax policy, is that we have the highest corporate tax rate in the world, so that Mark Parker, who is now the CEO of the company, and for a young whippersnapper of 55, he's doing a great job. But he sits every year when he sets the budget, and he has to decide where the last dollar of investment goes, and where it generates the last dollar of profit. So he can get a dollar of profit in the United States for which 60 cents goes down to the ultimate shareholder, or he can get that dollar of profit in Timbuktu from which 75 cents comes to the average shareholder. So, any global company can maneuver

around them. Proctor and Gamble does that, I'm sure, better than anybody, and we'll be just fine with that, but the American economy suffers from that kind of a situation. So, those are some of the handicaps and those are some of the things that contribute to the culture that I think is not receptive right now to innovation and those sorts of things, and I'm sure I'll get to talk about that later, and turn it around over to you.

MR. WEST: Okay. Bobby, you have developed shopping malls across the country including your new City Creek Center in Salt Lake City. What has been your experience with government?

MR. TAUBMAN: Complicated. As Phil talked about the culture of government really is, I mean, if it's not broken, it's certainly misguided. For a company to be successful you absolutely have to have a strong culture, and I think we sort of argue at times what the purpose of government it, and it's really trying to sort of understand what that purpose is that the constituents are always pulling themselves apart at because the agenda moves so much as you talk through a process.

I mean, you mention Dodd-Frank. You mention Sarbanes-Oxley. Sarbanes-Oxley, which does take maybe that 16 hours and everything else. At least it was about 100 pages and people understood what its purpose was. It was after some terrible abuses that occurred in the economy, and it got done, and it was implemented over a relatively

short period of time.

You look at Dodd-Frank. Dodd-Frank's 2,000 pages. Ask anybody that has read this thing up and down, they don't understand what it is, and there's so many interpretations, they'd still have to be -- they still have to happen that -- government doesn't have a clue how to regulate it. And eventually you've got 7-, 8,000 banks out there and everybody says, "Well, it's good. There's going to be some consolidation." But that consolidation may not be good. At the end of the day the small community banks will get consolidated because they can't understand Dodd-Frank ever, and they can't afford it if they can actually understand it. Those are the people that are lending the small businesses and rural communities and small communities, and it will largely go away because the larger consolidated banks will have less interest. So, you have to be careful what you wrought when you start down that path. It all comes back to, really, what is the purpose?

Now, we're in the shopping center world, and as Darrell said, we just opened a shopping center in downtown Salt Lake City, Utah. It's the first large shopping center of our kind that we've built with department store anchors and the like that have opened since 2006. So, this project's creating several thousand jobs. It's created a huge investment. That's just the retail portion, several thousand. But the full project, which is \$2-

1/2 to \$3 billion has created tens of thousands of jobs, both construction and permanent jobs in an urban core, so I mean it's fantastic.

But the entitlement process that we had to go through, and obviously entitlement processes are necessary in many ways to make sure that things are done in an appropriate way, in a safe way, in a way that helps the environment, a way that helps the economy and the local community and all of the above, but we've been in entitlement processes around the country that have taken over 20 years. So, if you think about projects, and we're in one right now that I won't name exactly where it is, but it's been over 20 years. We have a project down in Tampa, Florida that took us 21 years to open, so it's now the most successful shopping center in that region. It's created at least 3- to 4,000 permanent jobs. A huge spinoff and a huge catalyst for all kinds of growth, but why should it take us 21 years to do something that's really good? And I think that's the problem.

Regulation is necessary, but regulation has to have its place. There has to be a balance, and sort of determining the size of government a lot of people have said should be the people's will, but it doesn't feel that way. And bigger's not always better. And the idea of a faster and smarter government, I said earlier is really sort of like an oxymoron. It doesn't feel that way. It almost feels like we should outsource certain pieces of the

government.

I mean, Canada, as an example. They've approved budgets. They've actually met the budgets. They've actually balanced their budget. They actually have an immigration policy. They have certain things we've done. Maybe we should outsource certain of our -- take back the democracy, maybe in 10 years. Just outsource it for a period of time. It's just we can't set a budget. If you had a business, you'd go out of business if you can't set a budget every year. I mean, it's ridiculous, but we can't do it.

And we've all talked about polarization, but from my view, the performance of government is not high, and that's disappointing because I do think we have the greatest country in the world, and I think the earlier panel talked about the balance sheet being broken, management not being good, and I think that's really something to keep in our minds.

MR. WEST: Okay, Elaine, you sought to reinvent government in the 1990s through the Clinton administration. Twenty years later, how do you see the issue of government performance?

MS. KAMARCK: Well, I think that in the 1990s there were things that we instituted that are now standard operating procedure in government, so the use of performance metrics is standard throughout the

government. It is a move in the direction of trying to measure performance. I think it's had great effect within the Executive branch.

I think Congress has steadfastly ignored this entire phenomenon because they like what they like, and they don't like what they don't like, and they don't want to get confused by performance metrics. So, I think there's been a sort of limited impact of the Government Performance and Results Act, which has established performance metrics throughout the government.

Information technology has made the most impact. In the '90s, in Clinton's first term the IRS had spent \$4 billion on failed information technology programs. Part of the federal government's problem with information technology had to do with the fact that it had legacy systems. If it wasn't for the U.S. Department of Defense and the Social Security Administration, we wouldn't have the Internet. That's where it came from, so there was sort of an unusual situation there, unique to any place in the world. And I think, actually, between the Bush administration and especially the Obama administration, there's actually been great leaps forward in terms of transactional use of the Internet. People file their taxes online. This goes off year after year with relatively no problems. Those two things have been good advantages.

I think the major failing over the last 20 years, and it really

goes back beyond that, is that because we were in a sort of anti-government mode for much of that time, then we had at least until the last election a very ascendant conservative feeling in the country, we started to do government not through government, and I think what my two colleagues are reflecting is that we began to implement policy through regulation and through the tax system as opposed to taking on policy head on. So, your example, Phil, about the Congo -- okay, look. Clearly that place is a mess. Clearly, with every --

MR. KNIGHT: No argument.

MS. KAMARCK: -- every good intention people in the Congress wanted to make a stance, but doing it that way as opposed through a more direct, straight-on diplomatic endeavor? So, we see this all over the place in the area of regulation and in the area of tax expenditures. A government that has been for 20 to 30 years now making policy through directions that are not intended to do that. The net result is we have a tax code where corporate taxes are way too high. We're not competitive. We have a tax code that creates a whole bunch of incentives and disincentives for corporations that are not related to growth, that are related to lowering the tax bill, again, because we were doing government through the tax system as opposed to doing government.

We have a regulatory system that seeks to do policy through

regulations on companies. It's kind of crazy. Okay? That's not how these things work the best.

Finally, let me say something about culture because I think your culture point is well taken. And to understand the culture of much of at least the regulatory part of the government, I want to talk about a female pharmacologist, 1957, named Frances Oldham Kelsey. Probably nobody here knows who she is. Well, she was the scientist, the pharmacologist, at the Food and Drug Administration who refused to approved thalidomide for sale in the United States to pregnant women. Now, at this point it was used all through the world and there were tests in the U.S., so there were thalidomide babies here in the U.S. President Kennedy gave her an award for her steadfastness on this, and every year the FDA gives out the Kelsey Award.

So, the culture of the regulatory part of the government, particularly in places like FDA, or really at the SEC, any place, is to not be the one that approves thalidomide. And that culture is so strong in many of these agencies that it ends up creating a kind of morass that is not necessarily helpful to government and not necessarily helpful to business, but I do think it's important for business to understand that cultural dimension to the regulatory side of the government because that, again, exerts a very powerful influence on behavior.

With that said, there are lots of other things to talk about in terms of government performance, but I thought that since my colleagues brought up the regulatory side, I would start with the regulatory side, and then we can move into other issues.

MR. TAUBMAN: But what happens is that you take that example. You take policy -- ends up, as you said, being created through regulation because it gets slipped in the back door and then these agencies take over that have these cultures of not doing wrong.

MS. KAMARCK: Yep.

MR. TAUBMAN: And it sort of chews up the policy --

MS. KAMARCK: Absolutely.

MR. TAUBMAN: -- and it creates, in essence, something that ends up with the metal example that he has in the Congo.

MS. KAMARCK: Yes, absolutely.

MR. WEST: And it creates a problem that we don't have a culture of innovation in the public sector that we generally see in the private sector.

So, Phil, I want to come back to you. You've thought a lot about management and ways to improve private sector performance. What do you think government can do to manage itself better?

MR. KNIGHT: Well, as I said, that ain't my area of expertise,

but I'm a proud trustee at the Brookings, at least until this panel is over (Laughter), but I have a great, great faith that they could come up with things to help improve government and including in the next hundred days.

My question goes like this, really, which in some ways the question has to be answered first, and I'm reminded, almost haunted, in the last two hours of that airplane flight, so you may not want to have me on a panel or have the panel on the west coast afterwards, but 15 years ago when Mark Hatfield retired I asked him to go to lunch. Mark Hatfield was a Republican Senator who for 30 years, and before that he was 8 years the governor of the state of Oregon. He was a revered figure in the state of Oregon, and he worked brilliantly across the aisle between parties, so much so that his nickname was St. Mark. And that I went to lunch with him and said that I had come to the position that I thought I could help the state that I loved. How would he recommend that I go about that? And the first thing that he said was something that I not do. He said don't bother working with the government of the city of Portland. He says, "It is so dysfunctional. It's just a complete waste of time."

Now there's a certain irony, obviously, that now 15 years later Bruce Katz is trying to make Portland, Oregon an innovation hub, and I will say this: if he succeeds, it's a better trick than turning water into wine.

(Laughter) We may have to refer to Bruce Katz as Jesús Katz. But he may be able to do that, but I would submit that Mark Hatfield was certainly right for 15 years, and that's my concern for the environment that we have. And again, I think it crosses both sides of the aisle, the environment we have now. Brookings can come up with some really good solutions. I have confidence in that. I don't have confidence that they'll be received in a way that makes them effective.

MR. WEST: Okay, Bobbie. Your ideas on improving government performance? Like if we made you czar for a week, what changes would you make?

MR. TAUBMAN: Well, first I'd look to private industry because I really do think performance-based cultures that we talked about are critical and there's just so much inefficiency in government, but I do think there's examples at the state level, and I'll go to my state in Michigan and mention a few things of things that can be done. Grand Rapids, which is a city on the west side of Michigan, and Livonia which is in southeastern Michigan, have created an initiative called the Virtual City. So, in the Virtual City, even though we're on opposite sides of the state, they actually collaborate on delivering services like information technology, accounting, payroll processing, health care pooling. And Grand Rapids has also done the same thing with Flint and Lansing to try

to combine income tax processing and payment systems. We have to find more efficiencies, and it was a private initiative that suggested that this get done, and it finally got done.

If you think about Michigan, Michigan is about 10 million people today. If you think about the city of Manhattan, it's a little over 8 million people. Manhattan has one fire department, one police department, one school district. It has one of everything, basically, that leads 8 million people. We have 10 million people. We have 550 public districts. We have 83 different counties. We believe in Michigan we could save at least \$600 million a year just in combining those into one police department, one fire department. Think about that in 50 states. Think about how much inefficacy there is throughout the country. So, creating a virtual city, creating a lot more efficiency at the state government I think would be tremendously important.

We have something in Kalamazoo, Michigan. Again, a private-public partnership that really was created by private industry, a few donors there that had an idea. They wanted to keep people in Kalamazoo, which is a relatively small town. There's a state university there called Western Michigan University, and they wanted to encourage people not only to stay in high school but to actually go to college and actually find better employment nearby and go to local schools, go to local

colleges. It had lots of sort of a virtual chain in the thought, so in 2005 these private donors put up the money. It's called the Kalamazoo Promise, and they guarantee that anybody that went to a public high school in Kalamazoo would, in fact, have a full ride in college. And since they've done this they've had thousands of kids now go to college that would have never gone to college. It's improved property values. It's improved by 20 percent the number of students that are actually staying in school to finish to get that senior year of high school. It's created much more stability in the market. It's increased enrollment in Western Michigan and the other colleges, the community colleges and the other in that community. But these are the kinds of sort of private sector initiatives that the public needs to embrace and not sort of push away from, and we have to find efficiencies in government because it is so wasteful. When you look at that we are the biggest tax collector in the world, and we can't balance a budget, it just doesn't make any sense to me.

MR. WEST: Okay, Elaine. You actually were a government performance czar before that term came into vogue. What can we do to improve government performance?

MS. KAMARCK: Well, there's a lot of things. There's a long list of things, but let me start with taxes, which keeps coming up. Twenty years ago we had this kind of weird idea, and the idea was why do

Americans have to fill out several different tax returns? In fact, all the information on them is being centrally located. How come the government can't just send them a postcard saying "You paid this many taxes. You owe this much. Is that okay with you?" The vast majority of Americans fill out the 1040EZ. They don't have elaborate deductions. I think the people on this panel probably couldn't fill out that form, but I think that most Americans --

MR. WEST: (off mic)

MS. KAMARCK: Not a chance. Most Americans can. And at the time, the answer was the incompatibility of the information technology systems. Well, interestingly enough, we've come a long way, baby, and we can, in fact, do amazing things with information technology, and one of the things that we're talking about in Massachusetts is coming to the IRS -- I'm on the Governor's Innovation Council -- and coming to the IRS and saying why don't we try the integration of our federal, state, and local taxes in an information technology setting, which for the vast majority of taxpayers who file easy, simple, straightforward taxes would simply get rid of the need to file a tax return and allow them to, in fact, get a postcard from the government stating where they are. That was a sort of pie in the sky idea 20 years ago. I think the information technology systems are here that we can start doing that. And let's face it, most Americans, until

they hit Medicare age, don't have much to do with the federal government other than paying their taxes.

I think the second thing that we could do to improve performance is in the regulatory arena. The technology is simply quickly outpacing the regulatory structures that exist. My favorite one is the FDA, but I think there's instances from fracking and the coming natural gas boom. But think about this. We have been developing for half a century -- we have a regulatory schema that is designed to approve one-size-fits-all drugs. Okay? I get a sore throat, I get penicillin. You all get penicillin. Penicillin is approved for everyone. Well, where's the frontier of science? The frontier of science is on bioengineered drugs, et cetera, where, in fact, in the future we will each get a unique drug that is bioengineered for us. Okay?

How on earth does that old regulatory system move to accommodate the new one? This is extremely difficult, and of course they're bound by the systems, right? They're bound by their history as they all are, and this is becoming extremely difficult in area after area, and of course, business, particularly the cutting-edge innovative businesses, they're constantly frustrated. Look, we could grow. We could get so much bigger. We could bring in so much more money. We could create so many more jobs, and yet the regulatory apparatus is simply not built to

deal with the rate of technological change of the 21st century. So, I think that would be the second way we could improve performance.

The third way would be to take performance seriously. As I say, the government is now up to its ears in performance metrics. When I was having to be an advocate for this 20 years ago when it was a brand new idea, I said, "This is our profit and loss statement. This is our P&L -- is the metrics that we establish for this agency." The problem is while we're up to our ears in them, nobody takes them seriously. They are not used. They are not used to make anyone accountable, and so wasteful things go on in the Pentagon, and if you're on a certain side of the political spectrum, you completely ignore that. You don't want to see it. You don't want to hear about it. You're doing this. Wasteful things may go on at HHS. If you're on the other side of the aisle, you don't want to hear about it. So, these have not been used to create the kind of accountability that would, in fact, improve performance. And part of that is just the politics has overwhelmed the system of metrics.

Now, interestingly enough, they are being used in internal management in the government, and I think to some good avail, but they're not being used to get the kind of accountability that you guys have to stand up to from your profit and loss statements from your quarterly reports. They're not being used with that level of accountability, and that

would be the third thing I'd say we should really look at. Where are we with this performance revolution, and how can we make it have more teeth?

MR. WEST: So, I'd like to throw out kind of a question for everyone on the panel, and anybody who wants to respond can jump in. Is it time to rethink federalism and return some of the current federal responsibilities to the state and local levels, or to the private sector? And if you think that, do you have any candidates in terms of either specific agencies where their functions could be returned or specific functions of government?

MR. KNIGHT: May I interrupt? Just go back to your deal and God bless you for trying to simplify the tax reform and having that as a goal over 20 years ago. It ain't working. And that's the problem. Well intentioned and really, probably, extremely well done, and yet here we are 20 years later. It's worse than ever and then no hope over the next 5 years that it will get better. I would bet there's nobody in this room that fills out his or her own tax return, and my own tax return (laughter), and I'm guilty if I make a mistake on that return with no standard of materiality. I can't tell you what's in there at all. And that's just one of the problems, but my point is not that we have a tax problem. My point is that you set as a goal simplifying it, and here we are 20 years later and it's worse than ever,

and that's what's the problem.

MS. KAMARCK: And it goes back to my initial point. It's because in that 20 years we have done policy through, in a roundabout way, we've made policy through tax reform. That's why when people are talking about tax reform, which I hope will be one of the things we get on the agenda, it's been a move forward that people have suddenly discovered the amount of money there are in tax expenditures because what's happened is that we have been doing policy through tax policy as opposed to taking on policy straight on. And that has added to the complexity of the tax code. That's added to people's unhappiness with the tax code, and it is not good government. I mean, it's ineffective government because it's, in fact, round-about government.

MR. TAUBMAN: Well, let me jump on that for a minute because, again, policy? What does it lead to? So, in the early '80s, I'm head of the Real Estate Roundtable. We talked about that earlier, so we'll just talk about a little specific thing in real estate. It's called FIRTPA, the Foreign Investment Real Property Tax Act. It was put in place in the early 1980s. Why? Because the Japanese, at that time, were the biggest guys in the world at the time, buying everything up, and suddenly they bought Pebble Beach, and they bought Rockefeller Center and people said, "Oh, my God, they're going to buy America." (Laughter) So, there was this

xenophobia that came over to the United States, and we had to stop people -- you could still buy all the General Electric if you wanted, but you couldn't buy real estate assets anymore. So, they were prevented from owning more than 49.9 percent of real estate assets.

So, the guy who created the bill in the Senate, actually a few years later went back and said, "This is crazy." And actually got it passed in the Senate. It fell apart in the House in 1986, so since then it's been sitting there. Now, both sides of the aisle, okay, and the White House have in the last 3 years in multiple occasions said at least part of this should be repealed. This is crazy. It doesn't even have a lot of scoring when you go to OMB. It's just got a little bit of scoring, but it's just sitting there. And you've got literally tens of billions of dollars -- we have this year in real estate \$350 billion worth of real estate that is coming up for refinancing. A lot of it's still under water, and it doesn't have an equity home. So, there's at least \$50 to \$75 billion sitting out there instantly if we just repealed a piece of this.

So, you've got the House on both sides of the aisle. You've got the Senate on both side of the aisle. You've got the White House. You've got the Treasury Department. Everybody's lined up to do something, but they can't do anything. Why? Because tax reform might come in the next 5 years. So, it's just the perilization of government in this

incredibly polarized environment. It's very disappointing.

MS. KAMARCK: It is very disappointing.

MR. WEST: Okay, why don't we open the floor to questions from the audience? We have a question over here. I think we have microphones someplace, but if not you can go ahead, Hugh, with your question.

MR. GRINDSTAT: One of the senators that's about to retire --

MR. WEST: Actually, we have a microphone that's coming over for you right now.

MR. GRINDSTAFF: Hugh Grindstaff. One of the senators that's about to retire says, "I can't wait until I get into lobbying." Who writes the tax laws? Congress. So, even P&G, they had -- in 1997 there was a thing called the Morris Rule that got them out of \$2 billion worth of taxes. So, it's the Congress that really needs to be straightened out. How do we straighten Congress out to really writing effective tax laws? I mean that's a big question because it's the lobbying of the people who -- we used to say it was a cottage industry here. Lobbying is a mansion industry here, and it's a -- how do we get around the lobbyists?

MR. WEST: Okay, good question. Congress and lobbyists.

MS. KAMARCK: Well, I can't say that this is an easy --

you've obviously asked the \$64,000 question here which is about a fraction of what a good tax lobbyist would make in a year. I think that the only thing we can do is go back to, say, sometimes it happens. And sometimes you get an alignment of some pretty good leaders, and they see that they all stand to gain from doing something together.

The last time that happened was 1986. The tax bill, it was Senator Packwood. It was Congressman Rostenkowski, and it was President Reagan. And they, in fact, got rid of a lot of very distorting elements of the tax code which people were -- I mean, dentists were buying empty shopping centers in the middle of the desert, and it was a crazy time. That was the last time we did a big tax reform bill, and there are people who think that if we can get past all the posturing with this fiscal cliff and stuff like that that the time has come for another moving together on a major tax bill, and because there's so much obsolescence. There's so much to complain about.

The Business Roundtable has been out there leading the charge and saying, "Look, this thing's crazy." Our corporate tax rate is now the highest in the world, putting us in a pretty uncompetitive position, so again, I almost never say this, but this does come down to leadership and this does come down to three people. The President, somebody in the Senate, and somebody in the House, being willing to put aside all the

special interests, lock the lobbyists out of the room, and come up with a tax bill. People know what should be in it. Right? We know that there's a lot of junk that's gotten into the tax bill, but it really does take that kind of moment to happen. It did happen once before in our lifetimes, and maybe it will happen again. And I'm hoping maybe even this year or next year.

MR. WEST: Are you optimistic?

MS. KAMARCK: I actually am. Only because what's happened in the discussion about the deficit is that it's opened up a discussion about all the things that are impeding growth. Right? And impeding innovation. It has, in fact, brought these issues, these crazy tax expenditures, these crazy provisions in the tax code. It has brought them up in a way that it hasn't been brought up after a decade of wars and terrorism and where people were thinking about other things. So, would I bet the house on it? No, okay, but I am more optimistic than I would have been even 2 years ago.

MR. WEST: Hope springs eternal.

MS. KAMARCK: Hope springs eternal. Yes.

MR. WEST: Phil, go ahead.

MR. KNIGHT: I would just say that my concern is what I said before is that Washington, D.C. has become Portland, Oregon. In the 95 year history of Brookings, for me, the proudest moment was at the end

of World War II when they wrote the paper which ultimately became the Marshall Plan. And I was thinking again at the end of my flight, I says, "If Brookings came up with a Marshall Plan for government today, would it be accepted?" And I have a hard time getting to yes.

MR. WEST: Elaine has actually done some research on the history of the Marshall Plan.

MS. KAMARCK: I have.

MR. WEST: Do you want to comment on that?

MS. KAMARCK: I'll just give one plug. I have a book coming out that's called *How Change Happens: Success and Failure in American Policy*. And it starts with the Marshall Plan. Starts with how in a very unlikely situation, right, a President, Harry Truman, who as about as unpopular as you can imagine, a Congress that was led by Republicans that was ascendant, a country that was sick to death of Europe and sick to death of having anything to do with Europe, how they passed the Marshall Plan. And that's the opening to the book. And what it shows is that, I mean, the '86 tax bill is in the book and the Goldwater-Nichols bill, a lot of significant legislation. It shows that there's no magic formula for change. That change is a really complex phenomenon.

You have situations where incumbent Presidents of one party make a great bipartisan deal with the other party, as did George

Bush in 2006 on immigration, and guess what? They all fall flat on their face and they fail. So, this isn't easy. It's not bipartisanship or polarization. Right? It's a complex interaction, and a lot of it is the public getting to a place where they're demanding change, and I think one of the things we do have now is a public that's quite sick and tired of Washington, and quite sick and tired of the absence of progress. And how members take that, put it through their heads and come up with solutions, I think, is going to be very interesting. But I do think it's possible because I do think change is possible.

MR. WEST: And we also have a fiscal crisis that may force action.

MS. KAMARCK: Well, that's what forcing everything. See? The prospect of these deficits for decades to come is forcing a different mindset. Nothing focuses the mind like death, right? (Laughter) And so, whether you're in an agency now and you're looking at a sequester, or no matter where you are, there's a different kind of focus than there has been in -- listen. Let's face it. We've gone through -- I keep going back 20 years because that's when I was in the government, but at the end of the Clinton administration we had peace and prosperity. Okay? Then we had 911 and war. Well, that ate up a good decade, not to mention adding to the deficits. And then we had a gargantuan recession and fiscal crisis.

Right? So, we now are maybe getting a little bit back to normal, and people are looking at this structure and the legacy of the last two decades with these enormous deficits and saying, "Okay, what do we do about this going forward?" and that's where I think you get the potential for change.

MR. WEST: Ron Williams on the aisle has a question, right behind you.

MR. WILLIAMS: The question is really based on my business career, and what you learn in business is that once an organization is created, it wants to live. And once it lives, it wants to grow. And that organizations also can have a way of becoming their own customer, and in business it just doesn't work because there's no revenue in being your own customer. So, the question really is a sunset question, which is what happens if we can develop ways to sunset organization's regulations that require a review of is the original problem, which is often a very legitimate problem they're created to solve? Does it still exist? Does it require the same solution?

The second question or comment is around risk, and I am always reminded of a letter I keep framed I got from a state regulator that shall go nameless. It was a letter of non-disapproval. (Laughter)

MS. KAMARCK: Yeah. Typical, right?

MR. WILLIAMS: And the whole question of government and

regulations are set up to avoid any potential risk, and the world simply isn't that neat and tidy, and I think that's another important area because given the authority and responsibility, people appropriately say, "How do I carry it out?" Those would be just a few comments and questions.

MR. WEST: Great questions. Panelists?

MR. KNIGHT: Risk is endemic in business, and you don't have gain without risk, so I think the same thing is to some extent true in government, but in government you don't get paid for taking any risk. And I think that is part of the problem. It's not a performance-based result. It's not a performance-based sort of direction. The only performance you get is if you did whatever the policy of the moment is, and you don't take any other risks. So, I think it is a conundrum, and I'm not sure what a good answer is. And I love your idea of figuring out how to sunset an agency or two, because you're totally right everything you said. You start an entity. The entity is meant to grow because all the people have incentives to make it grow, and then it starts feeding itself and the beast becomes even bigger. And in government, it just never goes away, so I mean I completely agree with your point of view.

The other thing is that on your risk and that accountability - that sunsetting these things. The other thing that government has a problem with is the pace of the world today. In business, it's going like a

son of a bitch, and that government is not equipped to deal with the speed that's going on, so you have all of those things out there in this moment right now that, thank goodness, we have these two experts to figure all of that out because it's a tough puzzle.

MR. WEST: So, Elaine, on the risk question and the speed question, I'm wondering if your idea on performance metrics is a way to have governments be held accountable in ways that matter, and whether data analytics is a way to incorporate real-time information that can be used to improve government decision-making, to respond to Phil's speed question.

MS. KAMARCK: Yes, let me separate out two pieces of government because we always lump it all together. Right? There's government that actually does things. Okay. So, the Social Security Administration declares people eligible for their retirement. They process their payments, et cetera. I would put Social Security up against any insurance company in the country in terms of the efficiency with which they do their job, and also in terms of the loss of revenue that they sustain. They're actually quite good this, and have historically been quite good at this.

So, there are pieces of government that actually do things, and a lot of them are quite good. I think where government has a bigger

problem is in the area of regulation and in the area of taxation because there they get into this absolutely no-risk mentality, so the Federal Aviation Administration, it's not tolerable for them to have two airplane crashes a year. The public will not tolerate that. The public wants no crashes. Ironically, by the way, the FAA which we did re-invent in the '90s, has just overseen 10 years of no major crashes in the United States. The United States is the safest place to fly in the world bar none. And you talk to people at FAA, and it's not a question of assessing risk. Their goal is zero risk.

Talk to the 32 families who had family members die from the meningitis that they got from those faulty steroid shots. Right? They don't want a little bit of risk in drug compounding things. They want zero risk, so a lot of what happens in government is that there isn't the tolerance for any risk, and therefore there's the overcompensation going in the other direction, building elaborate systems, et cetera, and sometimes they're justified. Sometimes they're not.

There's a wonderful book from the 1990s I would recommend to any of you. It's called *In Pursuit of Absolute Integrity: How Government Regulation Makes Government Less Effective*. And there they're dealing with another kind of regulation which is the kind of regulation to get rid of corruption, a sort of corruption control. And again,

there the idea is zero corruption. Well, in fact, what they show in the book is that a zero-corruption architecture, in fact, ends up not having zero corruption and ends up being quite costly, whereas if you were to say, well, we would set a risk level at X percent to be lost, and then fire people, you'd probably do a lot better. So, it works in two ways. There's the no risk, but the no-risk mentality finds itself in every piece of the government.

So, I did a lot of work over the last 20 years with developing countries, and the big difference between the OECD countries and the developing world is that in the OECD countries we are drowning in regulation. Our government is killing us. They're killing innovation, slowing down business, et cetera, because why? Our governments are, by and large, very honest. In the developing world, they're drowning in corruption. They have no regulation, and any regulation they do have is instantly corrupted, and they're so corrupt that, in fact, they've got the opposite problem. They can't grow. So, it's both out of regulation, but two very different kinds of outcomes and has led to two very different kinds of conversations.

MR. WEST: So, it's interesting. You mention corruption. In Rhode Island where I used to live, corruption was viewed by politicians as just a tip for good service on their part. (Laughter)

MR. KNIGHT: Just to the point about government doing

things and corruption, just one data point because we're talking about performance of government at all levels, city, state, all the way through. So, in the city of Detroit schools, they went into bankruptcy. So, a financial manager came in from the state, a guy named Robert Bob. First thing he did was make everybody pick up their payroll check. Guess what? There were 3,000 people that didn't pick up their check. Some of them had been picking up the check in the mail for 25 years. So again, you think that for 25 years somebody wouldn't have to pick up a check in a business environment? I mean, it wouldn't happen. So, when you see that kind of waste and fraud, it's inexcusable.

MS. KAMARCK: Absolutely.

MR. KNIGHT: But it exists at many levels.

MS. KAMARCK: By the way, in the developing world, that is absolutely the norm at every level of government. They're called -- there's even a term. They're called ghost workers.

MR. WEST: Right. Okay, in the very back there's a gentleman with his hand up.

SPEAKER: Thank you, sir. Thanks to the panelists today. Thank you, Strobe, for the forum today. I wanted to part pretty much from the overview of the discussion and invite, I guess, a commercial from the chairman. A mutual friend of ours, a long-time mentor of mine, and one

among your board of directors has on his living room table top a statue of Nike of (inaudible) and whenever I pointed out -- we'd get into a conversation about cultural icons, cultural totems, Brookings being a vanguard of discussion about foreign affairs. Could you, Mr. Knight, talk about Nike's role as an icon of American soft power and as a global economic force?

MR. KNIGHT: (Laughter) That's easy. (Laughter) Well, I mean, I don't think that we really think of ourselves that way. I mean, if we do the things that we do well, that may well develop, but, I mean, obviously that we try to run all facets of the business including marketing and marketing in an effective way, and we've associated ourselves with a lot of real heroes, and sometimes that's backfired. I mean, you've seen that today with Lance Armstrong's confession, I guess, or near confession, whatever. We're going to find out on Oprah tomorrow night, I guess.

But we just try to do what we do and do it well, and sometimes it works. I don't think we ever set out to be the things that you talked about, and we just try to do the right things and do them well.

MR. WEST: Okay, other questions? Here, the mayor.

MR. FISCHER: Just an observation. To become more efficient, you've got to be concerned about being efficient. Right? In government. (Laughter)

SPEAKER: No more efficient without being efficient.

MR. FISCHER: Really dumb, but there's not that many business people in elected office, and business people are not the answer. I'm a businessperson and entrepreneur. I just happen to be mayor right now. Most people who hold elected office do not have training in efficiency or high performance, so they don't understand how to run an organization in a world-class way. So, we've got a fundamental disconnect over people that are overseeing large bureaucracies and hundreds of billions of dollars in resources without understanding the basic principles of total quality or leadership or management. And for some reason as a country, we allow that to go on, so that's a fundamental issue.

But government is a service business, and people want to act like it's something we can't understand, but at its core, we deliver services. So, there are cities out there -- I'm sorry Portland's not one of them -- that government is delivered most intimately at the city level. Right? People know their mayors and they hold them accountable and box their ears. When you come to Washington, it's so detached from Main Street, it's really hard to hold anybody accountable.

So, there's cities out there and Louisville, for instance, we have a process called Louistat. Each one of our divisions, their goal is to

be in the top quartile of performance. Our goal as a city is to be the best city government in the country. We benchmark who's the best at what each process is. We measure that. There's a gap if we're not the best. We have teams that work on that, so it's not complicated. It's just really hard to scale, but ultimately you have to have people interested in this really boring thing of management and leadership, and we get so distracted, especially in Washington, that we don't even talk about that type of thing. So, there's hope I would say and most of it when you look around the country is at the local level, and I'm just giving unabashed plug for cities and metro areas.

MR. WEST: But not all the agencies can be in the top 25 percent. That's like Lake Wobegone. All the people are above average.

SPEAKER: Let's give everybody a try and go from there. I'll satisfy --

MS. KAMARCK: Can I just say that the performance management revolution, which is now about 20 years old, where it has had its biggest impact is at the city level, and you've seen real transformations in New York, in Baltimore, in Louisville. You've really seen a great deal of progress, and I think part of it is that what cities do is easy to figure out and to measure. You can figure out if that street is clean, if that pot hole has been filled, et cetera, so it lends itself in a very

clear-cut way and the public can understand it.

Performance management in Washington is an extremely difficult task. In the army, you can measure the performance of the general's motor vehicle division. Right? You can do that. But how do you measure going to the State Department? How do you measure the effectiveness of the Policy and Planning Office? Right? I mean, it took us, what, 60 years to figure out that George Kennan was a genius? Right? I mean, you can't have a metric for the Policy and Planning Office that's at all meaningful, so lots of things in the federal government are not comparable. There literally are no benchmarks for them in the world. There are no benchmarks for the United States military for much of what it does, and that is, by the way, 50 percent, almost, of our discretionary budget. There are no benchmarks, so the performance revolution which has been so powerful at the city level, somewhat powerful at the state level, is most problematic at the federal level, and I keep running up against this just year after year after year.

MR. KNIGHT: One of the last Brooking meetings, I think Strobe or somebody made the comment that to be a good mayor or a good governor or a good President or good cabinet officer, you have to not only be a good manager, you have to be a good politician. And I thought about that. I really never kind of thought of it that way, but you really do need to

be both, and those are almost conflicting skill sets. There are really not many people that do both very well, and that I think's part of the problem.

SPEAKER: On that --

MR. TAUBMAN: I know, for instance, you're a hell of a politician. Think about that.

MR. KNIGHT: Who are you talking to?

MR. TAUBMAN: You. (Laughter) So, here's why. All right, so as a business guy --

MR. KNIGHT: Are you willing to accept (inaudible)?

MR. TAUBMAN: Oh, no. Think about it this way. You are selling ideas. You have competition. You have complex business settings that you deal in. That's what the political world is. I used to sell to Coca-Cola and AMPM and all this, and so selling a complicated idea or product is not really that much different than selling a political idea. So, I would say there's a lot of similarity to that, and so you can be a good businessperson and a good elected official at the same time.

MR. WEST: Yea, it's hard to do.

MR. KNIGHT: I would make one other comment. I go to Asia a lot because we have a business over there and I get asked, and I know they're not perfect. Okay? The central government does make decisions. You get asked a lot. You have this two-party system and it's in

such gridlock, yet we can make decisions, and we train our people to get to the point where they make decisions. Before they get to the point where they're actually in a senior leadership position that they've gone through a whole bunch of steps, and that central government is trying to get to the point of sort of bridging the politician and the businessman by putting that person in a managerial post. They don't just elect somebody and then that person now is ordained to create policy that then gets written in and has no relationship to reality. So, there's more -- I'll say there's more pragmatism.

Now, I know all the differences. It's a developing country. It's the second largest GDP, but it makes decisions and it gets things done, maybe not perfectly as we would all like in the democracy that we live in, but it does have trained people moving into these jobs, and I think that many of our leaders don't have both hats that they can wear.

MR. WEST: I think we have time for one more question. There's a gentleman right over here with his hand up, and then after that we'll invite Glen up for closing comments.

SPEAKER: Just a follow up to the question earlier about lobbyists wrong. I wonder what is wrong of big money in company financing in terms of contributing ultimately to more complexity in taxes, regulation, and may I call it legal corruption in government?

MS. KAMARCK: I think it's pretty easy. I think that whenever you allow your tax code to get extremely complex, whenever you allow your regulatory to get extremely complex, and you're doing all sorts of things through your regulatory system that you're not supposed to be doing, you then create an interest, and any interest creates lobbyists. And so, what you have then is a reinforcing function of dysfunction, if you will, because you get somebody is making money off it. For everything that's irritating Phil, somebody is making money by using that tax break in a certain way by manipulating that, et cetera. So, the role of lobbyists is particularly pernicious in that the most money to be made is not in these great big lofty ideas of policy. The most money to be made is down there in the weeds of the tax and the regulatory system, and complexity is the friend of lobbyists.

MR. TAUBMAN: Absolutely.

MR. WEST: Great. Okay. Maybe we have time for one more question since that was such a clear and succinct answer.

MR. MITCHELL: Thanks very much. I'm Garrett Mitchell and I write the Mitchell Report, and I want to pose a framework for how to think about this question it seems to me we're being asked to think about and address today which is innovation and government and how it can help America be more competitive, and it seems to me that in order to do

that, and Mr. Knight talked early on about culture, Mr. Taubman also talked about it, is for people who have not had experience in government to understand the complexity, the insidiousness of the competing cultures that exist in government, and if we stay here in Washington, D.C., there are Article I people and Article II people and they don't care much about each other. There are in Article I, the Senate and the House have about the same amount of love for each other that the Executive branch and the Congress do. Within both of those houses, the Republicans and the Democrats spend most of their time trying to eat each other's hearts out.

And then when you go to the executive agencies, you have an interesting management challenge which is you have X number of people at work in an agency, 2 percent of whom are revolving-door types. They come in and they go out. And 98 percent are people who are there for a lifetime.

So, it seems to me when we talk about how to drive innovation through government, it needs to be done with a realistic perspective about the nature of the animal itself and that animal has become more complicated and more complex because of our divisions in this country.

But I think I just want to say that anything that can be done to increase the interaction between people who have not had experience

in government with those who have really makes a difference. Like Elaine, I had, at the state government level -- I ran a re-inventing government process for 3 years, and it was remarkable to see the difference in perspectives from the private sector people that we involved in that re-inventing government process when it was over. They were different people. They thought differently about government, and I guess I could say question marks, so what do you think about that, but I don't really know if there's a question there except to say that the complexity of the cultures is enormously important and often overlooked when we get in this subject, it seems to me.

MR. KNIGHT: But there has to be an openness to a business culture and a businessperson being in that environment. It has to be respected. It can't just be, with due respect to Brookings and everybody else in these environments. It just can't be people in and out of government and the academic world. And that tends to reinforce each other because the academic and the governmental roles and the people that focus on policy and that love it and that are brilliant at it, they don't really care about business. And when business shows up in the room, they're very articulate about why it doesn't make sense. And so, we have leadership that really doesn't -- I mean, it's my personal view. We have a leadership that does not really care as much about the business being in

the room and their opinion as much as what you've just described.

MR. WEST: Okay. We're out of time but I want to thank Phil, Bobby, and Elaine for sharing your views with us. And Phil, we still want you to be a trustee after this panel. (Applause) And I want to introduce Glenn Hutchins to make closing remarks.

MR. HUTCHINS: So, that panel makes me want to rush out to a Taubman mall and buy some Nike gear. (Laughter) About a hundred years ago in 1916, Robert Brookings founded this institution. He had come to Washington, I think, Strobe, at the invitation of Woodrow Wilson, to explore bringing business-like approaches to government. After his service with Wilson, he founded this place.

MR. TALBOT: Republican coming to work for a Democrat.

MR. HUTCHINS: Republican coming to work for a Democrat in a non-partisan way. Not bipartisan, but non-partisan. And part of his vision was to combine business-like practices with first rate analytics and world-class scholars like Martin and Darrell and Bruce who have been with us, and Elaine, to create policies that could have real-world impact for problems that were important to our country, and I think if you think about what we did today, we served Mr. Brookings' mission quite well. First panel explored how business and government could work together at the local level on advance manufacturing to address our

unemployment crisis and restore middle class jobs in our country. Second panel looked at the fiscal situation, talked about how a non-partisan group of business people has come together in the tradition of Robert Brookings to put pressure on our politicians to do the right thing, to restore confidence, create the conditions under which our economy can grow, and this most recent panel has focused, I think, quite acutely on how one “manages” or brings business management type of practices and disciplines to government.

So, as I say good-bye to you all today, I will assure you that Robert Brookings will rest in peace tonight. As with the knowledge that nearly a hundred years later, this institution is navigating the course which he charted for us. Thank you. (Applause)

\* \* \* \* \*

## CERTIFICATE OF NOTARY PUBLIC

I, Carleton J. Anderson, III do hereby certify that the forgoing electronic file when originally transmitted was reduced to text at my direction; that said transcript is a true record of the proceedings therein referenced; that I am neither counsel for, related to, nor employed by any of the parties to the action in which these proceedings were taken; and, furthermore, that I am neither a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

Carleton J. Anderson, III

(Signature and Seal on File)\_\_\_\_\_

Notary Public in and for the Commonwealth of Virginia

Commission No. 351998

Expires: November 30, 2016