

# The Innovation Economy

## “The Innovation Economy”

Remarks at the Innovation Economy Conference

Moderated by Judy Woodruff

Lawrence H. Summers

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JUDY WOODRUFF: ...This is a poll done by Newsweek and Intel in September and October of over 4,000 people in the U.S., China, the U.K., and Germany – in which 78 percent of Americans said they think innovation will be more important to the economy in the next 30 years than it's been in the last 30. But only one-third of Americans think that the U.S. is going to lead in that innovation. But 63 percent of the Chinese answered that China will lead. What do you make of that?

LAWRENCE SUMMERS: Look, I think there are a couple things to say. China's been growing at 8 percent a year or more. We've been growing at 3 percent, or more than that in good years. It's not so surprising that they're more confident than we are. A lot of that, frankly, is not a cause for concern. It's a reflection of the fact that average standards of living in China are between a tenth and a fifth of average standards of living here, so there's a lot of growth to be had from catching up.

But it's also a reflection of the fact that we've got to work on our innovation system in this country. Some of it is terrific. We've got a capacity for flexibility and dynamism that is second to none. But other parts of our system aren't working so well. Our schools do a very poor job of teaching science and technology and mathematics. Our culture is as supportive of financial engineering as it is of other kinds of engineering, or more. And that doesn't encourage the kind of growth that we want.

We need constantly to focus on making sure that we're a country that is hospitable in every way possible to entrepreneurship, and we need to make sure that we're providing the kind of support for scientific innovation that the country needs. That's why it's so important that President Obama has set a goal to lift our national share of GDP devoted to research and development from the mid 2s as a percentage of GDP to 3 percent of GDP. That means an extra \$90 billion of R&D.

You know, if you think about it, the really fundamental progress comes from new technology. Think about it, the twentieth century was the century of physics, and the United States led with respect to nuclear physics, the United States led with respect to the semiconductor and everything that followed from the semiconductor, the United States led with respect to the internet, which grew out of DARPA. Think how different a century it would have been if some other country had been the leader in physics.

The twenty-first century is likely to be the century of the life sciences, whether it's what they'll mean for new materials, whether it's with respect to what might be called mental steroids that are under rapid development, whether it is with respect to what it means in human health. And whether we're the leader in that is going to make a very big difference in our history. So we've got a lot of work to do as a country, and those figures should really should just reinforce the kind of work have to do as a country.

WOODRUFF: But this country has been known for its can-do spirit, the frontier mentality, the idea that Americans can do anything. Have we lost that?

SUMMERS: I don't think that if you look at what Google has accomplished over the last 10 years, if you look at some of the remarkable things that have happened in the life sciences, if you look at, frankly, an outcome from the last presidential election that would have seemed inconceivable even a decade ago, I think this country has enormous, staggering capacity for resilience and for transformation. But it takes a jolt.

We went through a period when the concern was that Russia would surpass us. That's what John Kennedy believed while he was President, that by the 1980s Russia would be richer than the United States. We went through a period 20 years ago when at gatherings like this, the quip that everybody made was that the Cold War was over and Japan and Germany had won. And people expected us to be surpassed by Japan.

And now we are rightly responding to the tremendous challenge that comes from the progress that's coming from China and India, Asia, emerging markets. But I think of that as a spur to greater greatness. And I am not unmindful, especially after the events of the last year, of the challenges that our country faces, but I also think that if you look at the way people work in this country, you look at the quality of our universities, you look at the role of some of our great companies around the world, and I've got a lot of confidence in our future. And I think our future will keep being greater than our past as long as we stay nervous about our future and on edge. That's why I think gatherings like this and the kinds of discussions that you all are having are so very important.

WOODRUFF: You talked about growing R&D from 2 percent to 3 percent of GDP. What exactly is the right role for government? I mean, that alone isn't going to turn on an innovation freight train, if you will, is it? I mean, what is the right role for government? How much of that is just getting out of the way and letting the private sector do its will, which didn't work so well on Wall St. a year ago? Is it tax policy? Is it immigration? What's the right role for the federal government?

SUMMERS: Look, there are areas, which I'll come to in a minute, where reasonable people will have a spectrum of opinion. But there are areas where there is very little debate and where we can do a lot better.

- Support for basic and fundamental scientific research, which is the wellspring ultimately of everything else in ways that nobody can fathom in advance. You know, mathematics is the most abstract of the sciences; number theory is the most abstract part of mathematics. Every ATM transaction is secured by a code that comes out of research in that most pure branch of mathematics. So leadership in supporting science is something that is absolutely central.
- An educated workforce of highly motivated people with entrepreneurial capacity – no one doubts that that is a responsibility of government.
- A system in which people can contract freely and in which there is the rule of law – how long does it take to start a new business? What kinds of barriers are there to people who want to be entrepreneurs? Those questions are government's responsibility as well. No one argues about any of that.
- A capacity to recruit able people – some of that's about education; some of that, yes, Judy, is about the immigration law. That's a public responsibility as well.  
An environment in which companies have a strong incentive to flourish – that's why the only one of the so-called extenders – tax provisions that are in place, but not permanently in place, which the Administration, even in this very difficult budget environment, has asked to be made permanent – is the R&D tax credit, because it plays a key role in encouraging businesses to do R&D.

I think these things are pretty much not debated across a wide part of the political spectrum. What's the role of government in supporting cooperatives within particular industries? What's the role of government in trying to identify particular technologies and to provide subsidies to businesses with respect to those technologies? Just how far should government go on those dimensions? There'll be debates on those questions, as there surely should be.

But I think that those debates at the margin are actually less important than doing the things that everybody agrees on – open markets, support for R&D, basic science, quality education, legal frameworks for entrepreneurship and flexibility. Doing those things better will make an enormous difference in the future of our country.

WOODRUFF: So if somebody said to you, should the government be in the business of picking winners and losers, you're not going there?

SUMMERS: I don't think it's a productive kind of debate. You know, was the interstate highway system picking a winning technology, which is automobiles, as distinct from another technology, or was it providing an important bit of infrastructure for the country? I don't know. Was embarking on a policy of weatherizing and making energy efficient all federal buildings – was that picking winners or losers, or is that making a smart set of investments? When Francis Collins, who's here tonight, sequenced the human genome, was that doing the 1990s version of putting a man on the moon, or was that industrial policy towards the life sciences industry? I don't know.

I think it's too simple to put the question in terms of picking winners and picking losers. I think anybody with sense has to recognize that a society is a complex network that depends upon investments, not all which have benefits that only benefit a single firm, and therefore there's a great deal that government can do. And at the same time, I think anyone who's studied the countries that we compete with and studied our own country's experience with synfuels, for example, has to recognize that it's a mistake to think that people sitting here in Washington, no matter how well motivated, are going to be attentive to what customers want, what can and cannot be commercialized – we're not going to be as good at that as the private sector. And so I think we have to think pragmatically in each of the contexts about what the best way forward is.

I do think one very important thing that President Obama has worked very hard on is some change in the culture of the way decisions are made in Washington. And he has tried to reduce the role of special interests, to make lobbying a less effective strategy, and I think that's important because these kinds of economic decisions will be made better if they're made by people who genuinely disagree and debate about what will be best for the economy. But they're likely to be made worse if they're made with a view to furthering specific commercial interests. It's not something that's going to be changed overnight. It's not something that's going to be on or off like a light switch. But I think some furthering of the national interest rather than the particular commercial interest is an important part of the approach that President Obama has tried to bring.

WOODRUFF: How much is innovation hobbled by this recession? And let's put it in some context: a number of smart economists are talking about the "new normal." Even after we come out of this recession, they're saying we are looking at 2 percent growth for a long time, and unemployment at 6, 7, and up percent range. How can innovation flourish even in that new normal? And do you buy that argument?

SUMMERS: I don't think so. Well, I'd say two different things.

I think the first thing to say is that one of the most damaging ideas in economics is what I call the doctrine of the cathartic recession: the theory that we've had excesses and we've had bubbles – yes, we did have excesses and bubbles – but somehow it's for the best if everybody suffers for a long time, and if loans don't get made for a long time, and if we maximize the number of bankruptcies and have prolonged unemployment for a long time, it'll teach everybody a very valuable lesson. I think that's a profoundly misguided view.

I think recessions like the one we're suffering now have very substantial costs. You look at how much R&D budgets are slashed. You look at the lack of job prospects for people who are graduating with engineering degrees from the country's college. You look at what happens to people who are out of work for more than a year and what happens to their capacity to be productively employed going forward. You look at what happens to the dynamism in the economy – how much people are changing jobs and jumping from one business to another.

So I think addressing the recession, addressing 10.2 percent unemployment, is a matter of very great urgency. It's not something that's going to be fixed in a week or a month or a year. After all, the problems weren't made in a week or a month or a year. And it'll take time, and it'll take step-by-step on a lot of different elements of creating jobs, whether it's focusing on assuring that there are adequate flows of finance and adequate work on the infrastructure of the country, making sure that businesses have the right kinds of incentives. There are a lot of things that need to be done.

So it'll take time to have this expansion mature, but I see no reason why there should be some "new normal" idea that the potential growth of the country is going to be 2 percent or is going to be substantially reduced by what's happened. You know, if you look at productivity growth in the last several quarters, it's actually been remarkably rapid, above 8 percent on some measures. Now that's a reflection of what's been happening in terms of there not being enough rehiring. But I don't see the argument that there has been some permanent loss of potential in the economy, and I think the priority has to be putting people back to work and driving the economy forward. By the way, putting people back to work and bringing employment back to normal levels, that's also going to be the single largest factor when it happens – it's going to bring down the federal budget deficit. So it's a desirable fiscal policy as well.

WOODRUFF: We're going to open up to the audience for some questions in just a minute, but let me ask you – I want to quote something Intel [president and CEO] Paul Otellini said a minute ago. He said – I think I have it right – he said, "Innovation is not the birthright of any one country or company." My question to you is, can the U.S. come out of this recession – can it recover and grow as it should unless it leads the world in innovation?

SUMMERS: We'll be much better off. You know, there's no danger that we are going to have too much innovation. We are proud of the living standards we provide, and our ability to provide those living standards depends upon producing products where you don't have to compete just on price, because you're producing better products that other people aren't able to produce. And that depends on innovation. But we can.

I mean, you know, I'm a few years past the period when I was really in politics, the period when I was really in politics – the period when I served as the president of Harvard University. And, you know, you can say a lot of things about that experience – of course, I can say a lot of things about that experience – but anyone who saw the set of students that I was privileged to see and the set of young faculty that I was privileged to see – Americans, people who saw that the place to pursue their dreams was in the United States – has to be enormously impressed by this economy's ability to innovate if we just make sure those people get the tools they need and get the opportunities they crave. And if we are able to do that in government, given the way this country is a magnet for young people, I think we'll do fine.