## Welcome and Keynote Address

DANIEL SULLIVAN: Good morning. My name is Dan Sullivan. I'm the research director here at the Federal Reserve Bank of Chicago. On behalf of the Bank and our cosponsor, the Chicagoland Chamber of Commerce, I am pleased to welcome you to this Summit on Regional Competitiveness.

Today's agenda is a very timely exploration of the opportunities and challenges that were articulated in the Organization for Economic Cooperation and Development's recent territorial review of the Chicago tri-state metropolitan area.

Our partnership on this event with the Chamber's Alliance for Regional Development supports many efforts here at the Chicago Fed including our mandate to promote maximum employment in an environment of price stability and our mission to promote fair and equal access to credit as well as economic opportunity for low- and moderate-income individuals and communities.

As you can see in the program and as you saw a bit in the video, today's discussion is organized around the OECD's four key areas for regional economic development. These are increasing competitiveness especially in environmental areas, leveraging the region's assets as a

> Victoria's Transcription Services, Inc. (312) 551-8818

transportation and logistics hub, promoting innovation as a driver of economic development, and finally, as a labor economist something very near and dear to my heart, matching skills and jobs.

For each of these topics, the organizers have brought together an outstanding group of people who I know will point our way towards progress. As you can also see, the summit brings together elected officials, civic leaders, and policy practitioners to advance the goals of a 21county geography that spans three states.

The intergovernmental cooperation and leadership on display here may well serve as a model for what the region needs to do to compete in the increasingly competitive global economy.

I'd like to congratulate Kelly O'Brien and the leadership of the Alliance for Regional Development for today's convening. We at the Federal Reserve Bank of Chicago are excited to partner on this groundbreaking event and look forward to continuing to work with the Alliance as this initiative moves forward.

Now it's my pleasure to introduce this morning's keynote speaker, Austan Goolsbee. Austan is the Robert P. Gwinn Professor of Economics at the University of Chicago's Booth School of Business. He also serves as a strategic

partner and head of the economic intelligence practice for 32 Advisors, a global consulting and advisory firm. In addition, Austan serves as a member of the economic advisory panel of the Federal Reserve Bank of New York and an economics consultant for ABC News.

From 2009 to 2011, he served first as a member then as chairman of President Barack Obama's Counsel of Economic Advisors. He was also chief of the economic recovery unit that was chaired by Paul Volcker. Austan has a very long list of awards to his credit. He's been a Fulbright Fellow and a Sloan Fellow.

He won an award as an Outstanding Journalist, and I think most impressive to me, back in 2010, with all the other duties he had, he competed in a stand-up comedy contest that was allowed to award him the funniest Washington celebrity. I think that's truly an outstanding achievement.

We're very pleased that Austan was able to join us today, so please welcome Austan Goolsbee.

AUSTAN GOOLSBEE: Thanks for that introduction, and thanks, everybody, for coming. I think it's a great idea to have this summit. It's a very important subject.

Just to clear up one thing on D.C.'s funniest celebrity -- it's true that I won that -- I have always

said that the central question of economics is, "...compared to what," and in that contest that proved it -- this is not a joke -- the runner up in the contest was Grover Norquist, the tax guy.

My wife came with me. It was supposed to go for two hours. We were already three and a half hours into it and I was the last person to speak. My wife said to me in a whisper, "Honey, no offense, but if you can't beat these people, we're going to have to slink out of here because nobody's gotten a single laugh the entire night." So that's the way it was.

I thought what I'd do today -- it's always a depressing set up for you if they bring in the economist. You've seen the little cartoon. They're at the dinner party, and they come in. The person's looking at his program, and he asked the one next to him and says, "What do you do for a living?" The guy says, "I'm a terrorist." He says, "What? You're a terrorist?" He said, "Yeah, I'm a terrorist." The guy looks around and says, "Oh, thank God. This thing said I was sitting next to the economist."

That's because we're not usually the most optimistic people in the world. I thought what I'd do is maybe talk about a collection of national trends in the national economy and the world economy how they bear on this region

> Victoria's Transcription Services, Inc. (312) 551-8818

and its competitiveness as a set up for what's going to be a very interesting discussion as we go through about some of these issues in more regional detail.

Issue one that I would start with is about the shortterm outlook for U.S. growth, which is a different way to say, "Whatever happened to the V-shaped recovery?" It's supposed to be that deep recessions are followed by rapid comebacks. That was the pattern. We went through a period when I was in Washington when they were talking about Vshaped recovery. Then it was a U-shaped recovery. Then it was to be an L-shaped recovery, which isn't even the shape of a recovery, so they've moved on to Arabic script, Greek alphabets, and others to describe the nature of the recovery.

What happened that the growth rate would be only two percent over some extended period after a big downturn? The conventional wisdom holds that we had a financial crisis. Everybody has got to deleverage when you have that around the world. It always takes a long time.

I think there is some element of truth to that, but I think not enough attention has been paid to the nature of the need for transforming what the major drivers of the economy are. The last V-shaped recoveries we had are ones like 1982 to 1984 where the economy can go right back to

doing what it was doing before the recession began.

When you have that, you can come back rapidly. I've got to do this in reverse for you. You can come back the other way. This time we had two major drivers of economic expansion in the 2000s nationally, neither of which was sustainable.

The first as you know was residential construction driven by house price increases that were unprecedented. The second was personal consumer spending that was growing faster than income was growing brought the U.S. national savings rate to a negative number at two points in the 2000s.

So you sum up all of the private savings of everyone in America and it was less than nothing at two points. You don't need a regional summit on competitiveness to know that's not a sustainable model for how we're going to be growing.

So in the data I think it's quite obvious that the U.S. economy is going to need to shift to a more exportand investment-led orientation in its growth with still major contributions from consumer spending from residential construction but just way less than what they were in the 2000s.

I think that as direct implications for the Midwest in

general, for the Chicago tri-state region specifically because if you're going to have an increase in exports, the biggest export thing that we have is manufacturing.

So even though there's been a long-term trend of manufacturing employment being in decline, I think you have seen and will likely continue to see some rebound of manufacturing and those places with a focus on manufacturing activities as well as on transportation and logistics that you've got to ship this stuff to get it out plus those places where they're making capital goods in the kinds of things that as companies expand their investment they need to turn to.

Things like that are going to naturally have some relative boost. I think the complication about this -call it the transformation hypothesis or I call it the bus stop problem -- which is you have a lot of people in industries who are sitting at a bus stop waiting for a bus that doesn't run on this route anymore.

Mentally they are saying, "Wow. This is so uncertain, and so many things are going wrong. It let's just sit on our hands, and once things get back to what they were in 2006, then we're ready to roll." It's not going to be like it was in 2006. As I've outlined, 2006 was an unprecedented outlier, not sustainable, and if you're

> Victoria's Transcription Services, Inc. (312) 551-8818

waiting for that bus to come back, you're going to miss your dinner because it's not going to happen.

This is still generally pessimistic not just for this region but for the whole national economy in terms of how much growth can we expect over the next 12 months or 18 months. I think the answer is not a whole lot. You've got at state, federal, and local levels the government's share of the economy is shrinking like never before -- literally like never before -- as big or bigger than the demobilization after World War II, so that will not be contributing to GDP growth.

We got at the peak of the housing bubble up to almost 6 million vacant homes fueled by these price increases. Then those prices collapsed. They're working through a massive inventory of vacant homes, so the amount of construction is at the least going to be depressed. Some people argue that it is going to essentially be zero. Why build any new homes if we have all of these of vacant homes currently in existence?

Obviously there's more complexity to it than just that, but housing starts are up, but for the same reason it's hard to injure yourself jumping from the basement window. Large percentage increases in housing starts are not overwhelmingly positive for the GDP because it's

> Victoria's Transcription Services, Inc. (312) 551-8818

starting from such a very small base. So you say, all right. Housing is going to be little. Government is going to be negative. Even if the private sector X that stuff is growing at a decent clip, three percent, 3.5 percent average with these zeros and negatives, the overall national growth rate even in the best case is probably only 2.5 percent which is not enough to really make any serious a dent in the unemployment rate.

The only times that we've seen substantial improvements in the job market in the short run have been in those brief periods where the growth rate inched itself up above the 2.5 percent or more. We had a period where in the Chicago region and in Chicago the city as the growth rate went up Chicago had the biggest to drop in the unemployment rate of all of the major cities in the United States.

As the economy slowed, that slowed down. So now other places have caught up and passed Chicago on that measure. It's still improving, but it's just going to be a slow, tough slog because there's a lot of retraining of workers that have to take place. I thought the OECD's report and its emphasis on human capital could not be more timely, could not be more appropriate. It's totally obvious at the individual level, at the city, at the state, and even at

> Victoria's Transcription Services, Inc. (312) 551-8818

the national level every place where people are getting more skills, higher education, and investing in their workforce, they're doing better.

They survived the downturn much better. They have started growing much faster, and over a 40-year period, their incomes are higher. Their productivity is better. So we cannot neglect that. Everyone knows that that's not -- I would say that's the dirty secret, but it's no secret. Everyone knows that that's the way to get ahead, so they're moving very aggressively in that circumstance.

Now it's clear that for that trend we start from some decent base. We have a lot of skilled labor. We have a lot of major educational institutions doing a lot of important scientific research, and all of those have been key components as you look around.

I would say there is one element of danger that I see. Among educated analysts, not just reading the New York Times but the people who look at the business cycle, there's this group of people who say, "Yes, okay. Fine. We could try to transform everything we do, and that's super hard work, but maybe housing is turning the corner, and that will lead us out. That can put us back on Vshaped recovery. I just read that the Case-Shiller house price index was up 10.5 percent in the last year, so maybe

we don't have to do this big transformation. We can just go back to what we were doing before."

I fear this is -- we are attempting to relive the Onion headline. You know the paper, The Onion, is a fake paper. The real headline of the fake paper was, "Furious Nation Demands New Bubble to Invest In to Restore Prosperity." I believe that for the people saying, "Housing's going to lead us back out of this," they've got in their mind, "Hey, we're not being greedy about it. We just want to reflate the housing bubble by 75 percent. It doesn't have to be 100 percent. We're not asking for all of that, but if we could just reflate it 75 percent, most of our problems would go away."

You're waiting at that bus stop that I told you you should not be waiting at. In the housing data we have about 110 years of house price data. The first 90 years of that data house prices grow less than half a percent real over 90 years, per year. Some people say are you real zero over that time but it's some slow steady asset growth. That's basically what housing was as an asset class up until 1998.

Then we have an eight-year period where house prices rise 13.5 percent a year and then collapse. So now I think in most of the markets it has turned the corner.

> Victoria's Transcription Services, Inc. (312) 551-8818

Throughout the Chicago area you've seen in most of the neighborhoods it has turned the corner and across the tri-

But now you've got to ask yourself, are we going back to 90 years of slow half a percentage point a year growth? Are we going back to the go-go days of 13 percent? Because if you think that housing is what's going to lead us to Vshaped recovery, you have to have in your mind that house prices are going to go back to growing at double-digit levels.

That's what fueled the residential construction boom that was enough to make such an outsized contribution. I think that's very unlikely. As I say, I think that's kind of a dangerous path to get on though that's the most vocal alternative to the, "hey we've got to transform, the nature, what will drive our regional competitiveness will be. We're going to be out in front of this shift to more exports- and more investment-led growth in the country.

The alternative explanation says, "Why should we do that? Let's go try to just get back -- if housing is about to come back and we somewhat miss the big run-up. We weren't Silicon Valley. We weren't Florida or whatever. Maybe we can get on it this time." I think it's a bad idea.

Third point I would make here about the national trends and what they imply for this region is also continuing to be depressing about the next 12 to 18 months, which is at the same time we need to shift to exports and more investment, the big export markets traditionally for the U.S. are absolutely in the dumps. So our two percent growth seems inadequate. That makes us the dominant growth force in the advanced world.

We don't have time to get into the problems of our European friends, but horrible. I'm going to give you reasons for optimism in the U.S. I'm not going to give you any on Europe. They're overjoyed in Europe that they just upgraded the growth forecast. I'm not making this up.

They just upgraded the growth forecast for the euro zone to 0.2 percent. Whoa! They had a party because that's an upgrade. That's the highest it's been in five years. That's horrible. That has been our major export market growing very slowly. Emerging markets have definitely hit bumps compared to the euphoria that they were at let's say three or four years ago.

Japan looking better, but again coming up from a very low growth base, and even in China it's hard to tell much from the official statistics in China, but they clearly had some significant slowdown. Hopefully it's coming back.

> Victoria's Transcription Services, Inc. (312) 551-8818

Economic data are hard to produce. First of all, data is plural. I'm still trying to wrap my head around that. The data are difficult to produce, so I will give them that, but I will just point out, and Dan knows very well, we spend a lot of time in the U.S. trying to get the statistics right.

Our GDP numbers come out one month after the quarter ends, and then they're revised for two years as we get the data. Those revisions, it's not like some minor whatever -- at the end of 2008, the first announcement was the growth rate is minus 3.5 percent. People said, "Wow. That seems horrible." You go open the book now, it's been revised to minus 8.9 percent. As they got the actual data they said, "Oh, it wasn't near what we thought."

In China, they announced the GDP growth rate the day the quarter ends and it has never been revised. So my colleague has always asked, "Why wait until the last a day of the quarter to announce what the GDP growth rate is? Just tell us now what it is." They modified this a little. Now they wait 10 days. It's the same idea.

So you can't tell much from the official statistics, but these guys who put up the satellites, they track how many light bulbs have been turned on, and stuff like that, you've seen a slowdown in China. The shift to exports is

> Victoria's Transcription Services, Inc. (312) 551-8818

not going to be made easier for our region and you have seen that. I think that's why you were seeing unemployment coming down pretty significantly here, and then it stalled out.

Last short run consideration that I would highlight is, how does policy in Washington or policy in the states alleviate some of these problems that we have? Now you can commence the laughter there. Obviously nothing, there's not a -- every single thing that you hear is horrible for development, not just of our region but for the country.

If Washington told you today gridlock is so pervasive nothing will get done for the next three years a lot of people would be disappointed, but they would say, "Well, I guess that's the reality." Only they're not telling you that. They're saying, "Probably nothing will get done in the next three years because of gridlock but there's a small chance we can do something much more horrible than that. We can either default on the national debt, or we could have a huge increase in taxes, or we could have some other massive meltdown."

They've got what I have previously called the East German judge at the Olympics problem in which either side -- whew, he does a flip. Ta-da! "I give it a two." The card is already filled out. They're holding it up before

> Victoria's Transcription Services, Inc. (312) 551-8818

you've even done the triple Lutz. If the president is for it, they're against it. If they're for it, the Democrats oppose it, and we can't get out of this mindset of massive confrontation, and anybody who makes a compromise is going to get prime eared (phonetic) and we're going to drive them out on either side.

I think that's terribly detrimental to the economy. It's going to undermine our region probably more than most because as I said, the Chicago tri-state region is poised to be out front of the economic transformation that's taking place and that needs to take place, and the longer that that goes on, the slower that transformation is going to take place.

So whoever was out in front of that parade -- I don't know if you know these flugtag. RedBull puts on a flugtag of people have to build a plane out of wood and bike parts and stuff and then they put a big 30 foot in the air ramp over into Lake Michigan. These idiots run with these things up, and they try to fly. I think the winner went 12 feet or something like that. This is not that. They're just, "Wee! (crash sound)." "Wee! (crash sound)." I fear we've got the flugtag thing going on with this in a big way.

Yet, if we look at the budget and the confrontation

## Victoria's Transcription Services, Inc. (312) 551-8818

about -- you probably follow the way our budget works. We have a goofy system. The government has to agree on a budget to stay open. They are supposed to pass a budget. They're unable to do that, so what they do each time it comes up is they pass a continuing budget, which just says, "We can't agree on a budget, so whatever was your budget last year, let's just continue that budget."

So they just keep doing that every six months; continuing resolution, and if they don't agree, then they shut down everything except the essential services. Interesting note of sociology. In the government, everybody who's working in a position desperately wants to be declared an essential service to the United States. It has no impact on what their pay will be, but they absolutely -- we were at the Council of Economic Advisers.

Here come the senior staff economists. This is like the definition of not an essential service. There's nothing. If we have a nuclear war they are not like, "Can you write up a report of whatever?" There's nothing. Each one of them is making an appointment to come see me. "Do you think we will be declared essential?" "No. Absolutely not." "Well, how could we? Do you think if we call Homeland Security and give them advice on the economy, would that raise the chance that we would be declared

> Victoria's Transcription Services, Inc. (312) 551-8818

essential?"

If they shut down the government, I think the short run impact on the economy will not be that high unless it freaks people out. If consumer confidence plunges because they say people in Washington are crazy, and they can't get along. If they ran into the debt ceiling and defaulted, I think it would be financially catastrophic, but I think hopefully that's a low probability event.

Yet, if you ask whose fault is it that we're in this situation -- is that the President's fault that he's not leading? Is it the Tea Party's fault for being obstructionists? Is it Harry Reid's fault? Whose fault? The answer is it's our fault. Everyone in this room and in the country, it is 100 percent our fault because where the dysfunction is, is right in our own minds. That dysfunction is what is being reflected in Washington.

It was true when I was in the White House and it's true now in the polls, massive majorities saying they agree with Republicans, government spending is out of control and needs to be cut. Bigger majorities when asked about entitlements say, "That's not really spending, and anybody who says they're going to cut Social Security or Medicare, we're throwing them out of office." They don't want taxes to go up on anyone except billionaires. They don't want

the deficit to be big. They say it's their number one issue.

We've got a bunch of contradictory things floating around in our own minds, which are allowing the political leaders in Washington, each group, to think they have a massive majority of the country behind them. The reason why they're stalled out on the budget is both sides are just trying to -- they can't say they're trying to do a little sonar of where are the American people? Are they with us or are they with you?

So in a way, if they had a shutdown it might be good for the economy because at least it would sort out rather quickly whose side are the American people on. Do they really -- the polls say the majorities don't like Obamacare. Majorities don't like the idea of a shutdown.

So where people are I think will get sorted out. I'm just nervous about when it's going to be sorted out. Once it is sorted out, I think the evidence shows that although the two sides are currently saying, "We will never compromise, no way, not a chance." That was the same thing that they said before the shutdowns in 1995 where it was a similar dynamic.

You had Newt Gingrich with a budget. You had Bill Clinton with a budget. Each saying, "Never. I'll never

> Victoria's Transcription Services, Inc. (312) 551-8818

give it this." They had a shutdown. The American people decided they like Bill Clinton's budget more than Newt Gingrich's, so they just sort it out quickly. That has happened in the last two years too with the fiscal cliff, with the pulling the stuff out of the sequester, and in a bunch of different areas.

Once we, the American voter, decide where we are, the politicians do respond. What's happening now is policy, as I like to say, has become the golf channel, which is to say if you like golf you can watch that 24 hours a day. I understand that there may soon be a second golf channel, so you won't even need to watch the ads. You can just flip back and forth to any golfer of any decade. But if you don't know how to golf, you can purge your life of golf. You can watch the Dancing with the Stars channel or music channel or whatever you want. There're so many channels. You can just focus on whatever you agree with or like.

There are probably 10 million people in the country who are watching with bated breath every iteration of this and they know, you know you're one of those people if you're saying, "Well, is the Senate going to send back a clean version of the continuing resolution to the House? And if they do, do you think they'll add a Keystone pipeline with it?" If you're aware of these kinds of

> Victoria's Transcription Services, Inc. (312) 551-8818

things, if you know how many times the Republicans have voted to defund Obamacare, you're in this golf channel.

Three hundred-plus million people in the United States are not watching that golf channel. In their mind, they're like, "Why should I pay any attention? This is a joke. They're just going to yell at each other, and then five minutes before midnight before the thing is going to shut down, they're going to go sort it out. So I don't need to pay attention."

The irony is precisely because 300 million people are not paying attention, they can't agree because if 300 million people were like, "You stop it. We want you to do this, we want you to do this, they would do it, but nobody's taking a position. And in the meantime we have these contradictory things just floating around in our heads. So that's not a great circumstance.

I told you that I was going to be more optimistic than the usual economist, and actually, I probably have been, but we've gone through why 12 to 18 months low growth prospects and that's not great for our region. Housing is coming back -- add some contribution -- but it's not going to be the savior in my view that some people say. And most of the big export markets historically for the U.S. are growing much slower even than we are, so our reliance on

> Victoria's Transcription Services, Inc. (312) 551-8818

shifting exports is going to encounter some friction as we run up against those countries, and Washington is not doing anything to help that.

We could add on top of it the Fed it -- maybe the Fed can save the day. My view is the Fed is doing everything they should be doing, and if you're waiting for that to save the day, get in line at the bus stop because that's not going to work. We are in an environment in which the Fed's quantitative easing decision not to taper, all of those things, in my view is what they should do, but the incremental effectiveness and ability of the Fed to increase the growth rate of the country is quite limited, and they use the best bullets with the first QE and the second best with the second QE, et cetera, so we're now down to the relatively lower impact stuff.

So why did I say at this point we're about like my grandma's old thing of you'd say, "I don't like oatmeal. I don't want to eat it." She'd say, "You know what, 80 percent of the world really doesn't care about your problems. The other 20 percent are glad." As our issues -- we say, "Woe is us. Shouldn't you give us sympathy?" We get no sympathy. The world is like, "Get over yourself. We'll trade. You take our problems. We'll take your problems. Those aren't even problems."

So if you were to have optimism, what is the source of optimism past the next 12 months? For the nation and for the region, what are the trends that you would count on? The first thing to note is all of the things that normally lead to V-shaped recovery, the pent-up demand, all of that stuff still lurks below the surface. If you can clear out the deleveraging, clear out the transformation, it is still the case for example that population in the United States is up more than 10 million from when the recession began, but household formation has been close to nothing.

So I'm not being facetious when I say you will know real recovery has begun as 25-year-olds pack up their junk, move out of their parents' basement into their own place, they probably rent the place this time instead of buying it, and when they move into that place if the past is any guide, they will have to buy pots, pans, a crummy futon, get a cable subscription, a bunch of stuff that in the aggregate is a very cyclical part of the economy, and that is normally what leads a V-shaped recovery.

You've seen in autos, in consumer durable goods, in investment goods, people have put off buying this stuff for as long as they can and eventually your washing machine breaks down, you've got to get a new one. People can't keep driving the same car for 20 years. We have the oldest

> Victoria's Transcription Services, Inc. (312) 551-8818

fleet on the road as any time in the last 30 years. The chances are that when credit improves and as the economy improves you're going to see an expansion of those durable goods.

Second, I will say that in the nation as a whole and in our region, there's no question that we face an important grouping of demographic challenges that are associated with pensions, with Social Security, with healthcare costs, an aging population. But the aging of our population in the U.S. and in this region is of a serious but a manageable size. It's totally different than almost any other country in the advanced world. If you look at any of the countries of Europe or of Japan or of China they are aging much more rapidly and much more dramatically than is the United States.

I believe that immigration has been a major component of smoothing out our baby boom if you want to think of it that way, but our population continues to grow and is forecasted to grow to 400 million. In most of these countries their population is forecast to shrink by 2050 if not before.

We start with a low tax to GDP rate, a low spending to GDP, among the lower debt to GDP ratios in the advanced world. Know that -- you look at countries like Greece,

you'll hear people say, "Is the U.S. Greece?" "Is Illinois Greece?" The Chicago metro area is a lot bigger economy than Greece. I think that misunderstands what the problem is facing Greece or other European countries where their growth is slower, their tax rates on income are already higher, they have a 20 percent VAT already, their debt to GDP is already over 100 percent, and the tax and spending levels of the government are well, well in excess of anything they are in the U.S.

So the market looks at them and says, "What is your step two? You've reached the end of this road but you're not at a fork. You're just at a dead-end." That is why they have a -- in the U.S. circumstance, we are essentially at a fork in the road in which we could do it with revenue, we could do it with cuts, we could do it with some combination. All of those options are open. We, the American people, have not decided in our mind how do we want to confront these long-run challenges, but if you just look at their magnitude, they are definitely doable without too much pain. So that ought to be a good source of optimism.

Third, the corporate sector especially in our region but nationally has returned to record levels of profitability, has had astounding productivity growth over

this recession, which is very unusual. It usually goes the opposite way. With the discoveries of different sources of energy in the United States you've seen prices which were already relatively low compared to others come down even more, which is another source of cost advantage for the region, and the workforce remains the most productive in the world as it said in the video.

Now I would tell the President that. My CEA people being who they are, they would say, "You need to stop telling the president that because technically Luxembourg has higher productivity than the United States." So I said, "Okay, great. I'm going to have the President say in the State of the Union, 'Except for 250,000 workers in Luxembourg, we remain the most productive economy.'" So qualify by just saying the major economies. The U.S. remains the most productive workforce of all of the major economies -- even the mostly major economies -- everything bigger than Luxembourg, we still remain the most.

If you read the newspaper you'd think the problem has been our quality is slipping. Our people are no good. We're not productive. That's totally wrong. The U.S.'s problem has never been a quality problem. The U.S.'s industrial problem was countries that had one-half or onethird our productivity had one-tenth our wage, so on a per

> Victoria's Transcription Services, Inc. (312) 551-8818

unit basis lots of middle- and low-skill activity moved out of the U.S.

Just be aware that that calculation has shifted back in the US favor in a pretty dramatic way for a few reasons. One, to their credit, a lot of these countries have gotten richer. Their wages are way higher than they used to be, so it's not actually that cheap to produce in China as it was in the past.

US productivity has been high. Wages have been flat, so the per unit costs relative to these other places have come down. And granted, with the qualifier that we do live in the City of Chicago or in this region, generally we have excellent rule of law in the United States, protection of intellectual property. We have cheap cost of capital, and you don't have to worry about, "We've got a partner. He just stole all my blueprints and opened a factory right next door and is now producing the same thing and putting his name on it."

Issues like that are becoming more important as we get into more let's call it intellectual - and innovationintensive products. Even our manufacturing, a lot of things that used to be called services and used to be thought of as strictly intellectual property, are now embodied in our manufactured goods. As that happens, the

> Victoria's Transcription Services, Inc. (312) 551-8818

regions like the Chicago region stand greatly to benefit.

The last issue that I would say -- and I wanted to leave some time for questions and I have done that -- the last area I'd say that's quite important is the orientation toward entrepreneurship and innovation in a country or in a region. Now historically, the US has been probably the most aggressively oriented to entrepreneurial startups and entrepreneurship in big companies; orientation to innovation, new ideas, willingness to break out of the old mold.

If you look at the equivalent of the Fortune 500 in the U.S., if you go back 40 years, a massive number of what was the top 50 are no longer in existence. They're definitely not in the top 50, but there's a lot of movement. Doing the equivalent of that in Japan or Europe you don't see movement like that at all.

You don't see Google, Apple shoot to the top of the market value rankings. That doesn't happen. They're much slower moving. That's a great advantage to the U.S. Now, in this tri-state region we have had good success in the last several years, but we need much more of encouraging startups and building out ecosystems of entrepreneurial finance, et cetera.

In addition to the other news coming out of Russia,

you may have forgotten that Russia has put forward an alternative vision of where they come from. Russia has announced that they intend to build the world's next Silicon Valley from scratch in a town in what is either described as scenic eastern Russia or Western Siberia known as Skoldova (sic). In Skoldova they are ordering tens of thousands of engineers to move to this town and start companies that will have spillover benefits on the rest of Russia's tech sector and this is what they view will be the centerpiece of the next Silicon Valley.

I'm willing to bet someone that that is not going to work. That if you go to Groupon or you go to Google or you go to whoever, it didn't cross their mind the calculation of either you're going to the gulag or else you will be required to start a search engine, social media company, or something that has a spillovers. If you come at it that way, that strikes me as highly ossified, and it won't benefit. It's got to bubble up from the culture of the place.

I'm left with the -- I got to know Warren Buffett a little bit in the administration and he would quiz me -not just me, he would quiz others -- sometimes the 1900 and sometimes to the year he was born. "What was the DOW in 1900?" "I don't know." Fifty is the answer. The DOW was

at 50 in 1900, and he would say, "If you made a list," I started calling it the Buffett List instead of the bucket list. The Buffett List is what's every reason to be pessimistic that will go wrong from 1900 to today. Man, what a list it is. You've got world wars and the Holocaust and flu pandemics and bank runs and one thing after another.

If you asked them in 1900, "What do you think the DOW is going to be in 2013?" They'll say maybe 60. Maybe 40. That's quite a list you got there. It might be 40. Okay, granted, it depends what Ben Bernanke says, it depends whether we have a national default. The DOW is at 15,000. How did that happen despite all of those horrible things? The answer is because the innovative capacity of the American people proved unbounded, and it's grown steadily at real incomes, 2.5 to three percent rate for 180 years.

Nothing happened in the last three or four years that changed that fundamental fact, the thing that made us the richest country in the world, except for 250,000 people in Luxembourg, is the fact that we've had this commitment to innovation, to growth, and that will come back. As I say, the national trends bode well for our region, but they also bode not that well for the next 12 months because I think there's a lot of uncertainty.

> Victoria's Transcription Services, Inc. (312) 551-8818

So I'm left with the old line of George Stigler, one of the Nobel laureates down at the University of Chicago, who passed away just before I joined the faculty there in the mid-90s. They said Stigler was a guy who was -- some of you knew him -- he was kind of a mean, old, crusty guy. That was his personality type. They said he was the type of person who would wake up every morning, look in the mirror, and grade himself a D. Then he would smile because he gave everyone else in the world an F.

If you look at Washington, you look at growth, and what's happening in the labor market, there are many parts of the U.S. economy you probably would not give any higher than a D. But really, just look around, and I think you will agree that it could be a lot worse, and in many places really it is.

So with that, being of the optimistic note, does anybody have any questions? If you don't, I'll just tell funny stories about our mayor and how crazy he was in the White House.

Q: This is Mayor John Dickert, so hold off on the mayor jokes. First of all, I can see how you won. You do a great job of presentation, and you really do captivate a crowd, so thank you for that.

My question is simply, do you feel that infrastructure

is a big component when it comes to the growth of the economy? And if so, what is or is there a key component to infrastructure that we need to focus on?

MR. GOOLSBEE: I think the economic infrastructure of a country is quite instrumental. In some ways in the negative, a crummy economic infrastructure can prevent growth. Now, the complication is there are some infrastructure projects especially as relating to transportation and shipping, though I would also like to include the telecom infrastructure as being important, some of those that in my view have a massive social payoff, spillover benefits on the economy, and facilitate exports, facilitate attracting investment to a region or to a country.

That said, a large chunk of infrastructure spending in the U.S., I think everybody has to agree with the system we have, is not really dedicated to what's got the highest cost benefit analysis. We have a system where some guy says, "Well, I would like to have a highway go right through there." Okay, now we have it, but that didn't alleviate some of the bottlenecks.

In my view, the ports, the junction points of rail and highway, all of the things that allow the shipping and transportation -- one of the great advantages of the U.S.

is that it's by far the largest internally open market in the world. You can think of transportation costs, congestion, bottlenecks, all of that stuff basically as a tax. It's like a tariff, so any way you can reduce that stuff I think is a huge positive.

I wish we could come up with a better way -- I thought some version of an infrastructure bank where you could match private money with public money would be a good idea to allow us to have some governance structure which could target really high impact projects and especially ones that are multi-modal or things that cross state boundaries, things that our current financing system don't do a great job at financing. I thought stuff like that would be perfect for it, but as I said, most of what is coming out of Washington is nothing, and I think that actual prospects for doing that are quite low. I am a little pessimistic on that.

If you have the microphone, you have the floor, but one thing I just want to caution you is in the White House they have this theater, and they'll bring people in. They give a speech, but it's got very bright lights, so you can't see if you're the speaker. So I would always say, "If you have the microphone, just assume you have the floor." You ask a question, and I'll be able to hear it.

> Victoria's Transcription Services, Inc. (312) 551-8818

There's always a guy in the front -- this guy stands up and raises his hand, and he's got his back to the audience. I didn't know there were two microphones, and somebody with the other microphone starts making the most offensive pronouncement about, "Women should never have gone to work," and "The following people are lazy." The audience is gasping. Everybody assumes it's this guy because his back is to them, and he's standing up to this. Finally, that guy just throws the microphone and yells, "It's not me!" Here, there's only one microphone, and everyone can see you, so just be careful with what your question is.

Q: Thank you for the floor. I'm not as familiar with the floor as I was in my younger days. George Stone, Milwaukee Area Technical College. I would essentially ask you the same question as the previous one about infrastructure about energy trends and opportunities. What do you see?

MR. GOOLSBEE: My family is from Texas. In Texas, there's a view that energy -- these discoveries of energy in the United States, shale gas and others, are the biggest discovery of all times and that the energy sector will be the thing that leads to growth and leads to employment.

I think it's very positive but not necessarily for the

Victoria's Transcription Services, Inc. (312) 551-8818

reason that some people think it is. As regards the energy sector itself being the engine of growth, I think people need to remember the difference between net job creation and gross job creation. If I had a critique of the OECD's report, one of those critiques would be I think they fall under the same line of thinking when they're talking about green growth.

You can have a lot of job growth in let's say natural gas-fired power plants based on the new cheap natural gas, but if total demand for electricity stays the same, every job in a natural gas-fired power plant is one less job in a coal-fired power plant, so the net job creation for the economy is zero when that happens.

Kind of what matters is, what's the labor intensity of the new forms of energy versus the old forms if that's going to be the sector? So the net impact of that energy sector, I don't know if it will be that large. However, to the extent that it's lowering energy prices, the spillover benefits to other sectors and particularly manufacturing, transportation, and some of the things that benefit our region I think are potentially quite positive.

It's basically like getting a great improvement to your terms of trade, lowering your cost, making you more competitive, so I think that's fairly exciting. Though I

wouldn't be betting your retirement on it 20 years or 30 years from now because, just remember, we are the first to have the technology to tap into these shale gas reserves.

We are not the only place in the world that has shale gas reserves. We're just the first ones to be able to get it. The largest shale gas reserve in the world is actually in China. They just have not yet figured out how to get the resources out of there. Eventually, I think these things are going to tend to equalize, but in the mediumterm I think it's actually quite exciting for several of our industries.

Q: Adele Simmons, Metropolis Strategies. Could you comment on the impact of growing inequality on the economy?

MR. GOOLSBEE: The growing inequality is definitely a fact. It's been a fact that has been with us for at least 30 years in the data. Most of the trend has looked like the top doing very well, the bottom doing very badly, the middle basically moving along with the economy. So when we're in a boom, the middle's going up. When we're in a recession, the middle's going down.

As we got into the 2000s, that snapped. We went through the first boom in U.S. recorded history where the median family income fell by \$2,000 during the boom and then followed up by the worst recession that basically

> Victoria's Transcription Services, Inc. (312) 551-8818

we've ever had.

The inequality has transformed in the last 10 years into a form that I think is somewhat dangerous. My theory is -- this is just my theory -- I think high inequality leads to more propensity to bubble driven growth because if a small number of people have a lot of assets and they're all going out trying to buy the same things, it tends to drive up prices.

But you cannot change the fact that the biggest driver of the rising inequality are just the fundamental forces of the economy. There's much more demand for skill and there's a lot of unskilled labor around the world that's depressing prices. It's hard to get around that other than to say you've got to invest in the training of the workforce. That's really the only guaranteed way to get out of that problem.

Guys, this is an exciting conference, and I appreciate you asking me to speak. Thanks a lot.

MR. SULLIVAN: Thank you, Austan. That was great.

- END -