**LARRY SUMMERS:** I'm glad to be here. I'm glad to be here with my friend, Jared Bernstein. And I'm glad to be here with the Center on Budget and Policy Priorities. As I've told Bob Greenstein before, I don't think there is any other organization that has made as large of a difference through the presentation of facts and thoughtful analysis. And this contribution has been a great one, so I am delighted to be part of one of the Center on Budget and Policy Priorities' programs.

Having moved back and forth over my life between the university and the government, I think of my role in a sense as bridging the worlds of academia and policy. So, what I want to do today is highlight three economic ideas that would not have been part of the conventional wisdom seven years ago if you taught an economics class, but that I believe should be part of the conventional wisdom and that have very important implications for economic policy going forward for industrialized countries in general, and the United States in particular.

First, hysteresis, or as I will call it today, inverse Say's Law. Jean-Baptiste Say, the patron saint of Chicago economists, enunciated the doctrine in the 19<sup>th</sup> century that supply creates its own demand. That, in a sense, unemployment or output gaps were an impossibility because, after all, if you produce things, then you would have to create income in the process of producing them, and then the people who got the income would spend the income. So, Say argued, how could you really have a problem?

It was Keynes great contribution to explain that was wrong, that in a world where the demand could be for money and for financial assets, there could be a systematic shortfall in demand.

Here is inverse Say's Law. Lack of demand creates over time lack of supply. I want you to look at figure one of our paper. It is not really drawn very dramatically. You have to kind of peer a bit to see it, but it actually tells a remarkable and a profoundly troubling story. Here is what it is – we are now in the United States in round numbers 10 percent below what we thought the economy's capacity would be today in 2007. Of that 10

percent, we regard approximately half as being a continuing shortfall relative to the economy's potential, and we regard half as being lost potential. These are the estimates of the Congressional Budget Office; you'd get very substantially similar numbers from the IMF, from the Fed, from the OECD, and from almost anybody else you asked.



I want to focus on that second half. We have lost 5 percent of capacity that we otherwise would have had. Let me describe that 5 percent in some other ways. It is \$800 billion. It is more than \$2,500 for every American, more than \$10,000 for every family of four. Let me describe it another way. Imagine that you wanted to make investments to build up more physical capital or to build up more human capital, so as to replace this loss in annual income. How big would those investments have to be?

Let us make a fairly optimistic assumption. Assume that the rate of return on those investments was 10 percent. Nobody can consistently earn 10 percent on investments, but let us assume that. Then, you would need eight trillion dollars of capital to replace the lost output that we have suffered as a consequence of this recession. Eight trillion dollars,

to put it in perspective, is about 40 percent of the value of all the stocks in all the companies in America. To state the obvious, eight trillion dollars is 2 <sup>1</sup>/<sub>2</sub> times the federal budget and is a staggering multiple of any conceivable federal investment program.

Let me say it a third way. Eight hundred billion dollars a year is between 200 and 250 billion dollars this year on the federal budget deficit. Over ten years, this loss, which grows with the economy, is more than three trillion dollars – more in terms of its stake for the federal budget than Bowles and Simpson were talking about. Or, to put the point in another way, an extra quarter of a percent of growth maintained for the next 75 years would entirely eliminate the fiscal gap as estimated by the Congressional Budget Office.

Let me put the point a fourth way. That eight hundred billion dollars, unlike the majority of the things we do in public policy, is not mostly about the most fortunate Americans. Study after study has confirmed what Jared highlighted in his remarks: a stronger, more high-pressure economy disproportionately benefits those who are last to be hired. It has a disproportionate impact on the employment of disadvantaged groups. It has a disproportionate impact on the wages of disadvantaged workers. It has a disproportionate impact on the income of disadvantaged families.

So, quite apart from the cyclical gap, a soft economy casts a substantial shadow forward onto the economy's future output and potential. This might have been a theoretical notion some years ago, but it is an empirical fact today. It is always true in science that the predictions and the results that count most are the empirical results that come after the hypotheses are formed, rather than the empirical results that come as the hypotheses are being formed. The doctrine of hysteresis was put forward well before anyone imagined this financial crisis and any reasonable reader of the data has to recognize that this financial crisis has confirmed the doctrine of hysteresis more strongly than anyone could have anticipated. Eight trillion dollars in capital investment would be the cost of replacing the output that is being lost every year as a consequence of the shortfalls in demand that we have suffered. My second proposition I suspect is less conclusively established, but I think an equally compelling reading of the evidence. The American economy has for a substantial period of time, and is overwhelmingly likely for a substantial period of time going forward, like the economies of the industrialized world, to suffer a demand constraint and to have its level of output and employment constrained by demand rather than by supply.

I think in many ways, the most important paper in terms of how one thinks about policy towards full employment that has been written in the last several years is a paper that was written by a group of French economists including Esther Duflo, the John Bates Clark Medal-winning economist at MIT.<sup>1</sup> The authors investigated an important aspect of French labor markets, looking at a program aimed at easing the transition from school to work and helping workers transit from unemployment into employment – the kind of program that I suspect most people in this room, including myself, are sympathetic towards.

Here's what they did that was very interesting. In some of the districts in France, 25 percent of people got the program. In some of the districts, 50 percent of people got the program. In some of the districts, 75 percent of people got the program. And in some of the districts, 100 percent of people got the program. Standard program evaluation was unambiguous. It was a terrific program. In the three types of districts where you could do the comparison, the people who got the program moved into employment much more effectively than the people who did not get the program. That is what you would hope would be true – you put people in a training program, they get a job faster.

But is that the right question? If there are 10,000 unemployed people and 1,000 jobs and you do something for a thousand people, they will no doubt get the jobs first. But that may not expand the supply of jobs. So, the important thing about this study was that it asked whether there were overall gains in employment from giving 75 percent of people

<sup>&</sup>lt;sup>1</sup> Crépon, B., Duflo, E., Gurgand, M., Rathelot, R., & Zamora, P. (2013). "Do labor market policies have displacement effects? Evidence from a clustered randomized experiment." *The Quarterly Journal of Economics*, 128(2), 531-580.

the training program, rather than giving 25 percent of people the training program. The answer was no. And the answer was no with an important nuance. The efficacy of giving more people the training program was greater when the labor market was tight and when unemployment was low, rather than when unemployment was high. That stands to reason.

If there were 1,200 unemployed people and a thousand jobs to be had, you would somehow think you were going to have a more trained workforce and it was really going to advance matters. And that is exactly what was discovered. So notice what this study demonstrates. It demonstrates that a model that assumes that the constraint is on the demand side – that employers only want to hire so many people because they have only so many orders – seems to fit the facts about the labor market in a way that a model that is on the supply side and emphasizes the workers does not.

So, keep that in mind as I give you a view that I have come to hold in the last several months, and that I think is quite troubling with respect to the current configuration of the American economy. It is what I have labeled, probably slightly pretentiously, the new secular stagnation hypothesis. And it is this: as currently configured, the American economy has great difficulty generating both adequate growth and employment along with financial sustainability.

Join me on a brief tour of recent American economic history. It was an enormous accomplishment, of which I am proud to have played a very small role, to arrest the insipient depression of 2009. That depression had been arrested by the mid-summer of 2009. By the end of 2009, credit spreads had normalized, TARP money had been paid back, and we were no longer discussing financial breakdown a possibility.

Since that time, the economy has fallen just short of keeping up with population and productivity growth. The share of the adult population that is working has barely increased, and even making all the appropriate demographic adjustments, we are far

behind in terms of employment of where we were at that time. So past financial accident, still very slow growth.

Now consider the four or five years before the recession. They were, in a way, even more interesting and revealing. We had the mother of all bubbles in the housing market translated into vast expenditures on constructing housing, repairing homes, and supporting consumption as people borrowed against what they thought was real home equity.

We had a huge erosion in credit standards in all kinds of lending ranging from covenant light lending, to private equity firms, to lending to car loans, to emerging market loans. We had what many believe – and some versions of the Taylor Rules suggest – was extraordinarily easy monetary policy in the face of these bubbles. And we had in the wake of economic recovery plus the Bush tax cuts what was at the time widely concerning growth in budget deficits.

You might have imagined that in the face of those four things the economy would have been massively overheated. You might have expected that we would reach and exceed full capacity. You might have expected that the mother of all credit bubbles plus no financial risk standards plus expansionary fiscal and monetary policy would have generated an acceleration of inflation. You would have been wrong in those expectations. Growth during that period was adequate, but it certainly did not represent an overheating economy. Before that, there was the recession and jobless recovery of 2001, before that the internet and stock market bubble.

And so, I would suggest to you that a reasonable reading of the evidence suggests that the dominant determinant of the level of employment in an economy with substantial unemployment is the level of demand. And I would suggest to you further that there are grounds for concern about the American economy's capacity to generate adequate demand along with financially sustainable conditions. To put it in a stark way, we have not done it in 15 years. The Japanese have not done it in a generation, and depending on

how you interpret the experience of the first decade of this century, it has been a long time since it happened in Europe.

So the second conclusion that I would leave you with is that demand constraints are central to understanding the evolution of employment in industrial economies, not just at this moment, but at many moments.

The third conclusion of the economic research of the last years that I would highlight is that the zero lower bound on interest rates or proximity to it requires a radical alteration in traditional views about fiscal and monetary policy. I was a strong advocate for the program that President Clinton enacted in 1993. I believe it was an appropriate response to the economic conditions at that time. Relatively high interest rates, relatively high capital costs, and investment that was plausibly constrained by capital costs made it reasonable to suppose that by bringing down the budget deficit, one could substitute one form of demand for another form of demand as interest rates declined, capital costs declined, and investment was crowded in. And I believe it is a reasonable reading of the evidence of the 1990s that to a substantial extent that took place and that the crowding in of investment was a significant contributor to the productivity renaissance of the 1990s, and led to a virtuous circle of increased economic growth, lower deficits, and lower interest rates.

There are those who would debate that proposition. Whatever the merits of that proposition, though, I would submit that it is unconnected with the policy questions of the current moment. The confident presumption that slack can be met with easy monetary policy is surely more problematic when there is no room to reduce the federal funds rate; when there have been five years of extraordinary monetary policies and slack remains; and when there are grounds for concern that protracted interest rates near zero inflate asset prices, disproportionately favoring the wealthy and raising questions about financial stability. Monetary policy is, in my judgment, a preferred instrument to simply living with economic slack and its continued consequence in an inverse Say's Law world. But it is very far from the first best. I believe that whereas in normal times it is appropriate to make fiscal policy decisions on grounds other than stabilization and demand, because one can assume that a change in fiscal policy will be largely offset by monetary policy, when monetary policy is constrained by the lack of demand, that is not the case. The crowding out mechanism that is conventional in discussions of fiscal policy will not take place when interest rates are not going to increase. Indeed, to the extent fiscal policy increases demand and that operates to raise inflation, the consequence is a reduction in real interest rates which crowds investment in, rather than crowding investment out. There are other mechanisms as well. The expectation of increases in income will in turn lead to increased spending.

With the help of David Reifschneider, formerly of the Federal Reserve System, we have done a very straightforward experiment. We have taken the Federal Reserve's standard macro model, not a model we created, but a model that has been a workhorse of the Federal Reserve System for many years. We have asked the question – both taking account of hysteresis effects, not as estimated by me but as estimated by a group of economists at the Federal Reserve system, and abstracting from those hysteresis effects – what would the impact have been of an extra 1 percent of GDP in government spending maintained for five years beginning in 2009? So, this is a pure fiscal expansion.



There are many aspects you can look at. As you would expect, real GDP goes up. As you would expect, that leads to increases in potential GDP. Much more true with hysteresis than without. But, what I want to highlight is panel D. A five year increase in the level of government spending, then terminated after five years, beginning in 2009 would have led to a lower, not a higher, debt-to-GDP ratio in 2030. In other words, the purported benefits of austerity would be achieved by its opposite. And this is not, again, some theoretical

calculation by some professors; this is the result of running the Federal Reserve System's model.

What is true with respect to expansionary fiscal policy is true with respect to anything that would operate to increase demand, whether it is policies that more effectively manage America's trade position in the direction of promoting net exports, whether it is regulatory policies that successfully reduce inhibitions to investment, whether it is social insurance policies that lead to increased spending on the behalf of beneficiaries. All would, by this analysis, be availing.

I would just conclude by saying this. If I am remotely close in quoting the CBO on the \$800 billion or on the \$8 trillion in capital that it would cost to replace it, the stakes in the management of the macroeconomy far exceed the stakes in any other economic issue connected to employment. Let us hope that the focus of our macroeconomic policy discussion over the next five years shifts to a dominant emphasis placed on the crucial priority of generating sufficient demand to restore rapid and reasonable growth to the American economy. Thank you very much.