THE HAMILTON PROJECT AT BROOKINGS

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Welcome and Introductions:

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Featured Remarks:

JASON FURMAN
Chairman, President's Council of Economic Advisers
The White House

Roundtable Discussion:

JASON FURMAN
Chairman, President's Council of Economic Advisers
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P R O C E E D I N G S

MR. RUBIN: Good morning, I'm Bob Rubin. On behalf of my colleagues at The Hamilton Project I welcome you today to our discussion of U.S. labor market trends.

Before getting into the program, just let me say a word or two about The Hamilton Project. About eight or nine years ago, a group of us got together who were very concerned about public policy and we thought that there was a real need for additional focus on analytic and evidence-based policy development and, also, for support for seriousness in discussion with respect to policy issues.

And I think that that is even more true today than it was when we started The Hamilton project, in part because of the dysfunction of our political system and in part because of the continued transformation of the global economy with rapid technological change, effective growth policies in many emerging market countries, and globalization.

And if you look at those factors, the ones that I have just mentioned with respect to the transformation of the global economy -- and it is a powerful transformation -- they relate directly to the topic that we're going to focus on today, labor market conditions. The specific focus of the presentation will be Jason's comments on labor force participation rate, but that logically leads into discussions about job creation, wage pressure, stagnant median real wages, inequality, and unemployment in all of its aspects, the official unemployment rate, but also the various other measures of employment and

unemployment.

To return to The Hamilton Project itself, it is, to the best of my knowledge, unique. We are not an institution, but rather we are a small partnership. We have involved in that partnership former government officials, policy experts, academics, people involved in business and finance, and they are organized into an advisory council. The advisory council, as I just indicated, consists of people from many different walks of life and I think that has given us a -- since it provides the guidance for The Hamilton Project -- a distinctive perspective with respect to public policy issues.

Our architecture is totally open. Our policy to promote proposals are commissioned from leading experts and policy analysts from around the country. We do not endorse policies, but rather we provide a platform for discussion, for deliberation and, very, very importantly for promulgation, from dissemination in government circles, media circles, and policy circles.

The Hamilton Project works in partnership with The Brookings Institution, and that institution's intellectual vitality is a very important part of our life. We believe the objective of economic policy should be growth, broad-based sharing the benefits of growth, and economic security. And we believe rather than being antithetical, they can all be mutually reinforcing. We also support market-based economics, but believe strongly in the vital role of government to provide the functions for economic success that markets, by their very nature, will not

provide.

And that takes us to today’s discussion. I’ve already described the topic as labor market conditions writ large, starting with an examination of the participation rate. On the issue of measurement, there’s also the complex and controversial question of what is the comprehensive unemployment rate today, if you include the official unemployment rate, and then discouraged and marginalized workers, and those who are temporarily employed or have temporary jobs, but would like to work full-time. Comparing all of those last three -- marginally attached workers, discouraged workers, and the temporary workers who would like work full-time -- comparing the rates of those to what they would be in a normal, full employment economy. In other words, what is the excess in those areas or what it would be in a normalized, full employment economy?

And that, of course, leads to the question of how that comprehensive unemployment rate -- that unemployment comprehensively measured compares to the similarly measured unemployment rate prior to the recession. And given that, how long should it take us to return to full employment again in this comprehensive sense given the rate of growth we expect in the economy, the rate of job growth we expect in the economy, and the annual increases in the potential labor force.

And it was interesting, we celebrate -- and we should celebrate when we have job creation of 200,000 or 250,000 jobs a month, but those still turn out to really small annualized rates of increase. The 200,000 jobs is about 1.7 or 1.8 percent a year

and 250,000 jobs a month is an annualized increase of about 2.2 percent a year. So that's still a relatively slow rate of growth relative to what some people, at least, think is the excess labor capacity, though there's a lot of debate about what that labor capacity is, and perhaps Jason and Alan can shed light on that.

Let me add just two more comments. I think there's a tremendous challenge in meeting the objectives of achieving increasing incomes at all levels, and broad-based sharing in our output of goods and services. And that issue is far more complex and the policy measures with respect to it are far more uncertain than is recognized or at least acknowledged in the policy community and in most political and policy deliberations. And that is because of the powerful changes that have taken place in the global economic environment.

Most importantly, technological development and, to a lesser extent, globalization are, on the one hand, central to growth and, on the other hand, can create tremendous pressures on wages and on jobs and job creation. And that is true with respect to jobs at all income levels. Lower income level, middle income level, and even top income level -- although it's skewed considerably towards problems with respect to what we think of as middle income jobs and lower income jobs. And it creates enhanced opportunity for some of those in the top quintile -- or maybe it's not the top quintile, but at least the top of the income distribution.

In this context it seems to me there's a profoundly important question about which there's a lot of disagreement, as

to whether technological development is going to continue at the rapid rate that it has and, if it does, whether the labor displacement effects that have already taken place are going to continue. And looking at those possibilities, what kinds of policy responses should we have that can best enable us to deal with what, at least to me, seems like a daunting problem.

Let me mention one other issue, and it's -- I know it's in some of Jason's materials because I've read them, and that is that we have a very low participation rate and a very high unemployment rate amongst young, African-American males. And that is a cadre of our population that is going to be very important to our economic and social future, so this is an issue not only of great importance to those people, but to all of us, to our entire society and to our economy. And, once again, the question of what kinds of policies will be effective with respect to this problem, it seems to me, is a very complex and uncertain matter.

So, we are very fortunate to have with us today two people who are very specially equipped to address these vital and complex issues. Jason Furman, the chairman of the President's Council of Economic Advisers, and Alan Blinder, the Gordon S. Rentschler Memorial Professor of Economics and Public Affairs at Princeton University, the university that I very much wanted to go to when I was in high school, but they did not have a reciprocal feeling -- (Laughter) -- and a former member of President Clinton's CEA and former vice chairman of the Federal Reserve Board.

Both are outstanding economists. I've known them both for a long time. They also have a keen understanding of politics and policy. In keeping with the practices of The Hamilton Project, I will not recite from their resumes. They're distinguished and they're in your materials. I will just add that Jason is a former director of The Hamilton Project. He replaced Peter Orszag when Peter went to become head of the CBO. And perhaps less well known, Jason at a younger stage of his life was a juggler on the streets of New York, and I think in some sense that may help explain his success in Washington and his ability to work with quite a varied cast of characters, including myself, over the years.

Alan Blinder, in addition to being one of the nation's most highly respected economists -- not only in the academic community, but also in the policy and business community -- is a distinguished and active member of The Hamilton Project Advisor Council and outstandingly adept at juggling ideas.

Our program will start with Jason presenting a paper he released today on the participation rate, and then in his comments I have the impression he will also discuss labor issues more broadly. Then Alan and Jason will have a discussion, I'll be the moderator on all the kinds of issues I've just mentioned on Jason's presentation. And after that we'll wind up with questions from you all and we will adjourn at 12:30.

Let me close by thanking Melissa Kearney, the director of The Hamilton Project for the guidance she's provided.

MR. FURMAN: So, thank you, Bob, for that

introduction, Alan for joining us today, and Karen Anderson for everything you do to organize these terrific events. It's good to be back with The Hamilton Project at The Brookings Institution. Your work has consistently both advanced analytically sound policy ideas, but also fostered a broader, rigorous discussion about the most important issues facing our country.

And perhaps the most important economic issue facing our country today is the state of the job market. In my remarks I want to discuss the progress we've made in healing from the worst recession since the Great Depression, but also some of the challenges that we face and what we're doing to meet those challenges. Some of those challenges are the consequence of the Great Recession themselves, but many of the largest and deepest ones predated the recession and were decades in the making and will take a long time on a serious effort to recover from.

In the course of these remarks I'll be drawing on a new report that the Council of Economic Advisers released this morning, and should be on our website, on the labor force participation rate, which has been one of the most puzzling and, I think, for many people, one of the most misunderstood aspects of the labor market recovery in recent years.

I'll also touch more briefly on wages inequality, job quality, all of which are extremely important topics which could be the subject of several speeches of their own, so it's only time constraints that will prevent me from discussing them more.

There is a version of these remarks that should be

posted on our website momentarily. It’s slightly expanded from what I’ll be sharing with you right now.

To put some context on what we’ve seen in the labor market -- I’ll put the unemployment rate up here -- and I remember in 2009, Larry Summers asked Alan Krueger, who then was the assistant secretary for economic policy at the Treasury a question, the question was that in 2009, the unemployment rate went up much further, much faster, than anyone expected.

If you looked at the survey of professional forecasters as recently as November 2008, they projected by the second quarter of the next year, just six months in the future, the unemployment rate would be 7.4 percent. Instead, it was 9.3 percent.

Larry’s question was simple. We know the unemployment rate can rise rapidly, but how rapidly can it fall? Alan’s answer was sobering. In recent decades, according to his analysis, a half-dozen OECD countries had seen their unemployment rate jump up by 4 percentage points in a 2-year period. But in all of these cases, the average annual decline of the unemployment rate once the economy started recovering was just 0.4 percentage point per year.

The best case in the OECD in recent decades had been a 0.7 percentage point per year decline in the unemployment rate, and this was averaging across all recessions. And we know that the type of recession we went through -- a financial crisis -- is particularly severe and, as Carmen Rinehart and Vincent Rinehart showed, in 10 out of 15 countries that went through those a

decade after the crisis. That analysis was prescient for Europe, which currently has an unemployment rate of 11.6 percent, barely down from its 12 percent peak in 2013.

That analysis though was overly pessimistic for the United States and I think, in large part, due to the vigorous multi-front response to the economic crisis, the United States has enjoyed a sustained economic recovery. In the first years of that recovery, the unemployment rate was falling 0.7 percentage point per year -- equal to the maximum amount that Alan had found following previous big increases in unemployment. And over the last year, the pace of decline in the unemployment rate has doubled from that. That's been one of the most unexpectedly positive economic surprises we've seen in a year.

Just to put it in some context, for the last several years, if you ask the Blue Chip where the unemployment rate would be right now, they would have said above 7 percent. As recently as last year the Blue Chip said we wouldn't get to a 6.2 percent unemployment rate until 2017. As you see in the figure, we got to 6.1 percent in June, 3 years ahead of what was expected just last year.

A number of other indicators show a recent strengthening in labor markets. That unemployment rate decline of 1.4 percentage points in the last year is the fastest in nearly 30 years. The participation rate, which I'll discuss in much more detail, appears to be stabilizing. Job growth strengthened over the course of a year, with 1.4 million jobs added in the first 6 months of this year, the best first half of

a year since 1999.

Steve did a good column today or yesterday on part-time employment. It bounces around, it's very noisy month-to-month. Look at it over the last year, 99 percent of the jobs added have been full-time jobs. And finally, wage growth has picked up and is somewhat faster than inflation.

All of this is the culmination of 52 straight months of private sector job growth, the longest such streak in the nation's history. Nevertheless, there are substantial fluctuations from month to month and there's always significant uncertainty, especially about any one data point or any one month.

A wide range of labor market indicators do tell this same consistent story. We're now far into the recovery from the Great Recession, but we're not all the way there yet. The clear measure of this is the unemployment rate which -- and I'll explain this chart when I get to some of the other ones. The unemployment rate, which rose from 5.3 percent, its average during the 2001 through 2007 expansion, to peak at 10 percent in October 2009. It's since fallen back to 6.1 percent, which is unacceptably high, but as you see in that last column there, is 83 percent of the way back to its pre-recession value.

The short-term unemployment rate, the percentage of the labor force unemployed 26 weeks or less, is now slightly below it's pre-crisis average. And you can see it's recovered more than 100 percent. The long-term unemployment rate, those unemployed for 27 weeks or longer, remains elevated. In the

recession, the long-term unemployment rate more than quadrupled, as opposed to the short-term unemployment rate which was only up 60 percent.

The long-term unemployment rate has fallen steadily and recently has fallen at an even faster rate than short-term unemployment, closing nearly three-quarters of the gap to its pre-recession level. The fact that the long-term unemployment rate has come down without any concurrent spike in measures of marginal attachments to the labor force, or worker discouragement, suggests to me that the decline in the long-term unemployment rate represents a genuine healing. But the experience we have come through with respect to long-term unemployment is without precedent and we're still understanding the full implications.

Indeed, the long-term unemployment rate is still twice as high as what it was prior to the recession and higher than in almost any period since we started collecting data in 1948.

The prepared version of this goes in more detail into a range of gender, ethnic, racial, and educational groups. The bottom line being that they've all seen relatively similar magnitudes of recovery, but, for example, the fact that the African-American unemployment rate is 87 percent -- back to its pre-recession average -- is of little comfort when that pre-recession average was an extremely high 9.8 percent. So the structural problems are very much still with us, the recovery preceding in a roughly parallel way.

I wanted to address -- because Bob brought it up in his opening, and a lot of people discuss -- a range of broader measures of the labor market. Some people will call it the true unemployment rate and, whether you agree with that definition or not, a variety of these measures are informative about the state of the labor market. And as you see in the slide, a variety of these measure show pretty much the same picture as the official unemployment rate.

Take what the Bureau of Labor Statistics calls U-5. This is the broadest measure they produce of people without jobs. It includes both the officially unemployed and also the marginally attached. That's a group of people who would like a job, but they're not looking, either because they're discouraged or for some other reason. During the recession, this measure rose proportionally just about as much as the official unemployment rate and in the recovery it's come down by 79 percent; again, about the same magnitude of the recovery that we've seen in the official unemployment rate. And right now it is 18 percent above where it was in the last recovery as compared to the unemployment rate, which is 16 percent above where it was.

So, broadly speaking, it's telling a similar story and it's telling a similar story because discouraged and other marginally attached workers have clearly been recovering, although, as with everything else, not all the way there yet.

An even more expansive measure of labor market underutilization is U-6. This includes both the people without jobs that we talked about in U-5, and it also includes people

working part-time for economic reasons or for involuntary part-time workers. The U-6 has also come down steadily, falling by a total of 5 percentage points from it's peak, but it remains 3 percentage points its pre-crisis rate, indicating a smaller recovery relative to its original base than you see for the unemployment rate.

The main reason for the elevation in U-6 is people working part time for economic reasons. That's a group that expanded dramatically during the recession. In the course of the recovery, 90 percent of the jobs added have been full-time -- 99 percent of the jobs in the past year, but there's still further to go to deal with that large run-up.

I'd also note if you look at another measure of how much people are working, average weekly hours, that is almost entirely recovered back to where it was pre-recession. All of this is important because unemployment, as we all know, has very serious consequences. Research shows that even once re-employed displaced workers face significant earnings losses in the form of wages that are an average 15 percent below their pre-displacement level.

Such losses can persist for a lifetime and affect family members, as well. Unemployment also matters because it affects the degree to which workers have leverage to ask for wage increases that are commensurate with the productivity that they're generating in the economy. And the next figure shows that as labor markets tightened, nominal earnings, which is the green line there, has started to grow at a faster rate and are

growing somewhat faster than inflation, but are still below productivity growth and nowhere near what you'd need to make up for decades of stagnation.

So, you may have noticed one indicator that wasn't in the previous table and that features prominently in discussions of labor markets, and that is the participation rate. While the unemployment rate and a range of other indicators are coming down and are on track to return to pre-crisis rates, the participation rate is a different story.

As is widely known, it has fallen over the course of the recovery, although it appears to have stabilized recently, even as the unemployment rate has continued to come down sharply. Unlike the unemployment rate and the other indicators I showed in that table, however, we wouldn't expect the participation rate to return to its pre-crisis levels and, in fact, we weren't expecting that even prior to the crisis.

To understand that, ask someone in 2006 what they would project the unemployment rate would be in 2014 or the unemployment rate for black men or the unemployment rate for women with a college degree. Probably what that person would do is look at the average for that group in the last couple of years and assume we'd have that same unemployment rate in 2014. And if you made that type of projection, you'd be pretty accurate. You'd be a little bit off because of the recession.

However, if you'd asked the same person to forecast the participation rate, they would have done nothing of the sort. Rather than looking backwards at the last couple of years, they

would have looked forwards and they would have known that the first Baby Boomers were born in 1946, would turn age 62 in 2008, and become eligible for Social Security, and that there's a large decline in the participation rate for people as they enter their 60s.

That decline in the participation rate was predictable and it was predicted. For example, in 2004, the economic report of the President talked about how the participation rate was going to come down for the next several years and then stated that, "The decline may be greater, however, after 2008." Someone in 2006, trying to predict the participation rate might have gone further than just looking at what was going on with the age structure of the population.

And they might have noticed, as we see in this next figure, that the labor force participation rate for prime age men, age 25 to 54, has been falling steadily since 1953, due to a range of causes that we could discuss and debate, but probably include technology, shift from manufacturing, and certain aspects of globalization. They would also have noticed that in 2006, the labor force participation rate for prime age women was lower than it was a decade earlier in 1996, even though the unemployment rate was also lower.

And that might have lead them to suspect that above and beyond the trends associated with the age structure of the population, there may be additional reasons why -- even conditional on a given age -- the participation rate would fall. In fact, a 2006 Brookings paper by five Federal Reserve

economists, who were some of the leading students of this topic, used this observation to predict that in 2014 the labor force participation rate would be 62.9 percent, almost exactly the 62.8 percent that it actually was in the second quarter.

I say this not to say that everything in their model was correct and their thinking has evolved and there was a recession that they hadn't factored in when they wrote their paper in 2006, but just to suggest there was good reason to expect both an age-related decline and then a broader demographic decline.

Today the Council of Economic Advisers is releasing a new study, and I want to thank Jim Stock and Betsey Stevenson, the two members, for their tremendous contributions. And I'm going to mispronounce your last name, even though you've worked there the last year, John Coglianese, for his tireless work on the report, which has been really terrific. And we try to be pretty comprehensive, and I'll just do a quick summary here.

The first thing we look at is the causes of the decline in the participation rate and our analysis puts us right in the middle of the range of a range of studies that have been done in recent years, and pretty similar to the way CBO has looked at it. In particular, from 2007 Q4 through 2014 Q2, the participation rate has fallen by 3.1 percentage point. We think that 1.6 percentage point of that decline -- half of that decline -- is due to the aging of the population. And this is a relatively straightforward calculation that just says let's hold the participation rates constant where they were at the end of

2007 and just let the age composition vary.

The second cause is the business cycle. And our statistical analysis shows it's a little more complicated than this, but it can be summarized with a rule of thumb that for every 1 percentage point the unemployment rate is elevated. The participation rate is about 0.2 percentage point lower than it otherwise would have been. This, when you account for lags and other things, gets you 0.5 off the participation rate.

Importantly, and I'll get to the outlook for participation, we very much expect that cyclical component to go away and when it goes away, it will bring in another 1.3 million workers back into the labor force over time. The remaining 1.0 percent decline in the participation rate is unsatisfactorily labeled "residual." And we've worked hard to try to understand exactly what that residual is. We have a lot of different fragmentary pieces of evidence that help get at it, but I don't think any definitive answer to what it is. I think part of it probably is a continuation of those trends that were unrelated to aging, although it's important to note those trends go in different directions: older workers working more, for example, while younger workers were working less.

Another possibility that is likely to explain at least a portion of the decline is the very severe recession and its unique characteristics. And, in particular, in our statistical analysis, we find that that residual -- not just in this recession, but historically -- is very correlated with long-term unemployment. So whatever is causing the unusually high

long-term unemployment may also be causing some of the larger than expected reduction in the participation rate.

We also looked at some of the other explanations for why participation has fallen. Two of them that to us didn't at least explain this residual are school enrollment and disability. Disability insurance always goes up during recessions. It always goes up when the unemployment rate goes up. The question is, did it go up more than you would have expected in this recession? Does it explain some of the puzzle or is it part of the normal business cycle?

And this next figure sheds a little bit of a light on that. The red line is what we would have projected, given the past trends and relationship between disability and unemployment. The black line is what we've actually seen. It's well within the margin of error, but, if anything, the puzzle is that disability insurance has grown less than we would have expected, given the large rise in the unemployment rate in the recession.

Everything I've been talking about is aggregates for the participation rate. There's a lot of really important observations about different demographic groups. I'll just briefly point out a few of them.

The first is young people. We're all familiar with the decline in the participation rate there. It's something that began around the late '80s, but what we also show if you look at the share enrolled in school or participating in the labor force, that has been pretty much constant over that period.

One of the -- oh, I guess we don't have the old

people -- but another chart is the participation rate for older individuals has risen. I think an important and underappreciated story is what's happened with prime age women and it's an issue we've paid a lot of attention to at CEA and in the administration lately. There had been a huge surge of women into the labor force in the 1970s, 1980s, and the beginning of the 1990s, but that surge stalled and may even have slightly started to reverse itself.

As a result, the United States was a leader among many of its peer countries as recently as 1990, and now we've fallen behind a large range of other countries for female labor force participation. And even Japan is catching up with the United States.

Prime age men have experienced a substantial decline in their labor force participation and unemployment. That is a trend over the course of the last 60 years and you see it starkly in the employment population ratio which, over the course of that 64-year period, fell from 92 percent to 83 percent. The fall is even larger for black men, who started out lower than white and fell even further. All of that being even more pronounced for younger workers.

This diagnosis of the causes of the decline in the participation rate helps to inform our understanding of its evolution in the current years. The aging trend will continue to push the participation rate down by about 0.2 percentage point per year for the foreseeable future. As the economy continues its recovery, the cyclical component of the decline in the

participation rate should disappear, adding 0.5 percentage point to the participation rate over time; those 1.3 million workers I mentioned before.

And then, finally, there's the residual part of the participation rate. And without fully understanding the causes of it, it's hard to be confident in any particular prediction of it, but certainly one would expect that at least a decent portion of it is due to the Great Recession and at least a decent portion is something we could recover from as we recover from the Great Recession.

The next figure here shows a number of different scenarios for the participation rate and these are all different assumptions on the pace of decline of the cyclical component, the pace and degree of decline in the residual component, and the question of whether there is an unfavorable non-aging trend above and beyond the aging trends, but all of those lines spread out a decent amount, but tell a pretty consistent story, which is that over the next couple of years, you would expect the participation rate to stabilize as the recovery in the economy offsets the demography. But then, after the economy recovers, that downward trend would reassert itself.

I want to talk very briefly about what this means for the Obama administration's agenda and what we're trying to accomplish in the economy. Everything I just showed in terms of the participation rate is what would happen absent any changes in policy. Some of those changes are actually good. The fact that people are able to enjoy dignified retirements is one of the

strengths of the American economy and the American society. Nevertheless, the declining participation rate also subtracts from potential economic growth and exacerbates our future fiscal problems, which is why I'm looking at the participation rate narrowly or the labor market more broadly. We're focused on four areas and, as with everything, focused both on legislation and what we can do administratively in each of these areas.

The first is to strengthen the economic recovery, especially for the long-term unemployed. And that includes everything from infrastructure investment, what we're doing in the overall budget, the housing recovery is especially critical to that, the debate over the Export/Import Bank. And it's important to understand that anything that we do that brings down the unemployment rate will bring down the long-term unemployment rate. But the long-term unemployed have a unique set of challenges, which is why we've wanted to extend unemployment insurance and why one of the first things the President did this year was bring a set of employers to the White House, including 300 of them -- 20 of the *Fortune* 50 -- to make commitments to better hiring practices for the long-term unemployed. And the federal government did the same.

Second, strengthening the economy will help strengthen wages, but there's something we need to do above and beyond that, whether it's the minimum wage, improving the bargaining power of workers, or education, training, and better matching to jobs.

Third, that longer run trend in the participation

rate, one of the big dials we have there is immigration reform. Immigration reform wouldn't just expand the population, it would expand the fraction of the population that is working age, and CBO estimates it would raise the participation rate by 0.7 percentage point.

And then, workplace flexibility policies and a range of other initiatives could help deal with issues like the female labor force participation that I showed.

Finally, there are these even longer-standing and deeper challenges that we face, including prime age men and young men of color, and that's an area where infrastructure would once again help put people back to work, spending the earned income tax credit and, especially, a bipartisan proposal the President has in his budget to expand it for childless workers and non-custodial parents.

And then an initiative that we have, My Brother's Keeper, focused on helping young men of color participate in the labor force.

In conclusion, we now stand at 52 consecutive months of private sector job growth and counting. The jobs that have comprised this progress have been overwhelmingly full-time, with their promise of restoring sound financial footing to millions of American households. And the unemployment rate has come down, together with reductions in discouraged workers, marginally attached worker more broadly, and part-time jobs, representing a genuine improvement in labor utilization.

Yet significant challenges remain. Even at a strong

pace of recovery, the depth of the recession means that a full recovery will still take more time. A steady decline in the long-term unemployment rate is little consolation to the remaining 2 percent of the labor force who have been out of work for 27 weeks or more.

Demographic shifts and high levels of unemployment even before the recession continue to make the recovery challenging. For many more Americans, the biggest challenge they face is growing their wages. We've seen a falling unemployment rate translate into a pick-up in wage growth, but it still does not match productivity growth, let alone come close to making up for what we need.

The good news is that we're making progress on all these fronts and they are complementary steps to strengthen the economy, increase demand, and increased growth will ultimately translate into higher wages and incomes for American families. The key is to continue to move forward on all of these steps. Thank you. (Applause)

MR. RUBIN: Jason, that was terrific. I think the way to start this, I could -- I'm sure it's true for all of you, an awful lot of questions come to mind, but why don't we start it this way since we have one of the country's and maybe the world's most distinguished economist with us with Alan, why don't we just ask Alan more broadly what comments you'd like to make or observations that relate to Jason's remarks or anything else that strikes you in this area?

MR. BLINDER: Yeah, sure will, happy to.

MR. RUBIN: And why didn't I get into Princeton? (Laughter)

MR. BLINDER: Now, I was too young at the time to have had anything to do with that, which brings me exactly to the first reaction I wanted to make. Many people in this audience will know that the word "distinguished" is a euphemism for "elderly." (Laughter) But not old enough to have had anything to do with your admission.

I'm going to pose a few questions and make a few observations, but first I just want to start by praising Jason or really other -- and also other members of the CEA who worked on this report. It's a very nice job, very nice piece of high-quality, highly applied macroeconomic research on a contemporary issue. This is not the sort of work that you see done in the academy, and I think there are good reasons for that. If you pose questions such as the one Jason was addressing to academics, you'll get several reactions which I think are correct, but not very helpful to policymakers.

One is that we need more data to sort this out, which is true. (Laughter) We need the data to settle down because things do bounce around a little. That's related to the more data. And thirdly, look, there are always residuals from an econometric relationship and we can't spend our lives explaining every residual.

Is the picture up there? Yeah. That's the first of several uses to which I want to put my one visual aid, which was Jason's decomposition.

If you're instead sitting anywhere near the White House, this residual that you see at the very end of the diagram is about 1 percentage point on the participation rate. That's a big deal. That's a very, very, big deal. And from a policy-making point of view, policy-making in real time, it doesn't really do to say, well, there are always residuals or we need more data or anything like that. And I think this report comes very, very close to the best job you can do of coping with squaring that circle with very good, very well though out statistical approaches, the trying to make the best you can out this.

That said, I want to come back in a minute to the unexplained 1 percent. But first, I just want -- I won't take too long, but I want to put this in a slightly broader context which Jason sort of touched on or more than touched on. There is a huge and consequential debate going on right now about how tight the U.S. labor market is. One very simple way to put it -- but it's not the only way to put it -- is, is the 6.1 percent headline rate misleading? That is are things not as good as that number, that single number suggests? One piece of that, moving down from the broad to the narrow, is the behavior of the labor force participation rate. That is, if there were more people participating would we, therefore, see a higher unemployment rate and, therefore, in some sense, the real unemployment rate is higher than 6.1? Whatever "real" in this context means. And so that's what this paper's about and then I want to say about one more sentence about that and then we can come back to this other

issue, if anybody wants to.

The other huge factor in thinking about that -- well, maybe there are more, but to me the two huge factors are the behavior of labor force participation and, secondly, the behavior of productivity. What Jason didn't mention is that during this surge in job creation, and it has been kind of a -- I guess I shouldn't use the word "surge" in this building. (Laughter) I'm stuck on surge here. This acceleration of job creation is significant and a piece of very good news.

I like to look at these things in quarters. The last quarter, payroll employment has averaged 272,000 per month over the quarter. Over the previous six quarters, so I'm not just talking about a short period of time, it was averaging a little under 200. So this is a nice acceleration. But throughout this whole period, and this is my point, productivity has just been awful; there's no other word, activity slowdown that started in '73 and ended in '95. Those are the two big ingredients in this puzzle and this effort by the CEA is aimed at the first.

The last thing I want to say is to go back to my visual aid. Can I actually walk up to the screen for this? I'm mic'ed, so I think the answer must be yes. (Laughter) You're still hearing me, right? Yes.

Oh, well, I'm not tall enough. (Laughter) If you look up at the beginning of this chart, and I'm going to focus on the black line, there are -- so what this is showing you is that aging of the population and the business cycle, the crummy business cycle that we've experienced, should have been pulling

down the labor force participation rate. If you look at the black line, the actual, what you see is two very big downdrafts early: one right at the beginning in looks like roughly the second half of 2009 and a second one that looks like roughly the second half of 2010.

So if you think about -- so I'm now in the mode of what an academic doesn't do, like think about where the residuals came from. Why did we get such big downdrafts in those two episodes? One is very early in the recession when both businesses and individuals were in the oh-my-god mode, look what in the world is happening to us. And the second was what I like to call the relapse that seemed to have started -- if you can remember that far back, the early part of 2010, things were looking very nice and people were -- some optimism was starting to creep back in the U.S. economy. Then whatever happened, so Greece happened -- that's what a lot of people attribute this to, the euro episode -- but whatever happened, something happened and the economy got very sluggish again in 2010. That's those -- those are the current events of those two episodes.

And it makes me think, putting on more of a policy hat than an academic hat -- and an academic hat, you just say, well, those were just residuals, forget about them -- it makes me think, it gives me the suspicion I guess is the right way to put it that there may be more to the cyclical explanation. The part of the explanation Jason was suggesting at the end is, yeah, it's cyclical, but abnormal cyclical because of the abnormal cycle than this chart suggests. I mean, this chart is conservative in

the sense it just calls it the residual. But it just made me think that maybe there's a little bit more to the cyclical piece, and that's an optimistic reading because the cyclical piece is going to come back.

Let me just stop there.

MR. RUBIN: You want to respond, Jason, or would you like me to raise another question?

MR. FURMAN: Whatever you prefer.

MR. RUBIN: I prefer I raise another question. Okay. (Laughter)

Alan, could I ask you one question before we get back to this, though? Because I don't understand something and I hadn't thought about it till you said it. But as you say, productivity is really very low now and yet profit margins are high. Because of what I do for a living I deal with a lot of companies. They're very cost-conscious. They think they're doing very well. I don't understand how you reconcile that.

MR. BLINDER: Yeah, I've been thinking about this a bit lately, not in a research way. I haven't done any serious research to back up anything. But I think -- and I think and I may start to try to do this campaign which will fail, is we need a new word than "productivity." Let me explain.

When you speak about productivity it conjures up technology and how well is the business working and are workers productive and do they have the best machinery and are they not playing video games on the job and things like that. Productivity. The word conjures that up and we've always used it

that way.

I think what we actually see in the productivity statistics, data from one quarter to the next, is the toing and froing of output growth versus employment growth. It is kind of the residual -- I mean, it literally is the residual. That's how it's computed. So if you have a period in which firms are really economizing on labor and not hiring, but growing their -- but their businesses are growing, productivity is going up. If you have a time when businesses turn around and say we've really been operating on a shoestring on labor and squeezing everything we can out of our labor and now we need to do hiring, productivity goes down. So I think the productivity statistics are really about that rather than how nifty the latest technological improvement is or the latest management craze or anything like that.

So that leaves me looking at the recent period, but still scratching my head. So this must be a period in which firms, having shed labor early on and then early in their recovery, so let's just make more -- create more output without adding to our workforces, are now coming back to the previous -- I don't know if it's an equilibrium, but moving back in the other direction and hiring a lot of people relative to the increment in output.

Last thought on that. Most people have forgotten, but you may remember that early on in this economic catastrophe one of the miraculous things that we observed was how fantastically well productivity was doing. But that, of course,

is because businesses were firing like mad. And so maybe this is just a payback from that, but we don't really -- and I'll put back my academic hat, we're not going to know until we have more data. (Laughter)

MR. FURMAN: Yeah, and in particular, I mean, the productivity statistics are notoriously volatile. The latest number for the first quarter is -3. That's likely to be revised down. I remember, as you just said, in 2009, there was one quarter when we had 8 percent productivity growth. You know, if you'd extrapolated that forward for the next 70 years, it would have solved a lot of problems. Part of the problem with productivity is you have a numerator that has a bunch of errors in it, which is basically GDP, you have a denominator which has a bunch of errors in it, which is basically hours, and then you divide those two and you basically multiply both of those errors.

In the economic report to the President, when we show productivity trends, we tend to show them over very long periods of time. I mean, 15 years is almost the finest-grained resolution you feel you can get on this number. If you look over 15 years, it looks like we're still in the new economy increase in productivity, not where we were in the '50s and '60s, but above the '70s and '80s. And we've tried to do statistical techniques to adjust for the normal business cycle effects, and we basically can't reject the hypothesis that productivity has continued at the same rate. In other words, we don't find a strong statistical basis for being confident, you know, that productivity growth has fallen.

So I think the best evidence leads me to be a little bit less nervous than some others are out there. But there's no doubt Alan is right that more data and more time is needed because this is something that is very hard to measure on the time scale that we'd like to measure it on. And that's especially frustrating because it's the single most important aspect of, you know, determining overall economic growth.

MR. RUBIN: Let me ask another measurement question. I really want to get to technology and its effect looking forward, but before we get to that one of you mentioned, I don't remember which one it was, that there's a good bit of controversy about how much slack there is now in the labor markets. And however you all each think of this, how long do you think it's going to take us to get back to the point where that slack -- however you measure the slack -- is fully absorbed and we have what you'd call a real full employment economy? And take into the rates of growth, the rate of growth of the labor force or potential labor force and anything else you want to consider.

MR. FURMAN: I assume you wanted Alan to stick his neck out.

MR. RUBIN: No, I want you.

MR. BLINDER: I was going to offer you the opportunity. (Laughter)

Let me just elaborate very slightly. There's a tremendous debate going on now both inside the government and outside the government over how much slack, just the question you asked. One pole of that debate actually is answering zero, that

we're there. Now, if you look for -- the piece of evidence on that side of the debate that Jason showed was that the short-term unemployment rate is now back to where it was before the recession. I think the exact number you had was a little bit better, but, you know, basically back to where it was. And by inference, that means that the 6.1 percent unemployment rate is now the natural rate, the full employment unemployment rate.

I don't buy that. Some people do. I just want to say some people do buy that.

MR. RUBIN: And that takes into account, Alan, the marginally attached, the discouraged workers, that how thing?

MR. BLINDER: Well --

MR. RUBIN: Because that was my question, full employment, you know, in the full sense of that word.

MR. BLINDER: Sort of. One of Jason's tables showed that these -- the BLS calls the official unemployment rate U-3. And then Jason showed U-4, 5, 6. And within some tolerance, they match up pretty well. That is, if you look at what's going weird in the labor force, in various measures of labor force slack, it's the participation rate, the e-pop, and things like that. It's the long-term unemployment rate. But it's not in that conjuries of U-3, 4, 5, 6; maybe a little on 6. But those relationships look pretty normal one to the other. It's much more the question of how much of this labor force participation behavior that we're seeing is permanent and the long-term unemployment rate being so very, very high, which I suspect, as Jason suggested, are probably linked to one another.

MR. RUBIN: So how long did you say, Alan?

(Laughter)

MR. BLINDER: So if you ask me to stick my neck out, so I can do that, my current estimate of the NARU, or the natural rate, is not 6, but more like 5-1/4 to 5-1/2, something in that range. Now, how long will it take us to get there? Well, lately we're dropping pretty fast.

MR. RUBIN: But you're talking about getting the -- I'm sorry, the so-called residual, getting them back in to the extent that they're cyclical (inaudible)?

MR. BLINDER: Some of it will come from that and some of it will just come from job -- hopefully a lot of it will come from job creation. We've had pretty strong job creation of late.

MR. FURMAN: Right. You know, I mean, the same thing I said in my remarks that we're now far into the recovery from the Great Recession, but not all the way there yet. People can cherry-pick whatever number they want. I showed a large range of numbers and they all told about that same story, which is it is a genuine labor market recovery. It's not just the official unemployment rate. It's also in the marginally attached, the discouraged workers, and part-time, across the board. But in none of those, with the one exception of the short-term unemployment rate, are you all the way back yet. And so, you know, our unemployment rate is higher than where it should be. More people need to be coming back into the workforce in terms of our participation rate. Some of those marginally attached need to come back, as well, so we have some way to go.

And I think if you look at the forecast we did in our mid-session review of the budget we put out last week, that CBO did in their last budget forecast in January or February, the Blue Chip, all of them have growth elevated above potential for several years, reflecting the fact that the economy will be continuing to bring resources back into production that essentially aren't there today.

MR. RUBIN: So that number was what, Jason?

MR. FURMAN: You know, our budget has a forecast, but the unemployment rate today is lower than where it was when we finished that budget forecast in June.

MR. RUBIN: We have a ways to go and we don't really have too clear an idea what will take us to get there.

MR. FURMAN: Well, we know exactly what we need to do to get there. We know we need to do infrastructure, you know, we know all the steps.

MR. RUBIN: Okay. Does the debate continue, by the way? I assume it does, about how much slack there is in the labor market and --

MR. BLINDER: Does it continue? Oh, absolutely. I mean, yeah. I think it's just -- Jason's not allowed to talk about the Fed, but I am. (Laughter) And there's going to be a huge and loud debate inside the federal Open Market Committee over exactly this question because it's tied so tightly to when does the Fed lift off the short-term interest rate. So you haven't even began to hear the noise that's going to be in the media and elsewhere around exactly this question.

MR. RUBIN: Let me change tack -- well, let me -- I've got one question first. If we're going to succeed as a country, it seems to me at least, we've got to deal with the question of poverty. In fact, The Hamilton Project did a poverty summit, I don't know, three or four weeks ago, whenever it was. President Clinton was our keynote speaker. And that gets down to the unemployment -- one of the facets of that is the unemployment rate for young African-American males, which is really distressing when you look at the numbers in your chart. You had it in your materials. I don't remember if you put it up on the board or not, Jason, but could you comment on that briefly? And also, what is it that we as a society can do about people who grow up in the tremendous disadvantages that our society has created for these people? It's not their fault, it's our fault. So what do we do about it?

MR. FURMAN: Yeah. No, I mean, if you look at the employment rate -- well, I might put it back on the screen -- for young black men it went from 65 percent in 1950 to 37 percent in 2004 Q2. The denominator for that calculation is the non-institutional population, so if you're incarcerated, for example, you're not in the denominator, so the number would look even worse. There's a reason why -- there's an old saying that the best anti-poverty program is a job and, you know, creating jobs is the most important thing.

I think one important lesson of looking at this economic recovery, like the one before it, like the one before it, is when you are strengthening the overall economy, you are

bringing the unemployment rate down for everyone and you're bringing it down at roughly the same pace. So the groups that -- disadvantaged groups get hurt the worst in a recession. They actually can benefit even more from an economic recovery that drives the unemployment rate down. So some of that is just the same economic strategies we want to have: investing in infrastructure, strengthening our growth. But there's no question that a lot of specific things are needed.

I think expanding the childless EITC for non-custodial parents. We have a very generous EITC for families with children. We don't for people without children and we don't for people who have a lot of responsibilities for taking care of children, they're just not living with them and eligible for that. So that could both put more money in people's pockets, but also bring more people into the labor force. The EITC in the 1990s was a bigger factor, research show, in bringing single mothers into the labor force than welfare reform was. And so I think this is one of the big tools we have going forward.

MR. RUBIN: I think that sort of leads naturally into -- well, let me ask you one more question on that, Jason. Aren't there just enormous numbers of issues, though, about getting to these kids when they're very, very young and helping, in whatever way we do this, equipping them for a modern economy and a modern society?

MR. FURMAN: Yeah. Oh, if you look at the fracturing --

MR. RUBIN: Early intervention, in other words.

MR. FURMAN: Right. You look at the fraction of four-year-olds in America who are in school, we're 25th in the OECD. You know, I think Mexico is well ahead of us. When you look at that, that's why we'd love to expand preschool. That's why we were excited that we actually were able to secure some funding for that in the omnibus last year and it was one of the real victories in that budget agreement, but there's more we need to do. So there's a whole range of things that start there that go through, you know, some of the improvements in training programs that help connect people to jobs the Vice President's been working on. You know, but a stronger economy, more jobs and infrastructure, for example, that would help, too.

MR. RUBIN: Let me -- by the way we're going to extend this to 12:30 or 12:40, Karen instructed me, because we started 10 minutes late. Somewhere in early 2011, Michael Spence, Nobel Laureate, wrote a piece for *Foreign Affairs*, and his basic -- as I remember it at least -- his basic thesis was that technological development is going on at a very rapid rate, whether exponential or not, I don't know, but very rapid. And a lot of that was labor displacing, not labor complementary. And these are really questions. I'm saying it as a statement because this is what he wrote, but that sort of obviously has questions in it.

And that that created tremendous challenges with respect to the displacement of -- well, to the elimination of many what had previously been considered middle income jobs and every lower income jobs where assembly lines -- well, not much in

the way of assembly lines anymore, but the (inaudible) assembly lines were being replaced, call centers being replaced by voice recognition systems, and so forth. I found myself -- and then there's a book recently, I don't know if you all have read it or not, called The Second Machine Age, written by two people at MIT, which carries this point forward. And Michael has not written a piece with the authors of that book.

How do we deal with all -- the first question is how much -- obvious technology's been a plus in many ways, but it also has all these other aspects to it. How do you all react to that?

MR. FURMAN: I think to a first approximation, you know, we have a couple hundred years of data and a couple hundred years of data show enormous technological progress, tons and tons of inventions that replace things that humans used to do. And for most of those 200 years, about 95 percent of the people who wanted a job were able to find one. So to a first approximation, you know, we keep thinking the next machine will replace people's jobs and it doesn't. That's to a first approximation and I'm glad we left that chart up there because you look, you know, we're talking about poverty.

Poverty's a very serious issue, but you just look at prime age men, so we're just talking about the bulk of the male labor force, and that e-pop -- and I don't have these numbers in my head so I'll look -- you know, went from 92 down to 83 percent. That happened over a 64-year period. It was gradual, but technology probably is part of that story and what the types

of things technology was and wasn't complementing. I think, understanding that decline and understanding what we can do about it and, you know, create jobs and raise wages not just at the bottom, but all the way across, really is maybe one of the economic problems and challenges we've talked less about, but one that -- again, a lot of the things we'd love to do and are no-brainers, low-hanging fruit, like infrastructure, would certainly be part of the answer, too.

MR. RUBIN: Alan.

MR. BLINDER: I very much agree with Jason. You know, the Luddites were wrong and the next were wrong. If you gave me 15 minutes on Google, less, I could bring you articles from the 1950s about how automation was going to make human effort obsolete and nobody would work anymore. Some of them were happy articles, like we'll have all this wonderful leisure, and some of them were sad articles, like people won't be able to earn a living. So to believe in, in a deep way, the Brynjolfsson, *et al.*, theory -- I've talked to Erik about this; he knows -- you have to believe that we're now experiencing or on the verge of experiencing a sui generis historical event not at all analogous to the things that have happened in the past. I'm very skeptical about that.

It is -- technology is now and always has been a job destroyer as well as a job creator. It changes. We have a lot of jobs that used to employ a lot of people decades ago barely exist now. And in return, we've got all kinds of jobs that people in the '70s couldn't even have imagined training

themselves for. So there's a tremendous amount of churn.

So maybe the right way to answer this, I think of the technology as more about churn. There's a tremendous amount of churn. When there is a tremendous amount of churn, there's disruption and people don't like disruption and it causes stress and so on. But as Jason was saying, at least for the first 275 years of the Industrial Revolution it has not led to mass unemployment.

MR. FURMAN: I hadn't look at those first 75, so I'm glad it was true there, too.

MR. BLINDER: You skipped them, but throw those in, too, yeah.

MR. FURMAN: Okay.

MR. RUBIN: I guess my question -- and this will be my last question and then we're going to turn it over to everybody else, I guess my question didn't only go to the question of employment, but also employment in what we used to think of as middle income jobs. You know, we're eliminating those so that people now only have lower income jobs left, so let me frame it that way.

And then, in that context, also, ask if you could very briefly comment on what you think has caused the tremendous increase in inequality and basically the meaning. You know, inequality (inaudible). You can look at it from the point of inequality. You can look at it from the point of view of median stagnant real wages, and I kind of tend to look at it the latter way and that's how President Clinton looked at, but those are two

sort of I think very closely related questions.

MR. FURMAN: Right. I think the reason the Luddites were wrong is that, for the most part, wages adjust in order to clear labor markets. So you do have that phenomenon and 95 percent of people who want a job can get one. That doesn't tell you what wage they can get that job at. And to the degree that technology -- most of the time technology has actually expanded the pie and benefited everyone. Most inventions are complement -- have historically been complements to a wide range of workers. The ones we've had lately have more complemented skills of workers at the top and have contributed to an increase in inequality.

It's hard to explain that increase, though, without looking at a bunch of norms and social changes which have allowed, especially at the very top, that inequality to grow. And I think it very much -- the ultimate test really is median household income or wages for the typical worker, but it's hard to understand what's happened to those without understanding that all the productivity hasn't gone to those groups. The productivity's gone somewhere else. So, in some sense, inequality in that are flip sides of the same phenomenon.

MR. RUBIN: Alan.

MR. BLINDER: Two things we know. There's lots we don't know, two things we know. One is that for decades what economists like to antiseptically call "skilled, biased technical progress" has been a major factor holding down the wages of -- now I'm not quite sure where you want to draw -- let's say the

lower 60 percent or lower 70 percent or something like that. What that just means is the workforce needs to skill upward to keep up with the technology. And as you were saying and Jason was saying, in some important respects we're not keeping pace.

You know, if you looked at the -- Jason just mentioned it. Jason mentioned preschool. I didn't know that we're 25th in the OECD. How many countries are in the OECD?

MR. FURMAN: About, well --

MR. BLINDER: Twenty-eight?

MR. FURMAN: Thirty-four.

MR. BLINDER: Thirty-four. Oh, good, I thought you were going to say 27. (Laughter) But that's at the bottom. And also at the top, you know, we used to stand out as the fraction that we sent to and through college, and we don't anymore. We're like middle of the pack. So this we know and there are things that can make that better, which we're not doing, but a lot of them are not mysterious.

The second thing we know is that over a shorter period -- so that's gone on for a decade. Over a shorter period, maybe I should call this period 15 years, I'm not sure I got that exactly right, I wasn't prepared for your question, but over a shorter --

MR. FURMAN: He gave me the questions in advance, you know.

MR. BLINDER: What?

MR. FURMAN: You didn't get them in advance?

MR. BLINDER: No. (Laughter) No, because nobody

cares what I answer. (Laughter)

Over a shorter but not trivial period, there's been a hollowing out or polarization in the rewards to work and the opportunities to work with these -- this is what you were asking about, Bob -- a lot of these middle income jobs that used to be available -- the quintessential example is working in a factory, but there are others -- that would give the worker, one worker, a decent standard of living just holding that one job even if your spouse wasn't working. And then if your spouse was, you were doing pretty well. A lot of those are disappearing in favor of bottom jobs, which are being generated, and top jobs, which are pulling away dramatically from the rest. I mean, if you look at these data -- and, again, I can't quite cite you numbers because I can only retain something for about an hour and a half and I haven't looked at them in the last hour and a half -- but if you look at wages at the 99th percentile versus wages at the 50th percentile over the last couple of decades, it's just dramatic --

MR. RUBIN: It's tremendous --

MR. BLINDER: -- how the top has pulled away. And that is a very real phenomenon. It might be traced to technology, at least part of it is certainly traced to technology. And it's a very, very important component of the increase in inequality.

MR. RUBIN: Terrific. Why don't we now open it up to anybody who would like to -- we'll start way in the back. Yes, sir. If you can say who you are, where you're from, and make your question brief so we can get as many questions in as

possible.

SPEAKER: (inaudible). The question is for Jason and also a question for Professor Blinder.

Jason, your question is pretty much on measurement. If I were to take you back to the labor force decomposition, which you propose --

MR. RUBIN: Could you put the mic a little closer to you?

SPEAKER: Yes, of course. Yes, I'm sorry. So, Jason, what degree of confidence do you have on the measurement? And I'm somewhat curious because of the fact that, to quote Ken Rogoff, what if the lessons that we learned from the Great Recession is we don't really understand business cycles? So my question was how did you manage, you and (inaudible), to measure at least the cyclical part in addition to the residual? And so the question is what degree of confidence and who were you able to recalibrate that model?

And Professor Blinder, to go back to the question that you pose or the issues that you raised, what would then be the Fed's reaction function if there is no agreement on what the level of slack is in the labor market? Thank you.

MR. FURMAN: So in economics, the real test is how a model does. It's really easy to fit a sample. If you have enough variables you can fit it as well as you want to fit it. The test is how something performs out of sample. Now, that's a hard test to do because if you know what happened out of sample, you can actually do a ton of things in sample to get your best

fit out of sample, which is why I'm placing a certain amount of weight on that 2006 Brookings study because they did an entirely out-of-sample prediction. They weren't trying to make sense of what they did or didn't see, and they really did expect that the participation rate would fall. You know, in some sense, they were predicting it would have fallen even more had they known about the Great Recession because it was all their stuff plus the cyclical they didn't have on top of it. So that certainly gives me a certain amount of confidence that there's an aging effect and that there's something potentially on top of that.

In terms of our actual decomposition, the aging is a very straightforward computation. There's a couple different ways to do it, but they all get within, I don't know, about a tenth of each other, so that one I'm very confident in. The cyclical is quite plausible. You know, different ways of looking at it get you similar numbers, but could it be two-tenths smaller, two-tenths larger, something like that? Of course, you know, one could debate something of that magnitude.

And then we've talked a lot about the residual and the degree to which we have some theories that help fill in that picture, but don't have a definitive answer to it.

MR. BLINDER: Very briefly on your question, the Fed's reaction to large-scale uncertainty about how much slack is going to be a big fight. The leader of the Fed has stated many times, including just yesterday, I think yesterday, that in her view there's a lot of slack still left in the U.S. labor market and the Fed usually follows the leader.

MR. RUBIN: Oh, anybody? The gentleman in the orange shirt.

MR. CHECCO: Thank you. Larry Checco. I think the last discussion that you had is going --

MR. RUBIN: Say who you are and where you're from.

MR. CHECCO: Larry Checco, Checco Communications. What are the implications for the middle class, long-term implications? We kind of jumped over the impact that the last recession has had. And despite -- you know, notwithstanding with the labor participation and productivity, lots of people lost their homes, lots of people are underwater with their homes, lots of people lost their jobs, lots of people went through their savings. How do we reconcile all of this if we don't get the strengthening of the economy and the wage increases that you said were two of your four points moving forward? What's the long-term implication for the middle class? I guess that's what I'm saying.

MR. FURMAN: Yeah. I mean, we are -- you know, as I said, we're far into the recovery. We still have some way to go, but when President Obama ran for office in 2008, you know, he was in part motivated by the observation that over that last economic recovery from 2001 through 2007 a typical household didn't see its income rise. They saw it was flat. And that's actually related to the issues I've been talking about. From 1970 to 2000, household income rose. It rose not because wages rose. It rose because more women were coming into the workforce and more of those households had two earners rather than one. That

progress in terms of the second earner stopped around 1999, and with it, that income growth stopped.

So to get back to the types of income growth we need, we're going to need to do what we can to get more people, you know, into the labor force, more people working, and to make sure those jobs are better paid. And some of that is a cyclical recovery that we still need to run the course of, but a bunch of that will be left as a continuing challenge even after we have recovered. And if you look at a lot of what we're trying to accomplish, whether we're below our potential or at our potential, we still need a lot more infrastructure to keep -- to repeat that one yet again.

So I think a lot of the types of things we're looking at are where we're going. Female labor force participation, childless EITC, all of that, is about where you're going after you've recovered and how you're dealing with not repeating the 2001 through 2007 experience in terms of family incomes and getting to something much better in terms of a trend line.

MR. RUBIN: Oo, we got a lot of people. Let's see, the lady way, way in the back. Yep.

MS. REDDY: Thank you. My name is Vasu Reddy. I'm with the National Partnership for Women & Families. And I wanted to ask about the aging trend and other similar demographic trends and their effect not just on the -- if you've looked at the effect not just on the workers who are being aged out of the workplace, but the younger workers who are responsible for -- who have care-giving responsibilities for those older workers and,

also, often for their own children. And so I just wanted to know if that was anything that you had been to measure, that care-giving effect on labor participation.

MR. FURMAN: Yeah. No, I mean, if you look -- I think that's part of why those workplace flexibility policies are so important for labor force participation. We usually talk about that in terms of children and, you know, paid leave at the birth of a child, but it also is increasingly, as you just said, caring for an older parent, as well. And that's why it's a striking fact that you look around the world and ask what countries don't have paid leave and it's the United States and Papua New Guinea. (Laughter)

MR. RUBIN: We'll have time for one more question. Oh, lordy, lordy. Yes, sir.

MR. TAO: I'd like to point to this chart --

MR. RUBIN: Again, who you are and where you're from.

MR. TAO: So I'm Wen Tao. I'm from Harvard. So I'd like to point to this chart. As you can see, 1950, the young man employment, employment for various population ratio were low, but pretty like, you know, the same across different ethnic groups. But right now there's like an alarming drop in the employment-population ratio for young black men. And I wonder like what are some of the explanations?

MR. FURMAN: Yeah. I mean, they started, you know, young black men were higher, you know, in 1950 and have fallen lower. And I think a lot -- some of the trends we've talked about in terms of inequality and wages and availability of jobs

have played into that. There's a large number of young black men that are in the ambit of the criminal justice system at any point in time, and that has a lasting impact on employment in terms of discrimination later on, in terms of being able to get hired. And, you know, just a number of other challenges, all of which come together in terms of this group. And that's why, you know, with My Brother's Keeper, it's focused on everything from the very youngest ages, but there's a very strong mentorship component, you know, looking at successful programs, like Becoming a Man in Chicago, that Mayor Emanuel has expanded a lot in that city and the President has been very enthusiastic about. And so there's a lot of things we can do. It's not all government policy. A lot of it isn't. It's things businesses can do, individuals, mentors, but it's certainly not -- you know, you don't solve a problem of that magnitude with one or two little changes.

MR. RUBIN: You know, I said before when I raised the same question you did that it's not their fault, it's our fault. It's a society that simply hasn't dealt with a problem that that society is responsible for, and I think it has a tremendous effect on all of us.

Let me wind up just by thanking both of you. And I must add one reaction listening to both Jason and Alan. There's so many issues and yet there's so many policies we could -- so much we could do if we had a Congress that was willing to function, even if people had very different views, if they were willing to compromise in some principled way to reach a point

where they could go forward. And I think that really -- you have people, Jason, Alan, and so many others, who have so much they can contribute, we just need to have a functioning political system, by which I mean a functioning Congress, to do what the nation needs to do.

But thank you all very, very much. (Applause)

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