Mr. Davis: Very interesting talk, Alan Krueger, and I appreciate the attention to concerns about restraints of trade in the labor market. Just one question. You suggested that high pressure markets give employers a greater incentive to chisel in the face of various collusive or tacit collusive agreements and so on. That seems plausible, but it makes me wonder whether in fact we have any direct evidence of that. You can imagine trying to look at local labor markets and asking: When local labor markets become high demand markets, do we see some erosion of these employer agreements or arrangements like no poaching, noncompete agreements? Do they unravel? I don’t know whether we have any evidence, maybe you do.

Mr. Krueger: I don’t have a lot of evidence. I would defer to what we’ve learned from industrial organization research. But I’ll tell you a couple of shreds of evidence. One is if you look at the spike of minimum wage, it does tend to decline in tighter markets. Now there are other interpretations of that as well. The second piece of evidence is when the minimum wage increases from a low level, the workers who were already paid above the minimum wage within a firm that has a lot of minimum wage workers tend to get a raise as well. The reason is companies care about relative pay. If, however, the minimum wage is very high, and it goes up again, there’s much less of that kind of
spillover effect. And I think implicit in these remarks is that companies find it hard to price discriminate. They find it hard to pay their workers different wages. If they could, monopsony would not reduce employment, it would not be inefficient. And there’s an aspect to the tightness of the market I think, or how binding the constraints are, which affect how much companies are going to take into account relative wage and relative fairness considerations. But I don’t know, and it may be that a clever theorist can come up with a better theory which says that a tight labor market would not break down collusion.

Ms. Eisfeldt: I have two things to say. One is a question and one is a comment. I didn’t hear you mention as alternatives two things that usually come up when you think about low wage growth for unskilled labor. One is replacement of workers by machines, and the second is replacement of U.S. job by jobs abroad. I want to understand what role those might play and what fraction of the observed low wage growth those might explain. The second thing is more of a comment. It’s about the way companies can keep high-skilled labor at their own firm, which is through deferred compensation. In addition to the no-poaching agreements, a lot of high skilled labor has compensation that doesn’t vest immediately. By compensating high-skilled labor through deferred, or unvested, compensation, employers can prevent the departure of their key talent.

Mr. Krueger: On the second point, I think a much better way to deal with the issue of mobility is to backload compensation. I think that’s a good market solution. Steve Jobs didn’t want to do that. He just wanted to go to war with Google if they broke their no-raiding agreement. The first question, if I were to talk about changes in the wage structure, what you brought up would figure prominently. I wanted to focus more on cyclical movements and wages. The other factor in addition to global competition and potential offshoring of work and technological change, substituting workers with machinery, etc., is the practice of using temporary staffing firms, outsourcing, contract workers, which has been growing in the United States. And I think that’s actually a little bit more relevant for why wage growth has been weaker in this recovery. But I don’t want to say that the factors you brought up are irrelevant for the big rise in inequality
that the United States has experienced. I think they’re very high on the list of factors that are responsible.

Mr. Van Reenen: I’m a great fan of imperfect models of the labor market. I was a colleague of Alan Manning for many years who’s a great proponent of monopsony. I have one general question which something you touched on. With the growth of the internet and the fall of communication and information costs, ex ante one would think this would be a fantastic thing for being able to look at possibilities of different jobs and wages in a much broader geographical range of labor markets. And I was wondering why you think that hasn’t happened. Is it because these other forces have overwhelmed them, or is it due to something about the way these internet markets are operating. Or maybe it’s in the same way that price comparison sites we brought up that don’t seem to be increasing competition. What’s your thoughts on this? What do you think is happening?

Mr. Krueger: It’s a great question and I have a few thoughts on it. One is the number of workers who find work by searching over the internet might be smaller than we think. Word of mouth is still, I think, the main way that workers actually find jobs. It might not be the main way they search, but it’s the main way they actually end up in jobs. Number two, it works in both directions. It’s easier for companies to observe the pay that their competitors are offering, and to implicitly keep their pay at that rate, rather than bid things out if that’s what they wanted to do. Number three, in their online application McDonald’s asks, “Do you currently work for another McDonald’s?” Now you might think when you’re filling that out and answer “yes” that this will help me. It will show I have the experience and ability to work at McDonald’s. It might actually hurts with no-poaching clauses. That’s one way of saying, I think that employers have become more sophisticated about some of the other practices that they use and no-poaching agreements is one of them. And the internet might actually facilitate that.

Ms. Daly: I really enjoyed your talk, Alan. I had a couple of questions that relate to things you didn’t mention when you were talking about how much of a gap in wage growth we needed to explain. Let me ask you about two things. The first one is, as we enter, as we bring
new workers into the labor force who were displaced or they are entering with lower skills, the skills gap in the United States I think has widened between labor demand and labor supply. How do you factor that into your model of how much of a gap there is? And the second one is, increasingly we’re hearing from employers I think throughout the country, but certainly in the Twelfth District that they’re offering other kinds of compensation that don’t get into the wage and salary measures we rely on. One would be more vacation time, more flexible time, time off, different methods of telecommuting and other things that allow them to have. These are all perks that go into labor unit costs, but they don’t get translated easily into the wage measures we follow. I thought maybe you could comment on those.

Mr. Krueger: I’ll comment on both. On the first, the same issue occurred in the late 1990s when the job market was tight, a lot of nontraditional workers were coming into the labor force. I think that dynamic is sort of reflected in the type of wage Phillips curve that I was estimating. On the second, what you said is exactly right, that companies are very reluctant to change the wage level, which makes no sense from the standard competitive textbook model. One of the things David Card and I learned when we studied minimum wage 25 years ago is companies would offer “buddy bucks.” They would pay a bonus if you brought somebody else in, which makes no sense in terms of a perfectly competitive market. If you just offer a little bit higher compensation, you should be flooded with applicants. I think this is actually consistent with the idea that they’re doing what they can to keep the whole wage structure low.

In terms of the data, probably the best we have for looking at vacation time and the other components of compensation you mentioned would be the Employment Cost Index (ECI). The ECI is growing a little bit faster currently than the nonsupervisory worker wage, but not that much faster.

Mr. Rajan: Just getting to your last comment about running the economy hot so that you can break collusion. The question is, if the Fed or any central bank does that, that’s really the point at which they could be thought of as being behind the curve. And you suddenly see a big increase in wages, and now everybody gets antsy about
that. Are you then suggesting we should move away from inflation targeting to something like price level targeting so that we smooth over the cycle and that would be better for the labor market?

Mr. Krueger: I was being much more agnostic. I was suggesting that this possibility should be open for discussion, then what you do about it. I think you raise an interesting question. I don’t suspect the way that, if it’s correct that collision breaks down, that it’s all of a sudden and wages go from 2.7 percent to 7 percent growth in a year. I think the history in the United States, just like the history with price inflation, is you rarely see movements from one year to the next in the rate of wage growth that exceed a percentage point. That said, I think there is a risk of getting behind the curve and I think what makes monetary policy really, really hard is you have to keep an eye on what’s likely to happen in the future because the other thing Milton Friedman taught us is that monetary policy is laced with a long and uncertain lag.

Mr. Bullard: I want to get at this poaching argument. If the industry structure is franchised like McDonald’s, then you’re going to be mad at them because they’re going to have this no-poaching agreement across the franchises. But if it’s just one big firm, then the big firm can control who moves where and who gets what wage, and then you’re not going to be mad at them. How should I think about that? Is it just a choice of industry structure for the firm?

Mr. Krueger: First of all, that’s a great question and what you said is exactly right. If McDonald’s was organized differently and if all of the outlets were company-owned as opposed to franchises, it would not be illegal. And it’s actually still a gray area of the law, whether it’s illegal for them to have no-poaching agreements. Or take another example. Suppose two firms were colluding in the labor market. Then they merged. Once they merged, what they were doing which was dividing up the labor market and not competing was no longer illegal. But it gets to the issue of the effect of concentration, not the effect of collision across firms. But we could still think of concentration as having those effects. Another way of putting it is, one of the more subtle effects of concentration is it enables companies to orchestrate the labor market in this way and to administer the labor
market in this way, which kind of goes under the radar screen, but still has the same impact when it comes to competition.

**Mr. Spriggs:** When you mentioned the paper on the Herfindahl Index and what appeared to be increasing concentration of employment, you left out that it clearly showed unions mitigated against the wage decrease. I was wondering if you left that out because you either didn’t think it was true or what? The other is getting to the point of how the Feds should think about this. We spent a lot of time arguing about what’s the source of concentration. You spent a lot more time discussing there could be many sources when it comes to labor and monopsony power, but it doesn’t really matter because they act like monopsonies, and you concentrated on what the outcome meant, what the policy implication was. Could you re-emphasize whether you think the genesis of the monopsony power matters or whether we should really remain focused on, “OK, whatever they got here, however they got here, they’re all acting like monopsonies. So it doesn’t matter how they got here.”

**Mr. Krueger:** In the first point, I did try to emphasize that I think unions have been bulwark against monopsony power on the part of employers. I’m in agreement there. The genesis I think matters for a lot of reasons. I try to lump them together because analytically the idea of having a finite labor supply to a firm was the same. And one of the problems I’ve found is that when you mention monopsony, people say that’s absurd, that’s just one employer, and look how many companies there are. You can’t have monopsony power. I think one of the breakthroughs in Alan Manning’s book Monopsony in Motion, which is all about dynamic forces that bring about monopsony when you have many employers, is a really important step forward. I wanted to put them all under the same heading for that reason, to make it apparent that monopsony-like forces can be operating even in situations where there are multiple employers, that there’s enough of a moat around them that they have enough protection to exercise their monopsony power.

The genesis matters for several reasons. One, just like in monopoly, if a company obtains monopoly power by illegal means, then there’s a whole set of policies that come into force legally. If a company
obtains monopsony power just because it’s big and it has monopsony power like what Jim mentioned before—they happen to merge and then they can actually move people from one office to another and they don’t have to actually bid away. But if they can coordinate because they are one firm, then there may not be a legal remedy if that was the source of the monopsony power. If on the other hand, they banded together and they said, “We’re not going to hire from each other,” that’s patently illegal and in fact criminal. I think that the genesis also matters in monetary policy. If the genesis is because of concentration occurring for whatever reasons and that’s probably beyond the reach of monetary policy. If it’s because of practices that employers have been using, which might break down if the job market gets very tight, then that’s potentially affected by monetary policy.

**Ms. Hays:** Alan, I just wanted to ask about the fact that wages are easy to raise, difficult to cut, and especially we’re 10 years after the worst recession since the Great Depression. Globalization, technology, is that one factor you’ve looked at as something that’s holding down wages?

**Mr. Krueger:** Yes, so certainly the marketing is that wages are sticky on the way up as well as on the way down, and that’s what the idea, and I think this is what Neel Kashkari is finding. Companies say that they face a shortage, and they probably do, but they’re still resisting raising pay. I think they’re probably more sticky on the way down than on the way up. One of the arguments for having moderate price inflation is it helps to grease the wheels of the labor market. I do think that there’s something to that. One of the paragraphs I had in my written remarks is, I think we also need to consider what effect these changes in the structure of the labor market have to do with wages in a downturn, and the stickiness of wages for potential wage cuts.

**Ms. Hays:** Just have to ask a quick follow-up because you just said something about moderate inflation helping wages. Is this an argument then about monetary policy? Let it go above the target and let it stay there longer?
**Mr. Krueger:** When I was at the Council of Economic Advisers I was informed that the Fed was going to announce a 2 percent target. And my thought was, why not a range of 1-3 percent? First, hitting 2 percent exactly is just going to open you up to criticism. Also, it was never clear to me why you would tie your inflation target to one particular measure of inflation when there are multiple measures. You can certainly put more weight on one. We don’t look at just one measure of wages.

**Mr. Fischer:** Are we sure that if we raise the nominal inflation target we’d get more flexible real wages? Or what do we think? I mean, we talk about it as if it’s just automatic. We raise the thing, and it makes the market work better. Does it?

**Mr. Krueger:** There is some evidence on the adjustments. There’s a paper by David Card. There are a couple of other papers in that literature. I suspect from that literature it helps on the downside. On the upside, it could actually create problems. If nominal wages are more rigid on the upside, it could create problems. The micro evidence, I think, on inflation affecting the real wage adjustments is fairly strong, but I would want to go back and reread it before I give you a more definitive answer.