General Discussion:
Causes of Changing Earnings Inequality

Chairman: George Shultz

Mr. Shultz: Thank you very much. Questions? Discussion?

Mr. Crockett: May I make an analogy and see whether it conveys any insights? In the finance field, we think of technology and liberalization as having driven the enormous changes in financial markets. Technology enables the better pricing of risk; liberalization allows risk to be more efficiently managed and traded. Could one say that something similar is taking place in labor markets? Technology, in the form of managerial developments, has enabled us to assess better the marginal product of labor, and thus to differentiate among previously apparently similar labor inputs. And liberalization has made it more acceptable to carry that differentiation forward into wages and salaries, even in areas where it was previously accepted that labor pricing had to be much more homogeneous. In other words, are factors like technology and liberalization driving greater wage dispersion?

Mr. Snower: I would like to respond to that comment together with the excellent discussions that were given by Kevin and Robert. To start with Andrew’s question, I don’t think that the major issue is that we can differentiate among similar labor inputs and fine-tune wages to a much larger degree. I think organizational change is important for earnings inequality because of the redefinition of skills that it necessitates.
This gets me back to the comment from Kevin about organizational change and technological change. We’re used to thinking of different labor inputs as different occupations. So, think of different types of labor in terms of different occupational tasks needed to produce output through a production function. And our standard way of thinking of technological change is that these different occupations, these different types of labor, can now produce more output and therefore the production function shifts up. Now, in the work that I’ve done with Assar Lindbeck, we show that when people span a larger variety of tasks, then the nature of the production function changes. Before, if different individuals occupied different occupations, it didn’t really make any difference whether you looked at the production function in terms of tasks or in terms of people. But when a given individual can devote himself or herself to a wide variety of tasks and get remunerated in terms of the entire bundle of tasks performed, then what is relevant to income distribution is productivity in terms of people, rather than tasks. But what is relevant to our concept of technological progress is an upward shift of the production function in terms of tasks. So, tasks and people no longer occupy the same space; therefore, we need a new concept of how the production function relates to inequalities. I think there is something deeper going on than simply saying we are getting more output for a given number of inputs. So our concept of technological change is different from that of organizational change.

One last point concerns relative supplies. Kevin said that it is only relative supplies that matter. I think one interesting thing is not just that the demand and supply of skilled workers has risen, but the demand for unskilled workers fell over a long period of time and has risen now. That is a mystery. Has the nature of skill-biased technological change changed to a degree that would allow us to explain why the demand for unskilled labor fell before and then is rising now? That is, I think, difficult to explain within the conventional framework. It may become easier to explain in organizational change terms.

Mr. Lindbeck: I have two comments. When we talk about this organizational change and the consequences for relative wages, one important aspect, which I think should be mentioned, is that wage
earnings in Europe have been squeezed by centralized bargaining in several countries. But centralized bargaining becomes more and more difficult because of these organizational changes, because the work and jobs become so heterogeneous that people in a centralized level have no chance to set wages in individual firms when people are multitasking. And that means you get less and less centralized bargaining and that means you get more widening of the dispersion of earnings in the future, probably as a result of this.

Since I have the floor I just want to say one other thing—the figures that you presented for Nickell, I think, are rather misleading. Nickell wanted to show that unemployment has increased as much for skilled workers as for unskilled. But I think that is rather ridiculous. If unemployment goes up from 1 percent to 2 percent for skilled workers, it doubled; and if it goes from 10 percent to 20 percent for unskilled, it also doubled. But the latter is certainly much more costly from a social point of view. So I think that is rather misleading. Moreover, it is true that the unemployment rate for unskilled workers in the United States is about the same as in many European countries, but that is not the issue. The issue is that it has increased much more in Europe than in the United States, and what we are discussing now is the change in earnings and unemployment rates. So I think from both these points of view, Nickell’s paper should not be given that prominence.

Ms. Rivlin: I thought Dennis Snower’s paper was extremely stimulating. I just wanted to say a word about the gender gap question, which Kevin Murphy has already alluded to. Mr. Snower several times refers to the narrowing of the gender gap as a mystery, and I think the mystery is actually why it hasn’t narrowed further. What we have had, at least in the United States since the 1960s, and he notes that is when the narrowing started, is a massive legal change. The difference in wages between men and women for the same job was very common and legally sanctioned as well as culturally sanctioned, and the decline in that discrimination, both legal and cultural over time, I think, is the primary explanation of the narrowing of the gap. The other thing that happened along with this is the opening up of skilled professions, law, medicine, and so forth, to educated women who before were clustered in nursing and teaching because there was
nowhere else to go. Although we don’t need an explanation of the narrowing, I love his explanation; we should not lose this hypothesis, that women are more versatile, more creative, and find a better place in the new organization than they did before.

**Ms. O’Neill:** I, too, have a comment about the gender gap, but in a different direction from Alice. I think the primary reason for the narrowing in the male-female earnings gap is the change in women themselves. I don’t think it can be tied to gender differences in psychological traits or to Kevin’s suggestion about women’s better adaptation to work in new kinds of office structures. My own research indicates that the primary factor in the shrinking wage gap has been the dramatic increase over time in women’s labor market attachment. At one time, although women maintained dual careers, their major focus was on their career in the home. Now that has changed, for various reasons. (Of course, Claudia Goldin, who is here today, has written extensively on that subject.) Today, women are still dual-careerists—so their earnings are still not the same as men’s, but a much larger proportion of their work effort has shifted into the labor market. That shift is evident not only in terms of increases in the number of years that women work but also in terms of their career outlook, their educational and other preparation for the labor market, and the kinds of occupations they pursue.

Regarding that last factor, I don’t mean merely the opening up of certain professional occupations. That happened a long time ago. The passage of anti-discrimination laws and regulations occurred in the 1960s and early 1970s. For blacks, there was an immediate relative gain in earnings following passage of the Civil Rights Act; for women, nothing happened. In fact, the male-female earnings differential actually widened at that time, largely because the rapid growth in the female labor force brought in a larger proportion of inexperienced and lower-paid women. The narrowing in the wage gap really did not begin until the 1980s—and that was when you began to see cohorts of women in the labor force with labor-market characteristics that were much closer to those of men. If women’s work-related skills had not improved relative to men’s throughout the 1980s, the gap would have widened because wages in the kinds of occupations
and jobs that women traditionally held—typically the predominantly female, less-skilled occupations—did not improve during the 1980s, as was the case for low-skilled jobs generally.

**Mr. Shultz:** Any panel members wish to make a comment?

**Mr. Murphy:** Yes. I think I did mention the experience gains and changes in what women do. I didn’t mean to downplay that. In fact, I was looking at you when I made those comments because I knew what you were thinking. For high school men versus high school women, the fact that a lot of the operative jobs have done much worse than the clerical sector, in general, in terms of demand growth, I think, is important. But for college women, definitely, you see a dramatic change in what they do. In the late 1960s, something like 70 percent of college women were school teachers and that number is only 20 percent today. So, yes, there is a huge difference over time periods.

**Mr. Shultz:** Allan.

**Mr. Meltzer:** There is a presumption that runs through several of these papers. Kevin touched on it, but I would like to go a little bit deeper: that more equality is good in all cases. I think a different tradition in economics is the tradition that starts with Hayek. It says that the vanguard always moves faster. I thought it was tautological, but it seems to be objected to by many of the papers here. As the vanguard moves, it spreads the distribution of income. Later, the change spreads throughout the income distribution. And I wondered whether in your work, and the other work that you survey, you’ve seen effects in the United States from the deregulation in telecommunications, transportation, and finance that have gone very rapidly to change these industries in a direction in which you discuss? And I wondered whether these changes are going much faster in the United States and in the United Kingdom than they are in continental Europe? Is there any evidence of that? Casual evidence seems to suggest that the United States and the United Kingdom are much more advanced in changes in those three very important industries where technological change and organizational change have been rapid and much more so
than in Europe. And I wonder if there is any systematic evidence to support or explain the differences in the distribution or the changes in the distribution between the United States and Europe?

**Mr. Snower:** One of the difficulties in assessing the importance of the organizational revolution is finding the right ways of measuring what has been happening. If one looks at case studies, with which management and business administration literatures are replete, the organizational changes vary significantly across particulars. There are some common features, but lots of differences in detail. At present, in Britain and other countries, we are beginning to collect some statistics on how many tasks workers do, and that might provide some indirect evidence. But deregulation and organizational change are very different things.

Now, another point that I think is terribly important but hasn’t been addressed so far is that if we adopt the conventional demand-supply analysis under perfect competition and perfect information, we are also thereby adopting a very strong policy agenda. If I were to verbalize it very starkly, it is that inequality may, in a sense, be the cost that we have to pay in order to benefit from technological progress. But this conventional framework is not the only one that economists can draw on. There is the efficiency wage framework and the insider-outsider framework that could tell very different stories. Let me give one quick example. If it is true that organizational change encourages the formation of customer-related teams in which the workers within teams have to cooperate with one another, then these workers (insiders, established employees) may be able through the cooperation activities that they perform, keep outsiders out. Therefore, they may be able to erect entry barriers to their jobs and these entry barriers may be explaining some of the inequality. And if that is true, then that may be an inefficient process and there may be some room for policy to correct it. And in that case, it is certainly not true that inequality is simply the cost that we pay for technological progress.

**Mr. Shultz:** Last question.

**Mr. Goldstein:** I wanted to ask Dennis Snower whether there are
any implications of the organizational revolution that he speaks of for another measure of inequality and that is differences in per capita income between industrial countries and developing countries? Most of the papers deal primarily with industrial countries; developing countries come in a little bit by the globalization and factor endowment story, but not much beyond that. What does the organizational revolution mean for the ability of developing countries to benefit from productivity catch-up?

Mr. Snower: I’m glad you asked that question. I think there is an interesting analogy between the underdeveloped countries and the underclass in any particular society like this one. I don’t think that a lot of the low incomes that you see, either in the underdeveloped countries or in the underclass in our country, are explainable in a large degree through sort of standard supply-demand analysis. They are much more the outcome of sociological forces, keeping these countries and groups down. I think that, significantly, the underclass displays social hysteresis so that once people are excluded from the labor force, they find it progressively more and more difficult to become included—something George Shultz alluded to earlier. Similarly for the underdeveloped countries, as far as organizational change is concerned, I think it is interesting that outsourcing has meant, to quite a large degree, that the previous forms of organization that we inherited from the technological revolution, Tayloristic forms, have been exported to countries that are not as advanced and industrialized. Consequently, the organizational revolution has affected different countries very unevenly. Countries like the United States and the United Kingdom, I believe, have been in the forefront of organizational changes of the sort I have been describing, and moved the Tayloristic forms to other countries, like China and India. That may, in fact, account for some of the observed changes in inequality across countries that we see.

Mr. Shultz: Thank you. It is now time for us to shift gears. I thank the panel, and next we’ll look at the relationship of monetary policy to the distribution of income.