## Comments on Session IV: Labor Market Effects

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This is a fascinating, puzzling and in the end, reassuring research project. Before I comment on the paper, let me put the work in the context of recent changes in long-term retirement patterns in America and research on the retirement process.

Dora Costa has documented a 110-year decline in the rate of "gainful employment" of older American men, from 1880 through 1990.<sup>1</sup> "Gainful employment" is not the same as our current definition of "labor force participation rate," but it is close enough, especially given the magnitude of the changes over time. For men aged 65 and over, what we used to call traditional retirement age, the rate dropped from nearly 80 percent to about 20 percent. For men aged 55 to 64, what we used to call early retirement age, the rate declined from about 95 percent to 70 percent over this century – less dramatic than for the older men, but still noteworthy.

The decline has been relatively steady over time, with some variation during the Depression (the prior one!), but it has accelerated after World War II. From 1950 until 1985, for example, the labor force participation rate of American men aged 62 dropped nearly 40 percent (from 81 to 51%) in only 35 years. At age 65, the rate dropped nearly 60 percent (from 72 to 30%), and at ages 68, 70 and 72, by over 60 percent. From the mid-1960s through the mid-1980s, the participation rates of men aged 60 to 64 dropped by more than 1 percentage point per year, and for men 65 to 69, by nearly 1 percentage point per year. This decline in labor force participation by older American men is one of the two most dramatic labor supply trends in our recent history, the other being the significant increase in the labor force participation of married women in the post-war period.

The long-run explanation for this remarkable change in older men's labor supply behavior is straightforward. During these 110 years, Americans became wealthier, and they chose to spend some of this new wealth on more leisure late in life; that is, on earlier retirement. Americans also decided to

<sup>&</sup>lt;sup>1</sup> Costa, Dora. *The Evolution of Retirement: an American Economic History, 1880-1990.* Chicago: University of Chicago Press, 1998.

spend more time in school, work fewer hours per week and take more vacation days per year. A second and more recent explanation for the trend has focused on Social Security and defined-benefit employer pensions, which became more extensive and more generous over time. Replacement rates (the ratio of post-retirement to pre-retirement income) rose and more people could afford to leave employment and retire.

During the 1970s, especially after the Social Security Administration's wonderful Retirement History Study data became available, with internal Social Security records attached to the extensive interviews every 2 years for over 12,000 older Americans, economists began to take a more sophisticated look at pensions. We realized that it was not just the size of the annual pension or Social Security benefit (or the ratio of that to prior earnings – the replacement rate) that is important, but also what would happen to that benefit if one delayed receipt after eligibility and continued to work, foregoing retirement benefits while working but then receiving higher annual benefits later. This is pension accrual - the change in the present discounted value of the pension stream following another year (or more) of work. If pension accrual is positive, even a large and generous pension (and a high replacement rate) could be a retirement disincentive (and therefore a work incentive) because the pension benefits become even larger during another year on the job – and enough larger to more than compensate for that initial year's foregone benefits. In this case, the wealth equivalent (the present discounted value) of one's retirement rights increases with additional work, and the employee earns both a paycheck and the positive pension accrual. On the other hand, a pension benefit of any size, large or small, could be a retirement incentive (and a work disincentive) if the present discounted value of the expected pension stream were to decline with an additional year(s) on the job. In this case, although future annual benefits would be higher after another year of employment, they would not be enough higher to compensate for the loss of the benefits one could have claimed in the first year of eligibility. Here, one *loses* pension (or Social Security) wealth as one continues to earn a paycheck. For

example, if the employee earned \$40,000, but the present discounted value of the expected pension stream declined by \$8,000 during that additional year of work, then the true compensation is not \$40,000, but only \$32,000. This is equivalent to a pay cut - a subtle one, but a pay cut nonetheless - one that goes into effect when one becomes eligible to receive pension benefits. It is a pay cut that would be illegal if done explicitly at a particular age, but one that is perfectly legal (and recently very common) if accomplished through the benefit calculation rules buried in the pension regulations.

It turns out that back in the 1970s, the decade covered by the Retirement History Study, Social Security regulations did in fact create significant negative accruals at age 65 (but not between ages 62 and 65) for the average worker. In addition, most defined-benefit pension plans, like those enjoyed by the Pennsylvania educators whom Strauss and Liu are studying, did the same, usually after the first year of eligibility, which differs by pension plan. The combination of a Social Security work disincentive plus an employer pension work disincentive could be very large; in some cases, equivalent to a pay cut of 40 percent. Not surprisingly, facing a pay cut of that magnitude, many people chose to leave the job and retire.

Both of these influences worked in the same direction. Older Americans, on average, were wealthier than earlier generations had been, and so were more able to afford to stop working. In addition, the reward for addition work (the true compensation, net of negative pension accruals) declined at come age (certainly by age 65, when the negative Social Security accruals began), making work less attractive. Older Americans responded to these financial incentives (and to many other factors important in the retirement decision) by retiring earlier and earlier over time.

Since the mid-1980s, however, older men's labor force participation patterns have been completely different. The century-old decline has slammed to a halt, and participation rates are on the rise. Between 1985 and 2004, only 2 decades, participation rates for men aged 62, which had fallen by nearly 40 percent between 1950 and 1985, increased by 10 percent. At age 65, rates that had fallen by

nearly 60 percent were up 25 percent; and at age 70, rates that had fallen by nearly 70 percent had increased by 50 percent. The prior trend has not only stopped; it has reversed.

The situation for older American women was both very different and the same. What were different were the labor force trends from the mid-1960s through the mid-1980s. Unlike for men, there was very little change during these two decades; the women's trends were basically flat, changing by about a percentage point per decade rather than by a percentage point per year. But what has been the same for both genders is the dramatic break from trend. For women, the flat patterns turned sharply upwards after the mid-1980s, and even more so than for older men. In summary, many more men and women are working today than the prior trends would have predicted. Why has this happened?

There are many explanations, all of which point in the same direction - work more! First of all, macroeconomic conditions cooperated. The two decades following the mid-1980s were times of healthy economic growth, meaning strong demand for all types of workers, including older workers. Mandatory retirement was first delayed from age 65 to age 70 (in 1978) and then outlawed altogether (in 1986) for the vast majority of American workers. Life expectancy and health improved, and jobs, on average, became less strenuous. Technological improvements (like home computers and hearing aids) assisted older workers who wanted to remain in the labor force. And most important from the perspective of this paper, there were dramatic changes in the Social Security and employer pension financial incentives described above. Over a 20 year period, Social Security increased the delayed retirement credit after age 65 from 3 percent per year of delay to 8 percent - about actuarially fair. The age-specific negative Social Security accrual at age 65 was eliminated for the average worker - someone expecting to live his or her life expectancy. And defined benefit employer pensions, which still do penalize work at specific ages, are fading in importance, as defined contribution plans (by their very nature age-neutral, with no age specific incentives one way or the other) take over. The surreptitious but very important pay cuts imposed by our public and private retirement systems are much less important today than they were two decades ago. In

many dimensions, the relative attractiveness of work and retirement has changed in favor of work, and folks have responded to the new environment as one would expect.

This research by Robert Strauss and Jinxiang Liu is part of this rich literature which analyzes who retires and when, and what people do when they do retire, by which I mean leave a career job. But these authors have identified a phenomenon I have rarely seen - people retiring and then becoming employed again in the same pension system, and often with the same employer! Among the "returnees," all of whom in this research are public education employees who retired and claimed their pensions, half returned to the same school and two-thirds returned to the same administrative district. Three quarters remained in the same county, and 90 percent in the same statistical metropolitan area. In fact, 43 percent had the same assignment before and after "retirement."

The impacts of the behavioral determinants that Strauss and Liu have studied make sense. These educators are more likely to return after retirement the younger they are, the less experienced they are (probably highly correlated with age), the lower their salary, and if the person is not yet eligible for Social Security benefits (also correlated with age.) Administrators and coordinators were more likely to return to work than were teachers, which may reflect duties less arduous than classroom work late in life. Those with master's degrees or doctorates were more like to keep working, as were blacks and Hispanics, both underrepresented groups among these educators. Finally, those were more likely to return whose professional expertise involved vocational education, English as a second language, or dealing with the hearing, speech or language impaired or those with mental or physical handicaps.

In work that colleagues and I have done on bridge jobs, which are often part-time, but sometimes full-time but of short duration, we find some similar results. Age, health (always important, but unfortunately unavailable in Strauss and Liu's data-set), and pension status are all important, as is any index of socio-economic status, such as wage rate, wealth or the skill level of one's job. It turns out that the relationship between socio-economic status and taking a bridge job after leaving a career job is

non-linear; in fact, it is u-shaped. Those at both ends of the socio-economic spectrum are more likely to utilize bridge jobs on the way out, and to remain in the labor market after leaving a career job. At the upper end, people do so largely for quality of life reasons. They enjoy their colleagues and the challenges at work, and want to make a contribution, even if they could afford to retire. They continue to work because they want to. At the lower end of the scale, people are more likely to continue to work for economic reasons - they need the paycheck and, when available, the medical insurance to get by. They continue to work because they have to. But what we almost never found in our research were people moving to bridge jobs with same employer, either because they were not given the option or because they did not want to do so even if they could. Why might workers not want to work part-time with the prior employer, where specific human capital would be most valuable? Some want to move to a better climate or to try a new occupation. Others might have pension plans that would penalized the decision to end a career with a part-time stint; for example, if pension benefits after retirement were based on the last three or five years of actual earnings. What seems to be the case in this Pennsylvania example is that people can cut the employment cord, claim benefits based on their lifetime service and their most recent earnings, and then be hired back by the same employer or another employer in the same pension system (typically a better school, according to Strauss and Liu) without affecting their pension benefits, and work for another 4 or 5 years, to the detriment of the 20 to 25 percent of teachers in this state who are unemployed. Although this does happen, relatively few educators do this, and even fewer did after legislation increased the annual pension benefit per year of service from 2.0 to 2.5 percent, so that many experienced teachers now have replacement rates near and sometimes over 100 percent, without even counting Social Security benefits. In addition, there used to be some pension penalty for this doubledipping, but the penalties were reduced if not eliminated during 2003-2004.

This is a puzzling system that begs for an explanation, especially in a state with a significant oversupply of home-grown teachers. Why would one develop such a generous retirement package, with

large replacement rates for those with significant years of service, offer early retirement after only 10 years of service (reduced from 25 years), offer a 10 percent bonus in number of years of service for those 55 and older, offer additional early retirement incentives in 1993, 1997 and 1998, induce teachers to leave, which they do, and then hire them back, with no loss in their pensions? If a goal of the pension plan was to induce teachers to retire in order to create opportunities for younger teachers, which it looks like it was and which became even more important to do after the demise of mandatory retirement in the mid 1980s, why would one then eliminate the penalty for double-dipping and welcome retirees back?

The specialties and types of people who are most likely to return suggest one explanation - that these opportunities are offered to attract those people most underrepresented to return, like blacks (only 7% of the retirees) and Hispanics (less than 1% of the retirees) and those in various forms of special and vocational education. These might be demographic groups and specialties in which there is not an excess supply, despite a significant one among educators overall.

In this paper, I suggest several extensions, beginning with more historical detail on why and how this system developed. What were its goals, from the perspectives of the administrators and the teachers, or their representatives? Are the goals the same today? Also, the paper would benefit from more analysis of why some choose to retire and then to return, rather than just not retire in the first place. What are the pros and cons (financial and otherwise) of these two different ways to continue teaching or administrating? In particular, do the details of the pension regulations encourage departure and return? To what extent are the subsequent returns to work anticipated at the time of retirement, or a response to something unexpected during retirement? Since the researchers know the pension details and the work histories of the employees, one could actually figure out the financial implications of staying on for another year, or retiring, claiming a pension, and then coming back.

When I worked with the old Retirement History Study, there were detailed Social Security records but almost no information about the respondents' employer pensions. To estimate accrual

rates, one had to use broad occupational averages, which were very rough estimates of what any individual faced. Nonetheless, despite considerable measurement error, the variables reflecting the estimated accrual incentives were statistically significant in describing individuals' behavior. In contrast, Strauss and Liu do not have Social Security records (although one might be able to estimate Social Security benefits, given their work histories), but do know the pension details. One could estimate not only the employees' potential pension benefit amounts, but also their pension accruals following an additional year of work. I suspect that these accruals are negative after some age, which is why the employees retire and claim their pensions. Once they then disconnect from the system and the negative accruals they would have suffered, they can return to work without that implicit wage cut, and get paid as well! It is a great opportunity for these veteran workers, at the cost of the fresh recruits who might have been hired into the system.

I began by saying that this research is fascinating, puzzling and reassuring: fascinating, since I have never seen a deal like this; puzzling, because I do not understand why the authorities would create a system like this; but reassuring, because I am confident that much of the answer lies in the financial incentives these educators face, as is so often the case.