

Commentary: Active Labor Market Policies to Expand Employment and Opportunity

James J. Heckman

Labor markets in all Organization for Economic Cooperation and Development (OECD) economies are under stress. Two main factors generate the pressure, although the precise contributions of these factors to unemployment and wage growth remain to be determined. The first factor is an apparent shift in the bias of technology toward skilled-labor-intensive methods of production. The second factor is the industrialization of Third World and former Third World countries and the expansion of world production of goods made by **unskilled** labor. The effective supply of **unskilled** labor has increased and demand has shifted against it leading to forces that would drive down the wages of **unskilled** workers if wages were permitted to adjust. Where they have not been permitted to adjust either because of institutional or governmental interventions, unemployment has increased. In the United States, where interventions are minimal, wages for the **unskilled** have fallen in real terms relative to the wages of the skilled. In many European countries, wages of the unskilled have been maintained but at the cost of high rates of unemployment and labor force withdrawal. The combination of high levels of social welfare benefits for the unemployed, coupled with reduced demand for unskilled labor at prevailing European wages, produces high levels of European unemployment.

That generous unemployment benefits can produce higher levels of unemployment comes as no surprise to microeconomists in North

America. That this idea has only recently been embraced by most macroeconomists can only be greeted with enthusiasm and wonder. Why did an idea with such intellectual support take so long to be accepted into the mainstream of macroeconomics?

The answer is clear. Perceptions of unemployment vary across generations. Economists who came of age in the Great Depression perceived a labor market that failed. Willing workers could find no jobs. The cause of the failure was on the demand side. Individual supply decisions played only a minor role in generating Great Depression unemployment. That this extreme view of the labor market has persisted for decades in macroeconomics reveals the power and influence of a now fading generation.

The newer empirically based view of unemployment recognizes the contribution of individual supply choices to aggregate employment. It is significant in this regard that the definition of "involuntary unemployment" advocated by Layard, Jackman, and Nickell (1991) in their influential book defines that concept in terms of choices of workers. An individual is "involuntarily unemployed if he cannot get a "suitable" primary sector job and refuses a "low-wage" secondary sector job. The transformation in the concept of involuntary unemployment signalled by this definition is remarkable.

Restoration of the supply side to macroeconomic discussions of unemployment can only enrich policy discussions. The paper by Katz contributes to progress in this area. Katz accepts the macroeconomic demand and supply paradigm and suggests that an appropriate response to recent trends in the demand for unskilled labor in OECD countries is to convert unskilled persons into skilled persons. The logic is simple. Remove some of the unskilled from that category and also make unskilled workers scarcer. This is precisely the strategy advocated by Robert Reich, Katz's former employer, and is the foundation for President Clinton's human capital strategy.

The argument set forth by Katz is largely qualitative. It indicates a promising direction but never discusses the costs and benefits of specific policies nor the magnitude of the problem created by the new American labor market.

In my comments, I wish to make two key empirical points: (1) the scale of the problem facing modern economies is enormous and (2) the scale of the human capital investment required to solve the problem is enormous even under very optimistic assumptions. The evidence indicates that even successful government training programs are unlikely to make substantial improvements in the **skill** of the workforce. The evidence indicates that few government programs are successful.

These points lead me to consider alternative policies not addressed by Katz: tax policies that operate on both demand and supply in the labor market and wage subsidy policies that operate on firm demand. In my view, Katz—and the Clinton Administration—take an oversimplified approach to the problems of the modern labor market. Katz and the Clinton Administration make the same kind of mistake as the early **Keynesians**—they neglect one side of the market. They ignore demand while the early Keynesians neglected supply. They fail to carefully distinguish effective short-term policies from effective long-term policies by focusing exclusively on short-term supply-side policies.

In the short run, the economy is populated with a large group of **unskilled** workers, many of whom can be converted into **skilled** labor only at a prohibitively expensive cost. In an era of tight budgets, it is not obvious that investments in such workers are justified on any but ideological grounds. The real cost of such investment is the diversion of investment away from the young and the more malleable where a human capital strategy is likely to be more effective and where it is likely to produce favorable outcomes in the long run. Missing in Katz's paper is any discussion of the rather convincing evidence that investment is most profitable when it is made in the young.

A better use of limited resources may entail use of wage subsidies to employ the large mass of **unskilled** workers for whom human capital investments are not profitable. In the current environment, work subsidies are more palatable than welfare. There is some evidence that work raises wages and stimulates future work even at the same wages. (Heckman, 1981). Work may promote values above and beyond the output produced. The key point is that for a large group of workers, an investment strategy may not be the correct one.

Missing from Katz's discussion is any discussion of priorities or the need to prioritize. In an era of tight government budgets, it is impractical to consider active investment programs for all persons. The real question is how to use available funds wisely. Government investments have not been shown to be effective in any meaningful cost-benefit sense for severely disadvantaged adults or older workers. For these groups, wage subsidies may be more effective tools for keeping persons employed than skill investment programs. The available evidence supports the policy proscription: invest in the young; subsidize the old and the severely disadvantaged.

Katz also implicitly assumes that investment should be supplied by the government sector. This leads him to ignore a potentially important role for tax incentives to encourage training by private firms to raise the demand and wages of labor. The evidence suggests that the returns to firm-supplied investment in human capital are larger than the returns to government training. This alone would justify greater reliance on the private sector. However, the better performance of private firms may be due to the lower quality of trainees in the government programs. Evidence of their lower quality does not vindicate continued investment in such persons. No investment may be the best short-run strategy for low-skill adults, contrary to a central implicit premise of the Katz paper and the Clinton Administration. Current tax policy is inconsistent and should be reformed. It works against investment in low-skill persons. It is a policy option that should be explored.

The new American labor market

There is much evidence to support the view that wage gaps have widened across skill levels. In purchasing-power-constant or deflated dollars, male high school graduates earned 4 percent less per week in 1989 than in 1979. Male high school dropouts earned 13 percent less per week than in 1979. In contrast, male college graduates earned 11 percent more per week (Blank, 1994). These comparisons widen further if we consider annual earnings. By any measure, labor incomes for men have become more unequally distributed. For women, the story is somewhat different. The real weekly earnings of female high school graduates have risen but the rise has been even greater for female college graduates.

For both men and women, inequality of labor incomes has risen. The returns to schooling and skill have increased. The relative earnings of workers at the bottom of the skill distribution (less than high school graduate) have definitely declined for persons of either gender. Youth have been hit hardest in the shifting market for skills.

A corollary phenomenon is the decline in labor market activity, especially among the unskilled. A variety of labor force measures show increasing joblessness and longer unemployment spells for workers at all skill levels. Particularly problematic are less-skilled youth (those with high school education or less) who appear to flounder in the market for years before they find stable jobs. These youth are a source of major social problems. Teenage pregnancy, crime, and idleness are important phenomena that are on the increase in most areas.

The problem of a deteriorating market for unskilled or semi-skilled workers is not solely a problem of youth. Displaced adults, primarily factory workers, are a major concern. Middle-age workers displaced from high-wage jobs are at a major disadvantage in the new market for labor that has emerged since many of these workers first took their jobs. Displaced workers constitute 10 to 20 percent of the unemployed, or roughly 1 to 2 million workers. Recent evidence on the patterns of earnings losses experienced by workers displaced by mass layoffs suggests that the losses are significant and long-lasting, especially for those previously employed in unionized industries or occupations (Jacobson and others, 1993). Katz documents these facts well.

The level of investment needed to reduce the current levels of wage inequality

There have been many proposals for investments in human capital designed to increase the wage levels of the less skilled. An investment generally yields returns over many years after initial costs are incurred. For human capital, a round, and roughly correct, average rate of return is 10 percent. Thus, for each \$10 invested in a person, the expected annual return is \$1. Some claim that this number is lower and some claim that it is higher, but most economists would accept a 10 percent return as a good starting point for estimating the aggregate investment

needed to upgrade the skills of the low-skilled segment of the workforce.

At this rate of return, to add \$1,000 in earnings per year to the average person it is necessary to make a one-time investment of \$10,000 in that person. Using a 10 percent rate, the investment needed to reduce any wage gap is ten times the amount of the gap.

To put the magnitude of recent developments in the labor market in perspective, consider the following two questions:

(1) How much would we have to invest in our workforce in 1989 dollars to restore real earnings of male high school dropouts and graduates to their real 1979 levels?

This question is meaningful only for men because real weekly earnings for women have risen or remained roughly constant over the period 1979-1989. A second question is:

(2) How much would we have to invest in our workforce in 1989 dollars to restore 1979 earnings ratios between lower education groups and college graduates, without reducing the 1989 earnings of college graduates?

Using a 10 percent rate of return, it would require an investment of \$25,000 in each high school dropout or a staggering \$214 billion in 1989 dollars to restore male high school dropouts participating in the workforce to their 1979 real earnings level. To restore all high school graduates to their real 1979 levels would take an investment of \$10,000 per high school graduate, or more than \$212 billion 1989 dollars, for a total of \$426 billion in 1989 dollars.

The answer to the second question is even larger. Table 1 shows the amount needed to restore the 1979 earnings ratio between high school graduates or high school dropouts and college-educated full-time workers over age 25. To restore real earnings for both male and female workers over age 25 that are high school educated or less to their 1979 *relative* positions with respect to college graduates (holding the latter at 1989 real wage levels) would require an investment of more than

Table 1
Investment in Human Capital Required to Restore
Earnings to 1979 Levels and to Restore 1979 Relative
Wage Ratios Using a 10 Percent Rate of Return
(in billions of dollars)

To Restore Earnings to 1979 Levels

Males	
Investment needed to restore average male high school dropout earnings in 1989 to average real earnings of male high school dropouts in 1979	\$214
Investment needed to restore average male high school graduate earnings in 1989 to average real earnings levels of male high school graduates in 1979	\$212
TOTAL	\$426

To Restore 1979 Earnings Ratios

Males	
Investment needed to restore average male high school dropout earnings in 1989 to the level needed to achieve the 1979 high school dropout/college earnings ratio (holding 1989 college graduate wages fixed)	\$382
Investment needed to restore average male high school graduate earnings in 1989 to the level needed to achieve the 1979 high school graduate/college earnings ratio (holding 1989 college graduate wages fixed)	\$770
Females	
Investment needed to restore average female high school dropout earnings in 1989 to the level needed to achieve the 1979 high school dropout/college earnings ratio (holding 1989 college graduate wages fixed)	\$136
Investment needed to restore average female high school graduate earnings in 1989 to the level needed to achieve the 1979 high school graduate/college earnings ratio (holding 1989 college graduate wages fixed)	\$378
TOTAL	\$1.66 Trillion

Source: Wages are from Blank (1994). We assume workers work 50 weeks a year. The figures on the educational breakdown for the labor force are from Table #616, *Statistical Abstract of the United States, 1992*. We delete all persons out of the labor force and those less than age 25. On these criteria, our estimated investment costs are downward-biased.

\$1.66 trillion. These numbers are conservative because they do not consider persons below age 25 or persons who do not participate in the workforce at the current wage levels. They are conservative for another reason: few—if any—government training programs have returns anywhere near 10 percent. Zero percent is a much closer approximation to the true return.

One might wish to qualify these calculations in many ways. One might want to adjust down the rate of return as more difficult-to-train persons receive training. Or, one might wish to account for the fact that as persons have their skills upgraded, the real wages of the lower skill workers are likely to increase as they become more scarce and the real wages of those with higher skills are likely to decrease as their supply increases. Still, under most plausible scenarios, the costs of restoring skill parities to their 1979 levels are huge.

Investment in human capital may still not reduce income inequality. Raising the skills of a few need not reduce overall inequality. By moving some workers from low-skill to high-skill status, some standard measures of earnings inequality might actually increase. Many programs train only the high end among the low-skill workers. Such training efforts could polarize the labor market. In addition, it takes skilled labor to produce skilled labor. A large-scale increase in training activity might therefore increase earnings inequality in the short run since it would further expand the demand for skilled labor to train the unskilled labor. It takes educated labor to produce educated labor.

Finally, the most efficient training policy may not be to train the unskilled. As first noted by Mincer (1962), there is strong evidence of universal complementarity between post-school investment and formal schooling. It may be economically efficient to invest in higher-skilled workers and to alleviate concerns about income and earnings inequality through income transfers or through wage subsidies. However, to the extent that working fosters socially desirable values among those who work, it may still be desirable to invest inefficiently or subsidize the employment of low-skill workers in order to promote those values.

The ineffectiveness of public training programs

In this section, I examine the evidence concerning the rate of return to government training. The evidence suggests that the 10 percent rate of return assumed in the calculations performed in the previous section is wildly optimistic. Few of the programs summarized by Katz earn anywhere near this return.

The Summer Youth Employment and Training Program

It has been proposed that the Summer Youth Employment and Training Program under the Job Training Partnership Act be increased. The stated purpose of this program is to preserve and upgrade the skills of low-income youth during the summers between school terms. The new twist on this program is that an “investment” argument has been given to support it. Barbara Heyns and her associates have argued that knowledge acquired in schools deteriorates through disuse during the summer (Heyns, 1987). The new proposals recognize this possibility and suggest that summer youth programs should be enhanced by learning enrichment activities. What are the prospects for success of this program? A recent evaluation of a similar effort, the Summer Training and Education Program (STEP), has been presented by Public/Private Ventures, a Philadelphia-based nonprofit corporation that evaluates and manages social policy initiatives aimed at helping disadvantaged youth. STEP offered two summers of employment, academic remediation, and a life skills program to low-achieving youth aged 14 and 15 from poor families. The objective of the program was to reach youth at the crucial ages at which they are deciding whether or not to drop out of school or become pregnant. Part-time summer work at the minimum wage was supplemented with remedial reading and math classes and courses on the long-term consequences of drug use, unprotected sex, and dropping out of school.

Using randomized trials, 4,800 youth in five cities were enrolled into or randomized out of the program. Both treatments and controls were followed for eight years. A high quality evaluation was conducted using state of the art demonstration methods for three cohorts of participants. The findings from this evaluation are disappointing. STEP participants experienced measured short-run gains including

