

Dissertation Awards

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1-1-1999

**Three Essays on Labor Market Institutions and Low Income  
Populations: Dissertation Summary**

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# Three Essays on Labor Market Institutions and Low-Income Populations

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The three essays that comprise this dissertation discuss three different sets of institutions affecting the lives of low-income populations. I start with a brief overview placing these essays into a larger body of research; then I present a fuller description of each individual essay.

One of the difficulties in studying low-income groups is that their lives are touched by so many institutions. Moreover, these institutions often affect low-income groups differently than middle- or high-income groups. Perhaps nowhere is this more true than in the labor market. Increasing wage inequality since the early 1970s has reduced the return to work for the less skilled relative to those with more skill, in particular for males with less education. Over this same time period, males with less education also have experienced larger declines in employment. Less-educated females, on the other hand, have not experienced analogous declines in wages and labor force participation, but both their wages and especially their labor force participation have increased much less rapidly than highly educated females.

My first essay contributes to the earnings inequality literature by examining changes in the composition of educational groups and how ignoring these changes affects estimates of changes over time in the earnings and employment of educational groups. Educational attainment has increased dramatically over the past few decades, resulting in large shifts in the composition of educational groups. In other words, given the large increases in educational attainment, do today's high school dropouts, high school graduates, and college graduates have the same level of unobserved skills as their counterparts 20 or 30 years ago? The evidence in this essay suggests that today's workers, conditional on education, have less skill than their counterparts 20 or 30 years ago, thereby overstating the employment and earnings declines of less-educated workers. This essay focuses on native white males, but it is expected that correcting for changes in the composition of educational groups may also be important for

explaining changes over time in differences in wages and employment by experience, race, and gender.

The return to work for low-income groups is determined not only by wages, but also through the redistribution of income through both transfer programs and the tax system. This is particularly true for low-income single mothers, whose return to work has changed dramatically in the past decade and a half in response to unprecedented changes in tax and welfare programs. My second essay (joint with Bruce Meyer) investigates how single mothers' employment has changed in response to large increases in their after-tax income when they work, expansions of Medicaid coverage for their families when they work, reductions in the welfare benefits that they lose when they work, and numerous other changes that affected their return to work. In fact, one of the contributions of this essay is that it is perhaps the first study to examine so many institutions simultaneously. The findings suggest that these incentives, in particular those due to the Earned Income Tax Credit (EITC), have been successful in bringing more single mothers into the workforce.

Single mothers are not the only low-income group to be affected by tax and transfer programs. Low-income married couples with children also have experienced increases in their after-tax income and most low income individuals are eligible for food assistance. Low income individuals are also often eligible for job training programs. Finally, minimum wage laws are another determinant of the earnings and employment of low-income individuals.

Another institution that affects low income populations is the unemployment insurance (UI) system. My third essay (joint with Bruce Meyer) examines a particular feature of the UI system: the workers who repeatedly receive UI. Analyzing repeat use of UI makes it possible to determine whether UI is providing insurance for rare bouts of unemployment or whether it simply transfers income to the same workers each year. Our findings suggest that less-experienced

workers in low-paid jobs are less likely to repeatedly receive UI. Hence, the evidence suggests that the UI system may transfer income away from low-income workers.

The three essays in this dissertation touch on many of the important institutions affecting the lives of low-income populations, but they certainly do not touch all of them. For example, they ignore many of the factors that determine entry into and exit from low-income populations. Family background, neighborhoods, and schools all potentially affect skill formation and thus income levels. Other factors, such as marital status and childbearing, affect both income levels and how institutions such as the tax and welfare systems treat particular individuals. Consequently, research that examines the links between marital status and the labor market outcomes of both partners or between marital status and childbearing and the incentives created by welfare systems also is important for understanding low-income groups.

## **1. ABILITY, SCHOOLING RANKS, AND LABOR MARKET TRENDS**

“Perhaps the most important change in the labor market over the past 25 years has been the increase in the demand for more educated workers” (Economic Report of the President, 1998). Findings of widening differentials in earnings by education along with “wages for less educated workers [that] deteriorated . . . in the mid-1970s and 1980s” color the way in which both policymakers and researchers think about the world. For that reason it is important that this picture of the U.S. labor market be as accurate as possible.

This essay argues that increases in education differentials have been overstated and that the wages of less-educated workers have not “deteriorated” if we take into account one simple fact. Over the past few decades, educational attainment has increased and with it, the composition of educational groups has changed, implying that using educational groups is a particularly bad way to examine how both inequality and the returns to skill have changed over time. Accounting for these changes in the composition of educational groups results in a very different picture of the U.S. labor market, including 1) increases between 1969 and 1989 in the college/high school weekly earnings differential that are about half as large, 2) weekly earnings for high school graduates and dropouts that increase between 1969 and 1989 rather than decrease, and 3) a doubling of the 1969–1989 increases in the differences in weekly earnings between older and younger high school graduates and dropouts.

This new picture of the U.S. labor market is important for both policymakers and the vast literature in economics in search of explanations for the rising U.S. wage inequality over the past few decades. In fact, these findings challenge one of the bodies of evidence used to establish the findings of increases in wage inequality, i.e., increases in education differentials. Other recent research raises concerns about the other body of evidence for wage inequality, increases in within-group inequality.

This literature has tended to ignore changes in the composition of educational groups resulting from the dramatic increases in educational attainment over the past few decades. One particularly extreme example from Autor, Katz, and Krueger compares the wages of college and high school graduates between 1940 and 1996. In 1940, college graduates made up the upper 6.4 percentiles of the educational attainment distribution, while high school graduates were between the 68<sup>th</sup> and 87<sup>th</sup> percentiles. By 1996, college graduates made up the upper 28 percentiles, while high school graduates were between the 9<sup>th</sup> and 43<sup>rd</sup> percentiles. Hence, due to the large increase in the fraction of workers who attended college but did not receive a bachelor’s degree, relative rankings in educational attainment have fallen much faster for high school graduates than they have for college graduates. If educational attainment and ability (or unobserved skill) are positively correlated, then comparisons such as these require heroic assumptions in order to be interpretable as changes in only the return to skill. Thus, we might expect that changes in the composition of educational groups would have resulted in a large increase in the college/high school wage differential between 1940 and 1996, even in the absence of any change in the returns to ability and schooling. In this light, the 6-percentage-point increase in the college/high school wage differential between 1940 and 1996 likely indicates that wage inequality decreased rather than increased between 1940 and 1996.

This essay uses educational ranks—cohort-specific relative rankings in educational attainment—as a control for changes in the composition of educational groups. This approach rests on the intuition that individuals in different cohorts with the same educational rank, i.e., those in the same place in their cohort’s educational attainment distribution have about the same level of ability. Thus, the ability (or unobserved skill) of high school graduates in 1940 was more like that of college graduates in 1996 than their counterpart high school graduates.

The research strategy in this paper is a simple one. I first estimate education differentials, experience differentials, and wage patterns using a conventional individual-level regression using data from the Decennial Census. Then I re-estimate these parameters after including educational ranks, i.e., controls for the changes in the composition of educational groups. As mentioned above, accounting for these changes in the composition of educational groups profoundly changes our picture of the U.S. labor market. Increases in the college/high school differential are considerably smaller but more concentrated among younger workers, and it is more difficult to argue that the earnings of less educated groups have deteriorated, especially when comparing 1989 to 1959 or 1969. Finally, the increases in the return to experience are much larger for less-educated workers, once changes in the composition of educational groups are accounted for.

One of the primary advantages of using educational ranks as a control for changes in the composition of educational groups is that it is applicable to the large, nationally representative data sets that span long time periods and multiple cohorts, such as the Decennial Census (Census) which is used in this paper. This applicability is in contrast to another approach, using test scores as a control for ability, which typically are available in surveys that span only a short time period or only a few cohorts. A second advantage of this approach stems from educational ranks being a function of educational attainment. Hence, educational ranks are an ideal control for the variation in ability (or unobserved skill) that is correlated with educational attainment, precisely the variation which biases estimates of changes over time in the returns to skill.

This essay also examines a second approach of controlling for changes in the composition of educational groups: within-cohort comparisons. One would expect that compositional shifts would be negligible within cohorts, yet the evidence presented in this essay suggests precisely the opposite, thereby raising questions about the validity of this approach. These findings suggest that some workers may report higher levels of educational attainment than what they have received when the stigma for doing so increases.

There is more at stake in this paper than just estimates of earnings patterns for different educational groups. In essence, any research that uses educational groups to delineate different skill groups or conditions on education over long periods of time runs the risk of confounding changes in composition with changes in the parameter of interest. For example, estimates of changes over time in race differentials often compare

blacks and whites with a given educational attainment. Consequently, estimates of changes over time in race differentials may simply reflect racial differences in the patterns of educational attainment.

## **2. WELFARE, THE EARNED INCOME TAX CREDIT, AND THE LABOR SUPPLY OF SINGLE MOTHERS**

In recent years, there have been enormous changes in many of the tax and transfer programs that affect single mothers. These changes have dramatically increased the incentive to work. Between 1984 and 1996, real dollars received through the Earned Income Tax Credit (EITC), which go primarily to working families with children, increased more than tenfold. Likewise, between 1984 and 1994 the number of children receiving Medicaid increased 77 percent, while the number of covered adults with dependent children increased 35 percent. These Medicaid expansions primarily affected non-welfare families with incomes near the poverty line, making work more attractive for low-income single mothers. In the last few years nearly every state has experimented with changes in its welfare programs, often under waivers of the existing program rules. Many of these changes have imposed work requirements, time limits, or other measures to encourage single mothers to work. Finally, there have been recent increases in child care funding and job training for single mothers. The combined effect of these program changes has greatly increased the incentive for single mothers to enter the workforce. This essay (joint with Bruce Meyer) examines whether these policy changes have been effective in encouraging more women to work. More precisely, we calculate the effect of each of these program changes as well as several others on the employment of single mothers.

During this 1984 to 1996 period in which single mothers experienced dramatic increases in the return to working, their weekly employment increased by about 6 percentage points, and their annual employment increased by nearly 9 percentage points. Over the same time period, both weekly and annual employment for a plausible comparison group, single women without children, decreased by about 1 percentage point. The increases in employment were the largest for single mothers with children under age six and occurred primarily after 1991.

Understanding the relationship between the increase in the employment of single mothers and the changes in government policies is important for several reasons. First, there is little previous work which estimates the

effects of the EITC, Medicaid, and welfare changes on whether single mothers work. The only paper which directly examines how the EITC affects single mothers' employment is by Eissa and Liebman, examining the effect of the Tax Reform Act of 1986. Furthermore, there is no work that we are aware of that assesses the overall effect of recent changes in training and child care programs. The work on the effects of welfare waivers has examined program caseloads rather than employment, and has reached conflicting results.

Second, these changes in policies provide a plausible source of exogenous variation with which to identify the effects of tax and welfare parameters on labor supply. The magnitudes of these effects are key determinants of the gains or losses from changes in income redistribution and social insurance policies. The variation across individuals and over time in the after-tax and transfer return to work that we use here to identify labor supply elasticities is due to large changes in federal and state laws. These laws applied to some individuals and not to others or had differential effects on the incentives of different people. This source of variation is likely to be unrelated to underlying differences across individuals in their desire to work and is thus potentially exogenous to labor supply decisions.

Third, the passage of "welfare reform," i.e., the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), has allowed states more discretion in designing their programs for low-income single mothers. Redesigning these programs will be more successful if informed by recent experience.

We examine the major policies affecting the employment of single mothers during the 1984 to 1996 period using two data sets, the Current Population Survey (CPS) Outgoing Rotation Group Files and the March CPS Annual Demographic Files. This paper improves on the common past research strategy of examining changes in one of these policies in isolation over a short time period. By investigating several programs at once, we are able to directly compare the effects of different programs using the same sample, time period, and methods.

The large number of changes over the 1984 to 1996 period allows us to study the employment effects of a wide range of social policies. We examine the federal EITC, as well as other tax changes, and state EITCs. We examine the effects of changes in many aspects of AFDC, food stamps, and Medicaid including: changes in AFDC benefit levels, earnings disregards and benefit

reduction rates; the expansions of Medicaid coverage to low-income non-AFDC children; and the recent flurry of welfare waivers. We also examine the effects of changes in child care and training programs during this period. The employment responses to many of the more important recent policy changes have not been studied, including the increases in the EITC after 1990, the Medicaid expansions after 1991, the implementation of work requirements and time limits for welfare mothers, and the growth in job training and child care for low-income women.

Our base specification compares changes in employment for single mothers to those for single women without children, relying on the differential treatment of these two categories of women under welfare and tax laws. These specifications also control for state-specific factors common to all single women as well as a number of factors that vary by family composition. The estimates from these specifications suggest that the EITC accounts for about 63 percent of the increase in both the weekly and annual employment of single mothers between 1984 and 1996. Welfare waivers appear to account for less than one-sixth of the increase for both employment measures. Other changes in AFDC can account for about one-quarter of the weekly employment increase and about one-seventh of the annual increase. Changes in Medicaid, training, and child care programs play a smaller role. In other specifications we use more subtle identification strategies to estimate the effects of policies. In these specifications, we compare changes for single mothers with different numbers of children, with different earnings opportunities, and in states with different living costs. We also examine the effects of changes in welfare programs within a state over time and changes in state income taxes. These specifications often indicate somewhat smaller and less precisely estimated effects of the policies on employment, but the main patterns usually remain.

### **3. REPEAT USE OF UNEMPLOYMENT INSURANCE**

This chapter (joint with Bruce Meyer) shifts focus to a different institution, the unemployment insurance (UI) system. One of the central empirical questions about UI is the extent to which it insures against unforeseen events or subsidizes certain firms and workers engaged in temporary layoffs. Government provision of insurance against unforeseen layoffs can be justified by the absence of a well-functioning private unemployment insurance market due to both aggregate recession risk and adverse selection by workers and firms. On the other hand, subsidies to workers and

firms with frequent and predictable layoffs lead to distortions of employment in favor of industries and firms with unstable employment, such as seasonal ones.

Using administrative data from five states between 1979 and 1984, we find that repeat UI use is a prevalent feature of the UI system. Almost 40 percent of the benefit years in our sample are from claimants with three or more benefit years in the five-year period. A large fraction of this repeat use is attributable to temporary layoffs, as over half of the persons with multiple-benefit years in the sample separate from the same employer each time. Certain industries, particularly construction and manufacturing, generate most of the repeat UI use; these two industries account for over three-quarters of those with three or more benefit years but less than one-third of overall employment. At a finer industry level, we find that agriculture, forestry and fishing, mining, construction, food, tobacco, apparel, lumber, leather, and transportation equipment exhibit high rates of repeat UI use. In contrast, retail trade, financial, insurance, real

estate, services, and the public sector have low rates of repeat UI participation. We find strong evidence that the industries with high repeat are those with seasonal variation in employment levels.

We also find that some of the attributes thought to indicate a better job are associated with a high probability of repeat use. There is surprising evidence that those who repeatedly receive UI tend to have good jobs and some may prefer to be laid off and receive UI for part of the year. While nonwhites and those with less education are more likely to be repeat recipients, more senior workers and those with higher quarterly earnings are also more likely to be repeat recipients. One consequence of these findings is that the UI system may not provide as much of a safety net for workers in bad jobs. Thus, moving a group like single mothers (who disproportionately hold bad jobs) away from a welfare-based safety net to a UI-based safety net may leave them disproportionately unprotected from spells of unemployment.