

Dissertation Awards

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Four Essays in Labor Economics and  
Microeconometrics: Dissertation Summary

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# Four Essays in Labor Economics and Microeconometrics

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This dissertation comprises four essays in labor economics and microeconometrics. In particular, I am concerned with three issues: firms' hiring decisions and compensation structures; immigration and welfare; and earnings dynamics. I also propose new econometric methods for the empirical analyses.

## **Chapter 1** **Who Gets Good Jobs?** **The Hiring Decisions and Compensation Structures of Large Firms**

It is a stylized fact that large firms pay higher wages than small firms. Most research in labor economics concerning firm size has focused on this size/wage puzzle, but little attention has been paid to the differences in hiring practices and wage structures between large and small firms, which are the issues this chapter focuses on.

The firm-specific human capital theory implies that large firms prefer to hire younger workers because they invest more in workers than small firms do and because those investments are fixed costs. In this paper, I use data from the Benefits Supplement to the Current Population Survey (CPS) to demonstrate that large firms indeed hire younger workers than small firms, especially for white-collar occupations. I present a simple model of firm cost minimization within an employee search framework, which is consistent with large firms' propensity to hire younger workers and has additional testable implications regarding large firms' compensation structures. First, because young workers are more valuable to large firms than to small firms, large firms offer higher starting wages to attract them, which implies flatter starting wage/age profiles among the new hires in large firms than in small firms. Second, because large firms invest more in workers, they continue to pay higher wages to retain the trained employees; this implies steeper wage/tenure profiles in large firms. Both predictions are borne out by the CPS data. Most strikingly, for the newly hired white-collar workers, not only are the starting wage/age profiles

flatter in large firms, but also the size/wage premium disappears for workers hired at age 35 or older.

Furthermore, by exploiting cost variations in dimensions other than firm size, such as occupation and industry, this model has additional testable implications. More specifically, an extension of the simple model would imply that, for high training occupations, workers displaced at older ages suffer greater wage losses than younger workers (even after controlling for tenure on the previous job) because they have a harder time finding a new good job that requires high investments. Yet, there should be no systematic difference in wage loss by age for occupations that require little training, and this prediction is supported by the data from the Displaced Worker Surveys. Finally, limited evidence from the Bureau of Labor Statistics' Survey of Employer-Provided Training 1995 and the CPS suggests that industries that train more also appear to hire younger workers.

The findings in this paper suggest the importance of human capital accumulation in workers' labor market success. Firms' reluctance to hire and invest in older workers might result in serious problems for workers displaced later in their careers. Some form of government subsidies to employer-provided training might help alleviate the difficulties faced by the older workers in their transition.

## **Chapter 2** **Use of Means-Tested Transfer Programs by Immigrants, Their Children, and Their Children's Children** (co-written with Kristin Butcher)

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 radically changed the welfare system in the United States. While the changes brought by this law affect all welfare recipients, noncitizens were singled out and their access to federally funded programs was especially curtailed. We present a brief summary of the changes in the welfare rules pertaining to noncitizens and highlight

the fact that the new rules lead to especially high variability across states for noncitizens. We then use the most recent data available prior to these law changes (1994–1996 Current Population Surveys) to examine immigrants' participation in a wide range of transfer programs, providing a baseline against which to compare immigrants' post-reform participation. Next, we examine the participation in transfer programs of the native-born children of immigrants (the second generation). We combine information from the 1990s on the second generation with information on immigrants in the 1970s to analyze intergenerational correlation in welfare use for immigrants and their children.

We find that immigrants in the 1990s are more likely to participate in transfer programs than are the native-born, particularly for in-kind programs such as food stamps and Medicaid. However, immigrants are less likely to participate in transfer programs than are the native-born with similar characteristics. The second generation is less likely than any other group to use such programs, on average and controlling for characteristics. Finally, we find that initial differences in welfare receipt between immigrants and the native-born are likely to die out after three generations. Once the education levels of the second generation are controlled for, there is no correlation between the welfare receipt of the first and second generations, suggesting that welfare receipt does not lead to welfare dependency across immigrant generations.

In sum, there is little evidence that immigrants behavior under the pre-reform welfare system was different from that of the native-born with similar characteristics. Thus, limiting immigrants' access to welfare programs must be justified as a cost-saving measure, rather than because immigrants respond differently to the incentives inherent in transfer programs.

### **Chapter 3**

#### **Estimating a Censored Dynamic Panel Data Model with an Application to Earnings Dynamics**

There is a large literature on the black/white wage differential and its convergence after the

antidiscrimination law of 1964. However, less is known about the racial difference in earnings stability and its change over time.

Motivated by this situation, this chapter studies earnings dynamics using a particular data set, namely, the matched data from the CPS and Social Security Administration (SSA) earnings records. The advantages of the SSA earnings data include that 1) they are accurate (less subject to measurement error) and 2) they cover a very long history of earnings (1957–1973) and are therefore appropriate for studying earnings dynamics. However, the SSA earnings data also have one significant shortcoming: the records were severely top-coded at the maximum Social Security taxable level and the tax ceiling was changing over time. To deal with this problem, an econometric method is proposed to estimate a censored panel data model with a lagged latent dependent variable and individual-specific fixed effects. Valid asymptotic confidence intervals for the AR(1) parameter in the earnings process are constructed. The main empirical finding is that although linear GMM estimation yields no difference in earnings dynamics by race, the earnings process for white men appears to be more persistent than that for black men (conditional on individual heterogeneity) after censoring is taken into account.

In future work, I plan to expand the empirical analyses to examine changes in the black/white earnings stability after the 1964 Civil Rights Act. The results should help us to a fuller understanding of the effect of the law on the black economic progress during the 1960s.

### **Chapter 4**

#### **Estimation of Cross-Sectional and Panel Data Censored Regression Models with Endogeneity** (co-written with Bo Honoré)

This chapter is an extension of the econometric theory considered in Chapter 3. It proposes methods to estimate panel data censored regression models with general predetermined variables rather than a lagged dependent variable, which was considered in Chapter 3. The insight behind the estimation methods can also be applied to cross-sectional censored regression models with endogenous explanatory variables.