

TRANSITIONS THROUGH THE  
LABOR MARKET: WORK,  
OCCUPATION, EARNINGS AND  
RETIREMENT

# RESEARCH IN LABOR ECONOMICS

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RESEARCH IN LABOR ECONOMICS VOLUME 46

**TRANSITIONS THROUGH  
THE LABOR MARKET:  
WORK, OCCUPATION,  
EARNINGS AND  
RETIREMENT**

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## PREFACE

*Research in Labor Economics* is a biannual series that publishes new labor economics research. Chapters apply economic theory and econometrics to policy-relevant topics often with an international focal point. This volume contains seven chapters. Two deal with broad wage (including the minimum wage) and employment transitions related to the entire labor market; two with promotion transitions within the corporate structure; two with gender as it relates to mathematics ability, social capital, and occupational choice; and finally one with a model indicating how health impairments induce the transition into retirement. As you will see, published chapters focus on important issues and maintain the highest levels of scholarship. They are indexed in EconLit, Google Scholar, RePEc, and Scopus. Readers who have prepared manuscript that meet these stringent standards are encouraged to submit them via the IZA website (<http://rle.iza.org>).

The 2007 financial crisis and subsequent Great Recession was the biggest economic shock facing the United States and probably the world since the 1929 Depression. In the United States, this period was marked by a decline in residential private investment, a decline in housing prices, a decline in household income, and a double digit unemployment rate. Whereas a number of studies focus on broad labor market measures during this time period, a few, if any, examine the transition process of moving in and out of work, particularly for blacks and Hispanics. In the volume's first chapter, Kenneth Couch, Robert Fairlie, and Huannan Xu fill this vacuum by addressing two questions. First, they examine labor market transitions of blacks and Hispanics compared to whites in order to ascertain whether minorities are the last hired following periods of growth and the first fired during recessions. Second, they concentrate on comparing these employment transitions within the Great Recession relative to prior years. They find that minorities are more likely to be fired as the economy worsens, but, on the other hand, they are not last hired as the economy picks up. As a result the cyclical sensitivity of minority unemployment transitions declined since the Great Recession.

Of course one institution that could affect employment transitions is the minimum wage. Also minimum wage legislation is often viewed as a tool to redistribute income to the poor and increase social welfare. However, such legislation potentially increases unemployment especially among low skilled

workers. Further, whereas a minimum wage can increase social welfare in a linear income tax environment, theory indicates it can never do so in the presence of a nonlinear tax structure. In the next chapter, Eliav Danziger and Leif Danziger expand on an earlier graduated minimum wage proposal. They show that a graduated minimum wage can improve welfare beyond what is typically achieved in a constant minimum wage environment. This enhanced welfare results in a higher consumption for low-productivity workers that can be obtainable from a welfare policy-based solely on an optimal income tax. Further, they argue that such a minimum wage structure is not unusual and perfectly feasible because other government policies such as income taxes are nonlinear and a number of countries as well as states within the United States already impose multibracket minimum wages.

In contrast to transitions in and out of employment are transitions regarding type of employment within the firm itself. In the next chapter, Christian Belzil, Michael Bognano, and François Poinas analyze promotions within the firm. To do so, they estimate a dynamic model of within firm promotions conditioning on sample attrition and taking into account observed worker and firm characteristics as well as unobserved worker heterogeneity. They find that quick fast-track promotions arise largely from employee heterogeneity, that is, “the persistent benefit of being more able.” They find that promotions per se do not on average lead to further promotions except for a number of executive positions lower in the corporate hierarchy. Further, observed characteristics, such as age and education, play a role, but so does firm size, sales, and profits.

Promotions and wage increases within the company both depend on and affect the firm’s hierarchical structure. One trend observed over the last several decades is the “delaying” of corporate hierarchies. Independent of why this hierarchical flattening came about, the consequences of this change with regard to employee wages and the resulting wage structure within the firm are important. In the next chapter, Xin Jin explores such corporate delaying. He roots his analysis on a theoretical market-based tournament model and explains two empirical regularities: First, all wages within a firm on average increase after delaying, and second, the within firm wage distribution becomes more equal.

As seen above, the rate of promotion within a company is to a large extent based on unobserved ability. But how one chooses his or her occupation in the first place is also determined by individual characteristics. One such characteristic is sociability including one’s inclination to care for others. In the next chapter, Julie Hotchkiss and Anil Rupasingha model occupational choice based on matching one’s own individual sociability and the way occupations reward this characteristic. First, they find social and caring occupations are not all about women. Both men and women choose occupations best suited to their characteristics. Expected wage rewards based on their characteristics (matching) play a significant role. Second, they find social occupations carry a wage penalty, but individuals choose such occupations based on how their characteristics

match in terms of rewards. In short, self-selection contributes strongly to inter-occupational wage differences.

Aside from sociability, another individual characteristic governing occupational choice is mathematical ability. Yet, unlike sociability, mathematics ability is well rewarded in the labor market, but as has been widely argued, men and women appear to differ in mathematical ability. Not known at this point is why is gender related, specifically favoring men. In the next chapter, Yann Algan and Nicole Fortin examine the role of computer gaming as a potential mechanism to reduce this gender gap. Using the 2003–2015 Program for International Assessment (PISA) data, they estimate the impact of gaming on mathematics test scores by gender. As it turns out, boys are at an advantage in that an hour of gaming increases math scores more than for girls. As such, they show that math test scores are lower for girls both because girls game less and because the impact on math score is smaller for girls than boys. In short, they attribute 13–29% of the female test score disadvantage to differences in the incidence and returns. As such, they claim girls must “swim upstream” in order to catch up.

Once in the labor force, one decision often plaguing workers is when to retire. Many considerations are relevant. These include savings, potential pension receipts, social security, opportunity costs, consumption patterns, and health. In the final chapter, Alan Gustman and Thomas Steinmeier construct and estimate a dynamic evolutionary model of health embedded in a structural econometric model of retirement and savings. The innovation lies in the detail of the health model. An individual begins each time period with an initial set of medical conditions which then evolve based on his or her proclivity toward smoking, drinking, obesity, and cognition. Health status feeds into the retirement model by affecting the decision to work. Noteworthy is the current health of the US population over 50 years of age has reduced their retirement age by one year compared to the potential retirement age of a population in top health.

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