

DAVID POWELL
dmp@mit.edu

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

OFFICE CONTACT INFORMATION

National Bureau of Economic Research
1050 Massachusetts Avenue
Cambridge, MA 02138
617-230-1592

dmp@mit.edu

<http://econ-www.mit.edu/grad/dmpowell>

HOME CONTACT INFORMATION

25B Alewife Brook Pkwy
Cambridge, MA 02140
Mobile: 617-230-1592

MIT PLACEMENT OFFICER

Professor Nancy L. Rose nrose@mit.edu
617-253-8956

MIT PLACEMENT ADMINISTRATOR

Mr. Peter Hoagland pvhoag@mit.edu
617-253-8787

DOCTORAL STUDIES:

Massachusetts Institute of Technology (MIT)
PhD, Economics, Expected completion June 2009
DISSERTATION: “*Essays on The Impacts of Income and Wage Taxes*”

DISSERTATION COMMITTEE AND REFERENCES:

Professor James Poterba
MIT Department of Economics
50 Memorial Drive, E52-350
Cambridge, MA 02142-1347
617-253-6673
poterba@mit.edu

Professor Jonathan Gruber
MIT Department of Economics
50 Memorial Drive, E52-355
Cambridge, MA 02142-1347
617-253-8892
gruberj@mit.edu

Professor Jerry Hausman
MIT Department of Economics
50 Memorial Drive, E52-252
Cambridge, MA 02142-1347
617-253-3644
jhausman@mit.edu

PRIOR EDUCATION A.B. Applied Mathematics Harvard University 2002

CITIZENSHIP United States citizen

RESEARCH & TEACHING FIELDS Primary Fields: Public Finance
Secondary Fields: Econometrics, Labor Economics

TEACHING EXPERIENCE Spring 2003, Spring 2004: Teaching Assistant, Stanford University:
Statistics

RELEVANT POSITIONS 2002-2004 Research Assistant to John Donohue, Stanford
 2004-2005 Research Assistant to Jonathan Gruber, MIT

FELLOWSHIPS, HONORS, AND AWARDS 2004-2007 National Science Foundation Graduate Fellowship
 2007-2009 NBER Aging and Health Pre-Doctoral Fellowship

RESEARCH PAPERS: **“Estimating the Value of a Statistical Life Using Income Tax Changes” (Job Market Paper)**
A vast literature has focused on estimating the value of a statistical life (VSL) by looking at the tradeoff between wages and occupational risk. The literature has recognized the inherent identification issues with any empirical strategy identifying off cross-sectional risk variation or risk changes over time. These concerns likely bias the estimates downward. By recognizing that the magnitude of any compensating differential is a function of the tax rate, this paper employs an innovative identification strategy to estimate the VSL parameter. When tax rates change, the pre-tax wages of dangerous jobs should shift relative to the pre-tax wages of safe jobs. This relative shift is directly proportional to the VSL. While prior studies have relied on potentially endogenous variation in risk for identification, I use tax schedule changes as a more plausibly exogenous source of variation since they are beyond the control of workers or firms. This strategy allows me to account for industry- or individual-level heterogeneity without using industry-specific changes in risk levels as a source of identification. This strategy yields VSL estimates between \$50 million and \$75 million, an order of magnitude higher than the previous literature.

RESEARCH IN PROGRESS: **“The Tax Elasticity of Labor Income Throughout the Income Distribution: The Introduction of a Fixed Effects Quantile Estimator”**
This paper estimates the elasticity of labor income with respect to wage and income taxes in the United States. Because labor income can be taxed independently of other types of income, it is important to isolate its response to changes in tax rates. Furthermore, nonlinear tax schedules (most relevantly, the FICA cap) allow marginal tax rates to differ throughout the income distribution and it is, therefore, crucial to understand how the elasticity changes by income. In this paper, I introduce the Fixed Effects Quantile Estimator (FEQE) to estimate the tax elasticity of labor income throughout the income distribution. This estimator allows for an arbitrary correlation between the fixed effects and the instruments, does not suffer from an incidental parameters problem, and relies on minimal assumptions. The estimator is unconditional in the fixed effect and, for a linear specification, can be modeled as $Y = X'\beta(\alpha, \epsilon)$. For the sake of comparison, Koenker (2004) provides a quantile estimator which can be modeled as $Y = \alpha + X'\beta(\epsilon)$. The estimator in this paper defines the quantiles based on both the fixed effect and the observation-specific residual, which is critical in this context. To deal with the potential endogeneity of individual tax rates, I use an instrumental variable strategy which relies on the fact that two workers with the same labor income may face very different *changes* in marginal tax rates if they have different initial secondary or capital earnings. This instrument should isolate the effect of labor supply choices from general equilibrium effects resulting from tax changes and wage trends.

“The Impact of Income Taxes on Occupational Choice” (with Hui Shan)

Due to complex identification issues, few papers have studied the effects of taxes on occupational choice. The link between taxes and occupational choices, however, is central for understanding the welfare impacts of income and wage taxes. If workers change jobs when taxes change, it suggests that taxes could induce an inefficient allocation of workers across occupations with potentially long-term economic consequences. This paper focuses on occupational changes based on the wage premium for each occupation. When income tax rates increase, workers should favor jobs with lower wages and higher non-wage amenities. We introduce a two-step estimation strategy to isolate the elasticity of job choice with respect to tax rates. First, we estimate the occupation premia in each year using panel data to control for individual-level heterogeneity. In the second step, we estimate how taxes affect the choice of occupation as measured by the occupation premium in that year. This estimation strategy studies whether workers select higher (lower) wage jobs when tax rates decrease (increase). To isolate occupational choices from the general equilibrium effects that tax schedule changes might have on wages, we use an instrumental variable strategy which recognizes that workers within an occupation may experience different tax changes due to differences in initial secondary and capital earnings. Our preliminary findings suggest significant and economically meaningful occupational changes when tax rates change.