# Daniel Giraldo Páez

**Full Name:** William Daniel Felipe Giraldo Páez

**Telephone:** (786) 543-8916

E-mail: wdanielgiraldo@gmail.com

Web page: www.danielgiraldopaez.com

Citizenship: U.S. Citizen

#### **Fields of Concentration:**

Labor Economics
Public Finance

# **Comprehensive Examinations Completed:**

2020 (Oral): Labor Economics (*with distinction*) and Public Finance (*with distinction*) 2019 (Written): Microeconomics, Macroeconomics

**Dissertation Title:** Essays on Life-Cycle Labor Supply and Income

#### **Committee:**

Professor Joseph Altonji (Chair) Professor Jason Abaluck Professor Cormac O'Dea

#### **Degrees:**

Ph.D., Economics, Yale University, 2024 M.Phil., Economics, Yale University, 2021 M.A., Economics, Yale University, 2020

B.A., Economics & Mathematics, with distinction, magna cum laude, Yale University, 2017

#### Fellowships, Honors, Awards:

Cowles Foundation Carl Arvid Anderson Prize Fellowship, 2022 Yale University Fellowship, 2018–2024 Yale Economic Growth Center Fellowship 2018–2023 Phi Beta Kappa, 2017

## **Teaching Experience:**

Spring 2022, Teaching Assistant to Prof. Joseph Altonji, Intermediate Data Analysis and Econometrics, Undergraduate, Yale College.

Spring 2021, Teaching Assistant to Prof. Shari Eli, American Economic History, Undergraduate, Yale College.

Fall 2020, Teaching Assistant to Prof. John Eric Humphries, Introduction to Data Analysis and Econometrics, Undergraduate, Yale College.

## **Research Assistant Experience:**

Research Assistant to Prof. Cormac O'Dea, Yale University, 2020–2021. Research Assistant to Prof. Jose Espín-Sánchez, Yale University, 2016–2017. Research Assistant to Prof. Martin Shubik, Yale University, 2015.

### **Work Experience:**

Predoctoral Research Assistant to Prof. Zachary Liscow, Yale Law School, 2017–2018.

#### **Publications:**

"Labor Income Inequality in Pre-industrial Mediterranean Spain: The City of Murcia in the 18<sup>th</sup> Century," with Jose Espín-Sánchez, Salvador Gil-Guirado, and Chris Vickers, *Explorations in Economic History*, 73, 2019.

"Inequality Snowballing," with Zachary Liscow, *International Review of Law and Economics*, 77, 2024.

## **Working Papers:**

"The Changing Nature of Work, Old-Age Labor Supply, and Social Security," 2023. *Job Market Paper*.

"Earnings, Marriage, and the Variance of Family Income by Age, Gender, and Cohort," with Joseph G. Altonji, Disa Hynsjö, and Ivan Vidangos, 2024. *Accepted, Journal of Labor Economics*.

"Marriage Dynamics, Earnings Dynamics, and Lifetime Family Income," with Joseph G. Altonji, Disa Hynsjö, and Ivan Vidangos, 2022. *Reject and resubmit, American Economic Review*.

#### Languages:

English (native), Spanish (native).

#### References

Prof. Joseph G. Altonji Yale University Department of Economics New Haven, CT 06520 PO Box 208264

Phone: (203) 432-6285 joseph.altonji@yale.edu

Prof. Jason Abaluck Yale School of Management 135 Prospect Street New Haven, CT 06520 PO Box 208200 Phone: (203) 432-7811

jason.abaluck@yale.edu

Prof. Cormac O'Dea Yale University Department of Economics New Haven, CT 06520 Phone: (203) 432-7572 cormac.odea@yale.edu

## **Dissertation Abstract**

# The Changing Nature of Work, Old-Age Labor Supply, and Social Security [Job Market Paper]

Policymakers often propose increasing the Full Retirement Age (FRA) to reduce deficits in the Social Security program. But this change could burden older individuals who are in more unpleasant, physically demanding jobs and have low capacity for additional work. Perhaps allaying this concern, five decades of technological change have shifted American work away from physical and routine tasks and towards cognitive and social ones. Indeed, these changes in work towards more pleasant tasks may have contributed to the increase in the labor force participation of older Americans since the 1990s.

In this paper, I assess the extent to which the changing nature of work has increased the labor supply of older workers. I then build and estimate a dynamic model of old-age labor supply to evaluate how shifts in the nature of work affect welfare at old age and the implications of such shifts for proposed Social Security reforms.

Using data from the Health and Retirement Study (HRS) combined with O\*NET occupational information, I show that workers' occupation characteristics between ages 51 and 56 predict their probability of working at older ages. Workers in more cognitively- and socially-intensive occupations are more likely to work at ages 60–69, while workers in occupations with more physical, routine, or extreme demands are less likely to work. This relationship survives when controlling for other potentially confounding factors, such as health, wealth, private pension structure, and education.

I estimate the increase in labor force participation implied by these relationships and changes in American work in the Census. Changes in the average characteristics of occupations in the Census imply that the changing nature of work predicts 10–16% of the increase in participation of 60-to-69-year-old men from 1990 to 2010 and 6–9% of the increase for women.

Addressing concerns that unobserved characteristics drive this relationship between occupation characteristics and older work, I exploit variation in the changing nature of work across commuting zones in the Census and American Community Survey. I estimate the effects of changes in the nature of work on old-age labor supply using commuting zone fixed effects as well as a shift-share approach. The latter leverages variation in the computerization shock, which increased the cognitive and social demands of work. The relationship between occupational characteristics and later-life labor supply remains significant in these models.

To quantify the distribution of welfare gains from changing work as well as to evaluate the impacts of Social Security reforms, I estimate a dynamic model of male old-age labor supply that includes savings, health, occupation differences, and Social Security. Occupation is modeled as fixed differences across individuals in their disutility from work and mean wage profiles. This captures the idea that different careers give people access to different kinds of work in older age. Estimating the model with the Simulated Method of Moments, I find that individuals in more physical occupations have a higher disutility from work, even after taking their lower wages, lower wealth, and poorer health into

account. Comparing the 1992 and the 2004 HRS distribution of occupations, the top three quartiles of lifetime income have seen increases in welfare, but the bottom income quartile has seen welfare declines as a result of its increasing detachment from the labor force.

I evaluate two Social Security reforms. The first is an increase in the FRA, which effectively cuts benefits at any given age of claiming. The reform leads to large participation increases among men in the most physical jobs and with the poorest health. By contrast, an alternative reform that produces similar fiscal savings but concentrates benefit reductions largely among higher earners leads to nearly no participation increases among men in the most physical jobs. In terms of aggregate welfare, the latter reform is preferable to the former, both under the 1992 and 2004 HRS occupation distributions.

# Earnings, Marriage, and Lifetime Family Income: Generational Change for Men and Women, with Joseph Altonji, Disa Hynsjö, and Ivan Vidangos.

We study generational change in the role of labor market behavior and marriage in determining the family income that individuals experience over their adult lives. Building on Altonji, Giraldo Páez, Hynsjö, and Vidangos (2022), we estimate a model of individual earnings, marriage, divorce, fertility, and nonlabor income, where key parameters vary with birth year. For the 1935–44, 1945–62, and 1967–80 birth cohorts, we use the model to measure the dynamic responses of earnings, marital status, and family income to various labor market shocks, education differences, and permanent wage heterogeneity. For each cohort, we also provide gender-specific estimates of the contribution of education, permanent wages, labor market shocks, spouse characteristics, spouse wage shocks, and marital histories to the variance of lifetime family income. For both the dynamic responses and the variance decompositions, we isolate the importance of effects on marriage probabilities and on spouse characteristics (sorting). We find that gender asymmetries are substantially smaller for more recent cohorts. The decline reflects the increase in the labor supply of married women as well as other changes. We also find that own characteristics have become increasingly important in the determination of lifetime family income for women, while variation in spouse characteristics has become less important. The opposite is true for men. Gender differences in the sources of inequality in lifetime family income have narrowed.

# **Inequality Snowballing,** with Zachary Liscow

It has long been argued that Kaldor-Hicks efficient legal policies provide larger legal entitlements to the rich as a result of rich's higher willingness to pay. This paper shows how efficient legal rules can become even more skewed against the poor over time by sowing the seeds of their own vicious cycles. Repeated application over time of these rules can lead to increasingly adverse outcomes for the poor, which this article calls "policy snowballing." Consider a set of polluters choosing between locating in places with rich versus poor people and facing a strict liability rule for harm to earnings. Polluters will disproportionately locate in the poor area, where they face lower damages. That disproportionate share of polluters in the poor area can make it cheaper to harm the poor in the next period, making subsequent polluters locate yet more disproportionately in poor neighborhoods, driving down the poor's earnings further. We identify the conditions for snowballing and explore its dynamics. When compensation for the harm is incomplete, policy snowballing can lead to spiraling income inequality. As a result, government transfers to the poor to compensate for a change in legal regime may be inadequate. We raise the prospect that legal rules could generate state dependence in the legal costs of harm, and that efficient policymaking may be a contributing factor to increasing inequality.

Marriage Dynamics, Earnings Dynamics, and Lifetime Family Income, with Joseph Altonji, Disa Hynsjö, and Ivan Vidangos.

We use the model to measure the dynamic responses of marital status, earnings, and family income to various labor market shocks, education, and permanent wage heterogeneity. We also provide gender-specific estimates of the contribution of education, permanent wages, labor market shocks, spouse characteristics, spouse wage shocks, and marital histories to the variance of family income by age and over a lifetime. For both the dynamic responses and the variance decompositions, we isolate the importance of effects on marriage probabilities and spouse characteristics (sorting). Marital status has a much larger effect on family income for women than men, while labor market shocks to men are more important than shocks to women. Marital sorting plays a major role in the return to education and permanent wages, especially for women. Marriage probabilities are less important. An individual's own education and the permanent wage component account for 28.0% and 12.6% of the variation in lifetime family income for women, but 36.2% and 26.4% for men. Marital sorting on education and the wage components substantially increases the family income variance, especially for women. Random variation in marital histories accounts for 25.9% of the variance in lifetime family income for women and 7.5% for men but for only a modest part of the variation in lifetime family income per adult equivalent.