Occupational Heterogeneity and Retirement Behavior

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Abstract

Occupations vary in the pecuniary and non-pecuniary benefits provided to workers. Both empirical and structural literature has explored the role of pecuniary aspects of an occupation–such as wages, pension benefits, and health insurance–in determining the retirement behavior of older Americans. However, relatively less attention has been given to the importance of non-pecuniary amenities of an occupation–including physical and mental stress, hours and location flexibility, and satisfaction from work–as well as the interaction between these pecuniary and non-pecuniary benefits in determining labor supply over the life-cycle. While policy has focused on some of these amenities for groups such as single women with children or disabled individuals, increases in life expectancies, changes in the degree of automation, and more recently, the hardships of the COVID-19 pandemic have highlighted the importance of the non-monetary features of employment for labor market decisions of all workers, particularly the decisions of older workers. Understanding the impacts of these trends will be critical for the future of Social Security and other policies.

We propose a two-step approach to understand the impact of both pecuniary and non-pecuniary amenities in determining labor supply decisions and labor force exits of older Americans. First, we will use the k-means clustering algorithm to identify salient groups of occupations in the data based on both pecuniary and non-pecuniary features.[1] This approach not only reduces the computational burden of using many occupation codes in a structural model, but also estimates which amenities are meaningful for understanding differences in labor supply behavior of older workers. Second,

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[1]Our initial empirical analysis has made use of the Health and Retirement Study and the American Time Use Survey to document heterogeneities in wages, mental and physical stress, flexibility in hours and location, and labor force participation across different occupations.

we will build and estimate a structural life-cycle model of occupation choice and labor supply, consumption, savings, Social Security benefit claiming.[2] We will use the estimated model to understand the heterogeneous effects of policies such as changes in the Social Security normal retirement age (NRA) and early retirement age (ERA) across individuals in these different wage-amenity groups. The results from our analysis will inform policy in two important ways. First, it will provide novel predictions of heterogeneous policy responses by individuals in occupations with different bundles of wage and non-pecuniary amenities. Second, it will shed light on the extent to which the efficacy of changes in retirement policies might also depend upon changes in workplace characteristics.

Focal Areas

The project outlined in this proposal directly connects to two important research focal area of the U.S. Social Security Administration – **Return-to-Work** and **Informing Trust Fund Projections**.

1. Return-to-Work

   Workers choose their labor supply for many reasons – both monetary and non-monetary. This proposed research can help to illuminate what features of employment are important in determining labor market participation of OASI beneficiaries. This will allow a deeper understanding of how these workers select their occupations, participation, and hours as well as projections of how changing features of work will change work decisions among these workers. The COVID-19 pandemic has highlighted issues of hours flexibility and the ability to work from home. This work would help to understand how increased flexibility induced by the pandemic may impact work decisions in the future.

2. Informing Trust Fund Projections

   Correct future projections for labor force participation rates are important for understanding the gaps in the actuarial balance of the Social Security program. While a recent technical panel in its report to the Social Security advisory board has recommendations for adjusting labor supply projections along the education margin, this research will provide another potentially important margin of adjustment – occupation differences (which may feature different bundles of amenities).[3] The proposed research will estimate variations in labor supply of the elderly in different amenity groups. This will allow for an understanding of how the elderly labor supply in the U.S. might change given the expected future occupational changes.

[2] We will estimate the model from the Health and Retirement Study and Panel Study of Income Dynamics data, using the Method of Simulated Moments (MSM) technique

[3] 2015 Technical Panel on Assumptions and Methods, Report to the Social Security Advisory Board (September 2015).