

HEALTH INSURANCE AND RETIREMENT DECISIONS

JOHN KARL SCHOLZ AND ANANTH SESHADRI *

September 2013

Introduction

Our work seeks to enhance understanding of the relationship between health insurance and retirement decisions. Economic models of life-cycle consumption and wealth accumulation (that start at the beginning of working life) treat retirement as being exogenous, and therefore retirement is unaffected by unforeseen household circumstances, or abstract from decisions regarding medical expenses, treating these expenses as exogenous. We develop a rich life-cycle model of optimal consumption and retirement decisions where the stock of health affects utility and longevity and is influenced by one's health insurance status. We will use the model to study the complex interplay of saving/consumption decisions, retirement, Social Security policy and macroeconomic shocks.

An obvious way for some households to respond to perceived or actual shortfalls in retirement wealth is to work longer than they originally anticipated or to invest less in their health. Similarly, households with perceived or actual net worth surpluses may choose to retire earlier than initially expected. Of course, these households may also be concerned with the prospect of facing unusually bad health shocks or other necessary expenses or they may wish to leave assets to children or philanthropic organizations. Retirement decisions are also influenced by health status, which in turn is also a consequence of decisions made by individuals. This complex interrelationship is relatively understudied and has immense policy significance.

Empirical studies uniformly find a large positive association between retiree health insurance and early retirement. Yet, structural models to analyze the effects of retiree health benefits on early retirement that factor health insurance into the budget constraint based on the average cost of insurance find retirement behavior is similar to behavior that arises when ignoring health insurance, implying a small effect of retiree health insurance on retirement.

Methodology

We build on the past life-cycle consumption and health literature in at least three ways. First, our specification of utility is different. Most prior papers that add health or medical expenditures to utility assume it is separable from consumption in preferences. Health is the object of interest in our approach and we model health production. We allow consumption and health to be complements or substitutes in preferences.

* *John Karl Scholz* is the Dean of the College of Letters and Science at the University of Wisconsin-Madison. Formerly, he was the Nellie June Gray Professor of Economics. *Ananth Seshadri* is professor and chair of the department of economics at the University of Wisconsin-Madison. This Research Brief is based on MRRC Working Paper 2013-292.

Second, most papers do not examine health investments and consumption decisions of households younger than 65. Health capital, however, may be well-formed by prior decisions and expenditures by the time an individual reaches 65. We model health production from the start of working life. Third, we model the decision to retire.

After calibrating our model to match key moments for the typical household, we find the model is able to match the cross-sectional variation in medical expenses, longevity, and the stock of health and consumption in the Health and Retirement Study. We also match changes in wealth, health spending, and health status between 1998 and 2008. In addition, we match patterns of medical spending, health stocks, as well as longevity earlier in the life cycle. We finally examine the effect of health insurance on retirement decisions.

Findings

Our analysis reveals several interesting findings. While very adverse health shocks can lead to retirement well before age 62, our findings reveal that around 85% of early retirees at age 62 are in good health. This is consistent with the findings in the literature.

Next, we examine the impact of the availability of retiree health insurance on the decision to retire early. Our simulations reveal that there are two opposing effects at work. On the one hand, the availability of health insurance in retirement makes retirement more attractive, thereby making it optimal to retire earlier. On the other hand, investments in health are complementary with the availability of health insurance. The fact that this health insurance is available at a later date makes additional investments in health more attractive. These investments are costly and to defray these costs, the household finds it optimal to delay retirement. We perform an experiment where we remove post-retiree health insurance for households with such coverage - we assume that this is known to the household at the beginning of working life. On average, we find that the first effect dominates and the availability of post-retirement health insurance induces households to retire about 3 months earlier than their counterparts without such insurance.

University of Michigan Retirement Research Center
Institute for Social Research 426 Thompson Street Room 3026
Ann Arbor, MI 48104-2321 Phone: (734) 615-0422 Fax: (734) 615-2180
mrrcumich@umich.edu www.mrrc.isr.umich.edu

Sponsor Information. The research reported herein was performed pursuant to a grant from the U.S. Social Security Administration (SSA) through the Michigan Retirement Research Center (MRRRC). The findings and conclusions expressed are solely those of the author(s) and do not represent the views of SSA, any agency of the federal government, or the MRRRC.

Regents of the University of Michigan: Mark J. Bernstein, Ann Arbor; Julia Donovan Darlow, Ann Arbor; Laurence B. Deitch, Bloomfield Hills; Shauna Ryder Diggs, Grosse Pointe; Denise Ilitch, Bingham Farms; Andrea Fischer Newman, Ann Arbor; Andrew C. Richner, Grosse Pointe Park; Katherine E. White, Ann Arbor; Mary Sue Coleman, Ex Officio