Research Statement

Tim Murray | PhD Candidate | University of Connecticut
www.tamurray.weebly.com

I am an applied microeconomist whose research interests lay at the intersection of labor and health economics. My current focus, through both a theoretical and an empirical lens, is on how retirees use the equity in their home. Many older Americans die with positive housing equity that they could have used to help finance consumption while they were alive. My research goals are to better understand the impediments to optimal use of home equity by older Americans, and to explore policy solutions that might address this. This area of research is increasingly important as the age demographics of the United States continue to shift in accordance with a longer life expectancy.

I am also proposing future research projects that cover topics such as: Medicaid expansion and its effect on in-home health care; how that may influence the housing decisions of older Americans; whether and how these decisions these differ between urban and rural areas; and the impact of the Affordable Care Act on individuals choice of health care plans in state exchanges

Current Research

My job market paper, titled, *Do Potential Future Health Shocks keep Older Americans from using their Housing Equity?*, explores why retirees are not using the equity in their home to help finance consumption, and the possibility that future health needs may cause this population to treat home equity as a form of precautionary savings. I construct a calibrated dynamic general equilibrium model to assess how possible health shocks in old age impact the housing choice of older Americans in their late working years and into retirement. I model three-stage economy that consists of an overlapping generation of agents. In the first stage, agents are in their late working years (age 55-64); In the second stage, agents are in early retirement years (age 65-74); and in the third stage agents are in their late retirement years (age 75-84). In the first period, households are endowed with income and housing and then make decisions on consumption and savings. Following the first period, agents decide whether to rent or own; the size of their domicile; and how much to spend on consumption in each period. Agents can borrow (subject to a loan-to-value constraint) or save in each period. Homeowners must pay property taxes and face transaction costs if they sell their homes. I start by modeling an economy where agents in late retirement face a stochastic health shock that they are forced to pay for either through their fixed social security income or accumulated assets (including the house). Next, I model and economy where agents do not face a stochastic health shock. I then compare homeownership rates and moving patters at the different stages to see how agents would make housing choices in the absence of a health shock. I find that in the absence of a health shock, there is a decrease in homeownership rates by 12-percentage points indicating that in the presence of a possible shock, households are staying in their house as a form of precautionary savings. I propose an insurance policy that covers any out-of-pocket medical costs not covered by Medicare that would free the house to be used to help finance consumption in retirement. I find that if the cost of the insurance is between 0.15%-0.50% of an individual's house value, 12.8% of households purchase the insurance and homeownership rates decrease and look like the economy when a health shock was not present.

In a paper titled, *The Impact of the Great Recession on Housing and Wealth of Older Americans*, which has become a chapter of my dissertation, I analyze how homeownership rates and moving patterns of older Americans were impacted by the Great Recession using the Health and

Retirement Study. Following the Great Recession, the house was no longer a safe and steady investment whose value always increases. The housing market crash changed that. This paper analyzes the impact of that recession on homeownership and moving rates of older Americans distinguishing between Baby Boomers and older retirees. This paper presents a difference-in-difference analysis to examine the differential impact of the recession between generations and uses Ordinary Least Squares to test for structural breaks that may have been caused by the Great Recession. I find that Baby Boomers are more willing to downsize their house or own a rental unit than older retirees, most likely because they entered retirement with smaller pensions and more money in their 401Ks compared with older retirees. Their retirement portfolio contained more risk than older retirees and they were more willing to use their house to offset losses in the stock market due to the Great Recession.

A final paper (and another chapter in my dissertation), titled, *Home Maintenance and Housing Disinvestment among Older Americans,* explores the possibility that older Americans *do* extract housing equity in their home by reducing housing wealth by decreasing the allocation of time and resources to housing maintenance. Previous empirical studies have found that older Americans spend less money on housing maintenance, causing their houses to appreciate more slowly than the national average. However, these studies fail to consider that once retired, older Americans may be spending their own time on housing maintenance. It is possible that spending on housing maintenance is offset by an increase in time spent maintaining the home. In that case, households are not disinvesting in their home. Alternatively, it is also possible that older Americans are reducing both money *and* time spent in maintaining the home. In that case, the values reported in previous studies are lower than the true value of disinvestment. Using the Health and Retirement Study and its off-year survey – the Consumption and Activities Mail Survey –, this paper examines how much equity homeowners are extracting from their home by deferring both money and time spent on housing maintenance. It is possible that households are using some of the equity in their home in retirement. This could potentially explain why older Americans do not extract housing equity through more conventional means, such as moving or taking out a reverse mortgage.

Future Research

There are research areas I would like to explore in the future. First, I hope to analyze how expansions of Medicaid – specifically in programs like Money Follows the Person –, can allocate more money to in-home health care and this help to keep people out of institutions. This will impact the decisions by older Americans regarding their choice of housing. I hope to compare and contrast the effects of these programs on urban and rural households as well as examine how the proximity of children may affect housing choices.

The second project I plan on exploring is how the implementation of state health care exchanges as a part of the Affordable Care Act has affected individual choices of Americans health insurance policies. I am specifically interested in analyzing the choices of Americans around the cutoff for the subsidy, to determine its effect on their decision making.

In addition to these research projects, I also hope to explore policies at the state and local levels that affect minimum wage; wage differentials among demographic groups (gender, race, and age); health behavior (e.g., tax on soda); education and its effect on future labor market outcomes; and the role of economics in sports.