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THE DECISION TO RETIRE: RESEARCH-BASED RECOMMENDATIONS FOR INDIVIDUALS AND EMPLOYERS

Summary

The decision to retire has life-altering implications for finances, health, and well-being in later life. It is clear that advancing our understanding of the retirement decision process requires a holistic and integrative perspective that considers factors in all three domains.

The goal of this paper is to present a systematic framework for organizing, evaluating, and understanding the numerous factors involved in retirement decisions. This paper is designed primarily for professionals and practitioners, and it focuses on practical advice for improving the retirement decision process.

A companion paper describes the 3D Model of retirement decisions in more detail, and provides details on existing studies of the various factors that influence the decision to retire through a formal literature search.

Introduction and Overview

The decision to retire has life-altering implications for finances, health, and psychological well-being in later life. As a result, researchers have devoted a great deal of attention to understanding how individuals make this critical decision (For a discussion, see Shultz & Wang, 2011).

Past studies traditionally focused disproportionately, if not exclusively, on how finances affect the decision to retire. But it is becoming increasingly evident that nonfinancial factors have a significant impact on the retirement decision. Indeed, many workers approach and enter retirement without sufficient savings, while some individuals delay retirement despite being financially prepared (Federal Reserve, 2013; Rhee & Boivie, 2015). Evidence also implicates the role of health (Munnell, Sanzenbacher, & Rutledge, 2015) and psychological factors, although the latter category has received relatively less empirical attention.

The decision to retire has life-altering implications for finances, health, and psychological well-being in later life. To enhance retirement decision-making, this paper presents a systematic framework for organizing, evaluating, and understanding the factors involved in the retirement decision.

It is now clear that advancing our understanding of the retirement decision process requires a holistic and integrative perspective that considers factors in all three domains: finances, health, and psychological well-being. The psychological domain includes lifestyle and emotional considerations, as well as family circumstances and obligations. Attendant insights will guide and support the development of tools that can help individuals make informed and effective choices about when to retire, and will also inform practices by which employers can help with the transition process.

Individuals define “retirement” in many ways. For the purpose of this paper, we focus on situations where an older worker voluntarily leaves their full-time career employment. There can be a variety of subsequent outcomes, ranging from no work at all, part-time work or phased retirement with the same employer, a bridge job at another employer, self-employment, “unretirement” (returning to work after a period of retirement), or volunteering (Cahill et al., 2015; Maestas, 2010).

The goal of this paper is to present a systematic framework for organizing, evaluating, and understanding the numerous factors involved in retirement decisions. Because our focus is on individuals’ decisions, we discuss situations only in which the employee has some degree of control over the timing and nature of their retirement, as opposed to that individual being forced to leave their career employment and retire due to layoffs, workforce reductions, or severe health shocks.

This paper is designed primarily for professionals and practitioners, and it focuses on practical advice for improving the retirement decision process. This is a challenging and delicate topic to pursue with workers, and a thoughtful approach will benefit both employers and their employees.

In this paper, we provide an overview of the 3D Model of retirement decisions, which categorizes influential factors by domain and mechanism, and is supported by extensive research on the various factors that influence an individual’s decision to retire. We then discuss potential applications of this model and research for (a) individuals who wish to make a fully informed decision about when to retire and (b) employers and financial institutions that want to facilitate the retirement decisions of their employees or customers. These suggestions represent the authors’ views on potential ways to apply the research to improve retirement decision-making.

A companion paper (Stanford Center on Longevity, 2016) describes the 3D Model of retirement decisions in more detail, and provides details on existing studies of the various factors that influence the decision to retire through a formal literature search.

The 3D Model of Retirement Decision Making

Based on a systematic review of the existing empirical research literature on retirement decision making, we propose a novel conceptual model of retirement decision factors. The 3D Model posits that retirement factors fall into three primary and semi-discrete domains, each of which invokes a specific question:

A holistic view of retirement decision factors:

“Can I afford to retire?” (financial)

“Do I need to retire?” (health)

“Do I want to retire?” (psychological well-being)

The 3D Model further categorizes decision factors based on the mechanisms by which they operate:

- Push factors are negative factors related to work (e.g., perceived ageism) that encourage individuals to retire, or negative factors that compel individuals to continue working (e.g., financial necessity or anxiety).
- Pull factors are positive factors related to the perceived benefits of retirement (e.g., valuing leisure time) that lure individuals to retire, or positive factors that encourage continued work (e.g., job satisfaction).
- Barriers are factors that prevent individuals from retiring (e.g., a lack of retiree health insurance).
- Enablers are factors that facilitate the retirement transition (e.g., Social Security and pension benefits).
- Triggers are temporal factors or events that serve to “tip” individuals over the edge from working to retirement, such as reaching age-related milestones (e.g., Social Security eligibility at age 62 or Medicare eligibility at age 65).
- Overrides are factors that dominate the decision to retire, independent of all other factors (e.g., devastating health shocks).

These mechanisms vary in terms of the relative impact or strength they have in the decision process. For instance, push factors are relatively weak compared to overrides.

Note that, to date, push-pull terminology has been used to describe the terms that affect an individual’s decision to retire or not. In this paper, we’ve expanded the framework to also include factors that induce individuals to keep working. As described above, the 3D Model uses “push” and “pull” to denote factors that are negative and positive, respectively—whether they drive workers to retire or to continue working.

The following table depicts how various factors fit into the context of the 3D Model with respect to the decision to retire. It should be noted, however, that this is not intended to be a complete list of factors but rather a representative sample of factors that previous research has identified as important. The companion paper previously mentioned provides an in-depth discussion of a broader range of factors.

The following table illustrates how some factors can be both push and pull factors, depending on an individual’s circumstances. Examples include personal health status and the need to care for (or pay for care for) a family member.

Factors Influencing the Decision to Retire

Domain			
Mechanism	Financial	Health	Psychological Well-being
Push	Economic recession	Poor personal health	Unpleasant or stressful work environment
Pull	Buyout package; early retirement features	Good personal health*	Leisure valuation
Barrier	Insufficient savings; difficulty converting savings to retirement income	Need to pay for care of a family member; lack of retiree health insurance	Fear of social loss
Enabler	Pension; retirement work opportunities; retirement income program in DC plan	Retiree health insurance	Retirement readiness program
Trigger	Social Security eligibility; retirement plan eligibility	Medicare or retiree medical plan eligibility	Birth of grandchildren; retirement of friends and relatives; need to provide care to family member
Override	Layoff; job loss	Health shock	Family disruptions

**Although this can also be a pull factor to continue working.*

Although the 3D Model categorizes factors by domain and mechanism, it shows that certain factors inherently transcend categories. For instance, health insurance coverage reflects both financial and health-related domains, emotions such as fear and anxiety are inherently psychological but can be induced by financial and/or health factors, and health shocks can act as triggers or overrides (depending on their severity).

The model also proposes that factors vary in their scope; some factors, such as leisure attitudes, are entirely personal and controllable, while other factors, such as pension plans, are products of the environment and outside of workers' control. Other factors reflect a combination of personal and environmental forces, such as job satisfaction. As discussed below, employers and financial institutions should consider environmental as well as personal factors when designing retirement readiness programs.

In addition, the 3D Model maintains that retirement decisions reflect a broad constellation of factors within and across domains as opposed to individual factors. This central tenet is consistent with empirical evidence of direct linkages between psychological, health-related, and financial aspects of retirement (Shultz & Wang, 2011). This perspective emphasizes the importance of additive effects, whereby combinations of factors influence the odds of retirement, as well as interactions, whereby the weight or mechanism of one factor depends on another factor.

Finally, the 3D Model proposes that the extent to which a given factor influences the decision process depends critically on a number of personal characteristics, including demographic factors (e.g., gender, socioeconomic status, race and ethnicity), personality traits, and decision-making styles. For instance, financial considerations are likely to have greater influence on decisions among people who are highly conscientious and skilled in numeracy. Thus, the effect of a given factor on the decision to retire appears to vary from person to person.

Recommendations for Individuals

The proposed retirement decision strategies in this paper are for individuals who want to make the best possible retirement decision by following a thoughtful retirement decision process. Unfortunately, research shows that workers often fail to account for many or even all of the factors critical to the retirement decision. For instance, fewer than half of pre-retirees have actively calculated their financial needs in retirement, and workers are significantly less likely than retirees to have assessed their Social Security benefits or expected health expenses (Helman, Copeland, & VanDerhei, 2015).

One study shows only 28 percent of workers gave their retirement decision serious consideration for more than two years.

To remedy these issues, our recommendations focus on increasing awareness of the various decision factors critical to the choice of when to retire. Employers that want to help their older employees with the retirement transition would do well to understand these strategies so they can structure programs in a complementary manner.

The goal is for individuals to make conscious, thoughtful, and informed decisions that serve their best interests in retirement, considering their unique circumstances, needs, and resources. To achieve this goal, individuals can use a systematic planning process with the following action steps:

The systematic process individuals can use for making conscious, thoughtful, and informed decisions:

- 1. Accurately evaluate barrier/enabler factors.*
- 2. Identify relevant push/pull factors and develop appropriate responses.*
- 3. Build a positive vision of life after retirement.*
- 4. Recognize trigger situations to ensure appropriate responses and avoid making impulsive decisions.*
- 5. Reflect on personal decision-making style and consider alternative approaches.*

Many individuals don't spend enough time thinking and planning for retirement. For example, one study shows only 28 percent of workers gave their retirement decision serious consideration for more than two years (Helman, Copeland, VanDerhei, and Salisbury, 2008). Another survey reports that many individuals don't consider a sufficiently long time horizon when planning their retirement, instead planning for periods that are much shorter than their expected remaining lifespan (Society of Actuaries, 2013).

Individuals will want to allow sufficient time to complete these action steps, which can take months or even years. It may help if they "plan their planning" and commit to a time horizon for taking these action steps. They should also take steps to help ensure their finances will last for the rest of their lives, periods that can easily extend for 20 years or more.

Individuals (and their employers) should acknowledge that some of these factors might evolve over time. As workers age, preference for leisure might increase relative to continued work, health can deteriorate or improve, and family circumstances might change, such as the birth of grandchildren or the death of parents. It's entirely reasonable that a carefully designed retirement plan can change as the individual approaches retirement age.

Below we discuss each of the five action steps mentioned previously.

1. Accurately evaluate barrier/enabler factors.

Having adequate financial resources and appropriate medical insurance enables an older worker to retire; these factors can be a barrier to retirement if the worker perceives these resources to be inadequate. To assess financial resources, an older worker needs to take stock of their projected income from all sources and estimate whether it will cover their living expenses throughout retirement. The uncertainty surrounding how long these resources must last (how long retirees and spouses might live) is an important factor to consider in this process.

The most common sources of retirement income include:

- Social Security income, both for the worker and their spouse, if married
- Pension income
- Income from savings, including 401(k)s and IRAs
- Work in retirement

Most people will need to make a considerable effort to estimate their retirement income from the first three sources listed above. For many people, it's uncertain whether they'll be able to work or if work will be available, so planning to rely on work for income in their retirement years may take some careful thought.

The goal: Make specific plans to address retirement barriers.

Some individuals may want to explore if they can tap home equity as a source of income in retirement, either through rental income or a reverse mortgage.

When determining the adequacy of retirement income, individuals will also want to estimate how their living expenses may change in retirement. The most common expenses that can change include reduced housing expense if the mortgage on the primary residence is paid off or if they relocate, reduced child-rearing expenses, reduced work-related expenses such as commuting, and increased expenses for medical premiums and out-of-pocket expenses. They may also want to consider building an emergency fund for unforeseen expenses.

Important contextual factors that can influence these calculations include:

- The assistance a retiree may receive from the employer and/or financial advisors, including online retirement calculators or financial advice, to estimate the adequacy of retirement income
- The perceived risk of inflation in the retiree's living expenses
- The availability of post-retirement employment if the worker desires or needs work in their retirement years

Medical insurance is another significant barrier/enabler factor. Many people won't retire voluntarily unless they have adequate medical insurance (Dwyer, 2001; Kim & DeVaney, 2005). Medicare, which starts at age 65, provides universal medical insurance that's affordable for most people. It is a common retirement trigger—many people wait until they are eligible for Medicare to retire, unless they have access to affordable medical insurance before age 65. The Affordable Care Act may enable some workers to obtain medical insurance before age 65, although the high cost of insurance might still be a barrier.

2. Identify relevant push/pull factors and develop appropriate responses.

The goal here is to help people make thoughtful decisions in response to push/pull factors, and to help them avoid impulsive and/or regrettable decisions. Appropriate responses include:

- If an event with emotional strength pushes or pulls an individual towards a decision to retire or continue working, that individual should wait awhile to see if the immediate emotional reaction subsides. For instance, if a worker is assigned an unpleasant but short-term task, they should allow a “cooling off period” and focus on the bigger picture to prevent the task from overly influencing their retirement decision process.
- Explore viable alternatives to the push/pull factors, as discussed below.

The goal: Make specific plans to address retirement barriers.

Some people retire because negative factors push them into retirement; in other words, they retire to avoid the negative experiences associated with work (e.g., Thorsen et al., 2012). The following table illustrates a number of negative factors that commonly push people into retirement and the corresponding alternative choices they could make.

Alternative Choices to Retirement Push Factors	
Negative push factor to retire	Alternative to retirement
Boredom, frustration with work, or job stress	Seek alternative assignments; look for new work; or request fewer work hours, a sabbatical, or a leave of absence
Tired of the commute	Utilize public transportation; reduce hours; telecommute; or request a flexible schedule.
Perception of ageism; older workers don't feel wanted or appreciated	Look for positive ways to enhance the perceived value of older workers.
Skills become outdated	Enroll in training or mentorship programs to update skills or seek alternative assignments.
Poor health	Request flexibility or a reduction in hours or responsibilities, or enroll in wellness or disease management programs.

Alternatively, rather than feeling pushed to retire, some people feel pushed to continue working beyond the time they're still able to be productive. The following table illustrates a number of negative factors that commonly push people to continue working and the corresponding alternative choices they could make.

Push Factors: Alternative Choices to Work	
Negative push factor to continue working	Alternative to continuing to work
Need the money and health benefits	Build sufficient resources and appropriately assess adequacy of resources, or look for alternative work situations or self-employment.
Need the income to care for family member	Look into low-cost, alternative methods of providing care, such as adult daycare.
Lose social contacts at work	Consciously plan for social life after retirement, such as by joining a retiree 'alumni' group, volunteering, or joining community social groups.

In addition to the obvious need for income and benefits, one important factor that pulls older workers to continue working is having a sense of purpose and personal identity with work -- a sense that "I'm not done yet." If the worker and employer are mutually benefitting from the employment arrangement, there's no need for the worker to retire.

We find that successful and satisfying employment relationships exist for older workers when they don't feel compelled to continue working for the above negative push factors but instead continue working for positive pull factors and because their employer is satisfied with their productivity.

3. Build a positive vision of life after retirement.

We postulate that successful retirements result from retiring "to" a positive vision of life after the career transition rather than retiring "from" the negative aspects of work. One powerful factor that pulls people to retire is having an engaging vision of life after retirement, such as travel, pursuing interests or causes, new career directions, and/or spending time with friends and family. Workers may feel pulled into retirement if they have planned activities and experiences that are more compelling in total than the positive factors that may pull them to continue working (e.g., Davies & Cartwright, 2011; Topa, Moriano, Depolo, Alcover, & Morales, 2009).

It would be useful for workers to spend some time building a positive vision of retirement and go beyond focusing on the pure "vacation" aspects of retirement that will only take up a fraction of their newfound freedom. At the same time, they should adequately address barrier/enabler factors and adopt strategies to counter possible negative push factors to continue working.

4. Recognize trigger situations to ensure appropriate responses and avoid making impulsive decisions.

Common financial triggers are eligibility for Social Security, pension and/or retiree medical benefits. In this case, workers may become more vulnerable to the negative factors that might push them into retirement and become less tolerant of the negative aspects of work because they may now perceive that they have the option to retire.

Triggers might also influence workers to determine retirement timing in advance by providing decision anchors. For example, when deciding at what age they should retire, individuals may first consider a common trigger age (e.g. anchoring at age 62) and subsequently adjust their preferences upward or downwards from that anchor.

One possible strategy to counter this situation is for workers to be aware of the potential effect of triggers before they happen, set their intent to make conscious decisions, and vow not to make impulsive decisions when the trigger happens. Psychological research suggests that individuals are more successful in achieving their goals when they make concrete plans for how to respond to future events and situations (For a review, see Gollwitzer, 1999). In the context of retirement, this approach can take the form of a simple plan, such as “When I turn 65, I will re-assess the pros and cons of retirement.”

The above financial triggers can also be exacerbated by social triggers, such as when friends, family, or work colleagues retire. The appropriate response for workers is to have thoughtful strategies in place to address barrier/enabler factors, build a positive vision of retirement, and set their intent not to retire impulsively for the “wrong” reasons.

5. Reflect on personal decision-making style and consider alternative approaches.

How individuals make decisions vary greatly from one person to another. Some rely on “gut feelings” while others rely on rational evaluations; some choose independently while others delegate to family and friends, and so forth (e.g., Scott & Bruce, 1995). And just as employees should recognize and evaluate a range of decision *factors* that influence their decision to retire, so too should they recognize, evaluate, and counterbalance their own decision *processes*.

For instance, individuals who typically make impulsive decisions based on their feelings should consider slowing down their decision process and carefully compute the financial implications of working versus retiring. By contrast, people who exclusively focus on numerical calculations might benefit from reflecting on how they *feel* about work versus retirement, or from joining discussion groups with people who work together to reflect on the pros and cons of retiring versus continued work.

Recommendations for Employers and Financial Institutions

Employers and financial institutions can use the 3D Model of retirement decision-making to develop programs and tools that facilitate the decisions their employees and customers make. The goal is to develop a decision path and a set of activities and tools that enable older workers to address the various decision factors described in this paper. As discussed below, the approach of employers and financial institutions is meant to complement and bolster the approach for employees.

A successful retirement readiness program would go beyond providing just facts and figures. It would recognize that emotional considerations can override logical decision processes.

A successful retirement readiness program would go beyond providing just facts and figures to help employees make decisions; it would recognize that emotional considerations can override what might be considered logical decision processes. To this end, employers should be sensitive to employee fears and anxieties surrounding retirement and counteract them with programs designed to build positive visions of retirement and increase self-confidence and perceived control over the retirement decision and transition.

Program designers should also recognize that some employees might not be willing to spend much time and effort on the retirement process without initial motivation and inspiration. A robust retirement readiness program would take into consideration the behavioral economics and psychological factors that influence how people make decisions.

Likewise, employers should also acknowledge that employees' decisions to disengage from their career employment and retire is often not a distinct, singular decision but is more often a process that might take place over several years. Along the way, there can be many events that occur and decisions that workers must make before they finally decide to retire.

It's important to recognize the extent to which employers can influence different retirement decision factors. They will have little or no influence over outside factors such as eligibility for Social Security and Medicare, a worker's personal health, or the care needs of family members. On the other hand, they can influence the retirement decision through the design of their retirement programs, the work environment, including flexible work schedules, and by offering planning tools and decision-making support.

How employers can help their employees:

- 1. Assess*
- 2. Educate*
- 3. Support*

To help employees and customers with the retirement decision, we recommend employers and financial institutions take a three-part approach:

Part 1: Assess the workforce/customer base.

- Assess the decision factors that are most relevant to their workforce or customer base through analysis and sensing tools such as surveys or focus groups. Employers should be aware when their employees are nearing important triggers, such as age 55, a common early retirement age in organizations that offer employer-sponsored retirement plans; age 59-1/2, the earliest age at which retirement savings can be withdrawn without penalty; age 62, the earliest age at which workers can start Social Security benefits; age 65, the eligibility age for retiree medical coverage including Medicare; or the Social Security normal retirement age (currently age 66).
- Assess common decision-making styles that exist in the workforce, if possible, and identify the impressions and misconceptions that their older workers or customers may have about any aspect of retirement.

Part 2: Educate the workforce/customer base.

- Develop communications programs that raise awareness and inform workers and customers about common push/pull and trigger factors, and the emotions that are natural for older workers to feel about the retirement transition. Possibilities include discussion groups at work, print material, online programs including short videos, and retirement readiness seminars and workshops.
- Arrange for independent financial advisors to assist employees with the decisions surrounding retirement that we addressed earlier.
- Help older workers seek alternative work situations after retirement (specific to employers).
- Provide a forum for current retirees to share their experiences about retirement and the decision process. Potential discussion questions include: What do they like about retirement? What don't they like? What steps in their process are they glad they took? Do they have any regrets? Studies have found that this activity has particular credibility with older workers.

Part 3: Support the workforce/customer base through structural solutions.

- Sponsor retirement readiness and educational programs that help employees address the financial enabler/barrier issues, such as Social Security claiming strategies, generating income in retirement from savings, making the most of pensions if they're available, and investment considerations that are relevant to retirees.
- Design retirement plans that enable employees to convert their retirement savings into reliable lifetime retirement income, using institutional pricing instead of retail pricing to increase retirement incomes (specific to employers).
- Design retiree medical plans that enable workers to obtain affordable medical coverage prior to Medicare eligibility (specific to employers), or provide help with navigating the health care marketplace under the Affordable Care Act.
- Support alternative work arrangements for older workers (e.g., flex-time, bridge employment, etc.) or provide outplacement or career transition counseling for those older workers who would like to seek some form of employment after they retire (specific to employers).

Employers who wish to retain older workers in some manner might succeed simply by making their older workers feel appreciated, asking them to stay longer, and accommodating part-time or flexible work schedules. Research suggests such employers have a narrow window – no more than two years before retirement – in which to intervene to change workers' decision to retire and ask them to work longer (Helman, Copeland, VanderHei, and Salisbury, 2008).

In summary, employers can help their older workers address the barrier/enabler factors, overcome negative push factors, and develop a positive vision of life after retirement. Such a program can be considered a valuable employee benefit that helps employers with workforce management goals. Financial institutions, including 401(k) administrators and consultants, can also help, particularly for employers that don't have the resources to develop a robust retirement readiness program on their own.

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References

- Cahill, K., Giandrea, M., Quinn, J. (2015). Retirement Patterns and the Macroeconomy, 1992- 2010: The Prevalance and Determinants of Bridge Jobs, Phased Retirement, and Reentry Among Three Recent Cohorts of Older Americans. *The Gerontologist* 55 (3): 384-403.
- Davies, E., & Cartwright, S. (2011). Psychological and psychosocial predictors of attitudes to working past normal retirement age. *Employee Relations*, 33(3), 249-268.
- Dwyer, D. S. (2001). Planning for retirement: The accuracy of expected retirement dates and the role of health shocks. Center for Retirement Research at Boston College WP 2001, 8.
- Gollwitzer, P. M. (1999). Implementation intentions: strong effects of simple plans. *American Psychologist*, 54(7), 493.
- Helman, R., Copeland, C., and VanDerhei, J. (2015). The 2015 Retirement Confidence Survey: Having a Retirement Savings Plan a Key Factor in Americans' Retirement Confidence. *EBRI Issue Brief* (413).
- Helman, R., Copeland, C., VanDerhei, J., and Salisbury, D. (2008). EBRI 2008 Recent Retirees Survey: Report of Findings. *EBRI Issue Brief* (319).
- Kim, H., and DeVaney, S. A. (2005). The Selection of Partial or Full Retirement by Older Workers. *Journal of Family and Economic Issues*, 26(3), 371-394.
- Maestas, N. (2010). Back to Work: Expectations and Realizations of Work after Retirement. *Journal of Human Resource Management*, 45(3): 718-748.
- Munnell, A., Sanzenbacher, G., and Rutledge, M. (2015). What Causes Workers to Retire Before They Plan? Boston College Center for Retirement Research, Working Paper.
- Scott, S. G., & Bruce, R. A. (1995). Decision-Making Style: The development and assessment of a new measure. *Educational and Psychological Measurement*, 55(5), 818-831.
- Society of Actuaries Committee on Post-Retirement Needs and Risks (2014). Understanding and Managing the Risks of Retirement.
- Stanford Center on Longevity (2016). The Decision to Retire: "3D" Conceptual Model and Research Review.
- Thorsen, S., Rugulies, R., Longaard, K., Borg, V., Thielen, K., & Bjorner, J. B. (2012). The association between psychosocial work environment, attitudes towards older workers (ageism) and planned retirement. *International Archives of Occupational and Environmental Health*, 85(4), 437-445.
- Topa, G., Moriano, J. A., Depolo, M., Alcover, C. M., & Morales, J. F. (2009). Antecedents and consequences of retirement planning and decision-making: A meta-analysis and model. *Journal of Vocational Behavior*, 75(1), 38-55.

About the Center

The mission of the Stanford Center on Longevity is to redesign long life. The Center studies the nature and development of the human life span, looking for innovative ways to use science and technology to solve the problems of people over 50 in order to improve the well-being of people of all ages.

Working as a catalyst for change, the Center identifies challenges associated with increased life expectancy, supports science and technological research concerning those challenges, and coordinates efforts among researchers, policy makers, entrepreneurs, and the media to find effective solutions.

The Center was founded in 2006 by two of the world's leading authorities on longevity and aging. Laura Carstensen PhD, professor of psychology, is the founding director, and Thomas Rando MD, PhD, professor of neurology and neurological sciences, is deputy director. The Center received its initial funding from Richard Rainwater.

The Financial Security Division, directed by senior research scholar Martha Deevy, brings a unique interdisciplinary perspective to financial security issues facing our society by rethinking the perceived problems around population, focusing on retirement planning and the need to work longer. By understanding the role that research, education, and policy can play in solving these issues and looking at the problems from multiple perspectives, the division drives the dialogue forward in order to facilitate a healthier state of long-term financial security for the individual and society.