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Retirement Savings and Decision Errors: Lessons from Behavioral Economics

Long gone are the days when most American workers could rely on their employers to manage their retirement savings. Today, most people handle their retirement portfolios themselves, gaining the right and responsibility to determine their own best strategies. Research on retirement planning suggests, however, that many fall short of consensus targets for optimal savings and investment. While part of the shortfall is explained by information gaps and income constraints, research in behavioral economics suggests that “decision errors,” arising out of human tendencies such as procrastination, also play a role.

This *Economic Letter* reviews some key insights of this research and discusses how they apply to retirement savings and financial decisionmaking more broadly. It then discusses how policymakers and employers are enhancing the design of 401(k) savings plans and other retirement vehicles to circumvent what appear to be our less-than-optimal human instincts.

Retirement savings plans and common financial mistakes

The advent of defined contribution retirement plans, chief among them 401(k) plans, has placed retirement planning squarely in the hands of employees. The basic 401(k) plan allows employees to place pretax income into tax-deferred accounts and allocate the savings among a menu of employer-provided investment options. Employers generally match employee savings up to a cap (e.g., a 50% match of employee contributions up to 6% of salary). Such plans have several benefits: they allow employees to save and invest as they choose, they are portable across jobs, and they allow employees to withdraw their savings before retirement, albeit usually with a costly 10% penalty.

In the early 401(k) designs, employers offered opt-in enrollment and multiple investment choices, along with detailed documentation about fund performance and fund management, and even classes

reviewing the benefits of saving often and saving early. In general, employers steered away from providing investment guidance or recommendations, leaving employees responsible for saving and managing their individual retirement portfolios. These types of retirement plans were widely provided and popular among employees; however, employers and policymakers found that they were frequently undersubscribed and that participants saved and diversified less than experts recommended.

These deviations in savings and investment outcomes from consensus optimal targets spurred considerable investigation and yielded some surprising findings. Even when people had the income to save, were fully informed about the benefits of saving, and understood the incentives to save provided by their employer, they still made poor decisions, sometimes leaving money on the table (e.g., when they failed to save enough to get the full employer match). These investigations into the “irrationality” of American workers joined economics and psychology and uncovered some basic lessons about how individuals make decisions.

The dilemma of choice

A key tenet of classical economics is that economic agents are rational and act in their own best interest. But behavioral economists, folding psychological insights and observations into an economic understanding of behavior, argue that such a characterization may not always describe the average worker. For example, when employees have the option to save in a 401(k) plan (fill out a form, sign up, etc.), they may ask themselves, “Why go to all the trouble of making a decision today when it can be put off until tomorrow at the tiny cost of a day’s worth of interest?” Thus, a few days’ postponement can turn to weeks and even months before the employee actually decides whether to opt in. Such a pattern of decision-avoidance or naïve procrastination can lead to low retirement savings or to investments languishing in underdiversified portfolios. Hence, these individuals are

not acting in their own best interest, but rather responding naïvely to the all-too-human and common instinct to procrastinate.

A second tenet of classical economics is that choice is good and more choice is better, since the addition of an option does not preclude rational economic agents from selecting the same option as before. But again, behavioral economics says something different: when faced with a decision, people first decide *how* to decide. Psychologists have found that, as the complexity of a situation increases (e.g., choices expand), the sophistication of decisionmaking falls; that is, the more options and the more aspects to each option to consider, the simpler the rule for deciding becomes. In 401(k) decisions, for example, employees frequently have to choose a contribution rate and then an allocation strategy for investment. Studies have found that employees facing complex sets of investment choices use simple allocation strategies, such as “one egg in each basket” in which equal contributions go into each available investment fund, regardless of the funds’ relative riskiness or rate of return. Behavioral economics suggests that using a simple decision rule in complex situations arises from the trade-off between accuracy and effort: the harder the decision, the more willing we are to use a less precise rule of thumb if it saves us a headache. As a result, 401(k) decisionmaking likely grows worse as the decision becomes more complicated, deviating from optimal decisionmaking strategies.

When the choice is very complex, people can adopt the easiest decision rule: decide not to decide. Psychologists call this “choice overload”—the prospect of making the decision is so overwhelming that the individual refuses to make it. This effect has been documented in situations ranging from choosing which jam to buy to long delays before enrolling in retirement plans (Iyengar et al. 2004).

In retirement savings plans, the decision not to decide often means that individuals look to their employers for guidance. Data suggest that even when no explicit guidance is provided, employees infer that their employer’s default contribution rate or investment fund choices are “safe,” “suggested,” and optimal. In other words, workers frequently substitute a perceived expert suggestion (their employer’s plan design) for their own individual reasoning about their financial needs and risk

tolerance. This “endorsement effect” can produce savings and investment decisions that financial advisors, and eventually employees themselves, consider suboptimal.

Guiding optimal decisionmaking

The problems of procrastination, choice overload, and endorsement effects have led researchers to look for ways both to improve decisionmaking and to ensure superior fallback results if no decision is made, all while protecting freedom of choice. The solutions fall into a line of work in behavioral economics known as “asymmetric paternalism” (Camerer et al. 2003). Many of these solutions are now commonly used by employers and were formally endorsed in the Pension Protection Act of 2006.

The simplest solution, and one of the first to appear in employers’ portfolios, was default enrollment. Default enrollment is built on the assumption that most people who fail to enroll in an employer-sponsored 401(k) plan suffer from choice overload or are naïve procrastinators. Default enrollment solves this problem because workers who do nothing—make no active decision—are automatically enrolled in the employer-sponsored retirement plan and assigned a specific saving rate. At the same time, workers who want either a lower saving rate or no participation in the program at all can easily choose these options, thus protecting employee freedom. This solution has been very successful at improving participation in employer-sponsored retirement programs, producing near universal enrollment, at default rates, among companies that adopt it.

Another way to guide employees to invest more optimally was developed by Beshears et al. (2006). Called Quick Enrollment, it is predicated on the idea that choice overload, rather than procrastination, drives down enrollment in 401(k) plans. It gives new hires a card with a simple choice between the status quo or a predetermined option of 3% of pretax salary invested in a mutual fund. Employees check the appropriate box next to their preferred option and send the card back. Employees who want more control of their investments can still access the normal options. Collapsing the complex savings and investment problem into a binary choice should simplify the decision and thus boost participation among those who would otherwise have been “overloaded” by choice. In a study of Quick Enrollment and default

enrollment strategies, Beshears et al. found that participation rates rose substantially more with default enrollment than under Quick Enrollment, suggesting that while some employees suffered from choice overload, procrastination is a distinct driver of undersaving.

That said, the lessons of simplification from the Quick Enrollment program have proven very helpful for guiding individuals in asset allocation decisions. The boost in participation from “collapsing down” the participation decision has been used to “collapse down” the investment decision. For example, to solve the problem of underdiversification and/or static asset allocations over time, employers are helping their employees improve decisions by offering asset allocation bundles categorized by risk preference. For instance, a 401(k) plan may allow an employee to invest in a bond fund, an equity fund, and an international equity fund, but the plan would also offer funds labeled “conservative,” “moderate,” and “aggressive” growth, constructed with bundles of the above funds. This bundling allows workers to make 401(k) decisions based on risk preferences without having the technical expertise of a trained investor. Furthermore, the investment decision can be easily tiered: the employer can offer these allocation funds for investment, with the addition of another option, “allocate investments myself.” The decision appears much easier and discrete when first encountered, encouraging a more rational decision rule while retaining the ability to invest as freely as before. Although it is too early to tell whether these programs will improve diversification and optimal investment paths, they reflect an understanding that simplifying decisions can help employees achieve better outcomes.

Making “asymmetric paternalism” policy

The Pension Protection Act of 2006 strikes a balance between the participation boost from higher default rates and the pull of procrastination: it provides incentives for firms to start a default at 3%, but this default rises 1% each year during the first three years after hiring. The 3% rate ensures high participation rates, and research suggests that a low default contribution rate of around 3% encourages participants to take an active role in asset

allocation. However, if they still don’t make any decision, they’ll keep saving a little more each year. This form of paternalism does not bind employees to any preset plan; they are as free to choose as before, but if they procrastinate or are overwhelmed, they still save.

Applying these lessons to other fields

The lessons from applying decision theory and behavioral economics to 401(k) plans have broad implications for all types of decisionmaking. We already see the ideas about choice overload, for example, being considered in the delivery of health-care alternatives. And it may be possible to create the equivalent of the risk profiles for investment for individuals choosing health care, giving workers greater guidance on selecting health plans to fit their changing needs over time. Looking forward, it will be important to consider how the ideas of procrastination and choice overload affect the decision to convert 401(k) money into an annuity rather than to take it out in a lump sum or spend it unrestricted over time. With the baby boom generation entering retirement, these types of issues will be moving to the forefront of public discourse over retirement policy. In each of these situations, the ability of a little guidance to help individuals achieve better outcomes will be an important part of the discussion.

Phil Armour
Research Associate

Mary Daly
Vice President

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