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Behavioral Finance and Retirement Planning:
Key Lessons Learned

Behavioral Finance Research Digest for plan sponsors and their advisors

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BEHAVIORAL FINANCE AND RETIREMENT PLANNING: KEY LESSONS LEARNED

Executive Summary: Behavioral finance provides fascinating insights into participant behavior. More importantly, behavioral finance provides tools to help employees make better financial decisions. This article reviews the lessons we learned over the past few years and lists the behavioral tools available to help plan sponsors and their advisors.

After four years of writing this newsletter, we learned a lot, so perhaps it is time to pause and summarize our key lessons. As we go through the lessons learned, I will provide references to the original newsletters (e.g., Fall 2006) to make it easier for readers to go back and read the full articles and supporting research materials.

I organized the lessons learned into four sections, which correspond to the key decisions employees face: (i) whether or not to participate in the plan, (ii) how much to contribute to the plan, (iii) how to invest the contributions, and (iv) how to manage the money after retirement.

I. Participation

In the U.S., about seven out of 10 eligible employees join their employer's retirement

saving plan. This begs the question of why roughly three out of 10 employees do not join the plan. Not only do many employees forgo the tax benefits of saving through an employer plan, some also fail to receive the employer match. One study found that roughly four out of 10 employees did not join the plan even though they could take the employer match out of the plan tax-free immediately (due to their age)! (Summer 2006)

There are multiple psychological barriers that deter individuals from joining a plan. retirement saving The more significant barriers include inertia. procrastination, immediate gratification, and the emotional pain of compromising one's standard of living today for a better future. In addition, choice overload can also lower plan participation by overwhelming employees with the number of investment

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funds available to them. One study found the addition of 10 investment funds reduces participation by two percentage points (Fall 2006).

Unfortunately, financial education is typically ineffective at "moving the needle" for two reasons. First, research shows it is not easy to educate employees about financial matters. Second, even when employees attend a financial education seminar and leave intending to join the plan, just 14 percent follow up on their good intentions and fill out the forms to enroll (Spring 2007).

What can plan sponsors and their advisors do to increase participation? A number of behavioral tools are available. The most powerful tool to increase participation is changing the default from an opt-in system to an opt-out system. In other words, procrastinators who never get around to completing the enrollment process are automatically enrolled in the plan. Plans that adopt automatic enrollment features often enjoy participation rates above 90 percent (Fall 2006).

Behavioral tool #1: Auto-enroll employees

Additional tools are available for employers who prefer not to adopt automatic

enrollment. In particular, very much like choice overload and complexity participation simplicity rates, boosts One study showed that by participation. changing the enrollment form to involve simple "yes/no" only a decision, participation jumped from an anemic rate of just 9 percent to 34 percent (Winter 2008).

Behavioral tool #2: Simplify the enrollment process

II. Contribution Rates

The average contribution rate in U.S. retirement saving plans is approximately seven percent. By many counts, even employees who participate in a plan will not accumulate enough by retirement. For one thing, rising out-of-pocket medical expenses are a huge drain on many retirees' pockets (Spring 2009).

In addition, even those who are lucky enough to either be healthy or enjoy comprehensive medical insurance are likely saving too little to sustain a desirable life style. One study found that about half the retirees surveyed needed at least as much money in retirement as they needed while working. Current saving rates make the goal of full income replacement no more than a fantasy (Fall 2009).

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One often proposed solution – adding or increasing an employer match – is not only expensive, it also tends to have a relatively minor effect on participation and saving rates. Furthermore, the generosity of the match does not seem to have any incremental effect (Winter 2008). Hence, the match is unlikely to cure our "under" saving epidemic.

What can plan sponsors and their advisors do to boost saving rates? The most powerful tool to raise saving rates is the automatic escalator, where employee saving rates are gradually increased either every time the employee receives a pay raise or on a set date like every January 1. The first plan to adopt an automatic escalator back in 1998 resulted in employee saving rates quadrupling between 1998 and 2002 from 3.5 percent to 13.6 percent (Fall 2006).

Behavioral tool #3: Auto-increase saving rates

Further research on escalator programs indicates that employees can easily stomach annual saving increases of two percentage points and that the best timing to raise saving rates is probably in January. In addition, the program is still attractive to most employees when the cap – that is, the

saving rate at which the increases stop - is set as high as 20 percent.

Additional behavioral tools are available to plan sponsors who prefer not to adopt an automatic escalator feature. Since many plan participants focus on receiving the full employer match, I believe it is feasible to boost employee savings *without* increasing the cost of the match.

Consider, for example, a typical match formula of 50 cents on the dollar up to six percent of pay. In this case, many plan participants will end up saving exactly six percent. One option is to change the match formula to 25 cents on the dollar up to 10 percent of pay. Since employees are generally insensitive to the generosity of the match, they are unlikely to find the change unfair. The benefit of the change, however, is that many employees will end up saving 10 percent to get the full match.

Behavioral tool #4: Raise the salary percentage that is matched, but lower the match rate

III. Investment Elections

When it comes to investment decisions, plan participants do not score well. First, most people spend very little time making investment elections. In fact, participants often spend more time deciding where to dine or which movie to watch than thinking about their portfolio allocations (Winter 2010).

Second, many participants are confused about their underlying preferences. In the case of investment decisions, they find it challenging to assess their appetite for risk taking. Thus, it is not surprising many participants were caught off guard by the financial tsunami of 2008 and 2009 with portfolios that were far too risky for their comfort level. One study found that while 33 percent of participants put all their money in stocks, just seven percent of participants seem to have the appetite for the volatility associated with such portfolios (Winter 2007; Summer 2009).

Third, investment decisions are unfortunately influenced by many irrelevant factors. Consider the graphic designer who creates the investment election form and decides how many lines to put on the form based on what fits or looks good. One study found that the more lines displayed on the investment election form, the more funds participants select. Specifically, the fraction

of participants selecting more than four funds quadrupled when additional lines were displayed on the form. This was true even though participants were always allowed to pick as many funds as they desired (Summer 2006).

Fourth, participants tend to chase performance. As a result, they often engage in the dubious strategy of buying high and selling low. Put differently, the returns investors actually earn are far below the buy and hold returns they could have earned. In particular, while NASDAQ stocks averaged 9.6 percent over the long run, investors in NASDAQ stocks earned just 4.3 percent (Fall 2009; Winter 2008).

Fifth, participants neglect fees. Only one fifth of plan participants realize that a one percent fee per year ends up eating up two percent of an account over a two-year period, and similarly, about 30 percent of the account over a 30-year period (Spring 2008).

Sixth, some good news, plan participants did not panic when global markets collapsed in 2008 and 2009. The vast majority of participants did not sell their equity positions, and participation rates and saving rates held up. Furthermore, it seems like most participants slept reasonably well through the financial storm, as call volume to the hotlines and web activity did not spike

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much during this time (Winter 2009; Spring 2009; Summer 2009).

With the exception of not panicking during the financial tsunami, the evidence suggests that plan participants are not doing well as portfolio managers. We are all human and the same behavioral biases that affect participants also affect plan sponsors (and researchers who write newsletters). One study found that plan sponsors replace the funds in the plan too often. In fact, the funds dropped from the plan outperformed the funds added to the plan by an average of 129 basis points in the year following a change (Spring 2008).

What can plan sponsors and their advisors do to improve investment decision making? At the risk of sounding like a broken record, my main suggestion is to choose a well-diversified default portfolio with low fees. Research indicates that most participants do not have the expertise to select portfolios, nor do they have the desire to pick investments, so why not get the job done for them? (Winter 2007)

Behavioral tool #5: Choose a well-diversified default portfolio with low fees

I realize that some plan sponsors prefer participants to select their own portfolios. For those sponsors, I propose keeping the menu of funds as simple as possible. One option is to offer a small set of retirement date funds. To the extent that some employees prefer greater choice, a larger menu of funds could still be offered, but it is preferable to offer the extensive menu separately and frame it as the uncommon choice.

Behavioral tool #6: Offer a small set of retirement date funds

It is also important to put a system in place to protect plan sponsors and investment committees from their own behavioral biases. Since plan sponsors tend to replace funds too often, I propose drafting a "commitment contract" which spells out the specific conditions under which a fund manager should be replaced. This should be part of the investment policy statement. Hopefully, this will minimize the risk of impulsively replacing a fund manager that underperformed the benchmark for a couple of quarters.



Behavioral tool #7: Draft a "commitment contract" spelling out in advance when a manager should be replaced

IV. Postretirement Decisions

Postretirement decisions are arguably the most challenging financial decisions individuals face. Retirees have to select a spending plan and an investment strategy that provide a desirable lifestyle and ensure they don't outlive their money.

To illustrate the complexity of postretirement decisions, consider longevity risk and its financial implications. Suppose you and nine of your high school friends all made it to age 65. When do you think the first death would occur among your group of friends? When do you think the last death would occur?

As it turns out, the first death is expected to occur at age 69, just four years into retirement, whereas the last death is expected to occur at age 99, 34 years into retirement. Note that retirees have to set a spending plan and an investment strategy that accommodate very different scenarios, one living just four years and another living for 34 years. Needless to say, these are not

easy optimization problems to solve (even for those with a Ph.D in economics).

Before we devise any behavioral tools for retirees, it is important to remember that age does make a difference and that retirees have a unique set of skills and preferences in many respects. First, retirees often suffer from compromised cognitive abilities, so even simple calculations could be strenuous for the elderly. One study estimates that half the people in their 80s suffer from either dementia or cognitive impairment (Summer 2007).

Second, retirees are a lot more sensitive to losses than the general population. One study reports that 82 percent of retirees are not willing to risk more than \$10 to have a fifty-fifty shot at winning \$100. In comparison, younger adults are typically willing to risk \$40 to \$50 (Fall 2008).

Third, the elderly are hypersensitive to the framing and position of different choices. One study found that when annuities were framed as a consumption plan, 72% elected the annuity. However, when the same annuity products were framed as an investment plan, only 21% elected the annuity (Summer 2008).

What can plan sponsors and their advisors do to help individuals make better financial decisions postretirement? From a

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behavioral finance perspective, I must admit we know a lot more about the accumulation phase than the decumulation phase. With that caveat in mind, let me offer a few initial thoughts for consideration.

Given that most individuals lack the expertise to develop a financial plan postretirement, and that the majority of individuals don't have sufficient wealth to hire a financial planner, I think it is critical for plan sponsors to offer retirement income solutions through the plan itself. It simply makes sense to integrate accumulation and decumulation in the same plan. Using the powerful analogy of my good friend, Professor David Blake, we've built "retirement" airplanes that take off and cross oceans safely, but we forgot to provide the landing gear.

Having said the above, there are many legal and financial engineering issues that might delay the integration of decumulation vehicles into retirement plans, but let me suggest that we, as an industry, at least keep trying to accomplish this important goal.

Behavioral tool #8: Integrate accumulation and decumulation phases in the same plan

Plan sponsors should also rethink how communicated outcomes are to participants. It is often difficult for people to draw meaning from abstract numbers, so reporting rates of return is often neither a meaningful nor effective way communicate the performance and success of a portfolio. It is better to frame all outcomes as the monthly retirement income that individuals are projected to have. This seemingly minor change in disclosing account information could be very powerful in training plan participants to think about retirement income, the ultimate goal of the plan.

Behavioral tool #9: Frame decisions and outcomes in terms of projected retirement income

To summarize, behavioral finance research provided fascinating insights into participant behavior over the last few years. More importantly, behavioral finance also offers a variety of behavioral tools to help individuals make better financial decisions.

It is time to act. Plan sponsors and their advisors should utilize the available tools and stay on top of new research and associated tools to help reach company and participant goals. Large plans might even

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consider nominating a behavioral finance "officer." I do not envision a new position, but rather making sure that someone in the organization is in charge of staying up to date on behavioral finance research and its applications, and promoting the implementation of the tools that make sense for their plan.

Behavioral tool #10: Nominate a behavioral finance officer

I hope you enjoyed reading the 401(k)now research digest over the last four years. And, I look forward to sharing with you the Best Behavioral PracticesTM going forward.

If you have any comments, suggestions or feedback, feel free to send me an email at benartzi@ucla.edu.

Sincerely,

Shlomo Benartzi, Ph.D