Implications of Participant Behavior for Plan Design

- > Defined contribution plans are increasingly becoming workers' only employer-sponsored retirement program
- Behavioral economists have uncovered the predictable, but irrational ways that human beings make decisions—many of which are evident in our saving and investing behavior
- Without programs to overcome these behavioral issues, many American workers will be unable to comfortably retire—and employers will suffer the consequences

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About the Author

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Professor Shlomo Benartzi is a leading authority on behavioral finance with a special interest in consumer finance and participant behavior in defined contribution plans. He received his Ph.D. from Cornell University's Johnson Graduate School of Management, and he is currently co-chair of the Behavioral Decision-Making Group at the Anderson School at UCLA.

Professor Benartzi is also co-founder of the Behavioral Finance Forum, which is a collective of 30 prominent psychologists, consumer behavior experts and behavioral financial economists and 30 major financial institutions from around the globe. The Forum's mission is to help consumers make better financial decisions by fostering collaborative research efforts between prominent academics and industry leaders.

Professor Benartzi has supplemented his academic research with practical experience, serving on the ERISA Advisory Council of the U.S. Department of Labor, the advisory board of Morningstar, and the Investment Advisory Council of the Alaska State Pension.

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Understanding Investor Behavior and Prudent Plan Design

For insights into how behavioral finance can play a significant role in an employee's retirement savings, AllianceBernstein turned to a leading behavioral expert, Professor Shlomo Benartzi of UCLA, to author this special report.

Key Findings

- > Traditional defined contribution plan education programs have largely failed to fully prepare the American worker for retirement.
- > Behavioral economists have uncovered the predictable but irrational ways that human beings make decisions—many of which are evident in our saving and investing behavior.
- The shift from defined benefit plans to defined contribution plans, where employees rather than corporate plan sponsors make retirement planning decisions, means that these behavioral shortcomings have a pervasive impact on our national retirement security.
- > Without programs to overcome these behavioral issues, many American workers will be unable to comfortably retire—and employers will suffer the consequences.
- Responsible corporate plan sponsors should consider the powerful and positive impacts of behaviorally based programs that "automate" improved saving and investing decisions. These programs have been found to be more effective than traditional educational programs alone.

Want to Improve Your Corporate Retirement Plan? Here's How

Anyone with responsibility for a corporate defined contribution plan knows that employees need help. Over the last few decades we have seen a philosophical shift in workplace retirement plan programs. From 1980 to 1999, the number of defined benefit plans declined by nearly two-thirds while the number of defined contribution plans increased from 340,805 to 683,100. The responsibility for retirement funding has shifted almost entirely from the employer to the worker.

One Response: Participant Education Programs

Recognizing that many employees may not be prepared for this undertaking, well-intentioned efforts to educate them have been under way. Plan sponsors and retirement plan service providers alike have spent incredible amounts (in terms of both money and time) on participant education programs.

Unfortunately, despite the existence of some wonderfully creative retirement education materials and programs, a lot of these efforts have not been as successful as many

Prior to the outlay of millions of dollars on the education programs, participants, on average, got 54% of the questions right. And afterward, they answered 55% of the questions correctly.

^{1.}S. Department of Labor, Summer 2004 Employee Benefits Security Administration, Private Pension Plan Bulletin Number 12.

had hoped. Many, if not most, employees are still not adequately preparing for their retirement. Some have even gone as far as calling financial education a failure.

Academic researchers have studied the success of participant education efforts. In one case, a very large employer paid millions of dollars to a world-renowned advertising/marketing firm to create participant education materials. This was supplemented by services from a well-known online advice provider (who mailed customized illustrations to participants' homes) and a prominent worldwide professional services firm that conducted onsite education meetings. Every attempt was made to properly educate employees.

To measure the effectiveness of these efforts, the employer quizzed employees before and after the educational campaign. Employees responded to 15 yes/no questions covering very basic saving and investing principles. Prior to the outlay of millions of dollars on the education programs, participants, on average, answered 54% of the questions correctly. And afterward, they answered 55% correctly. (Keep in mind that it should be easy to score at least 50% with very little knowledge, since the quiz was entirely made up of yes/no questions.)²

In another case, researchers studied the effectiveness of educational meetings and found that meeting attendees made decisions (including no decisions) that were very similar to those made by non-attendees. While all meeting attendees said that they intended to join the plan within two months, only 14% actually did join within four months. The effectiveness of the seminars is even more questionable considering that 7% of non-attendees also

joined the plan within four months, as noted in Display 1.³ Given these disappointing results, it's interesting that plan sponsors still say that their primary planned effort to increase employee savings is employee education meetings.⁴

Financial Education and 401(k) Savin	ıgs

	Seminar Attendees		Non- Attendees	
	Planned Change	Actual Change	Actual Change	
Non-Participants Enroll in 401(k) plan	100%	14%	7%	
Participants Increase contribution rate	28	8	5	
Change fund selection	47	15	10	
Change asset allocation	36	10	6	

Source: Madrian and Shea, 2001

The Real Issue: Behavior

As the results of the study suggest, the real issue is not just a lack of education, but a lack of action. Meeting attendees reported that they intended to do the right thing; they just lacked the self-discipline to follow through. While there is some obligation to educate employees, there also has to be some acceptance that employees may not want to be educated, and that factors other than investment knowledge (like psychological factors) have a powerful impact on participant behavior.

Even very well-educated participants don't always exhibit the most rational behavior. Take the admission of Nobel laureate Harry Markowitz, often called the father of modern portfolio theory, who split his retirement account evenly between the two options available to him.

² Benartzi, Shlomo, and Richard H. Thaler, 2005, "Heuristics and Biases in Retirement Savings Behavior," working paper.

³ Madrian, Brigitte C., and Dennis F. Shea, 2001a, "Preaching to the Converted and Converting Those Taught: Financial Education in the Workplace," working paper, University of Chicago.

⁴ Benartzi, Shlomo, and Richard H. Thaler, 2005.

He explained the psychology of his decision: "My intention was to minimize my future regret. So I split my contributions 50-50 between bonds and equities." 5 What happened to Markowitz' notion of the efficient frontier?

The issue highlighted here is the limit of human rationality. Employee behavior is driven both by the human ability to compute optimal solutions to complicated problems, and by the ability to follow up on good intentions to implement the correct solutions, despite self-control issues.

As human beings, our rational capabilities are bounded, and where they end, we rely increasingly on mental shortcuts (or heuristics, as behavioral economists have called them). Unfortunately, this process leads to suboptimal retirement planning. Throughout the remainder of this paper, we'll explore some of the most problematic behavioral issues and offer our thoughts about proven ways to address them.

Getting Participants into the Plan: Behavioral Obstacles

Procrastination and inertia are two words that permeate any discussion of participant behavior. Procrastination, the tendency to delay decisions or action, results in a strong tendency toward inertia (doing nothing).⁶ Over 25% of eligible American workers who could participate in a company-sponsored retirement plan do not, and we suspect that inertia may be to blame, at least for some.⁷ When non-participants are surveyed, they often state their intentions to begin saving in the future, but an overwhelming majority of them never do.

Non-participation exists even when employees' contributions are matched and immediately vested. Perhaps the most extreme illustration of the power (and cost) of employee inertia and procrastination is found in a study of 26 defined benefit plans in the United Kingdom. These plans differ from the typical defined benefit plan in that workers must sign up for the plan even though the employer fully funds the entire contribution. Even in these cases, only about half of the employees sign up for the "free" plan.8

Exacerbating the problems of procrastination and inertia is the vast array of choices or decisions that participants must make to begin participating in most defined contribution plans. It's ironic that in a world of everincreasing choice and information, sponsors have caused participants to take even more decision shortcuts—like the passive decision to do nothing. While people generally value the ability to choose, it is recognized that having to choose complicates any decision and may even reduce their ability to make rational decisions. In fact, researchers have found that very often, people would delay a decision or decide not to choose rather than run the risk of regretting a choice they actively made. Researchers have now begun to quantify the effects of "choice overload" as it relates to retirement plan participation, finding that for every 10 funds added to a plan the predicted participation rate drops by 2% (Display 2, next page).9

⁵ Zweig, Jason, January 1988, "Five Investing Lessons from America's Top Pension Fund," *Money*, 115–118.

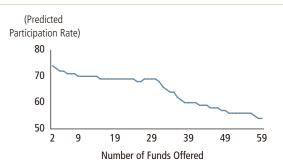
⁶ Benartzi, Shlomo, and Richard H. Thaler, February 2004, "Save More Tomorrow: Using Behavioral Economics to Increase Employee Savings," *Journal of Political Economy*, Vol. 112.1, Part 2, S164–S187.

⁷ Salisbury, Dallas, May 19, 2005, "Written Statement for the House Committee on Ways and Means Hearing on the Retirement Policy Challenges and Opportunities of an Aging Society."

⁸ Benartzi, Shlomo, and Richard H. Thaler, 2005.

⁹ lyengar, Sheena, and Wei Jiang, 2003, "How More Choices are Demotivating: Impact of More Options on 401(k) Investments," working paper, Columbia University.

Display 2
As Choices Increase, Participation Falls



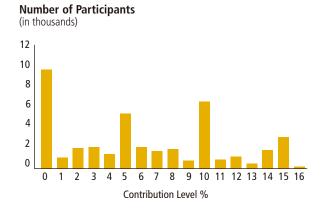
The graph above plots the relationship between participation rate (all explanatory variables except the number of funds offered are set at their respective mean values) and the number of funds offered using the Robinson¹⁰ two-stage semiparametric estimation method.

Getting Employees to Save Enough

Not surprisingly, we've observed that participants rely on mental shortcuts when they select their contribution rates. In general, there may be a reference point or range that guides employees' decisions. It could be the maximum rate matched by the employer, the maximum rate allowed by the plan, the common peer rate or a "round number" rate. A study of participant contribution rates points to a "round number" heuristic, since the most common selected rates were round numbers such as 5% and 10%, as shown in Display 3.¹¹

A further study investigated the impact of increasing the maximum allowable rate from 16% to 100% (as permitted by regulatory changes in the Economic Growth and Tax Relief Reconciliation Act of 2001). While such an increase would intuitively be better for employees, it's had the opposite effect in at least one plan, where the percentage

Display 3
Contributions for Plans with No Threshold Near
5% or 10%



Excluding Match Threshold and Pretax Limit Source: Benartzi and Thaler, 2005

of new employees selecting a deferral rate of 16% or higher actually dropped from 21% to 12%. It's likely that employees found that the new maximum allowable rate was too high and relied instead on the "round number" heuristic.¹²

Even when employees choose a contribution rate, which in most cases is too low to be considered optimal, the same behavioral tendencies we've discussed prevent them from ever increasing it: procrastination, inertia and loss aversion. However, most employees (more than two-thirds in one study¹³ and more than three-fourths in another¹⁴) state that they should be saving more for retirement. This disconnect provides further evidence that most employees have good intentions but poor follow-through.

¹⁰ Robinson, P., 1988, "Root-n-Consistent Semiparametric Regression," *Econometrica* 56, 931–954.

¹¹ Hewitt Financial Services, 2002, "Investing in Round Numbers."

¹² Benartzi, Shlomo, and Richard Thaler, 2005.

¹³ Choi, James J., David Laibson, Brigitte Madrian, and Andrew Metrick, 2002, "Defined Contribution Pensions: Plan Rules, Participant Decisions, and the Path of Least Resistance," in *Tax Policy and the Economy*, James Poterba, ed., Volume 16, 67–113, MIT Press.

¹⁴ Farkus, S., and J. Johnson, 1997, Miles to Go: A Status Report on Americans Plans for Retirement, New York: Public Agenda.

Ongoing Hurdles: Selecting and Managing Retirement Investments

Investments are a primary focus and concern for most plan sponsors. In the selection and management of retirement investments, behaviorists observe other heuristics that lead to suboptimal decision-making.

Naive Diversification and Poorly Defined Preferences

A very popular heuristic observed in many retirement plans is some form of naive diversification. While investment professionals know that portfolios should be designed based on the risk and return characteristics of individual investment funds, many employees are apparently more comfortable simply allocating their investments evenly among the available fund options, particularly when there are less than 10 options. This behavior has been termed the "1/n" heuristic, where "n" stands for the number of options. It should be noted, however, that the "1/n" heuristic is not used as often when the number of choices grows larger.¹⁵

Well-established psychology literature shows that people do not have coherent and consistent preferences; they construct preferences when choices are elicited from them. Since the framing of choices can affect the choices people make, there is no single preference ranking that can be clearly identified.¹⁶

This concept has been shown to hold true with respect to retirement plan portfolio selection. In one experiment, a group of subjects was shown three portfolios of increasing risk (low risk, moderate risk and high risk), 29% preferred the high-risk portfolio over the moderate portfolio (Display 4), but when subjects chose between only the moderate and risky portfolios, 39% preferred the riskier portfolio. In selecting retirement plan portfolios, participant choices depend on the other irrelevant options that are available.¹⁷

Display 4 Choice Is Driven by Available Options				
Portfolios Offered	Percentage Preferring "Risky" Portfolio over "Moderate" Portfolio			
Two Choices Moderate or Risky Portfolio	139%			
Three Choices Low, Moderate or Risky Portfolio	29			
Source: Benartzi and Thaler, 2002				

Heuristics are simple rules-of-thumb which explain how people make decisions, typically when facing complex problems or incomplete information.

¹⁵ Huberman and Jiang have a forthcoming paper that explores the "1/n" heuristic in situations where "n" is very large.

¹⁶ Benartzi, Shlomo, and Richard H. Thaler, 2002, "How Much Is Investor Autonomy Worth?" Journal of Finance 57.4, 1593–1616.

¹⁷ Benartzi, Shlomo, and Richard H. Thaler, 2002.

One effect of these decision-making shortcomings is that plan sponsors have a powerful ability to impact the portfolio allocations of new participants simply by the proportion of fixed-income and equity fund options offered. 18 The impact that plan choices have on participant asset allocation is illustrated by an experiment in which UCLA employees were offered two different groups of five investment options. One group of employees was offered four fixed-income funds and one equity fund (Display 5). The other group was offered four equity funds and one fixed-income fund. This experiment was designed to replicate the actual menu of funds offered to UCLA employees and TWA pilots, with TWA having the equitydominated menu of funds. The results indicate that the menu of funds has a strong effect on portfolio choices. Those offered one equity fund allocated 43% to equities,

whereas those offered multiple equity funds ended up with 68% in equities. The results are in line with the actual equity exposure of the two plans, which are 34% for UCLA and 75% for TWA.

Increased Choice

Presented with increased choice, decision makers are more likely to select the lower-risk alternatives available to them. ¹⁹ Academic researchers have shown that for every 10 funds added to a plan, there is a 5.4% increase in the allocation to money market and bond funds. In addition, there is a 1.7% increase in the probability that participants will allocate more than 50% of their contributions to money market funds, and a 3.1% to 4.6% increased probability that they will allocate no contributions to equity funds at all.

Display 5 **Mean Allocation to Equities**

	Fund Description and Mean Allocation				Mean Allocation to	
Version	Fund A	Fund B	Fund C	Fund D	Fund E	Equities
Multiple Fixed-Income	Money markets	Savings	Insurance contracts	Bonds	Diversified equity	
Funds	14%	14%	11%	18%	43%	43%
Multiple Equity Funds	Diversified fixed income	Conservative equity	Equity index	Growth stock	International equity	
, , ,	32	15	16	26	11	68

Two groups of individuals were asked to allocate contributions among five funds (A, B, C, D and E), based on a verbal description of the composition of the funds. The first group was asked to allocate contributions among four fixed-income funds and an equity fund. The specific funds are (A) money markets, (B) savings accounts, (C) guaranteed investment contracts, (D) bonds and (E) diversified equity. The second group was asked to allocate contributions among one fixed-income fund and four equity funds. The specific funds presented to the second group consist of (A) diversified fixed income, (B) conservative equity income, (C) equity index, (D) growth stock and (E) international equity. The table provides the allocation to equities by group. Sample size for the Multiple Fixed-Income Funds version was 179 funds, and 169 funds for the Multiple Equity Funds version.

Source: Benartzi and Thaler, 2003

Presented with increased choice, decision makers are more likely to select the lower-risk alternatives available to them.

¹⁸ Benartzi, Shlomo, and Richard H. Thaler, 2001, "Naive Diversification Strategies in Retirement Saving Plans," *American Economic Review* 91.1, 79–98. ¹⁹ Iyengar, Sheena, and Wei Jiang, 2003.

Excessive Extrapolation

In layman's terms, excessive extrapolation is known as chasing hot performers, and it's all too familiar. Participants are always asking for the latest hot fund—whether it be a tech fund, gold fund or real estate fund. They request value or growth funds based on recent quarterly performance, and we know that there is a high likelihood that today's winners will become tomorrow's mediocrity.

Company Stock

One of the extreme examples of poor diversification is the case of employees investing in their own employer's stock. It has been estimated that five million Americans have over 60% of their retirement savings concentrated in company stock.²⁰ Not only are employees risking their retirement savings, but they might also lose their jobs at the same time if the company goes out of business. Enron employees, among others, have sadly learned that lesson the hard way. And, despite well-publicized cases like Enron and WorldCom, many still feel it cannot happen at their company. The Boston Research Group reports that despite a high level of awareness of the Enron situation, half of plan participants feel that their company stock carries the same or less risk than a money market fund.²¹

The relative value to the employee of a dollar of company stock, as opposed to a diversified stock portfolio, is inversely related to the proportion of wealth held in company stock, the number of years the stock will be held, and the volatility of the stock. For example, with an assumed investment horizon of 10 years and 25% of the assets in company stock, a dollar in company stock is only worth 58 cents. Lengthening the investment horizon to 15 years, and increasing the allocation to company stock to 50%, would further reduce the value to 33 cents on the dollar. These results probably underestimate the costs of being underdiversified, as they ignore the correlation between human capital and the performance of company stock.²²

There are several reasons why employees invest in company stock. One reason is that they do not understand the risk and return profile of company stock. In a recent survey, we found that only 33% of the respondents realize that company stock is riskier than a "diversified fund with many different stocks." ²³ Earlier work indicates that a mere 6% of those without a college education recognize that company stock is riskier than a stock fund. ²⁴ Despite financial education initiatives by fund providers and plan sponsors, a recent major survey showed that participants continue to rate company stock as safer than a domestic stock fund. ²⁵

²⁰ Mitchell, S. Olivia, and Stephen P. Utkus, 2004, "The Role of Company Stock in Defined Contribution Plans," in Olivia Mitchell and Kent Smetters, eds., *The Pension Challenge: Risk Transfers and Retirement Income Security*, Oxford: Oxford University Press, 33–70.

²¹ Boston Research Group, April 25, 2002, "Enron Has Little Effect on 401(k) Participants' View of Company Stock," Boston

²² Meulbroek, Lisa, 2002, "Company Stock in Pension Plans: How Costly Is It?" working paper 02-058, Harvard Business School.

²³ Benartzi, Shlomo, Richard H. Thaler, Stephen P. Utkus, and Cass R. Sunstein, 2004, "Company Stock, Market Rationality, and Legal Reform," working paper, University of California—Los Angeles.

²⁴ Benartzi, Shlomo, 2001, "Excessive Extrapolation and the Allocation of 401(k) Accounts to Company Stock," Journal of Finance 56.5, 1747–1764.

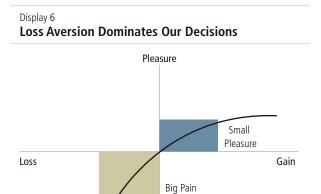
²⁵ John Hancock Financial Surveys conducted from 1992 to 2004.

Status Quo Bias

Participants may not have well-defined preferences, but once they make a selection, it tends to stick. This variation of inertia has been termed the "status quo bias." There is a behavioral tendency to avoid making any changes to a current situation. Researchers reporting on TIAA-CREF participants found that the median number of changes to portfolio asset allocation over participants' lifetimes was zero. ²⁶ More than half the participants had the same initial contribution allocation when they retired. (This is not the same as their overall portfolio allocation, which would include fluctuations in value.) Another study showed similar results—nearly half of participants made no changes to their retirement plan accounts over a 10-year period. ²⁷ Many participants are not rebalancing their portfolios as circumstances may dictate.

Myopic Loss Aversion

Loss aversion refers to people's tendencies to be more sensitive to decreases in their wealth than to increases (Display 6). Empirical estimates find that losses are weighted about twice as heavily as gains.^{28,29} In other words, the pain of losing \$100 is roughly twice the pleasure of gaining \$100.



Loss aversion behavior is also significantly influenced by the information (or frequency of information) that investors observe. The results of one research experiment showed that allocations to equities were lower for those individuals viewing monthly returns (over 40% allocated to stocks) than it was for those who viewed annual returns (nearly 70%). This supports the notion of myopic loss aversion, a combination of general loss aversion and a tendency to evaluate outcomes frequently. To the extent that participants take "advantage" of their ability to review the values of their investments daily (or even more frequently), they are very likely to take less risk (and earn less return) over time.³⁰

²⁶ Samuelson, William, and Richard J. Zeckhauser, 1988, "Status Quo Bias in Decision Making," Journal of Risk and Uncertainty 1, 7–59.

²⁷ Ameriks, John, and Stephen P. Zeldes, 2000, "How Do Household Portfolio Shares Vary with Age?" working paper, Columbia University.

²⁸ Tversky, Amos, and Daniel Kahneman, 1992, "Advances in Prospect Theory: Cumulative Representation of Uncertainty," *Journal of Risk and Uncertainty* 297–323.

²⁹ Kahneman, Daniel, Jack Knetsch, and Richard H. Thaler, 1990, "Experimental Tests of the Endowment Effect and the Coase Theorem," *Journal of Political Economy*, XCVIII, 1325–1348.

³⁰ Thaler, Richard H., Amos Tversky, Daniel Kahneman, and Alan Schwartz, May 1997, "The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test," *The Quarterly Journal of Economics*.

Risk Tolerance Assumptions Can Be Wrong

Investment professionals are just as likely to use mental shortcuts that lead to the same mistakes time and again. One of these mistakes is the assumption that each individual has a clearly defined investment risk tolerance, and more specifically, that all retirees have a low tolerance for investment risk. It may be true that some retirees have a low level of risk tolerance, but it's not true for all. If a financial advisor assumes a retiree has a low tolerance for risk, it will lead to taking less risk (and earning less return) over time, which may not be in the best interest of the retiree.

Where Does It All Lead?

Significant progress has been made in identifying and predicting participant retirement plan behavior. The decision-making shortcomings noted in this paper are but a few of those that behaviorists have discovered. And we have evidence that education alone is not an effective response. As a result, the majority of American workers have less than \$50,000 in total savings (excluding primary residences), according to the Employee Benefit Research Institute's 2004 Retirement Confidence Survey. The survey also finds that 78% of workers plan to retire by age 65. The reality is that without improved retirement saving behaviors, employers will find themselves with an aging and inflexible workforce, or with a reputation damaged by required involuntary terminations of older, long-tenured loyal employees who are not prepared to retire. And many are predicting a wave of litigation as employees seek damage rewards, claiming that employers failed to help them adequately fund their retirement.

Three Simple Solutions: Automatic Enrollment, Savings Rate Increases and Target-Date Retirement Funds

Not only have behaviorists identified employees' inherent and predictable decision-making problems, they have also developed (and tested) some solutions to overcome these problems. Many of these solutions recognize the impact of plan design on retirement outcomes, with careful thought about what happens when employees behave as they have been observed.

Most solutions suggest that retirement plans should be structured in a way that minimizes required decisions and choices by employees. In one approach that behaviorists have suggested, employees would be automatically enrolled in company-sponsored retirement plans with automatic annual deferral-rate increases and with automatic investment in professionally managed accounts such as target-date retirement funds. In these plans, employees would "opt out" of the automatic provisions to make other choices. The evidence supporting the efficacy of each aspect of this plan design is convincing.

1. Automatic Enrollment

With automatic enrollment, employees do not have to overcome inertia to become retirement plan participants. They have to make an active decision to avoid it.

Automatic enrollment plans have proven to be remarkably successful in increasing plan participation rates. In one plan studied by academic researchers, participation rates for newly eligible employees increased from 49% to 86%. Other automatic enrollment plans have achieved participation rates of over 90%. 32

³¹ Madrian, Brigitte C., and Dennis F. Shea, 2001b, "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *Quarterly Journal of Economics* 116, 1149–1525.

³² Choi, James J., David Laibson, Brigitte Madrian, and Andrew Metrick, 2004, "For Better or for Worse: Default Effects and 401(k) Savings Behavior," in *Perspectives in the Economics of Aging*, David Wise, ed., 81–121, University of Chicago Press.

It is important to note that researchers have also studied the possibility that automatic enrollment may "trick" employees into joining the plan, and they've found that this is not the case. In particular, they have researched an environment where employees had to state their decision to join or not to join a plan, creating the need for an active decision and leaving no room for default choices. If automatic enrollment tricks people into joining the plan, then such an active decision-making environment would not result in a dramatic increase in participation rates. The results of this research showed that participation rates are about 25% higher with required active decision-making relative to the standard opt-in environment—similar to auto-enrollment.³³ Therefore, it seems that automatic enrollment plans do not trick people into joining plans, but instead enroll individuals who would have elected to join the plan anyway if they'd found the time and energy to make an active choice.

2. Automatic Savings Rate Increases

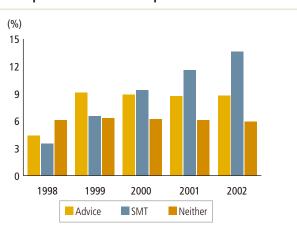
One of the criticisms of automatic enrollment plans has been that they cause lower savings rates for some inert employees who maintain their savings rate at the (too low) automatic default rate. In one automatic enrollment plan studied, researchers found that many new enrollees who remained at the default rate would have elected a higher savings rate if left to their own devices.³⁴

This problem is easily overcome by automatically enrolling participants in a plan that automatically increases their deferral rates periodically in the future. Called the SMarT program (for Save More Tomorrow™), ³⁵ this behavioral solution has also been extraordinarily successful. In its first implementation, employees had to actively choose to join the program, whereby deferral rates would increase by 3% with each pay raise. Seventy-eight percent of participants who were offered SMarT joined the program. After four cycles of increases, the average deferral rates of participants increased from 3.5% to 13.6% (Display 7), and 80% have remained in the program through all four cycles. ³⁶ Where SMarT has been implemented on an automatic basis, acceptance rates have exceeded 90%.

Display 7

Average Savings Rates for SMarT Participants as

Compared to Other Participants



Source: Benartzi and Thaler, 2004

³³ Choi, James J., David Laibson, Brigitte Madrian, and Andrew Metrick, 2005, "Optimal Defaults and Active Decisions," NBER working paper 11074.

³⁴ Madrian, Brigitte C., and Dennis F. Shea, 2001b.

³⁵ "Save More Tomorrow" is a registered trademark of Benartzi and Thaler, but the program is freely available at no cost as long as data are made available for research purposes. Please e-mail Professor Benartzi at shlomo.benartzi@anderson.ucla.edu for additional information.

³⁶ Benartzi, Shlomo, and Richard H. Thaler, 2004.

3. Automatic Professionally Managed Investments

Automatic portfolio selection and ongoing professional management is another behaviorally based solution. It helps avoid human tendencies like chasing hot performers, investing too conservatively, diversifying naively, never rebalancing and holding on to losers too long. Professional selection and ongoing management can be delivered in a number of different ways, but constraints compel a discussion of just two—managed accounts and target-date retirement funds.

Managed account solutions have been in place for a number of years now, with wide variation in adoption rates. Ideal managed-account solutions require minimal action by the user throughout the entire process, from initial data input to actual implementation. Most implementations have been on an opt-in basis only, where employees must make an active decision to receive the managed account service. The ongoing cost of these services probably hinders some plan sponsors from offering them as an automatic solution. Accordingly, usage tends to be low. Nevertheless, if implemented as the "default" choice, managed account services can help improve participants' retirement outcomes.

Target-date retirement funds can be simple, cost-effective investment solutions for most plans. As professionally managed solutions, they overcome the behavioral problems discussed above. Again, used as automatic default options with participant contributions fully invested in the most appropriate fund, they can be very effective. These funds are relatively easy for participants to understand and select. If plan sponsors do not want to automatically default participants into a fund based on expected retirement dates, the only decision participants must make is when they want to retire.

Conclusion: Use Behavioral Insights to Improve Employee Retirement Security

From inertia to excessive extrapolation of past investment performance, there are powerful forces impeding our ability as human beings to make rational decisions, thereby endangering our retirement security. But behaviorists have offered us powerful, proven solutions—automatic enrollment, automatic deferral increases and automatic investment in target-date retirement funds.

Collectively, these plan design features can go a long way in solving our nation's retirement crisis—but only if they are implemented on a widespread basis by plan sponsors. Corporate plan sponsors who don't give these services a serious look are passing up the opportunities to dramatically increase participation and savings rates and to ensure that participants' portfolios are well diversified. They're also passing up the opportunity to help solve our retirement security crisis.

Target-date retirement funds can be a simple, cost-effective investment solution for most plans. As professionally managed solutions, they overcome behavioral problems.

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