THE BEHAVIOR OF DEFINED CONTRIBUTION PLAN PARTICIPANTS

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Defined contribution plans empower employees to effectively save money toward their retirement in a tax-favored fashion. The retirement benefits that employees actually receive depend on four decisions that they have to make: whether to participate in the plan, what percentage of salary to contribute to it, how to invest these plan contributions, and, if the employee leaves the job prior to retirement, whether to take a current cash distribution of their 401(k) plan account balance or allow the account balance to continue to accumulate. In her contribution to the Symposium, Professor Susan J. Stabile explores the behavioral tendencies that affect participant behavior in defined contribution plans and how the current legal regime influences that behavior. Her research finds that the current statutory regime has not produced economically rational decisions among employees. Professor Stabile provides a number of avenues that can be explored for promoting employee decisions that would maximize retirement security and can serve as a springboard for future research.

INTRODUCTION

The defined contribution pension plan area is a fruitful one to examine from a behavioral perspective. First, defined contribution plans involve a set of decisions, each of which must be made from among a clearly defined range of options. The decisions made by participants illustrate the limits of rational choice theory, the implicit assumption that underlies law and economics. Second, the law already has attempted in various ways to address the biases and proclivities of defined contribution plan decisionmakers in order to encourage rational choices from among the prespecified options. More importantly, a significant amount of data regarding participants’ decisions already exists. Thus, we have the ability to examine the successes and failures of various means that have been used to encourage certain

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1 See infra note 9 (explaining how defined contribution plans differ from defined benefit plans).
decisions, which in turn gives us the ability to decide how to proceed in the future.\textsuperscript{2}

The defined contribution area is also interesting because it involves behavior at two levels. The decisions of plan participants are framed by choices employers make about the structure and operation of their plans.\textsuperscript{3} The plan design features are, in turn, impacted by legal requirements, some of which are premised on a presumption of rationality, and others of which reflect an understanding of the biases that influence decisionmaking and that attempt to channel employee decisions in certain ways. Thus, certain aspects of the law attempt to influence employee choices directly, and others aim to encourage certain behavior on the part of employers in order to indirectly affect the choices made by employees. This means that the law needs to be able to predict how changes in the legal regime will affect the behavior of employers as well as employees.

Part I of this Article sets the stage by setting forth the premises for the discussion of participant options. Part II examines the participant choices involved in defined contribution plans and the varying levels of success of different attempts by the law to encourage certain decisions. Part III suggests some further steps that might be considered to further the goal of retirement security and notes areas where further research is needed.

I

Setting the Stage

My examination of decisionmaking by defined contribution plan participants accepts certain things as givens. First, at the normative level, it accepts Congress's determinations that retirement security is

\textsuperscript{2} In addition to the value of the discussion for determining future legal intervention in 401(k) plans, discussion of participant decisions regarding investment of their 401(k) account balances has implications for discussions about Social Security reform, which have included debates over whether personal retirement accounts should give Social Security participants control over their investments. See, e.g., Anne E. Kornbult, Social Security Panel Presses On, Vows to Fashion Solution Despite Shrinking Surplus, Boston Globe, Aug. 23, 2001, at A2 (describing Democratic opposition to Republican proposal for partial privatization of Social Security); Michael W. Wyand, Commission to Discuss Private Accounts, Women's Issues at San Diego Hearing, 28 Pens. & Ben. Rep. (BNA) 2212 (Sept. 4, 2001) (describing Social Security reform proposals). The economic slowdown and the events of September 11 appear to have temporarily stalled serious consideration of such reform in the short run, but the issues are likely to resurface. See John D. McKinnon, Delay Is Urged on Overhauling Social Security, Wall St. J., Dec. 11, 2001, at A20.

\textsuperscript{3} Interestingly, unlike in many of the areas considered by other participants in the Symposium, employer choices are less likely to be affected by opportunistic behavior. That is, here we are dealing largely with questions of how employees will spend or allocate their own dollars, and employer behavior involves setting up a plan in a way that facilitates the best employee choices.
an important goal and that the central component for attaining that
goal is a voluntary system of employer-sponsored retirement plans.

The passage of the Employee Retirement Income Security Act of
1974 (ERISA)\(^4\) marked the federal government’s recognition that
promoting retirement security through employer-sponsored pension
plans was an important national goal. As the statute’s structure
reveals, Congress decided that it would not seek to achieve that goal
by requiring employers to adopt pension plans. Instead, it decided to
continue to offer favorable tax treatment to tax-qualified pension
plans as a way to encourage employers to adopt such plans.\(^5\) To pro-
mote the goal of retirement security, ERISA established minimum de-
design features that pension plans must meet and standards of behavior
that plan fiduciaries must meet.\(^6\) Congress also decided that regula-
tion in the area was to be strictly the province of the federal govern-
ment, preempting state regulation of pension plans.\(^7\) Thus, a ground
rule, so to speak, for the discussion, is acceptance of a voluntary pri-
ivate pension system. The impact of that ground rule is that every time
Congress considers further regulation of pension plans, it must con-
sider the behavioral effect of the regulation on an employer’s decision
whether to adopt a plan or maintain an already existing one. Con-
gress is cognizant of the fact that, at some level of regulation, compa-
nies may respond by not offering plans at all, on the grounds that the
costs of doing so outweigh the benefits.

Among other things, the extensive regulation of pension plans al-
ready contained in ERISA and the Internal Revenue Code (the Code)
means that the pension area is not one that raises the question
whether or not there is a role for the law.\(^8\) The law is already so inti-


\(^5\) The incentive approach has been less than completely effective. Almost 50% of all employees have no pension coverage at all. See, e.g., Andrew A. Samwick & Jonathan Skinner, Abandoning the Nest Egg? 401(k) Plans and Inadequate Pension Saving 5 (Nat’l Bureau of Econ. Research, Working Paper No. 5568, 1996) (50% of American workers have no pension coverage); Craig Copeland, Pension Coverage: Examining CPS Data, EBRI Notes, Sept. 2000, at 4 (46.7% of wage and salary workers were covered by pension plan in 1998). This is true notwithstanding the fact that there are reasons apart from the tax incentive why a rational employer would provide its employees with pension coverage, not the least of which is ensuring that workers approaching retirement age have sufficient retirement income, so they retire and make room for younger employees.

\(^6\) §§ 1053-1086 (addressing minimum standards for vesting, benefit accrual, and funding); § 1104(a) (establishing standard of care for fiduciaries).

\(^7\) § 1144 (preempting state law).

\(^8\) The original decision to have the law involved in this area may be easy to justify based on the collective preference of the majority for retirement security. See Cass R. Sunstein, Legal Interference with Private Preferences, 53 U. Chi. L. Rev. 1129, 1138-41 (1986). Leaving the area to private contractual dealings between the employer and the employee is likely to frustrate that collective preference, either because employees lack
mately involved in regulating pensions that no one seriously suggests it ought to get out of the business of doing so. The only question is what form regulation should take to best meet the goal of adequate retirement security.

The second factor this examination accepts as a given is that defined contribution plans, specifically 401(k) plans, are the primary vehicle for providing retirement income today. When ERISA was enacted in 1974, the dominant means of providing pension benefits was the defined benefit pension plan, which promised participants a stated annual pension for their lifetimes. Today, almost forty million employees participate in 401(k) plans. Defined contribution plans account for over 80% of pension plans and over 60% of plan participants. Although there are still a large number of employers who maintain only defined benefit pension plans or who maintain both a defined benefit and a defined contribution plan, a defined contribution plan is the sole source of an employer-sponsored pension plan for many employees and the primary source for many others. Thus,

sufficient information and ability to influence and monitor employer behavior, or because employees' attention to present over future needs will prevent them from being sufficiently diligent in their bargaining over pension benefits and monitoring of employer behavior with respect to their plans. Regarding the justification of legal interference based on majority collective preferences, see id.

9 In a defined benefit plan, participants receive an annual pension, the amount of which is based on a predetermined formula. See 29 U.S.C. § 1002(35) (1994); see also William F. Bassett, Michael J. Fleming & Anthony P. Rodrigues, How Workers Use 401(k) Plans: The Participation, Contribution, and Withdrawal Decisions, 51 Nat'l Tax J. 263, 264-65 (1998). For example, an employer might promise participants that they will receive an annual pension benefit commencing at age sixty-five that is equal to 3% times their final average compensation multiplied by their years of service with the employer. During the course of a participant's career with the employer, the employer makes contributions to the plan in an amount necessary to fund the benefits that ultimately will be paid. In contrast, in a defined contribution plan, periodic contributions are made to the plan and allocated to individual accounts maintained in the name of each employee who participates in the plan. See § 1002(34); see also Basset et al., supra, at 265. The ultimate pension benefit the participant is entitled to receive is simply the value of the participant's individual account at retirement.


for many employees, their 401(k) plan is their only meaningful source of employer-provided retirement income, and not merely a supplemental plan providing a tax-deferred investment for affluent employees.14

The dramatic shift from defined benefit to defined contribution plans is one that can be explained in traditional law and economics terms. The story line holds that the shift is a response to the collapse of the career model of employment and the increasing mobility of the labor market. Defined benefit plans, which typically calculate benefits based on a participant's final pay, maximize pension benefits for those employees who stay with a single employer throughout their entire careers. Such plans were thus a sensible means of providing pension benefits during a time when workers were less mobile. The shift to defined contribution plans, so goes the story, is a response to the fact that employees are increasingly mobile, requiring a form of pension plan that does not penalize employees who do not stay with a single employer for their entire careers.

I think there are good reasons to question the story line, notwithstanding its internal rationality. My skepticism is based both on doubts about whether the career model of employment was ever as pervasive in this country as the story line suggests and on the fact that large segments of the workforce today are no more mobile now than in the past.15 More interestingly, the most mobile employees tend to

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13 Many of the employers who continue to maintain a defined benefit plan after adoption of a defined contribution plan freeze the benefits under the defined benefit plan, making the defined contribution plan the primary retirement vehicle. See Advisory Council on Employee Welfare and Pension Benefits, U.S. Dep't of Labor, Report of the Working Group on Employer Assets in ERISA Employer-Sponsored Plans 10 (1997) (noting that 25% of sponsors who maintain both defined benefit plan and defined contribution plan have frozen defined benefit plan benefits).

14 See Leslie E. Papke, Are 401(k) Plans Replacing Other Employer-Provided Pensions? Evidence from Panel Data 23-24 (Nat'l Bureau of Econ. Research, Working Paper No. 5736, 1996) (concluding that more recent data suggests that 401(k) plans are replacing defined benefit plans rather than serving as means for additional savings, and citing early contrary findings).

15 See Kendra Hogue, Job-Hoppers & Loyal Laborers, Bus. J. Portland, Feb. 21, 1997, http://portland.bcentral.com/portland/stories/1997/02/24/focus1.html (citing Employee Benefit Research Institute (EBRI) study demonstrating that, although male workers are increasingly mobile, women have been staying longer with their employers in past thirteen years); David Rajnes, A 21st Century Update on Employee Tenure, EBRI Notes, Mar. 2001, at 3 (finding longer tenure for public employees).
be those without any pension coverage at all, suggesting that the form of pension benefit provided may have little impact on many of those who engage in frequent job shifts.

However, there is another (in my view more likely) explanation for the shift from defined benefit to defined contribution plans that is also consistent with a traditional law and economics viewpoint. Employers have grown to favor defined contribution plans because they are less costly and face less complex regulatory burdens than defined benefit plans and because they are perceived as making employees happier. Employers also view defined contribution plans positively

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16 James M. Poterba, Steven F. Venti & David A. Wise, Pre-Retirement Cashouts and Foregone Retirement Saving: Implications for 401(k) Asset Accumulation 21 (Nat'l Bureau of Econ. Research, Working Paper No. 7314, 1999) (reporting survey results finding that men between ages thirty-one and fifty without pension plans had 19.5% annual separation rate, compared to 6.1% separation rate for men in same age range without pension plans); Alan L. Gustman & Thomas L. Steimmeier, Pension Portability and Labor Mobility: Evidence from the Survey of Income and Program Participation, 50 J. Pub. Econ. 299, 303 (1993) (explaining that workers covered by pension plans are one-third as mobile as those without pension plan coverage, without regard to type of plan).

17 Jack VanDerhei & Craig Copeland, The Changing Face of Private Retirement Plans 5 (EBRI Issue Brief No. 232, Apr. 2001) (citing surveys of plans' sponsors indicating that primary motivation for switching to defined contribution plans is belief that younger, more mobile workers do not appreciate traditional defined benefit plans); see Bassett et al., supra note 9, at 266 (citing study findings that reason for rapid growth in defined contribution plans is fact that operation of defined plans is more costly, especially for small plans); Jefferson, supra note 10, at 614-15 (citing burdensome regulation as "single most important reason" for shift to defined contribution plans).

18 One might theorize that an endowment effect would lead to employees being unhappy about the switch from defined contribution to defined benefit plans because in defined contribution plans employers contribute less to an employee's pension than in a defined benefit plan. It would not have been surprising if employees felt that an entitlement to an employer payment of a promised annual pension benefit was being taken from them when the employer shifted to a defined contribution plan. However, for the most part, that unhappiness has not been manifest, perhaps because defined contribution plans offer employees the opportunity for unlimited upside potential that defined benefit plans do not offer. It very well may be that had the movement from defined benefit plans to defined contribution plans occurred during a down market rather than a robust one, employees may have reacted differently, perceiving the move to defined contribution plans as taking an entitlement away from them. Front-page headlines like that of a March 2001 New York Times article—"With Bull Market Under Siege, Some Worry About Its Legacy: Businesses in Debt and Retirement Funds at Risk"—may change employees' perceptions of what the shift means to them. Floyd Norris, With Bull Market Under Siege, Some Worry About Its Legacy: Businesses in Debt and Retirement Funds at Risk, N.Y. Times, Mar. 18, 2001, at I. This notion is borne out by polls regarding public views about privatizing a portion of Social Security and letting individuals invest part of their contributions. As the stock market has fallen consistently since early 2001, support for the program also has fallen, with far fewer Americans enamored of the idea than during the market boom. See Americans Not as Keen to Invest Social Security in Market: AP Poll, Investor's Bus. J., Apr. 2, 2001, at A2 (reporting that poll taken in last week of March 2001 found that 49% favor individual investing of Social Security contributions and 44% oppose; compared to polls taken in 2000, in which "63% said they favor investing at least part of their Social
because they serve as a means of attracting certain types of employees, i.e., "better, more conscientious workers. The desire to save for a rainy day correlates highly with other attributes that characterize a good worker bee."

From the employee side, defined contribution plans promote a notion of consumer sovereignty. They give employees control over the growth of their plan assets and the ability to benefit from that growth, something that looked especially attractive during the period of a booming stock market, the gains of which created in many an overinflated sense of their investment ability. In any event, whether one accepts the demise of the career model story line or the alternative explanations I have suggested, defined contribution plans are here to stay.

My purpose is to challenge neither the goal of promoting retirement security (and doing so through voluntary private pension plans) nor the type of plan through which employers have chosen to provide their workers to achieve that goal. My concern is prescriptive: How can law be used to better achieve the end of promoting retirement security? The answer to this question involves the positive task of exploring how the law has affected participant behavior in the past. For the purpose of the prescriptive analysis in the remainder of this Article, I accept both the normative judgment that retirement security is a goal that should be furthered and that the vehicle through which retirement benefits will be provided to employees is the defined contribution plan.

II

PARTICIPANT CHOICES AND THE LAW'S ATTEMPT TO INFLUENCE THEM

A. Participant Choices That Must Be Made in 401(k) Plans

The typical defined contribution plan is a 401(k) plan, which varies in significant respects from the traditional defined benefit plan...
plan. For purposes of this discussion, the most significant difference is that defined contribution plans involve much more individual participant decisionmaking than do defined benefit plans.

In the case of a defined benefit plan, the employer's decision to adopt the plan effectively decides for the employee that a certain portion of the employee's compensation will be paid in the form of deferred (retirement) compensation. An employer's adoption of a defined contribution plan shifts to the employee the decision whether to have a portion of compensation paid in the form of deferred compensation, i.e., contributed to the plan, rather than paid in the form of current wages. To phrase the difference in terms of an employee's "mental accounts,"21 in a defined contribution plan the employee has to decide whether to put some amount of compensation into a mental account labeled retirement savings or whether to allocate all of her compensation among other accounts. In contrast, a defined benefit plan makes the decision for the employee that a certain amount of an employee's compensation will be put in the mental account labeled retirement savings. Thus, the first choice presented to employees in a defined contribution plan is whether to participate in the plan.

The actual retirement benefit received by a defined contribution plan participant is dependent on two further decisions. In contrast to a defined benefit plan, which promises employees an annual pension in an amount determined by a formula that is typically based on compensation and years of service, a defined contribution plan entitles a participant to a pension equal to the value of the participant's individual plan account balance at retirement. The account balance will be based on contributions made to the plan and on investment returns on those contributions. Thus, the ultimate value of the employee's retirement benefit will be based on two choices: The employee must decide what percentage of her salary to contribute to the plan and how to invest her plan contributions and earnings.

There is a fourth decision most defined contribution plan participants will make at least once during their working lives. An employee who leaves employment prior to retirement must decide whether to take a current cash distribution of her 401(k) plan account balance, or whether to allow the account balance to continue to accumulate by leaving the money in the existing employer's plan or rolling over the contribution to a new plan or an IRA. I include this fourth decision as a defined contribution decision for purposes of the current analysis for

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21 Cass Sunstein refutes the economics assumption that money is fungible by observing that people compartmentalize money, organizing their decisions in terms of separate mental accounts. See Cass R. Sunstein, Introduction to Behavioral Law and Economics 6-7 (Cass R. Sunstein ed., 2000).
several reasons. First, the claim that 401(k) plans are better suited to a mobile workforce depends on mobile 401(k) plan participants rolling over their account balances each time they change jobs. Second, defined benefit plans do not always provide for lump sum distributions in lieu of annuity payments, meaning that the decision whether to take a current distribution at a job change more frequently arises in the defined contribution plan context. These factors, as well as the increasing prevalence of defined contribution plans, make the rollover decision an important one to consider as part of the analysis of participant behavior.

Each of these choices is a bounded one, involving a choice among a prespecified and clearly defined set of alternatives. The simplest decisions in terms of number of choices are the first and the fourth. The decision to participate is a binary one—participate or do not participate. A departing employee must decide on one of three choices: take a current distribution, roll over the account balance to a new plan or an IRA, or leave the money in the old plan. The second decision, how much to participate, has a limited range of options, as defined by the plan. Plans typically will allow participants to choose to contribute a percentage of salary between 1% and 13%, subject to limitations on maximum contributions imposed by the Code. The decision how to invest funds is framed by the investment choices made available by the plan itself. The number of investment choices varies by plan, with the average number of choices having increased from four to eleven over the last decade.

The following subsections look at participant decisions in each of these areas, as well as the legal interventions that have framed and attempted to influence participant decisionmaking. I leave until the next Part any consideration of further steps that might be taken to promote the goal of retirement security because particular suggestions to improve one set of decisions (e.g., rollover decisions) may have an affect on another (e.g., whether to participate), meaning that prescriptions for change are best considered holistically.

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22 As a shorthand, I sometimes use rollover to refer generally to keeping the funds in a tax-deferred plan or IRA, rather than consistently referring to rolling over or leaving the funds in the existing plan.


24 See infra text accompanying notes 76-77.
I. Participation and Contribution Amount Decisions

There is only one rational answer to the question whether or not to participate in a defined contribution plan. All retirees need adequate retirement income. Social Security, always intended to provide only supplemental retirement income, does not pay benefits in an amount sufficient to provide an adequate retirement standard of living.\(^{25}\) Therefore, the opportunity to save for retirement in a tax-favored fashion is not one that can rationally be passed up. Yet, there is nowhere near 100% employee participation in defined contribution plans. In fact, participation rates in 401(k) plans vary between 50% and 90%.\(^{26}\) Those who do participate generally do not contribute the maximum amount allowed by the plan, contributing, on average, about 7% of compensation to the plan.\(^ {27}\) Why? The following discussion focuses on the participation decision.\(^ {28}\)

Several employee biases may lead to a decision not to participate in a defined contribution plan. First is inertia, a bias in favor of inaction, reflecting a preference for the status quo. One suggestion is that the complexity of the task leads employees to procrastinate. Another is that uncertainties regarding the consequences of participant decisions that must be made incident to the decision to participate (how much to contribute, how to invest contributions) results in inaction.\(^ {29}\) In 1998 the law addressed this bias: An Internal Revenue Service Revenue Ruling expressed the position of the Service that employers may automatically enroll employees in 401(k) plans unless the employee opts out.\(^ {30}\)

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\(^{25}\) It is conceivable, although it does not seem likely, that some employees are overoptimistic about the extent to which government funds will support them in their retirement. Perhaps knowledge of the government "backup" results in a failure of some individuals to save, either through their 401(k) plan or otherwise.

\(^{26}\) See GAO Report on 401(k) Plans, supra note 11, at 3.

\(^{27}\) Id. at 3 (finding 7% contribution rate); Paul Yakoboski, Participant-Directed Retirement Plans Today and Critical Issues for Tomorrow, in When Workers Call the Shots: Can They Achieve Retirement Security? 9, 13 (Dallas L. Salisbury ed., 1993) (noting average contribution rate of 7.1%, up from 6.6% in 1988).

\(^{28}\) A certain amount of nonparticipation may have no explanation, rational or otherwise. Notwithstanding the model of rational actors, sometimes people act (or don't act) without thinking or without any apparent explanation for their acts. However, I ignore this explanation for purposes of the present discussion since there is little the law can be predicted to do in the case of this kind of behavior.


\(^{30}\) Rev. Rul. 98-30, 1998-1 C.B. 1273, 1274. The Service subsequently clarified its position in Internal Revenue Bulletin 2000-8, T.D. 8871, 2000 I.R.B. 641, 642 (retaining "changes . . . needed to clarify the rules relating to the plan provisions that may be desig-
Although automatic enrollment is far from being a common feature in 401(k) plans, a number of plans have been amended to allow for automatic enrollment,\(^\text{31}\) allowing the ability to test the inertia theory for employee nonparticipation. Brigitte Madrian, among others, has considered the effect on participation of using automatic enrollment with an opt out, rather than requiring employees to affirmatively elect to participate in a 401(k) plan.\(^\text{32}\) Madrian analyzed the behavior of employees of a large U.S. corporation before and after the change from requiring affirmative elections to automatic enrollment with an opt out and found that approximately 86% of employees hired after automatic enrollment participated in the plan, compared to a 72% participation rate prior to the plan change. Her findings are not atypical. A Hewitt study of two companies that made the same change to automatic enrollment found an increase in total participation of 12% in one company and 7% in the other.\(^\text{33}\) Similarly, a survey by Buck Consultants comparing participation rates of plans without automatic enrollment to those with automatic enrollment found that the latter had about a 7% higher participation rate than the former.\(^\text{34}\) Perhaps more significantly in terms of the goal of promoting retirement security, the effects of automatic enrollment appear to be larger for employees with the lowest levels of compensation.\(^\text{35}\) These findings suggest that inertia may, in fact, be a large part of the explanation for nonparticipation in plans that require an affirmative election to participate.

However, automatic enrollment may have unintended behavioral consequences that themselves are the product of inertia. Madrian's

\(^{31}\) A Buck Consultants 1999 survey reports 7% of 401(k) plan sponsors provide for automatic enrollment, although other companies are looking into doing so. See Brigitte C. Madrian & Dennis F. Shea, The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior 5 n.2 (Dec. 1, 2000), http://papers.ssrn.com/sol3/delivery.cfm/00cfm/00042403.pdf?abstractid=223635. Those plans that do provide for automatic enrollment typically provide for a 3% default contribution rate and for a conservative default investment. Id. at 5; see also Profit Sharing/401(k) Council of America, Automatic Enrollment 2001: A Study of Automatic Enrollment Practices in 401(k) Plans, http://www.psca.org/data/autoenroll2001.asp (last visited Jan. 31, 2002) (finding most common default contribution rate to be 3%, and finding 65% of plans to have stable value or money market fund as default investment election).

\(^{32}\) Madrian & Shea, supra note 31, at 3-6, 9-13.


\(^{35}\) Madrian & Shea, supra note 31, at 11-12.
study also found that 76% of the participants subject to automatic enrollment contributed only 3% of compensation (i.e., the default rate) to the 401(k) plan, in contrast to the company’s average contribution of 6.4%.36 Her findings suggest that many of these participants would have contributed more than 3% in the absence of automatic enrollment, but inertia keeps them “stuck” at the default contribution rate; 76% do not change the default contribution rate.37 This finding was replicated by the Hewitt study, which found that more than one-half of those automatically enrolled remained at the default contribution rate.38

Inertia has another significant effect in plans with automatic enrollment features. Both Madrian and Hewitt find that participants subject to automatic enrollment also have a tendency to retain the conservative default investment options established by the plan. In the company that Madrian studied, 80% of automatic enrollment participant contributions are allocated to the money market fund and 16% in stock funds, compared to 70% in stock funds and less than 10% in the money market fund for other plan participants.39 This is because the vast majority of participants subject to open enrollment do not change the default investment options. In the two companies studied by Hewitt, more than half of the participants subject to automatic enrollment fail to change the default investment options.40 Notably in terms of the goal of enhancing retirement security, those least likely to increase their contribution rate and make changes in the default investment options are lower-income employees. Madrian finds that over 70% of employees earning less than $20,000 suffer from the inertia effect, compared to less than a third of employees earning between $70,000 and $79,000.41 She suggests as one explanation for that inertia the complexity of decisionmaking and costs of gathering the necessary information to change investment options. It also may be that uncertainty about the outcome of changing investment choices leads to inertia, generated by fear of regret over a change that results in a loss.42 This may be fueled by the possibility, as Madrian suggests, that some participants may view the default investment allocation de-

36 Id. at 15.
37 Id.
38 Automatic Enrollment, supra note 33, at 26.
39 Madrian & Shea, supra note 31, at 19.
40 Automatic Enrollment, supra note 33, at 25.
41 Madrian & Shea, supra note 31, at 21.
42 See Korobkin, supra note 29, at 1622-23 (describing “outcome uncertainty” as existing “when future, unpredictable events will determine the value of a proposed change from the status quo,” and suggesting that outcome uncertainty may lead to inertia because of desire to avoid regret).
cisions as advice or a recommendation by their employer that the default choice is a good one, a notion supported by the fact that many employees who change the default contribution rate fail to change the default investment election.43

These findings suggest that attempts to counter employee inertia through automatic enrollment with an opt out have a positive effect on participation levels, but a negative effect on contribution levels and investment allocation decisions. Indeed, a more comprehensive study by Madrian, which finds that a significant number of participants stick with the contribution and investment elections even after three years, concludes that the effects of the higher participation rates but lower savings rates are “roughly offsetting.”44

In addition to inertia, the participation decision is affected by bounded willpower, manifested in a preference for satisfaction of immediate needs and desires over future needs. While employees are aware that they will need retirement income in the future, they are more concerned with satisfying immediate wants and needs. In some participants, the very self-recognition of the bias should lead to participation, on the thought that once the initial decision to participate is made, the participant never sees the funds in her paycheck and need not make a new savings decision each time she is paid. For others, the bias will lead to nonparticipation. That bias is aggravated by the fact that the tax incentive in place to encourage participation—the ability to save on a tax-deferred basis—is less meaningful for lower-income employees (those most likely to prefer satisfaction of current needs over future ones) than for higher-paid employees. As a result, 401(k) participation tends to be higher among higher-income employees than among lower-income employees.45

Several features of the law aim to counter this bias. First, the law encourages matching contributions, which are thought to sweeten the pot, so to speak, by making participation more advantageous to employees. The law encourages matching contributions indirectly through its nondiscrimination requirements, which prohibit plans from discriminating in favor of highly compensated employees.46

43 Madrian & Shea, supra note 31, at 22, 33.
44 James L. Choi et al., For Better or For Worse: Default Effects and 401(k) Savings Behavior 4-5 (May 4, 2001) (unpublished manuscript, on file with the New York University Law Review) (noting that if employees stick to default established in automatic enrollment plans, they may not accumulate as much retirement income as employees in companies without automatic enrollment).
nondiscrimination rules as applied to defined contribution plans limit
the deferrals of highly compensated employees in relation to the de-
ferrals of non-highly compensated employees. The desire of com-
panies to maximize the deferral possibilities of their highly compensated
employees encourages companies to offer matching contributions to
their 401(k) plan participants. The match aims at encouraging em-
ployees who otherwise would not participate in the plan to do so in
order to take advantage of the "free" money offered by the employer
match, and the match itself may be used by the employer to help meet
the nondiscrimination tests. A significant number of 401(k) plans in-
clude matching contributions.47 Thus, employees who might not be
sufficiently incentivized by the tax advantage of plan savings are given
the added sweetener of free money by the employer to counter their
preference for immediate consumption.

The law additionally attempts to counter participants' preference
for satisfying current needs by permitting plans to allow in-service
hardship withdrawals and to allow participants to borrow against their
plan account balances.48 The hope is that knowledge of the ability to
access funds in the event of a real need for funds will make partici-
pants more willing to make contributions to the plan. Although such
features are not universal, a significant number of employers tend to
make use of them in their plans. Over half of all 401(k) plans have
loan provisions.49 Roughly the same is true with regard to hardship
withdrawals.50 To the extent that part of what explains nonparticipa-
tion is fear that the employee will have a current need for the funds,
these provisions should have a positive effect.

In 1997, the General Accounting Office (GAO) analyzed the ef-
effect of loan provisions in 401(k) plans and found that loan provisions
in plans had two effects, encouraging both a higher rate of employee

47 See e.g., Arleen Jacobius, DC Participation: Plan Members Ignore Matches, Pen-
sions & Investments, Nov. 15, 1999, at 43 (citing KPMG 1999 survey findings that 98% of
Fortune 1000 companies surveyed provide matching contributions). Plan matching for-
ulas vary. A not uncommon match is fifty cents on the dollar up to a certain percentage
Group File.

48 This represents an exception from the general prohibition against in-service with-
drawals from 401(k) plans prior to age 59 1/2. See I.R.C. § 401(k)(2)(B)(i) (describing
circumstances under which distributions may be made); § 72(p) (describing circumstances
under which plan loans are not treated as distributions).

49 See GAO Report on 401(k) Plans, supra note 11, at 3; U.S. Dep't of Labor Bulletin
2517, supra note 23, at 133 tbl.181. Because larger plans are more likely to have loan
provisions than smaller ones, 82% of participants are in plans offering loan provisions. See
Holden & VanDerhei, supra note 10, at 5 (noting that 91% of plans with more than 5000
participants provide for participant loans).

participation and higher contribution amounts. The GAO study found that the effect of a loan provision is to increase participation rates by about 6% and to increase annual employee contribution amounts by 35%. It is not clear from the GAO study whether increased participation in response to loan provisions proves that concerns about lack of access to 401(k) funds discourage participation, or whether the introduction of the loan possibility itself created the demand and desirability of the provision.

Loan provisions, however, are not costless. While they tend to increase employee participation in plans, they do create the risk that some participants will have smaller account balances at retirement. They do so because interest rates on borrowed amounts are typically lower than what the account balance could have earned. The GAO concluded that participants who borrow from their plan account could see their final account balance reduced by 2% to 28%.

It is not clear how big a problem this is. Less than a quarter of 401(k) plan participants appear to take advantage of the ability to take a plan loan. Additionally, it is not clear from the GAO data whether, in fact, most borrowing occurs by participants who would not have participated in the absence of the loan provision, or whether the loan provision encourages loans (and therefore lower ultimate account balances) by participants who would have participated without the loan provision. If the former, even a reduced account balance is better than none. If the latter, it may be that the byproduct of an attempt to increase participation by some employees has an adverse behavioral effect on others. Further examination of the effect of loan provisions is clearly warranted.

The GAO study also examined the effect on employee participation of employer matching contributions and found that the effect of an employer match is to increase participation rates by about 20%, depending on the rate of the employer match. The combined effect of providing for loans and for an employer match is even greater. The

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52 See id.
53 Most plans provide for a loan interest rate equal to or less than prime + 1%. See GAO Report on 401(k) Plans, supra note 11, at 4.
54 See Holden & VanDerhei, supra note 10, at 23 (citing study results that only 18% of participants eligible for loans had outstanding balance at end of 1999); Investment Co. Inst., 401(k) Plan Participants: Characteristics, Contributions, and Account Activity, ICI Research Series 7 (Spring 2000) (citing findings that less than one-quarter of participants in plans offering loans had taken one).
55 Although I have not seen data specifically addressing this issue, there is evidence that participants with the lowest account balances tend to borrow less frequently. See Holden & VanDerhei, supra note 10, at 5.
56 GAO Report on 401(k) Plans, supra note 11, at 5.
GAO found that the combined effect of loan provisions and an employer match is to increase participation from 55% to 83%, and to increase contribution rates from 4.9% to 8.6%.

The GAO is not alone in concluding that matching contributions have a positive effect on plan participation. Research by the Employee Benefits Research Institute (EBRI) suggests that matching contributions increase participation, particularly among lower-income workers. Their research also shows that the younger the participant, the more likely she is to contribute just enough to receive the full employer match. However, evidence on this point is far from conclusive, with several studies finding that matching contributions have little or no positive impact on participation decisions.

2. Investment Decisions

401(k) plans replace investment decisions by professional asset managers, subject to fiduciary standards such as prudence and diversification, with decisions made by plan participants, who are not subject to any fiduciary standards. As a statutory matter, ERISA provides that in the case of an individual account plan that permits participants to exercise control over the assets in their accounts, if the participant in fact exercises control, then the participant is not a fiduciary and no other fiduciary (of most relevance, the employer) has any responsibility for losses resulting from the exercise of control. Regulations adopted by the Department of Labor (DOL) elaborate on what it means for a participant to exercise control, essentially requiring that plan participants be offered a broad range of investment options with varying risk and return characteristics, that they be permitted to move

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57 Id.
58 Id. at 8.
60 Kusko et al., supra note 45, at 16-17 (finding that employees generally do not change either participation decision or contribution rate in response to changes in employer's match). The findings of Andrea Kusko, James Poterba, and David Wilcox are particularly interesting because they study behavior within a single firm, making them less vulnerable to some of the comparison difficulties that affect other studies of the effect on behavior of matching contributions. On the other hand, as the authors themselves recognize, the fact that participants do not change their decisions from year to year in response to changes in the match may reflect inertia. This means that their findings should not be read to suggest that the presence of a match would not be an inducement to an initial employee decision to participate. But see, e.g., Leslie E. Papke, Participation in and Contributions to 401(k) Pension Plans: Evidence from Plan Data 24 (Nat'l Bureau of Econ. Research, Working Paper No. 4199, 1992) (finding employer matching rate to affect both participation and contribution rates).
in and out of those options with appropriate frequency, and that they receive sufficient information about each of the options.\textsuperscript{62}

Although the statutory and regulatory approach may be a sensible one under classical choice theory, behavioral theory suggests a fundamental problem with it. Work by Kelman, Rottenstreich, and Tversky and by others suggests that choices are context dependent, that the choice of options presented to the decisionmaker affects the choices ultimately made.\textsuperscript{63} One can find evidence of this context dependence in participant investment decisions, which do appear to be influenced by the investment options offered by plan sponsors. The EBRI compared plans offering guaranteed investment contract (GIC) and employer stock funds, plans offering one but not the other, and plans offering neither.\textsuperscript{64} It found that participants in plans offering neither option have the highest allocations to equity funds, that plans offering an employer stock fund but no GIC fund have substantially lower allocations to all other investment options, and that participants in plans with a GIC fund but no employer stock fund have lower allocations to bond, money market, and equity funds.\textsuperscript{65} The EBRI also found that where a plan requires that a company match be invested in employer securities,\textsuperscript{66} participants tend to direct a higher percentage of their self-directed funds into that option as well.\textsuperscript{67}

This context dependence casts significant doubt on the current statutory regime. The theory behind taking employers off the hook for losses in situations where participants make investment choices is that the cause of the loss is the participant’s exercise of control. Thus, in one case, a court found section 404(c) of ERISA to be an independent basis for relieving a plan sponsor from liability for inclusion of Executive Life GICs as a plan investment choice on the ground that even if the court were to determine that the inclusion of the GIC had been imprudent,\textsuperscript{68} any participant losses would have been caused by

\textsuperscript{62} 29 C.F.R. § 2550.404c-1 (2000).

\textsuperscript{63} See Mark Kelman et al., Context-Dependence in Legal Decision Making, 25 J. Leg. Stud. 287 (1996). For a discussion of active efforts to manipulate decisionmaking by influencing the context in which the decisions are made, see Jon D. Hanson & Douglas A. Kyser, Taking Behavioralism Seriously: The Problem of Market Manipulation, 74 N.Y.U. L. Rev. 630 (1999), which uses products liability as an example of this phenomenon.

\textsuperscript{64} Holden & VanDerhei, supra note 10, at 4.

\textsuperscript{65} Id. at 4.


\textsuperscript{67} Holden & VanDerhei, supra note 10, at 13.

\textsuperscript{68} In 1990, Executive Life wrote down its high yield bond portfolio, resulting in its being downgraded by the major ratings services. In re UNIYS Sav. Plan Litig., 21 EBC 2514, 2523 (E.D. Pa. 1997), aff’d, 173 F.3d 145 (3d Cir. 1999). The following year, the
the participant’s decision to leave assets in the GIC account. However, the fact that the employer’s choice of investment options has such an influence on participant choices, effectively framing or cabining the participant’s control, complicates the causation analysis and should cause us to reconsider Congress’s allocation of responsibility between participant and plan sponsor.

Apart from the theoretical problem with the statutory regime, investment decisions by plan participants are a poor substitute for investment decisions made by professional asset managers. Empirically this is clear—investment returns by defined contribution plan participants are 2% per year lower than those achieved by institutional investors. This is not a surprising result. Study findings reveal that substantial numbers of plan participants are financially illiterate, including a lack of knowledge and understanding of financial concepts and common financial instruments as well as inadequate “general knowledge regarding retirement planning and savings issues.” Indeed, one survey found that almost one-half of the 401(k) plan participants surveyed couldn’t name a single investment option in their plan. Another found that 40% of participants did not know how their investments were allocated. It appears that, notwithstanding increased media attention to the stock market and the proliferation of

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69 Id. at 2543. The court did not, in fact, believe that the fiduciary was imprudent in its initial decision to include the Executive Life GICs in the plan portfolio. However, the court viewed section 404(c) to be an independent basis for shielding the employer from liability, even in a situation where the initial investment violated ERISA’s prudence and diversification requirements. Although the Third Circuit vacated the lower court’s decision and remanded the case, it agreed with the district court’s analysis on this point. In re UNISYS Sav. Plan Litig., 74 F.3d 420, 445 (3d Cir. 1996).

70 Barclays Global Investors, Mind the Gap! Why DC Plans Underperform DB Plans, and How to Fix Them, Investment Insights, Apr. 2000, at 1 (Lest anyone mistake this rate of underperformance for a small number, note that $100,000 invested at 10% for thirty years grows to $1,744,940, while the same amount invested at 8% for thirty years grows to only $1,006,266. The missing 2% compounds to nearly three-quarters of a million missing dollars for a hypothetical investor with a 30-year time horizon, roughly the average time between mid-career and mid-retirement for today’s long-lived individuals.).

71 Medill, supra note 12, at 14 (noting that many plan participants suffer from financial illiteracy, and make decisions that threaten their retirement security).

72 Id. at 15; see The Next Big Challenge for DC Sponsors & Providers, DC Plan Investing, June 1, 2000, 2000 WL 32661756 (citing April 2000 survey by Keyport Life Insurance Co. finding that “52% of Americans don’t have an idea how much they need to save or invest to maintain the lifestyle they want in retirement”).

73 Laura Lallos, The 60 Minute 401(k), Money, Nov. 2000, at 85 (citing survey by Mutual of Omaha).

websites offering investment strategies, many ordinary workers lack the knowledge to invest wisely.

It is interesting to note that the law may contribute to this problem. The problem of lack of participant knowledge and financial sophistication is magnified by the fact that plans have been increasing the number of investment alternatives available to plan participants, which some attribute to an attempt by employers to satisfy the section 404(c) regulations. The average number of investment options offered by plans has increased to eleven, and some plan sponsors have moved to approaches that allow participants to choose from among hundreds of options.

How do participants deal with their limited knowledge? One reality of participant investment behavior is conservative investing, suggesting the operation of loss aversion. Many defined contribution plan participants invest too conservatively to ensure sufficient benefits at retirement—disproportionately investing in fixed-income options.

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75 Dan Vinod, Educating Workers to Save for Retirement: The Participation Decision at AT&T, in When Workers Call the Shots: Can They Achieve Retirement Security?, supra note 27, at 31, 32 (explaining that section 404(c) provided stimulus to employers to add investment options to plans).

76 See, e.g., Jon Christensen, When a Smorgasbord Replaces a Diet Plate in a 401(k), N.Y. Times, Feb. 22, 1998, § 3, at 1 (citing Mercer survey findings that average number of options increased from four to eight between 1993 and 1998); Lori Lucas, Under the Microscope: A Closer Look at the Diversification and Risk-Taking Behavior of 401(k) Participants and How Plan Sponsors Can Address Key Investing Issues, Benefits Q., 4th Quarter 2000, at 24 (citing Hewitt study showing increase to eleven choices on average, up from eight in 1997).

77 See, e.g., Christensen, supra note 76 (giving example of American Stores Company, whose 401(k) plan offers 137 choices); Hewitt Study Shows Employee Demand as Driving Force Behind Self-Directed Brokerage Accounts, Bus. Wire, Mar. 12, 2001, LEXIS, News Group File (citing Hewitt findings that 55% of employers either currently offer or are contemplating offering self-directed brokerage account as 401(k) plan option and that 26% offer or are considering offering mutual fund window, each of which effectively gives employees virtually unlimited investment options).

78 See Worker Investment Decisions: An Analysis of Large 401(k) Plan Data, 8 tbl.3, 11 tbl.6, 13 tbl.8 (EBRI Issue Brief No. 176, Aug. 1996) [hereinafter Worker Investment Decisions] [detailing EBRI study of three employers' plans, which found that 21%, 25%, and 37% of employees had none of their 401(k) plan assets invested in equity funds]; Vickie L. Bajtelsmit & Jack L. VanDerhei, Risk Aversion and Pension Investment Choices, in Positioning Pensions for the Twenty-First Century 45, 57 (Michael S. Gordon et al. eds., 1997) (finding 45% of account balance of participants invested in fixed income alternatives compared to 14% of account balances of male participants and 13% of account balance of female participants invested in a diversified equity fund); Jefferson, supra note 10, at 628-29 (noting that inexperienced investors are likely to invest disproportionately in fixed income investments).

Some of this behavior may be explained by lack of understanding rather than conservatism. According to the results of one survey, many plan participants thought GICs would outperform stocks over a twenty-year period. Blau & VanDerhei, supra note 74, at 84.
This is particularly true of lower-income participants.\(^79\)

Another coping mechanism is the tendency of some plan participants to follow the market, rather than making confident determinations in the first place. Evidence of participants responding to downturns by selling low\(^80\) or of participants responding too late to market signals abounds.\(^81\) On the other hand, many participants behave passively. In stark contrast to the active management of investments one finds in a defined benefit plan, one study found that 60% of 401(k) plan participants stuck with the initial investment decision they made when first joining the plan.\(^82\) This may be either because the complexity of the choice leads to procrastination or because participants fear making a change that may turn out in hindsight to have been unwise.

A particular example of suboptimal participant decisionmaking involves investments in employer securities, an area that may suggest the operation of what Cass Sunstein and Christine Jolls refer to as "bounded self-interest"\(^83\) as well as bounded rationality. 401(k) plans of large public companies typically offer employer securities as one of their investment options\(^84\) and participants in such plans frequently invest their plan accounts disproportionately in that investment option.\(^85\) Studies reveal that among large companies offering employer securities as an investment option in 401(k) plans, upwards of 30% to

\(^79\) Holden & VanDerhei, supra note 10, at 5, 15.

\(^80\) See, e.g., Vanessa O'Connell, Market Bumps Rattle Nerves at 401(k)s, Wall St. J., Aug. 23, 1996, at C1 (explaining that 401(k) plan investors respond to downturn in market by dumping shares of stock funds when market is down, then purchasing shares again after stock prices rise).

\(^81\) See Warren Boroson, The Long Haul: Investing in Your Retirement Plan, The Record (Bergen County, N.J.), May 12, 1996, at B1, http://www.bergen.com (Article ID: 2368037) (arguing that ordinary workers do not know enough to invest wisely, "regularly mov[ing] from cold investments to hot investments, just as the hot investments are turning cold").


\(^84\) See U.S. Gen. Accounting Office, 401(k) Pension Plans: Extent of Plans' Investments in Employer Securities and Real Property, GAO/HEHS-92-28, at 5 (Nov. 1997) [hereinafter GAO Report on Employer Securities] (reporting that participant-directed 401(k) plans had $40.7 billion invested in employer securities and employer real property in 1993); Kahn, supra note 66, § 3, at 6 (citing Buck Consultants survey findings that percentage of its client companies offering employer stock was 45% in 1996, up from 38% in previous year).

\(^85\) See Susan J. Stabile, Pension Plan Investments in Employer Securities: More Is Not Always Better, 15 Yale J. on Reg. 61, 81-82 (1998) (discussing fact that participants invest disproportionately in employer securities); Kahn, supra note 66 (noting that large companies with employer stock funds invest, on average, 31% of their plans' assets in employer securities).
40% of plan assets are invested in employer securities\textsuperscript{86} and in a number of large plans, 90% or more of the assets are invested in that option.\textsuperscript{87} Low-wage workers, those least likely to have adequate alternative sources of retirement income, are "three to five times as likely to have 80 percent or more of their retirement plan savings in company stock than at the highest wage levels."\textsuperscript{88} Such percentages are contrary to the universally accepted recommendation to diversify assets. The danger of violating that universal recommendation has been graphically illustrated by the collapse of Enron Corporation, which has resulted in staggering losses by the company's employees.\textsuperscript{89}

While some of this behavior may be the product of direct or indirect employer pressure, there are several explanations for such heavy investments in employer securities that have nothing to do with rational self-interest. First, many employees invest heavily in their employer's stock because of overconfidence in the employer, which can be viewed as a version of the optimistic bias that makes employees think that other companies are more likely to experience problems than their own. Although they recognize that diversification of investments is desirable, they feel that an investment in their employer's stock is less risky than investments in other stocks.\textsuperscript{90} The behavior thus may be a product of bounded rationality; participants know they lack the ability to suitably judge the entire array of investment choices and substitute confidence in the employer for doing so.

\textsuperscript{86} Bajtelsmit & VanDerhei, supra note 78, at 45, 57 (finding 41% to 42% invested in employer securities); Holden & VanDerhei, supra note 10, at 11 (finding 33.2% to 35.8% invested in employer securities, depending on participants' age); Kahn, supra note 66 (reporting 31% invested in employer securities).

\textsuperscript{87} See Kahn, supra note 66 (giving examples of Union Oil of California and Archer Daniels Midland, which have 97% and 99% of plan assets, respectively, invested in employer securities).


\textsuperscript{90} See Christine Dugas, Don't Bank 401(k) on Employer's Stock: If Company Hits Bad Spot, Retirement Plan Can Tank, USA Today, Aug. 4, 2000, LEXIS, News Library (noting that some employees "believe that because they work at a company, they are in a better position to predict its stock performance"); Jeffrey M. Laderman, More Gold for Your Golden Years, Bus. Wk., July 3, 1995, at 63, 66 (explaining that employees "don't think [employer securities are] risky because they understand the company. They think the stock market is risky because they don't understand it").
Second, many employees invest heavily in employer stock out of a sense of loyalty to their employers, an example of bounded self-interest. This loyalty may be particularly true of women, who make up a growing part of the workforce. However, it is by no means limited to women, as illustrated by the story of the General Motors (GM) executive who, despite his participation in all discussions with analysts about the company's financial prospects, insisted on investing enormous amounts in GM stock as the stock was falling. By the time the stock finished plummeting, he lost $160,000 of his retirement money.

The law has attempted to improve employee investment decisions. Responding to employers' reluctance to offer investment education due to the fear of being labeled a fiduciary with respect to participant investment decisions, the DOL issued an interpretive release in 1996 which provides guidance to employers as to the types of investment-related educational information they can offer to their employees without being considered to be giving investment advice within the meaning of ERISA. The security of the release has prompted many, although not all, employers to expand efforts to educate their employees to make better plan allocation decisions.

However, there is reason to question whether education represents a realistic solution to the behavioral biases that negatively im-

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91 See Dugas, supra note 90 (explaining that employees "may feel that investing in the stock is one way to show company loyalty"); Bryant, supra note 12 (stating that for some employees, the issue is emotional; employees invest heavily in employer securities even though they say they would never advise relative to be so heavily invested in single stock).


94 Preamble to U.S. Dept' of Labor Interpretive Bulletin 96-1, 61 Fed. Reg. 29,586 (June 11, 1996) (codified at 29 C.F.R. pt. 2509) ("[M]any employers have not offered programs or offered only limited programs due to uncertainty regarding the extent to which the provision of investment-related information may be considered the rendering of 'investment advice' under section 3(21)(A)(ii) of ERISA, resulting in fiduciary responsibility and potential liability . . . ").


96 Congress is currently considering legislation aimed at providing more meaningful investment education and advice to 401(k) plan participants. See Retirement Security Advice Act of 2001, H.R. 2269, 107th Cong. (2001). The bill would provide that employers are not liable for advice given to participants by investment advisers selected by the employer so long as the employer prudently selects the adviser. Id. § 2(a).
pact participant decisionmaking. First, several studies have shown that educational efforts have not been successful in countering participant bias toward conservative investment decisions.97

Second, education is unlikely to affect decisions with respect to investments in employer securities that are the product of bounded self-interest. Because employees’ decisions to invest in employer securities are frequently based on emotional and psychological factors, providing employees with general investment information and asset allocation models does not get at the root of their decisions. As suggested above, even employees who are generally sophisticated and who appreciate the dangers of excessive investment in a single stock overinvest in employer securities. That overinvestment continues despite attempts to educate employees.98

Finally, what employees want and what they really need is specific investment advice. As one commentator has suggested, “Many employees just want to be told how to invest their retirement accounts. They don’t want to invest time or money in a soup-to-nuts examination of their entire financial picture.”99 This reality means that education cannot be successful within the current legal regime. The fact that the law permits employers to avoid fiduciary status with respect to employee decisions so long as they do not offer investment advice constrains the type of education offered. Since attempts to educate employees take place within the guidelines that prevent such education from resulting in the employers being deemed to give in-

97 See Worker Investment Decisions, supra note 78, 4-5, 8, 11, 13 (Aug. 1996) (discussing study findings showing failure of participants to invest any plan assets in equities despite participant education efforts); Jeffrey N. Gordon, Employees, Pensions, and the New Economic Order, 97 Colum. L. Rev. 1519, 1557 (1997) (noting that despite more investment in education activity being carried on by employers in last several years, employees continue to “underweight the equity allocation in their portfolio”). But see Robert L. Clark & Madeleine B. d’Ambrosio, Financial Education and Retirement Savings 12 (TIAA-CREF Working Papers, June 2001) (finding that “high quality financial education can be effective in altering retirement income goals”); Medill, supra note 12, at 25 & n.146 (citing EBRI findings that significant percentage of employees change their plan investment allocations based on educational materials, but also noting that those changes are not necessarily ones that will positively affect account balances); Lynn Brenner, Crossing the Line, CFO, Oct. 1996, at 61, 61 (suggesting that although employees have received various forms of investment education for several years, their plan investment decisions have not improved).

98 See Ellen Benoit, Too True to Be Good, CFO, Aug. 1997, at 67, 67 (noting that employees continue to invest heavily in employer securities despite fact that employers have “stepped up efforts to provide investment education, especially since the adoption of rule 404C in 1992”).

99 Brenner, supra note 97, at 64-67.
vestment advice, employers will not give individually tailored advice to employees.\textsuperscript{100}

There are alternatives to education. However, the law has consciously chosen to forego mandatory intervention regarding employee investment choices, such as, for example, participant decisions to overinvest in employer securities. Section 407 of ERISA limits the acquisition of employer securities by defined benefit plans to up to 10\% of their assets.\textsuperscript{101} Additionally, Congress amended ERISA in 1997 to impose a similar 10\% limit on the acquisition of employer securities by employer-directed defined contribution plans.\textsuperscript{102} The statutory scheme reflects a Congressional decision to utilize mandatory restrictions as a means of addressing employer biases, but not to address employee biases.\textsuperscript{103} As a result, those plans that are already subject to fiduciary standards of prudence and diversification have a statutorily imposed limit on employer securities acquisitions, but those not subject to fiduciary standards have no such limit. Since most 401(k) plan participants participate in plans in which they, and not the employer, direct investments,\textsuperscript{104} the 1997 amendments are of little significance and most participant-directed plans continue to invest more than 10\% of their assets in employer securities.\textsuperscript{105}

\textsuperscript{100} The Department of Labor safe harbor from fiduciary liability does not protect individualized investment advice. See U.S. Department of Labor Interpretive Bulletin Regarding to Participant Investment Education, 29 C.F.R. § 2509.96-1 (1999).

\textsuperscript{101} See 29 U.S.C. § 1107(a)(2) (1994) (providing that plans other than individual account plans only may acquire employer securities if fair market value of employer securities and real property held by plan immediately after acquisition does not exceed 10\% of fair market value of plan's total assets). Even then, a defined benefit plan may invest in employer securities only if no more than 25\% of the outstanding stock of the same class is owned by the plan and at least 50\% of the outstanding stock of the same class is owned by persons independent of the employer. See §§ 1107(d)(5), (f)(1).

\textsuperscript{102} See § 1107(b)(2) (Supp. V 2000).

\textsuperscript{103} There is some indication this may be changing. On December 18, 2001, Senators Barbara Boxer and Jon Corzine introduced legislation that would limit investments in employer securities by participant-directed plans to 20\% of plan assets. See Richard A. Oppel Jr., The Danger in a One-Basket Nest Egg Prompts a Call to Limit Stock, N.Y. Times, Dec. 19, 2001, at Cl (describing proposed legislation). There is some sense that "the Republican-controlled House" may stall passage of any such bill. Id.

\textsuperscript{104} See Medill, supra note 12, at 11 n.51 (citing BLS figures that 83\% of 401(k) plans feature individual investment decisionmaking) (citing Bureau of Labor Statistics, U.S. Dep't of Labor, Bulletin 2496, Employee Benefits in Medium and Large Private Establishments, 1995, at 139 tbl.165 (Apr. 1998)); see also GAO Report on Employer Securities, supra note 84, at 9 (noting that only 27\% of participants are covered by employer-directed 401(k) plans).

\textsuperscript{105} See Managing 401(k) Plans, IOMA, Oct. 2001, at 3 (noting that "thirty of the plans tracked by IOMA have 60\% or more of the assets invested in company stock," giving as examples of companies with more than 90\% of 401(k) plan assets in employer securities Proctor & Gamble and Sherwin Williams, and noting seven other plans with assets of at least 80\% in employer securities); Purcell, supra note 89, at 4 (listing twenty large corpora-
3. Rollover vs. Current Distribution Decision

When a participant switches jobs midcareer, she has to decide what to do with her 401(k) plan account balance. For decades the law has attempted to dissuade participants from taking a current distribution by imposing a 10% penalty on early withdrawals from pension plans, i.e., distributions taken prior to attainment of age 59 1/2.\textsuperscript{106} Loss aversion theory would suggest that the 10% penalty would result in participants rolling over their account balances in order to avoid the 10% loss. Practice, however, did not conform to theory, and Congress became concerned about the loss of pension benefits due to early cash-outs incidental to job changes.\textsuperscript{107}

One possible explanation for the failure of the 10% penalty to serve as a sufficient incentive to rollover account balances was the existence of a competing avenue for loss aversion. Prior to 1992, a terminated employee received a pension distribution and had 60 days to make a rollover in order to avoid payment of income taxes and the 10% penalty.\textsuperscript{108} That put money into the hands of the participant, who then had to decide to take a current loss, so to speak, by giving up the money. Giving up the money in hand—even if it meant receiving more later—asked too much of many plan participants. In 1992, the Code was amended in a way consistent with this theory. In addition to vastly liberalizing and simplifying the rollover requirements,\textsuperscript{109} the Code was amended to include as a plan qualification requirement that plans provide for direct trustee-to-trustee transfers of plan distribu-

\textsuperscript{106} See I.R.C. \S 72(t) (1994).

\textsuperscript{107} The report of the Senate Committee on Finance on the Unemployment Compensation Amendments of 1992 noted that "[a] significant source of lost pension benefits is preretirement cash outs of pension savings in lump-sum distributions. The bill [facilitates] the preservation of retirement benefits for retirement purposes by requiring plans to transfer eligible rollover distributions directly to an IRA or another qualified plan." 138 Cong. Rec. 14,803, 14,806 (1992) (report on Unemployment Compensation Amendments of 1992, prepared by Senate Committee on Finance).


tions,\textsuperscript{110} thus reducing the transaction costs of rolling over account balances. The 1992 amendments also encouraged such direct transfers by imposing mandatory withholding on distribution amounts not so directly transferred.\textsuperscript{111} The hope was that by creating a scenario that did not involve actually putting dollars in the hands of participants and then relying on them to re contribute the funds to a new plan, fewer participants would take current distributions.\textsuperscript{112} The elimination of this competing "loss" theoretically should have the effect of highlighting the 10\% penalty loss.

The 1992 legal changes were not without effect. A 1999 Hewitt Associates study found that there was a 7\% decrease in the participants opting for a cash payout from 1993 levels.\textsuperscript{113}

However, despite the improvement, early cash-outs of defined contribution plan account balances remain a problem. According to a 2000 Hewitt Associates study, 68\% of 401(k) plan participants who switch jobs between the ages of twenty and fifty-nine take cash distributions instead of rolling over their plan account balances.\textsuperscript{114} The 2000 Hewitt findings are not unique; earlier studies by Hewitt also concluded that only one-third to one-half of employees who change employers during their working lives roll over their account balances.\textsuperscript{115} Rather than saving that money for their retirement through other means, many participants taking cash distributions use the money for things like vacations and the purchase of durable goods.\textsuperscript{116}

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\textsuperscript{111} § 3405(c). Prior to the 1992 amendment, an individual could elect to have no withholding with respect to a distribution that was eligible for a rollover. See § 3405(b)(3)(a) (1988) ("An individual may elect not to have paragraph (1) [withholding provision] apply with respect to any nonperiodic distribution."). amended by § 3405(c)(1) (1994).
\textsuperscript{112} A more conventional law and economics explanation is that the change merely reduces the transaction costs of a rollover.
\textsuperscript{115} See, e.g., Employee Benefits Research Institute, Facts from EBRI (2000) (citing Hewitt findings that in 1998, only 48\% of plan distributions made on account of job changes were rolled over and 53\% were taken as cash payments).
\textsuperscript{116} See, e.g., Samwick & Skinner, supra note 5, at 2 (suggesting that "[e]mployees may use the pension distributions to buy a boat or car or to take a vacation").
\end{flushright}
What explains this behavior, which assuredly is inconsistent with a rational choice model of decisionmaking? "Bounded willpower" provides one explanation. Faced with a choice of taking a sum of money and using it to satisfy a current desire or need, or saving the money for the future, many will forgo the future opportunity in favor of the current one. Thus, participants take a cash distribution, knowing that doing so is in conflict with their long-term interests, preferring opportunity cost that will be felt in the future to an out-of-pocket cost that will be felt today.

There may also be something else operating. Empirical evidence suggests that participants with smaller account balances are more likely to cash-out their account balances than participants with higher account balances. The explanation for that may be that a participant with a small account balance, especially early in her career, fails to perceive how large an effect cashing out that small account balance will have on her ultimate retirement benefit. Alternatively, to phrase it in terms proposed by Richard Thaler and others, participants may mentally account for small account balances and large account balances in different ways. As with the difference in how individuals treat small windfall gains and large windfall gains, participants may put small distributions in a mental account permitting current consumption and larger distributions in a mental account for accumulation for the future.

For many participants, particularly employees at the low end of the compensation range, the ultimate effect on account balances of cashing out account balances upon job changes may be quite large. Although a study by Poterba, Wise, and Venti of the National Bureau

117 See Jolls, Sunstein & Thaler, supra note 83, at 15 (using term "bounded willpower" as shorthand to express fact that people often act in ways contrary to their long-term interest in order to satisfy current desires).

118 Hewitt Associates, supra note 114 ("Hewitt's analysis also finds that the smaller the balance, the more likely the participant will opt for the cash payment—among all age groups.").

119 There is some evidence to suggest that younger workers are less likely to rollover than older ones. See Ken Hoover, IRAs' $2.47 Tril In Assets Surpasses Other Retirement Plans, Investor's Bus. Daily, Jan. 19, 2001, at B1.

120 A twenty-five-year-old employee who takes a $10,000 cash distribution of a 401(k) plan account balance could see her final account balance reduced by as much as $140,000, even if the participant continued to save until retirement and rolled over her account balance at any future job changes. For an example of a hypothetical calculation, see Hewitt Associates, supra note 113.


122 See id. at 635 (finding that marginal propensity to consume "out of windfall income increased sharply as the size of the windfall decreased").
of Economic Research suggests that the overall effect of preretirement cash-outs is not large in relation to total retirement income, the authors concede both that the effect for lower-income employees may be significant and that taking cash distributions at job changes that occur early in a career could have a significant effect in lost retirement income. Both concessions are important because the authors also find, consistent with the findings noted above, that older workers and those with larger account balances are more likely to rollover their funds. In contrast, younger workers with smaller account balances are more likely to take cash distributions, making it more likely the ultimate loss in retirement benefits will be larger than they hypothesize. Indeed, a study by Samwick and Skinner suggest that the effect of rolling over at least 50% of the amounts that are cashed out at job changes would increase retirement by between 10% and 25% for those in the bottom half of income distribution.

B. The Rationalist Response

A rational choice theorist reading this Article to this point would doubtless tell me that I have it all wrong and that what I declare to be economically nonrational decisions explained by various cognitive biases can be recharacterized in rationalist terms. The rationalist would reject my underlying presumption that nonparticipation in pension plans is irrational, arguing that for many participants, nonparticipation reflects a needs-based rationality. He would suggest that lower-wage earners participate less, contribute less when they do participate, and take current distributions at job changes because they need the money for current needs. He would conclude that there is nothing irrational about satisfying a current need over a future one. He might find support for his view in findings suggesting that loan provisions increase participation, suggesting a rational response by a lower wage employee that she will contribute if able to get the money back in the case of a need. He might also support his view of needs-based rationality in conservative investment decisions, which he would argue re-

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123 Poterba, Venti & Wise, supra note 16, at 4, 28, 34 (finding overall reduction in retirement savings of 5%).
124 Id. at 35.
125 Id. at 7.
126 See id.
127 Samwick & Skinner, supra note 5, at 6. It is likely that their results are understated since they assume a first job change at age 41, id. at 25, and many employees will have already switched jobs and taken a cash distribution prior to that age.
128 That presumption pervades my analysis of both the participation and rollover decisions.
fect a rational response by a participant who cannot afford to take any loss on the funds she invests.

To that recharacterization I would make several responses. First, much of the evidence on participant decisionmaking cannot be explained on the basis of needs-based rationality. Regarding investment decisions, evidence that many participants do not know their plan's investment alternatives and do not know how their funds are invested suggests something other than a well-thought-out economically rational response. Additionally, the fact that lower-income employees are the heaviest plan investors of employer securities is inconsistent with the rationalist claim. Regarding participation, the fact that many lower-income employees increase participation when a matching contribution is offered also suggests that nonparticipation is not explained simply by a current need for money, since the match does nothing to lessen the current need.

Second, for purposes of exploring the application of behavioral teachings to the pension area, acceptance of Congress's goal of providing retirement security through a system of employer-sponsored pension plans is sufficient to form a basis for characterizing nonparticipation (and, therefore, failure to rollover) as irrational. Once the goal is accepted, given the system we have, participation is necessary. Therefore, I have no hesitation about my underlying presumption.

Even absent acceptance of Congress's goal, I still think one can defend the position that nonparticipation is an irrational choice, except perhaps for employees who are truly at the economic edge (i.e., for whom the decision is "pay rent or put money in the plan" or "feed my kids or put money in the plan"). Everyone (except those who die the day they stop working) needs retirement income, and Social Security cannot be relied upon to provide sufficient retirement income. That means that the only rational choice is saving at least some part of current wages to provide a source of income in retirement.

III

Future Steps

What do behavioral insights suggest about ways the law can better achieve the goal of retirement security? There are really two issues. First, what plan features will best promote employee decisions that will maximize retirement security? Second, how do we obtain them? Do we encourage employers to design their plans in certain ways, or do we require them to put certain provisions in place? The following discussion offers some preliminary thoughts, while recogniz-

129 See supra notes 73-74 and accompanying text.
ing that more research is necessary before any of the suggestions offered here are adopted.

A. Debiasing vs. Coercion

One overarching issue that must be considered is whether the law should impose mandatory terms to get the results desired rather than to continue to make further efforts to change the incentives that influence voluntary participant and employer choices. It may be that mandatory efforts better take behavioral perspectives into account.

There is often an instinctive reaction against mandatory steps as being paternalistic. So at the outset it is useful to observe that it may be easier to accept at least some mandatory rules here than it might be in some other contexts. What we are really talking about here is establishing—or changing—the price for participation in the game, so to speak.

At the present time, the rules of the defined contribution plan game are that the employee decides whether to participate in the plan. If she chooses to do so, she decides how much to contribute, she chooses how to invest her contributions and earnings, and she decides whether to take a current distribution of her account balance when she leaves her employer prior to retirement. She knows that the cost the government imposes for permitting her to save for retirement in this advantageous tax-deferred manner is that once funds are contributed to the plan, they may not be withdrawn while she is employed by the plan sponsor, except for the limited ability to take a hardship withdrawal or a loan from her plan account.

There is no inherent magic to the game rules currently in place. There is no reason the rules for giving participants the ability to save for retirement in a tax-deferred manner could not be different. For example, the government could say: The rules for tax-deferred savings are that once the participant puts money into the plan, the employer decides how account balances will be invested, and no distributions can be made from the plan prior to retirement for any purpose except perhaps in the case of hardship or a loan or, perhaps, in the case of a rollover to a new plan upon termination of employment prior to retirement age.

Even making plan participation itself mandatory would not be all that radical a concept. After all, for years the norm for providing pension benefits was the defined benefit plan, which by definition involves a choice by the employer, not the employee, that a portion of compensation would be paid in the form of deferred wages (and no one at the time criticized defined benefit plans as paternalistic). There
is no philosophical reason that defined contribution plans must involve taking that choice from the employer and putting it in the hands of the employee.\textsuperscript{130} I am not suggesting here that participation should be mandatory or, indeed, that any mandatory steps should be put in place. My point here is merely that we should view everything as on the table for consideration.

\section*{B. Some Specific Steps to Consider and Suggestions for More Research}

\subsection*{1. Elimination of Section 404(c) Protection for Employers}

One approach to consider to improve 401(k) plan investment decisions is the elimination of ERISA section 404(c) protection for employers. If section 404(c) did not protect employers from co-fiduciary liability under ERISA for participant investment losses arising from unwise investment decisions, several consequences might flow.

First, eliminating this protection might lead to elimination of participant direction.\textsuperscript{131} That is, employers may determine that the best way to shield themselves from potential liability is by making investment decisions for participants. That would have the effect of making investment decisions in defined contribution plans, like those in defined benefit plans, the product of professional asset management, subject to fiduciary standards. It also would subject employer securities investments to the 10\% limit imposed by ERISA for plans in which the employer makes the investment decision.

Of course, in deciding whether to eliminate participant direction, an employer will need to assess the likely employee reaction to such a step. When surveyed, a majority of plan participants express positive reactions to making their own investment decisions,\textsuperscript{132} suggesting that an employer may face employee opposition to such a step.\textsuperscript{133} On the

\textsuperscript{130} Query whether, as we consider traveling down a path of mandatory participation and other mandatory terms, we will or ought to start to discuss whether to move to a mandatory private system, which involves rethinking the issue of leaving to employers' discretion whether to offer plans in the first place.

\textsuperscript{131} An alternative is to consider the mandatory approach of doing away with participant direction, something I have elsewhere suggested Congress should consider. Susan J. Stabile, Paternalism Isn't Always a Dirty Word: Can the Law Better Protect Defined Contribution Plan Participants?, 5 Employee Rts. & Emp. Pol. J. 491, 513-15 (2002).

\textsuperscript{132} See Medill, supra note 12, at 19 (citing EBRI survey finding that 62\% of survey respondents who contributed to plan prefer making their own investment decisions); Yakoboski, supra note 27, at 20 (reporting study findings that 33\% of participants want someone else to make their investment decisions).

\textsuperscript{133} Anecdotally, earlier this year I spoke on a panel with a partner in a New Orleans law firm who reported that when his firm eliminated participant direction from its 401(k) plan, opposition (from all employees, not just lawyers) was so fierce that they changed the plan back again.
other hand, even many of the plan participants who indicate a preference for making their own investment decisions admit that they are not qualified to do so, suggesting that it may be possible to persuade them that exchanging individual choice for higher investment returns is a good trade-off. It also may be the case that a period of stock market decline will soften some of the strong participant reaction in favor of individual investment decisionmaking.

Second, eliminating section 404(c)'s protection might lead employers to provide more useful investment education to employees. Since employers already would be fiduciaries with respect to employee decisions, fear of acquiring that label would not prevent them from offering tailored investment advice to participants.

Either of those outcomes would be beneficial in terms of better achieving the goal of retirement security. However, such a change in the law also might have the unintended consequence of making defined contribution plans less attractive in comparison with defined benefit plans, which may or may not be such a bad thing depending on one's point of view. It may also make pension plans themselves less attractive, which clearly would be an undesirable outcome. Therefore, research is needed regarding likely employer behavioral responses to a change in the law in this area before any such step is taken.

Less radically, if participant direction remains a common feature of 401(k) plans, it may be desirable to impose some mandatory requirements to cabin participant choice to a certain extent. For example, ERISA should be amended to impose a maximum on the percentage of a participant's account balance that can be invested in employer securities.

2. Requiring Retention of Account Balances at Preretirement Job Changes

Since efforts to encourage rollovers have failed, the question arises how best to limit preretirement plan distributions. This is not an issue where simply changing the default likely would be effective, since inertia is not really the cause of the leakage of retirement funds.

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134 See Yakoboski, supra note 27, at 20 (reporting study finding that only 26% of plan participants believe they are well qualified to make their own investment decisions).
135 There is no guarantee that the recognition of lack of qualification will eliminate opposition to taking investment decisionmaking away from participants. As Cass Sunstein recognized in his article, Second-Order Decisions, sometimes people want responsibility for decisions even if others would do a better job of decisionmaking. See Cass R. Sunstein & Edna Ullmann-Margalit, Second-Order Decisions, in Behavioral Law and Economics, supra note 21, at 191.
136 By analogy, compare public reaction to the notion of privatizing a portion of Social Security before and after the weakening of the stock market. See supra note 18.
To the extent the failure to rollover account balances upon job changes reflects bounded willpower, the question is whether the law, in light of its goal of adequate retirement security, ought to simply prohibit preretirement distributions when an employee changes jobs. It could do so in one of several ways. The existing employer could be required to keep the employee’s account balance in the plan, terminating employees could be given a choice between rolling over and leaving the plan in the existing employer’s plan, or, as I have heard others suggest, the account balance of a terminating employee could be transferred automatically to a pension “clearinghouse.” The clearinghouse approach has the benefit of not subjecting employers to any increased administrative burden.

Requiring rollovers does not attempt to de-bias participants; instead, it eliminates the effect of the behavioral biases that cause participants to take cash distributions. That raises the question whether the biases that lead participants to take cash distributions in the first place would cause responsive behavior to a required rollover. The obvious concern is that mandatory rollovers might cause participants to choose not to participate in plans, an issue if the participation decision remains a voluntary one. This is an area where additional research would be helpful.

There may be some alternatives to requiring rollovers that could be considered. For example, it may be that, for some participants more directed educational efforts may prove of some value. To the extent that younger employees with small account balances suffer from an inability to see the future effects of failing to rollover, educational efforts targeted toward this lack of understanding may be warranted. Behavioral work on the “framing” effect\(^\text{137}\) suggests that educational presentations framed in terms of ultimate loss to participants of early cash-outs may prompt their tendency toward loss aversion to kick in.

As a final note, elimination of the ability of employers to force a cash-out of participants with small account balances may encourage employers to develop automatic rollover approaches. Currently, in order to avoid burdening employers with the administrative costs of handling small account balances, the law allows employers to force employees who terminate employment with an accrued benefit of $5000 or less to take an immediate cash distribution of their bene-

fits.\textsuperscript{138} If that ability no longer existed, an incentive would exist for employers to find creative alternatives to avoid being saddled with numerous small account balances. This might lead employers to voluntarily develop plans and procedures allowing for automatic rollover of participant accounts, without the need for the law to force them to do so.

3. Changing Default to Automatic Enrollment with Opt Out

As of now, not many 401(k) plans contain automatic enrollment features. One thing that might prevent more employers from moving in that direction is fear of being deemed to be giving investment advice based on the fact that it is the employer rather than the employee who is making the initial investment decision. \textit{If} automatic enrollment should be encouraged, the DOL could clarify that an employer who sets a default contribution rate and default investment options is not rendering investment advice with respect to those options. A second means of encouraging employers to shift to automatic enrollment is to indirectly incentivize employers to do so by strengthening the 401(k) nondiscrimination requirements. If the test is made more stringent, employers may find automatic enrollment a more efficient means of bumping up participation of lower-wage employees than relying on matching contributions to do so.

\textit{If} automatic enrollment is to become a common feature of 401(k) plans, it is important to consider ways to minimize its potential adverse behavioral effects. As Madrian's findings suggest,\textsuperscript{139} and as supported by many of the other papers in the Symposium, default rules are sticky, meaning there is a great burden in selecting the default rule. This means that it is important to raise the default contribution rate to something closer to the average rate contributed by those currently participating in plans. It is also important to provide clearer education to employees that the default investments selected by the plan sponsor are not intended as recommendations.

I stress "if" in the previous paragraph because I think more work needs to be done before we decide that switching the default is the way to go. It is possible that switching the default may lead to employers doing away with matching contributions, which would lead to a decrease in pension benefit. To the extent that automatic enrollment leads employers to believe that the stickiness of the participation default means that matching contributions are no longer necessary to secure participation of lower-income employees, they may cease to

\textsuperscript{139} See supra notes 31-43 and accompanying text.
make them. Second, it is unclear how ERISA's fiduciary duties should play out in the context of automatic enrollment. Consideration needs to be given to the status of the default selections made by employers and the extent to which those selections should constitute fiduciary decisions giving rise to potential liability on the part of the employer. Finally, automatic enrollment may increase the need for automatic rollover. To the extent that automatic enrollment makes contributed funds more invisible to employees, distributions on job termination may seem like even more of a windfall than they do now. Issues such as these suggest that we should not jump immediately to the idea that switching the default is the obvious solution.\footnote{There is a mandatory approach to participation: requiring employees to participate in their employers' 401(k) plans. As I suggested earlier, this is not as radical a notion as it seems. However, one should be cautious before moving to a system of mandatory participation. Some employees really may not be able to afford any level of participation. Additionally, it is important to investigate ramifications of the proposal, such as the effect on employer matching contributions, before concluding that it is the right solution.}

**Conclusion**

I attempt in this Article to suggest ways in which participant choices in 401(k) plans reflect biases that are inconsistent with a rational choice model as a means of exploring how we might better achieve the goal of retirement security. I do not pretend to suggest that it is sufficient as it stands to provide a blueprint for future regulation of defined contribution plans. It does, however, suggest steps that could be considered, as well as areas where future research would be helpful.

At the same time, the paper suggests that while there are ways in which the law in this area already has attempted to take into account the actual behavior of plan participants, there are also aspects of the law of pension plans that are premised on the acceptance of rational choice principles that simply do not operate in the area. This suggests, among other things, that a wider reexamination of ERISA may be called for.