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## **TRENDS AND ISSUES**

### **Enhancing Retirement Savings Outcomes in Employer Sponsored Savings Plan Part I – Increasing Participation**

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*NOTE: This is the first part of a three-part series on increasing the effectiveness of employer-sponsored retirement savings plans. This first installment discusses how employers can promote savings plan participation. The second installment in the series will discuss approaches employers can take to help employees reach an appropriate level of savings. The final installment in the series will discuss the impact of plan design on asset allocation outcomes.*

### EXECUTIVE SUMMARY

Employer-sponsored savings plan are only a useful tool for helping employees save for retirement to the extent that employees actually participate. But the complexity of choosing an appropriate contribution rate and asset allocation hinders many employees from making a timely participation election. There are several approaches employers can take to encourage and facilitate savings plan enrollment beyond simply educating employees about the benefits of saving for retirement. The most effective mechanism for increasing savings plan participation is automatic enrollment. Firms with automatic enrollment have participation rates ranging from 85% to 95% among those employees who are impacted. The drawback to automatic enrollment, however, is that it corrals many employees into the employer-chosen default contribution rate and asset allocation.

Another effective mechanism, simply requiring employees to make a participation election by a certain deadline, also dramatically increases participation (although not to the same extent as automatic enrollment) but does not favor any particular contribution rate or asset allocation in the same way as automatic enrollment.

A more general approach to increasing savings plan participation is to simplify the decision-making that is required. There are different ways to do this, such as offering a managed investment option, decreasing the number of investments in the fund menu, or offering employees a pre-selected menu of asset allocation options to choose from. Offering an employer match also increases incentives for savings plan participation, but is likely to be more effective in conjunction with some of these other approaches to enhancing participation.

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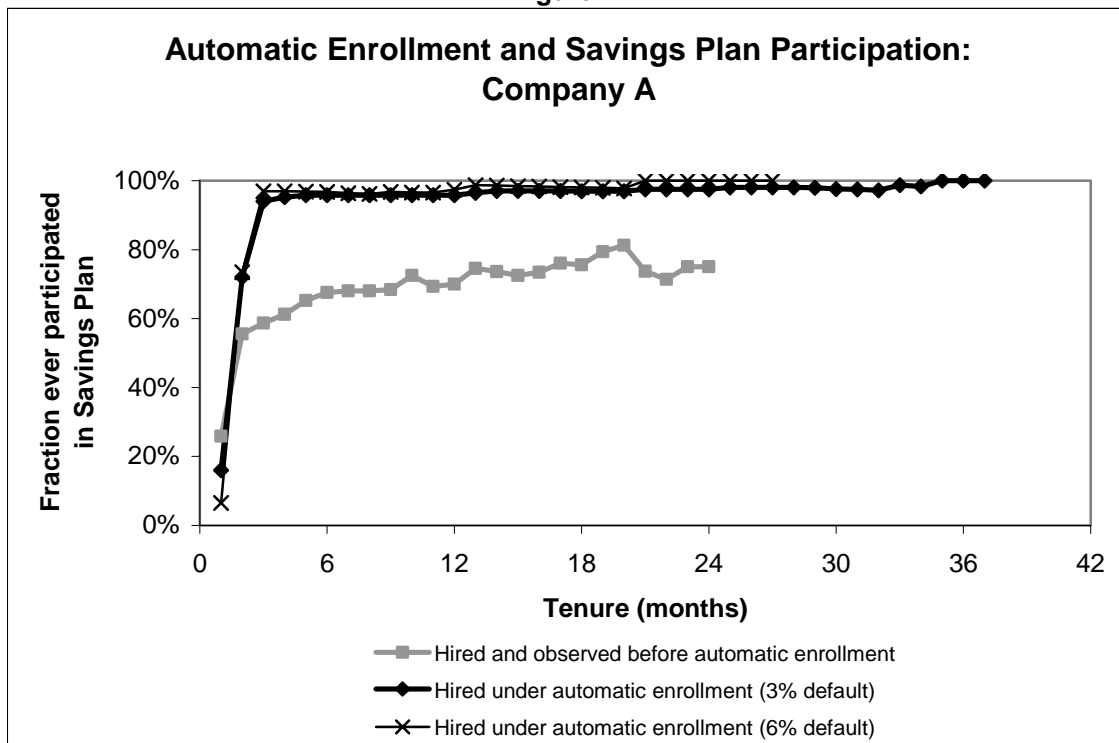
### THE FIRST RETIREMENT SAVING ROADBLOCK: PARTICIPATION

Employer-sponsored savings plans are only a useful tool for helping employees save for retirement to the extent that employees actually participate. Recent research suggests that when it comes to savings plan participation, the key behavioral question is not whether or not employees participate in their savings plan, but how long it takes before they actually sign up. There are several approaches employers can take to encourage and facilitate savings plan enrollment beyond simply educating employees about the benefits of saving for retirement.

### AUTOMATIC ENROLLMENT

In most companies, savings plan participation requires an active election on the part of employees. That is, if the employee does nothing, the default is that the employee will not be enrolled in the savings plan (“standard enrollment”). An alternative but less widely used approach is to automatically enroll employees in the savings plan, requiring instead an active election on the part of employees in order to opt out of participation.<sup>1</sup> This simple change in the default participation status that applies to employees who do nothing has a dramatic impact on participation outcomes.

Figure 1

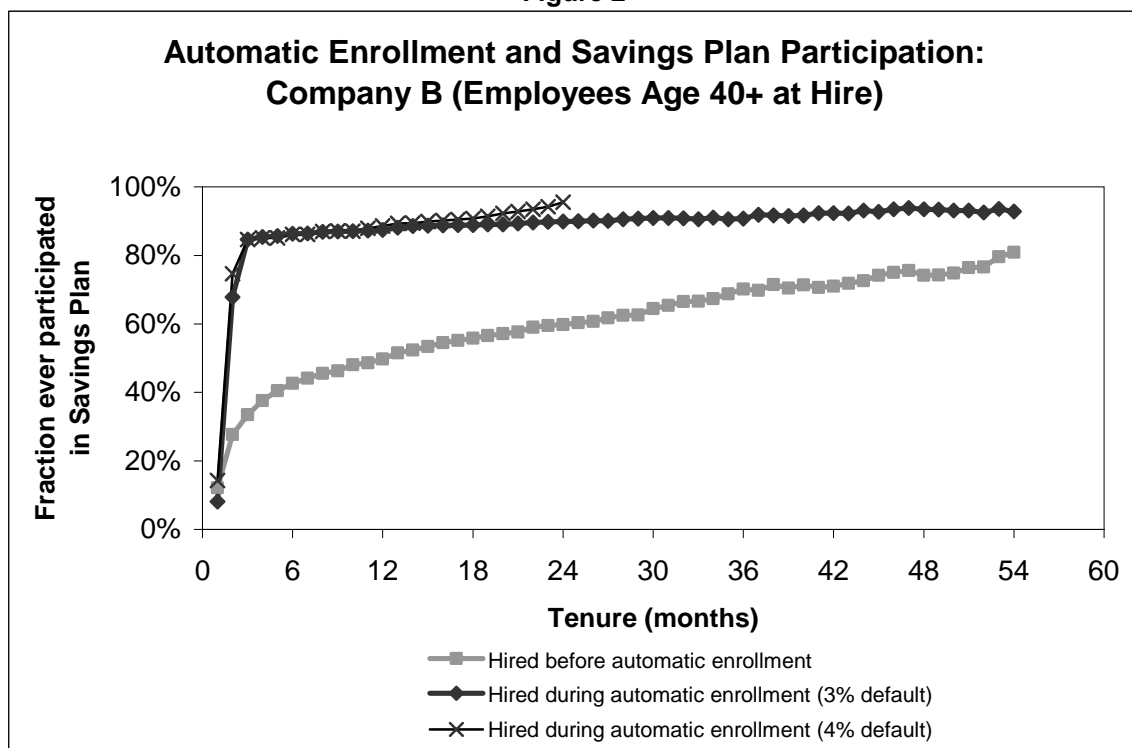


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Figures 1 and 2 show the relationship between savings plan participation and tenure (length of employment) at two firms that adopted automatic enrollment for new employees. The first, Company A, implemented automatic enrollment in 2000 with a default contribution rate of 3% and later increased the default contribution rate to 6%. The second, Company B, implemented automatic enrollment in 1998, also with a default contribution rate of 3%, and later increased the default contribution rate to 4%.<sup>2</sup> Under the standard enrollment regime, savings plan participation is low initially and increases slowly with employee tenure. Under automatic enrollment, however, participation jumps to between 85% and 95% of employees once it takes effect (between one and two months after hire in these companies) and increases only slightly thereafter. At low levels of tenure, the difference in participation rates under the standard enrollment and automatic enrollment regimes is substantial, with a difference of more than 40 percentage points at both firms. As participation increases with tenure under standard enrollment, these differences diminish but remain sizeable even after considerable periods of time. For example, employees hired under automatic enrollment with 24 months of tenure at Companies A and B have participation rates at least 20 percentage points higher than employees hired under standard enrollment with the same tenure. These dramatic differences are borne out in other firms as documented in Madrian and Shea (2001) and Choi et al. (2002, 2004a and 2004b).<sup>3</sup>

Figure 2



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Most firms that have adopted automatic enrollment have done so only for new employees going forward. Companies A and B are interesting because after their initial experiences with automatic enrollment for new employees, both subsequently applied automatic enrollment retroactively to previously hired but non-participating employees. Although not shown here, the participation rates achieved under automatic enrollment for existing employees mirror those for new hires at both firms.

As reported by the Profit Sharing/401(k) Council of America (2005), most firms with automatic enrollment have adopted a relatively low default contribution rate, typically 2% or 3% of pay. Companies A and B are also interesting because both initially implemented automatic enrollment with a low default contribution rate of 3%, but later increased the default contribution rate. The reason many employers with automatic enrollment cite for choosing a low default contribution rate is a concern that more employees will opt out of the savings plan with a higher default. Figures 1 and 2 show that this concern may be unfounded. The participation rates under automatic enrollment in Companies A and B are virtually the same with both a low 3% contribution rate and a higher 4% or 6% contribution rate.

### **SIMPLIFYING THE DECISION-MAKING TASK**

Madrian and Shea (2001), Choi et al. (2002, 2004a and 2004b), and Iyengar, Huberman and Jiang (2004) have all argued that in the absence of automatic enrollment, the complexity of the 401(k) savings decision acts as a deterrent to savings plan enrollment, even when employees would prefer to participate. One reason that automatic enrollment is so successful at increasing 401(k) participation is that it reduces the initial 401(k) participation decision from a task that usually involves comparing myriads of potential contribution rate and asset allocation bundles to two relatively-easy-to-compare options: opt-out of the plan, or stay in at the employer-specified default contribution rate and asset allocation. The drawback to automatic enrollment, however, is that the defaults tend to be quite persistent; even after several years many automatically enrolled employees retain both the default contribution rate and asset allocation (Madrian and Shea 2001; Choi et al. 2002, 2004a and 2004b). This can easily undercut the participation benefits of automatic enrollment unless the defaults happen to be appropriate for the savings needs of most employees.

Automatic enrollment, however, is not the only way to simplify the savings plan participation decision. The literature on the psychology of consumer choice and the results of many surveys on financial literacy both suggest that choosing an asset allocation is the real stumbling block to making a participation election. The asset allocation decision is complicated for two reasons:

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first, because choosing among the different fund options available in a savings plan requires making tradeoffs between risk and return, and second, because employees who are not financially savvy often lack the sophistication to understand the precise nature of these tradeoffs.

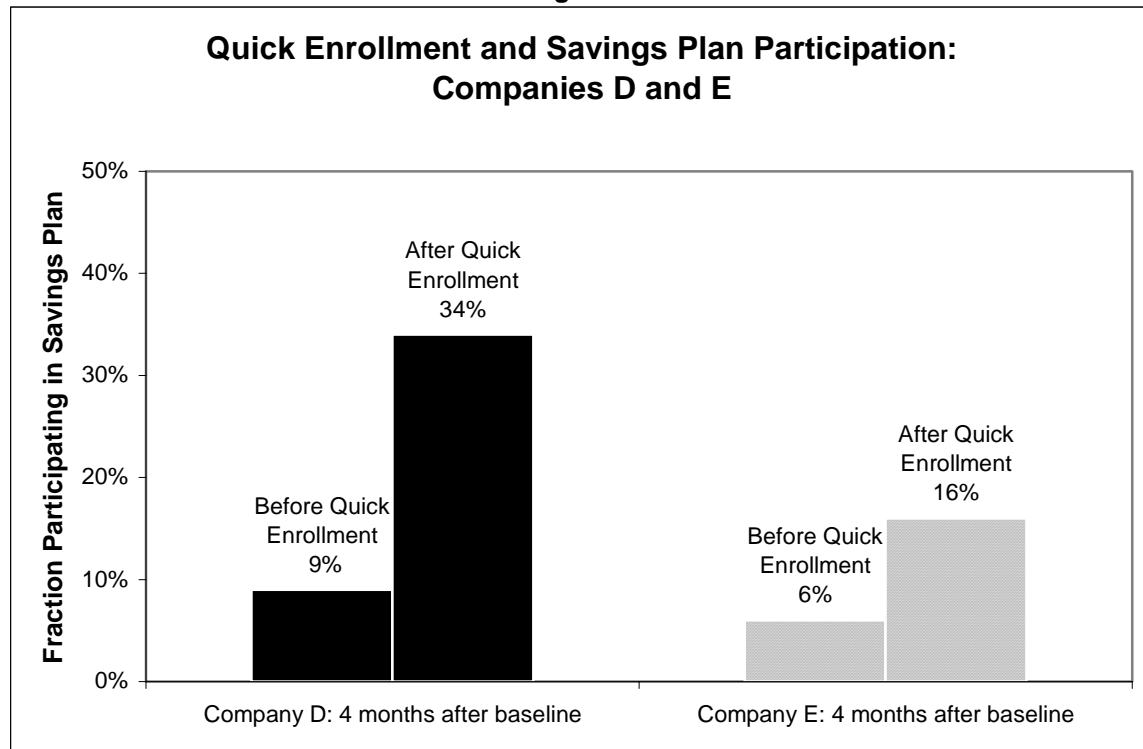
Evidence supporting this notion that the complexity of the asset allocation task leads employees to delay savings plan enrollment comes from a recent study by Iyengar, Huberman and Jiang (2004). They document a strong negative relationship between the number of funds offered in a 401(k) plan and the 401(k) participation rate: each additional 10 funds that are included in the fund menu leads to a 1.5 to 2.0 percentage point decline in participation, a result that holds even among firms with a relatively low number of funds. Given this evidence, the trend over recent years toward increasing the investment options available to employees may be counterproductive if increasing savings plan participation is a priority. On the other hand, employees perceive having some choice as being valuable even if they aren't necessarily in a position to understand and evaluate all of the options. As a result, reducing the complexity of saving plan enrollment by eliminating choice altogether actually leads to substantially lower participation rates.<sup>4</sup> The optimal number of funds to include in the fund menu from a participation standpoint is still an open question. One option that some firms are pursuing is to add a managed investment option to their fund menu—an elective option in which someone else chooses the employee's asset allocation. There is no evidence on the extent to which including such an option impacts participation, but anecdotally managed investment options are quite popular among employees in the firms that have adopted them, and if employees view this as simplifying the enrollment decision we should expect participation to increase.

There are other ways that firms can simplify the savings plan enrollment decision without changing the number or nature of the options in the fund menu. Choi, Laibson and Madrian (2005) and Hewitt (2003) study one such approach dubbed Quick Enrollment. Quick Enrollment decouples the participation decision from the investment allocation decision by giving employees an easy way to elect a pre-selected contribution rate and asset allocation from among the many other options that are available within the plan. Figure 3 shows the impact of Quick Enrollment on savings plan participation at two different firms (see Choi, Laibson and Madrian, 2005).

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Figure 3



At Company D, new hires were given Quick Enrollment forms at orientation allowing them to check a box to be enrolled in their firm's savings plan at a 2% contribution rate with a pre-selected asset allocation (50% in a money market fund and 50% in a stable value fund). Participation rates for employees with four months of tenure tripled under Quick Enrollment, from 9% of new hires to 34%. At Company E, non-participating employees at all levels of tenure were mailed postage-paid Quick Enrollment response cards allowing them to check a box to be enrolled in their firm's savings plan at a 3% contribution rate allocated entirely to a money market fund. Relative to the enrollment trends of non-participants a year prior to the mailing, savings plan participation four months later more than doubled, from 6% of non-participants enrolling to 16%. A different implementation of Quick Enrollment at Company D directed to existing non-participants allowed them to choose any contribution rate allowed by the plan with the same pre-selected asset allocation previously described. Fully 20% of non-participants signed up for the savings plan over a two-month period. Collectively these results suggest that there are a number of different strategies that firms can pursue to simplify savings plan enrollment in order to increase participation.



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Like automatic enrollment, Quick Enrollment induces heavy clustering of enrollees at the employer-selected contribution rate and asset allocation. But relative to automatic enrollment, Quick Enrollment mechanisms are potentially more flexible because they allow for more than one option as in the second implementation of Quick Enrollment at Company D; in contrast, automatic enrollment by its nature has only one default. A multiple-option implementation of Quick Enrollment would reduce the extent to which employees are corralled into a single outcome. The opt-in nature of the Quick Enrollment mechanism may also allay the fears of some employers about choosing less conservative defaults in the context of automatic enrollment resulting in employer selection of Quick Enrollment options that are more appropriate to the savings needs of most employees.

### REQUIRING AN ACTIVE DECISION

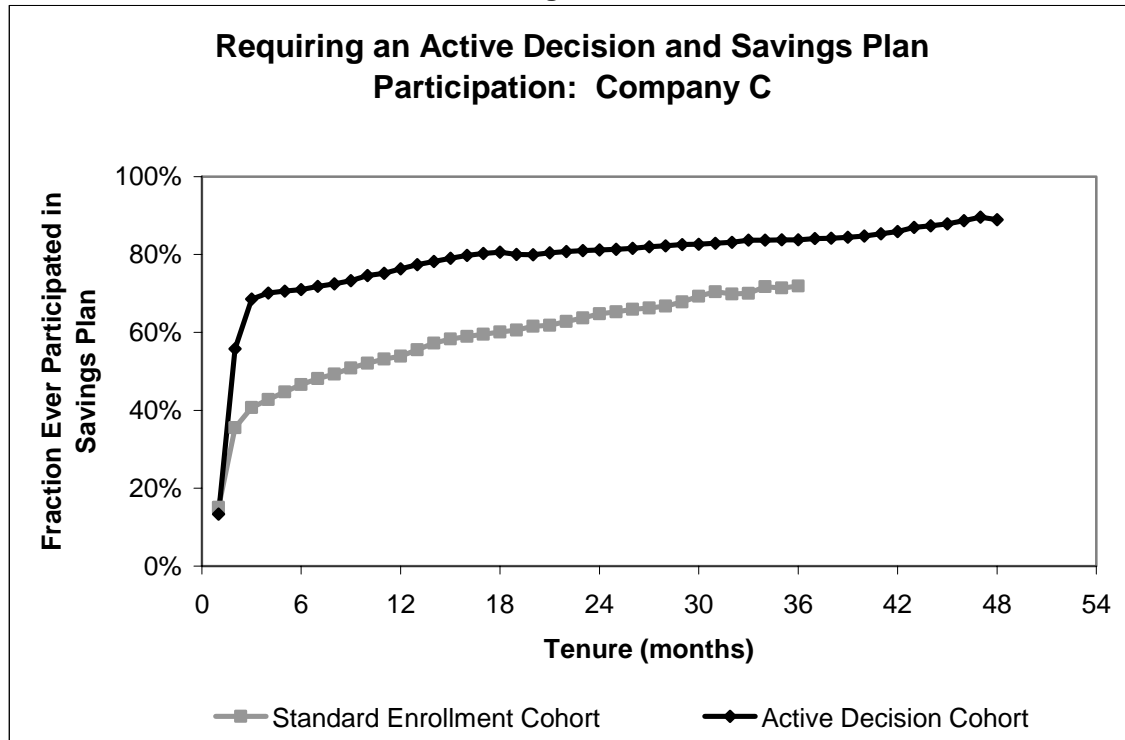
Beyond the sheer complexity of the decision-making process, another reason that many employees delay enrolling in their employer savings plan is simply because they can—why do to today what you can put off until tomorrow, especially if the task at hand seems complicated? In an environment that allows employees to enroll in their savings plan whenever it is convenient—24 hours a day, 7 days a week and 365 days a year—there is little pressure on employees to get around to this task sooner rather than later, and the natural tendency of many is to delay. One approach to encouraging timely savings plan enrollment that avoids the necessity of choosing a default option implicit in both automatic enrollment and the Quick Enrollment mechanisms discussed above is to simply require employees to actively indicate their savings plan participation preferences by a specific date, regardless of whether or not they want to enroll.

Figure 4, based on results reported in Choi et al. (2005), illustrates the contrast between such an “active decision” approach to savings plan participation and the standard approach used by most employers for one firm, Company C, that switched between these two regimes. In this particular firm, the deadline for making a savings plan participation decision under the active decision regime was the 30th day of employment, although there were some administrative delays in collecting and processing all of the forms beyond this initial 30-day period. The impact on participation of this active decision approach to savings plan enrollment is readily apparent in Figure 4: at three months after hire, 401(k) participation is 28 percentage points higher for employees required to make an active decision.

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Figure 4



Although the participation rate under the active decision approach to savings plan participation at Company C does not match that obtained by the firms who have implemented automatic enrollment, it does not result in a clustering of employees at a particular default savings outcome. Choi et al. (2005) show that the contribution rate distribution three months after hire under an active decision approach to enrollment is similar to the contribution rate distribution achieved three years after hire under a standard opt-in enrollment regime. On the other hand, the active decision approach forces employees to wrestle with the savings plan participation decision in a relatively short time period when deferring the required deliberations may have been more convenient.

## MATCHING EMPLOYEE CONTRIBUTIONS

The primary mechanism used by most organizations to encourage savings plan participation is the employer match. Indeed, over 90% of firms offer some sort of match on employee contributions (Hewitt, 2005). The rationale is simple—if employers reward saving through a match on employee contributions, employees will presumably be more likely to participate. Several studies have examined the impact of matching on 401(k) participation.<sup>5</sup> They

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universally find that having an employer match is associated with higher levels of participation. For example, Engelhardt and Kumar (2004) find that moving from no match to a 50% match on employee contributions will increase savings plan participation by 7 percentage points. Most of these studies also find that increasing the match rate also generates higher participation. Note, however, that the effect on participation of implementing a relatively standard 50% matching contribution, at least as estimated by Engelhardt and Kumar, is much smaller than the effect of automatic enrollment, Quick Enrollment, or requiring employees to make an active decision.

### **INCREASING PRE-RETIREMENT ACCESSIBILITY TO ACCOUNT BALANCES**

One reason that some employees may be reluctant to participate in an employer-sponsored retirement savings plan is a concern that should employees find themselves in a state of financial hardship, they will not be able to access their account balances or will only be able to do so by incurring a penalty. To both encourage participation by these employees and to help them out if they should run into financial trouble, many employers have adopted provisions that allow employees to borrow against their plan balances or that allow for withdrawals in the case of demonstrated hardship.<sup>6</sup> The only study that has examined the impact of such provisions on savings plan participation is a GAO report on loan availability and 401(k) participation. This study finds that participation rates in plans that allow for loans are 6 percentage points higher than in plans that do not. It is an open question as to whether total savings actually goes up as well. The answer here depends on whether the increased participation (and potentially increased saving by those who would have been participating anyway) is more or less than the leakage that occurs as some participants tap into their account balances.

### **CONCLUSION: ASSESSING THE OPTIONS**

There are many approaches employers can take to increasing savings plan participation. The mechanisms most commonly adopted by employees include offering an employer match and a loan option. But these are not necessarily the most successful, or the most cost-effective, mechanisms to increasing participation. The most effective mechanism for increasing savings plan participation is automatic enrollment. Firms with automatic enrollment have participation rates ranging from 85% to 95% among those employees who are impacted. The drawback to automatic enrollment, however, is that it corrals many employees into the employer-chosen default contribution rate and asset allocation. Simply requiring employees to make a participation election shortly after employment also dramatically increases participation (although not to the same extent as automatic enrollment) but does not favor any particular contribution rate or asset allocation in the same way as automatic enrollment. A more general

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approach to increasing savings plan participation is to simplify the decision-making that is required. There are different ways to do this, such as offering a managed investment option, decreasing the number of investments in the fund menu, or offering employees a pre-selected menu of asset allocation options to choose from. Offering an employer match also increases incentives for savings plan participation, but is likely to be more effective in conjunction with some of these other approaches to enhancing participation.

The most appropriate approach to increasing savings plan participation is likely to vary from one firm to another depending on any other savings vehicles being offered by the firm (such as a traditional defined benefit pension) and the demographic characteristics of the firms' employees (Choi et al. 2005). If the savings preferences of employees are very similar, automatic enrollment is a simple and effective mechanism to lead employees to their collectively desired outcome if the default contribution rate and asset allocation are appropriately chosen to meet the needs of employees. On the other hand, if savings preferences vary significantly across employees, requiring an active decision or simplifying the participation decision through a Quick Enrollment mechanism may make more sense. Automatic enrollment, Quick Enrollment, and requiring an active decision are all likely to be more effective when done in conjunction with an employer match.

### ABOUT THE AUTHOR

Brigitte Madrian is an Associate Professor of Business and Public Policy at the University of Pennsylvania Wharton School of Business where she holds the Boettner Chair in Financial Gerontology. She is also a research associate at the National Bureau of Economic Research, a TIAA-CREF Institute Fellow, and co-editor of the *Journal of Human Resources*. Before coming to Wharton in 2003, she was a faculty member at the University of Chicago (1995-2003) and Harvard University (1993-1995). Dr. Madrian's research focuses on employee benefits and social insurance programs, particularly retirement savings plans and health insurance. Her current research focuses on the relationship between 401(k) plan design and employee saving outcomes. She has also examined the impact of health insurance on the job choice and retirement decisions of employees and the hiring decisions of firms. Dr. Madrian received her Ph.D. in economics from the Massachusetts Institute of Technology and studied economics as an undergraduate at Brigham Young University. She is the recipient of the National Academy of Social Insurance Dissertation Prize (first place, 1994) and the TIAA-CREF Paul A. Samuelson Award for Scholarly Research on Lifelong Financial Security (2002).

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### ENDNOTES

- <sup>1</sup> In a recent survey of large employers, Hewitt Associates (2005) reports that 19 percent of companies utilized automatic enrollment in their 401(k) plans in 2005, up from 7 percent in 1999. In another survey, the Profit Sharing/401(k) Council of America (2005) reports that 8% of firms overall have automatic enrollment, but that the likelihood of having automatic enrollment was much higher in large than small firms (24% vs. 1%).
- <sup>2</sup> The data for Company B are restricted to employees over the age of 40. This is because the eligibility requirement for employees under the age of 40 was changed at the same time that automatic enrollment with a 3% contribution rate was implemented.
- <sup>3</sup> See also Vanguard 2001.

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- <sup>4</sup> Papke (2004) finds that having the ability to direct the asset allocation of contributions to an employer-sponsored savings plan leads to a large 36 percentage point increase in the probability of participating.
- <sup>5</sup> See Engelhardt and Kumar (2003) and Choi et al. (2002 and 2004b) for a review of the literature on matching and savings plan participation.
- <sup>6</sup> Note that firms are not required to allow employees to make hardship withdrawals, although many do so. There are some limited circumstances under which employees younger than 59 ½ can withdraw 401(k) balances without incurring a 10% tax penalty. These include permanent disability, a court order pursuant to a divorce, medical expenditures in excess of 7.5% of income, and some specific cases of early retirement or following a permanent layoff. Home purchase, education, or general financial hardship do not exempt employees from paying a tax penalty on early withdrawals.