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SIMPLIFICATION AND SAVING

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ABSTRACT

Many financial decisions that individuals face are complicated and daunting for those who are not financial experts. One important consequence of this complexity is that individuals procrastinate in making these decisions. In this paper, we evaluate a low-cost intervention designed to simplify the retirement saving decision. Individuals received the opportunity to enroll in their workplace savings plan at a pre-selected contribution rate and asset allocation. By collapsing a multidimensional set of options into a binary choice between the status quo and the pre-selected alternative, this intervention increases participation rates by 10 to 20 percentage points among affected employees. We find that similar mechanisms can be used to increase contribution rates among employees who are already participating.

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1. Introduction

Household financial decisions, such as choosing a savings rate or asset allocation, are often complicated. One potential consequence of this complexity is that individuals put off confronting these difficult decisions. For example, Madrian and Shea (2001) and Iyengar, Huberman, and Jiang (2004) argue that the complexity of the retirement savings decision discourages employees from timely enrollment in employer-sponsored savings plans, even when they prefer participation to non-participation. Unfortunately, even modest delays in saving for retirement can lead to substantial reductions in long-run wealth accumulation. This paper's goal is to document the effect that simplifying financial decisions can have on financial outcomes.

We do this by studying two firms that implemented an intervention called Quick Enrollment. Quick Enrollment gives employees the option of enrolling in the savings plan by opting into a contribution rate and asset allocation pre-selected by the employer. We also evaluate a similar mechanism called Easy Escalation, which allows existing participants to increase their contribution rate to a pre-selected level. Both of these interventions allow workers to psychologically collapse a complex, multidimensional savings and investment problem into a binary choice: remaining at their status quo or moving to the pre-selected alternatives.

We find that Quick Enrollment substantially increases savings plan participation relative to a standard opt-in enrollment regime, although these increases are not nearly as large as those obtained by firms that automatically enroll their employees in savings plans. Similarly, we find that Easy Escalation increases employee contribution rates, with effects similar in magnitude to those of Quick Enrollment. Simplified opt-in mechanisms such as these may be attractive to employers and policymakers who are put off by the excessive clustering around defaults under automatic enrollment regimes.

The paper proceeds as follows. Section 2 describes the Quick Enrollment and Easy Escalation implementations at the two firms we study and the data that we use to analyze their effects. Section 3 presents the results of our empirical analysis for one firm, Company A. Section 4 presents the results of our empirical analysis for the second firm, Company B. Section 5 concludes.

2. Quick Enrollment and Easy Escalation Implementation

The first Quick Enrollment implementation we study was at a large health services company—hereafter referred to as Company A—with approximately 40,000 employees. Virtually all Company A employees in our data were immediately eligible for their employer-sponsored savings plan, a 401(k) plan. Most employees were also eligible for a 50% matching contribution from the company on the first 4% or 6% of pay contributed to the plan. Individuals were allowed to contribute up to 100% of their pay, subject to U.S. Internal Revenue Service annual dollar contribution limits, to eleven investment options. There was no employer stock in the fund menu.

Prior to July 2003, the company used a standard opt-in enrollment process: employees were not enrolled in the savings plan unless they made an affirmative election. When they did choose to enroll, they had to select a contribution rate between 0 and 100% and specify what fraction of their contribution they wished to allocate to each of the eleven investment options. In July 2003, Company A adopted Quick Enrollment on a trial basis at its main location. New employees attending orientation received Quick Enrollment cards. Employees who checked the box on the card and returned it were enrolled in the savings plan at a contribution rate of 2% of salary (before tax) invested in a pre-selected asset allocation (50% in a money market fund and 50% in a balanced fund). Returning the Quick Enrollment card was not mandatory. However, the cards did tell employees that if they wished to use Quick Enrollment, they had to submit the card within two weeks of orientation (the deadline on the card was a specific date which changed according to when the new employee orientation was held).[1] Employees also could enroll on their own at any contribution rate and with any investment allocation (subject to plan limitations) using the standard channels (phone or Internet) throughout this time. In February 2004, Company A adopted Quick Enrollment as a permanent feature of its new employee orientation.

Company A's second Quick Enrollment implementation took place from mid-June through mid-October 2004 for non-participating employees who were already at the firm. This implementation occurred in conjunction with the adoption of a new Web-based benefits management system for all employees. As part of the transition to this new system, the company

[1] The company reports that many of the Quick Enrollment cards were handed in during the orientation rather than taken home and mailed in. The deadline was not actually binding, although employees probably did not know this.

had employees meet individually with an outside vendor's representatives to help them register on the new system. These meetings were not designed to be financial planning sessions, but representatives answered questions about company benefits—in particular, about the firm's life insurance products and savings plan. Non-participating employees received the opportunity to enroll in the savings plan using a Web-based Quick Enrollment interface. This implementation offered the same asset allocation as the new-hire implementation, but employees could choose any pre-tax contribution rate. Employees did not have the option to use the Web-based Quick Enrollment channel after the meeting.

The third Quick Enrollment implementation that we study is at Company B, a manufacturing firm. This company employs approximately 20,000 individuals. Employees are immediately eligible for their employer-sponsored savings plan, also a 401(k) plan, which provides a variable employer matching contribution between 55% and 125%, depending on company profitability, on the first 6% of pay contributed to the plan. The employer match is invested in employer stock. Employees may contribute up to 25% of pay, subject to the Internal Revenue Service dollar contribution limits, and choose among nine investment options, including employer stock. Throughout our sample period, Company B operated a standard opt-in enrollment system.

Quick Enrollment at Company B was implemented as a one-time mailing to non-participating employees already at the firm in the latter half of January 2003. Employees who checked the form's box and returned the card were enrolled in the savings plan at a 3% (before-tax) contribution rate invested entirely in a money market fund. Although Company B employees were given a two-week deadline for returning the Quick Enrollment cards, this deadline was not binding in practice. Cards returned after the deadline were held and processed in May 2003. A second Quick Enrollment mailing occurred one year later in January 2004 with the same contribution rate and asset allocation option as in 2003. A third Quick Enrollment mailing occurred in February 2005, offering the same contribution rate but a different asset allocation: a lifestyle fund rather than a money market fund.

In 2004 and 2005, Company B also sent Easy Escalation forms to already-enrolled employees whose contribution rate was below the 6% match threshold. These forms, similar to the Quick Enrollment forms, allowed employees to check a box to increase their contribution

rate to the 6% match threshold. The 2004 and 2005 Easy Escalation mailing dates coincided with the 2004 and 2005 Quick Enrollment mailings (January 2004 and February 2005).

The data we use to analyze the impact of Quick Enrollment and Easy Escalation come from Hewitt Associates, a large U.S. benefits administration and consulting firm. The data are repeated year-end cross-sections of all employees at Companies A and B, from year-end 2002 through year-end 2005. These cross-sections contain data on participation status, initial participation date, a monthly history of contribution rates, and year-end asset allocations and total balances.

3. Quick Enrollment at Company A

We first assess Quick Enrollment's impact on new-hire savings plan participation at Company A. To do this, we compare participation among employees hired from February to May of 2004—after Quick Enrollment was permanently incorporated into new hire orientation at the company's main location—to that among employees hired from February to May of 2002 and 2003, before Quick Enrollment was adopted (see Figure 1). We track all three cohorts' participation rates through June 2004, when Company A's second Quick Enrollment implementation began. Choi, Laibson, and Madrian (2006) document the three cohorts' demographic similarity.

New-hire savings plan participation rates are similar and extremely low under standard enrollment for employees hired from February to May 2002 and February to May 2003: only about 5% at one month after hire and 15% after 12 months. Participation rates under Quick Enrollment are dramatically higher: 19% one month after hire and 35% in the fourth month, a 25 percentage point increase over the 2002 and 2003 cohorts in their fourth month of tenure. We do not calculate Quick Enrollment participation rates at higher tenure levels for this group because they are potentially contaminated by the June-to-October intervention described below.

Company A's second Quick Enrollment implementation occurred from mid-June to mid-October 2004 in conjunction with the new benefits management website rollout. The aggregate participation impact of this Quick Enrollment extension to all non-participating employees is striking (Figure 2). During a four-month period, the firm's overall participation rate increased from 54% to 66%, converting roughly 25% of non-participants into participants.

Figures 3 and 4 show Quick Enrollment's impact on the contribution rate distributions for new hires (Figure 3) and for all employees (Figure 4). In both figures, non-participants are coded as having a contribution rate of zero, although they are not shown in the graph. As is typical in companies with an employer match, the modal contribution rate prior to Quick Enrollment is the match threshold of 6%. Figure 3 shows that Quick Enrollment for new hires dramatically increased the fraction of new hires contributing 2% of pay, the pre-selected Quick Enrollment contribution rate. We find no evidence that Quick Enrollment moved people away from other non-zero savings rates, as automatic enrollment does; the increase in employees contributing 2% of pay at one month after hire is approximately equal to the one-month participation increase in Figure 1.

The second Quick Enrollment implementation gave employees the option to choose any contribution rate. Figure 4 shows increases in the fraction of employees at each contribution rate between 1% and 6%, with little increase at higher contribution rates. Because Quick Enrollment participants are spread across several contribution rates, the match threshold remains the modal contribution rate.

Quick Enrollment also affects asset allocations, as both Quick Enrollment implementations offered only one pre-selected asset allocation. Prior to Quick Enrollment, virtually nobody at Company A chose the pre-selected asset allocation. After Quick Enrollment's adoption, however, 73% of newly hired participants and 92% of new participants among previously hired employees had the Quick Enrollment pre-selected asset allocation.

Research has shown that automatic enrollment defaults are quite persistent; a substantial fraction of participants remain at the defaults for years after enrollment (Choi et al. 2004). Persistence at the pre-selected Quick Enrollment elections is also high. Figures 5 (new hires) and 6 (all new participants) show the fraction of plan enrollees who remain in the plan by the length of time since their initial enrollment. Both before and after Quick Enrollment, no more than 4 to 5% of new participants subsequently opt out of the plan, even after two or more years. In Figure 7, we also find only small differences in the persistence of the initial contribution rates selected by newly hired participants before and after Quick Enrollment. In contrast, Figure 8 shows that when we examine the entire pool of new enrollees (not just new hires), contribution rates of those who enrolled after Quick Enrollment are much more persistent than those who enrolled before Quick Enrollment. Because the long-tenured employees who hadn't enrolled prior to

Quick Enrollment are particularly passive, their passivity continues after they have been induced to join by Quick Enrollment.

We have less data with which to measure asset allocation persistence, as we only observe year-end asset allocations. For the February to May 2004 new-hire participants with an initial 2% contribution rate (the pre-selected Quick Enrollment election), we find that 88% still have the pre-selected asset allocation for their contributions at year-end 2004, and 81% retain this asset allocation at year-end 2005.[2] As a comparison, 60% of new-hire participants from February to May 2002 and 2003 have the same asset allocation for their contributions at both the end of the calendar year in which they were hired and the end of the calendar year following their hire year. Asset allocation for this group is also quite persistent, although not as much as for those employees joining the savings plan through Quick Enrollment.

For those employees who enrolled in the savings plan from June to October 2004 and who are observed having the pre-selected Quick Enrollment asset allocation at year-end 2004, 98% retain that same asset allocation at year-end 2005. As a comparison, for those employees who enrolled in the savings plan between June and October 2002, 65% had the same asset allocation at year-end 2003 as they had at year-end 2002. Clearly, there is tremendous persistence at the pre-selected asset allocation under Quick Enrollment.

Finally, Figure 9 shows the cumulative impact of the different Quick Enrollment implementations on the average contribution rate for all employees at Company A (non-participants are included at a zero contribution rate). The average before the initial Quick Enrollment implementation was a relatively low and constant 4.3% of pay. Near the end of 2003, when Quick Enrollment was adopted on a trial basis, we see the average contribution rate start to rise slightly. After Quick Enrollment's second implementation, for already hired non-participants from June to October 2004, the average contribution rate is permanently higher than it was in the pre-Quick Enrollment period. The average at the end of 2005 is 5.4% of pay, a 25% increase (1.1% of pay).

4. Quick Enrollment and Easy Escalation at Company B

We now turn to the Quick Enrollment and Easy Escalation interventions at Company B. As described in Section 2, this company mailed Quick Enrollment cards to non-participating

[2] We define a new-hire participant as someone who enrolls within 30 days after hire.

employees in January 2003, January 2004, and February 2005. Those returning the reply card were enrolled in their employer's savings plan at a 3% contribution rate invested in a money market fund (the 2003 and 2004 mailings) or a lifestyle fund (2005 mailing). The Quick Enrollment cards were processed a few weeks after their mailing: in February of 2003 and 2004, and in March of 2005.[3] In addition, participants contributing less than the 6% match threshold in 2004 and 2005 were mailed an Easy Escalation form; those returning this form had their contribution rate increased to 6% of pay.

Figure 10 shows the cumulative impact on savings plan participation of the three Quick Enrollment mailings for employees who were not participating in the savings plan on February 1, 2003. To see what might have happened to this group in the absence of Quick Enrollment, we also show the participation paths for employees who had never participated in the savings plan as of March 2000, as of February 2001, and as of February 2002. The *x*-axis in Figure 10, labeled "time since baseline," is the number of months since the date at which these non-participating cohorts are identified as non-participants. For the 2003 cohort, Quick Enrollment forms are first processed between months 0 and 1 (February and March of 2003); the final processing of forms from the 2003 mailing takes place between months 3 and 4 (May and June of 2003). Forms from the 2004 Quick Enrollment mailing are processed between months 12 and 13 (February and March 2004). Those from the 2005 mailing are processed between months 25 and 26 (March and April 2005). Our time series for the three standard enrollment cohorts all end in January 2003, before the initial Quick Enrollment implementation.

The pre-Quick Enrollment non-participant cohorts all show similar slow and steady participation increases over time. In contrast, the participation rate of employees who were not participating at the time of the first Quick Enrollment mailing increases markedly between months 0 and 1, and again between months 3 and 4, which are exactly the times when the Quick Enrollment forms were processed. We see another sharp participation jump between months 12 and 13, and again between months 25 and 26, coinciding with the 2004 and 2005 Quick Enrollment mailings. The cumulative impact of the three Quick Enrollment mailings is sizeable: participation rates are more than double those at similar tenure levels prior to Quick Enrollment.

Figure 11 shows the impact of the 2004 and 2005 Easy Escalation mailings on employee contribution rates. Each bar represents the fraction of employees with an initial contribution rate

[3] In 2003, the reply cards of late responders were held and processed in May 2003.

less than 6% who changed their contribution rate in a given month (participants who retain their initial contribution rate—the vast majority of participants—are not shown in the figure, although they are included in the denominator used to calculate the percentages). In general, only a small fraction of low contributors change their contribution rate in any month. The notable exceptions occur in March 2004 and in March/April 2005, which coincide with the processing of the Easy Escalation forms. In these months, roughly 12 to 14% of low contributors increase their contribution rate to 6%, compared to about 1% in the other months.

Figure 12 shows that Company B's savings plan participation persistence is high (as at Company A) and similar for employees who enrolled through Quick Enrollment and employees who enrolled prior to Quick Enrollment. Only 2 to 4% of participants drop out of the savings plan over a 12-month period, and 4 to 5% over a 24-month period.

Given the confounding impact of the Easy Escalation interventions, we do not examine the persistence of the Quick Enrollment pre-selected contribution rate at Company B. We can, however, examine the persistence of the pre-selected asset allocation for the 2003 and 2004 Quick Enrollment implementations. For employees who enrolled in the savings plan in February to May 2003 and who are observed with the pre-selected Quick Enrollment asset allocation at year-end 2003, 90% retain the same asset allocation at year-end 2004, and 84% retain the pre-selected allocation at year-end 2005, roughly in line with the asset allocation persistence observed for new hires under Quick Enrollment at Company A. As a comparison, for employees who enrolled in the savings plan between February and May 2002, 61% had the same asset allocation at year-end 2003 as they did at year-end 2002, and 35% retained the year-end 2002 asset allocation two years later. These numbers, however, are likely to understate the underlying asset allocation persistence for employees not using Quick Enrollment, as some asset allocation changes for this group were due to the fact that the company eliminated some of the funds in its menu over this time period, forcing employees who held these funds to choose a different allocation.

5. Conclusions

Madrian and Shea (2001), Iyengar, Huberman and Jiang (2004), and Choi, Laibson and Madrian (2006) have argued that the complexity of the savings decision discourages employees from timely enrollment in employer-sponsored savings plans, even when individuals would

prefer participation to non-participation. Quick Enrollment is a low-cost manipulation that reduces this complexity by allowing employees to enroll at a contribution rate and asset allocation pre-selected by the employer. We find that Quick Enrollment tripled the participation rate among new hires relative to a standard enrollment mechanism in which employees must actively select both a contribution rate and an asset allocation. When Quick Enrollment was made available to previously hired employees who were not participating in their 401(k) plan, a sizeable fraction of these non-participants enrolled in the plan: 25% at Company A during a four-month intervention window and 45% at Company B over the course of three interventions separated by roughly a year each. We find that similar mechanisms can also be used to increase the contribution rates of already-participating employees, with roughly 10 to 12% of low contributors increasing their contribution rate to the match threshold in response to such interventions.

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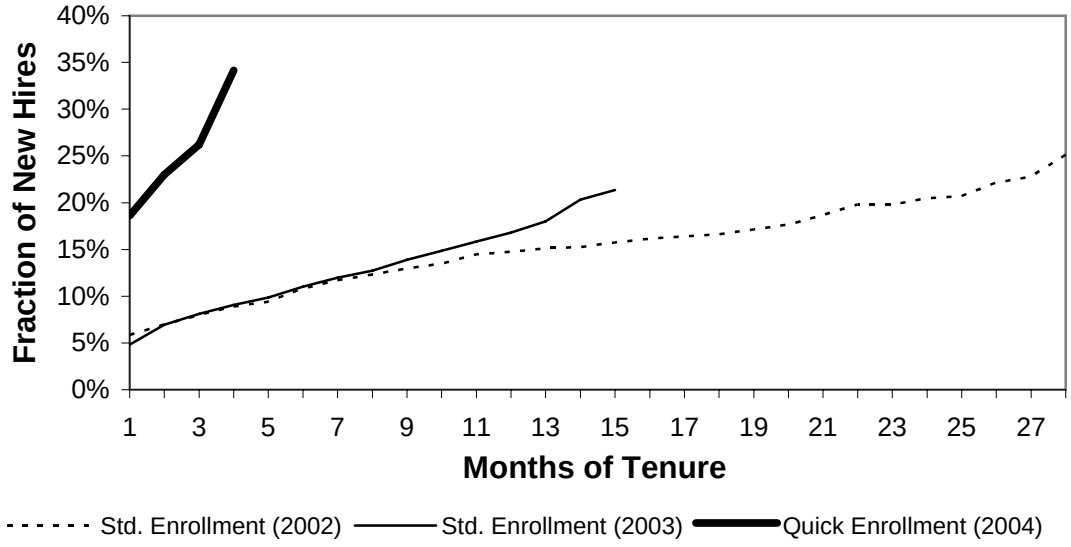
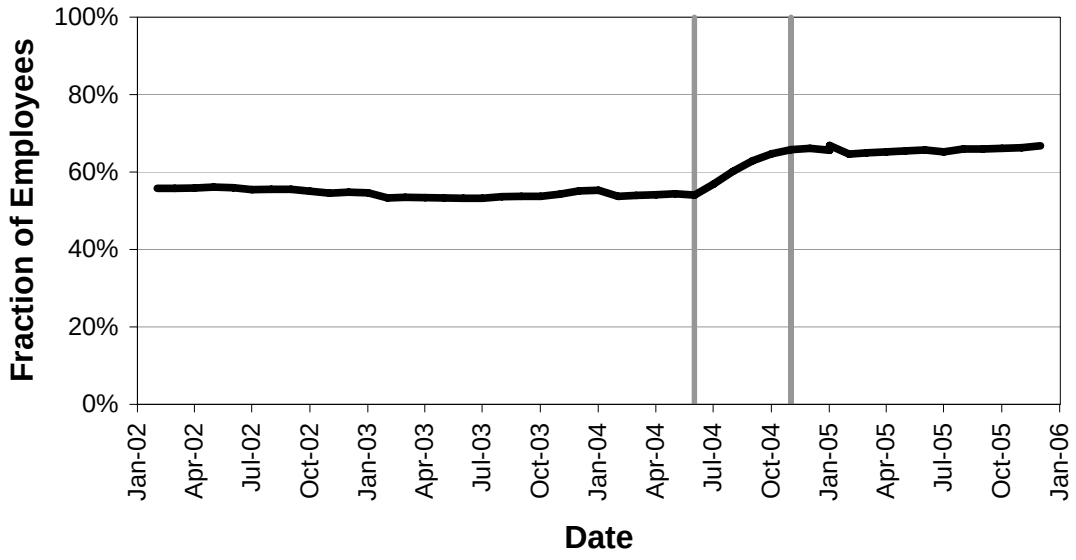
FIGURE 1. Savings Plan Participation by Tenure (Company A, Main Location)



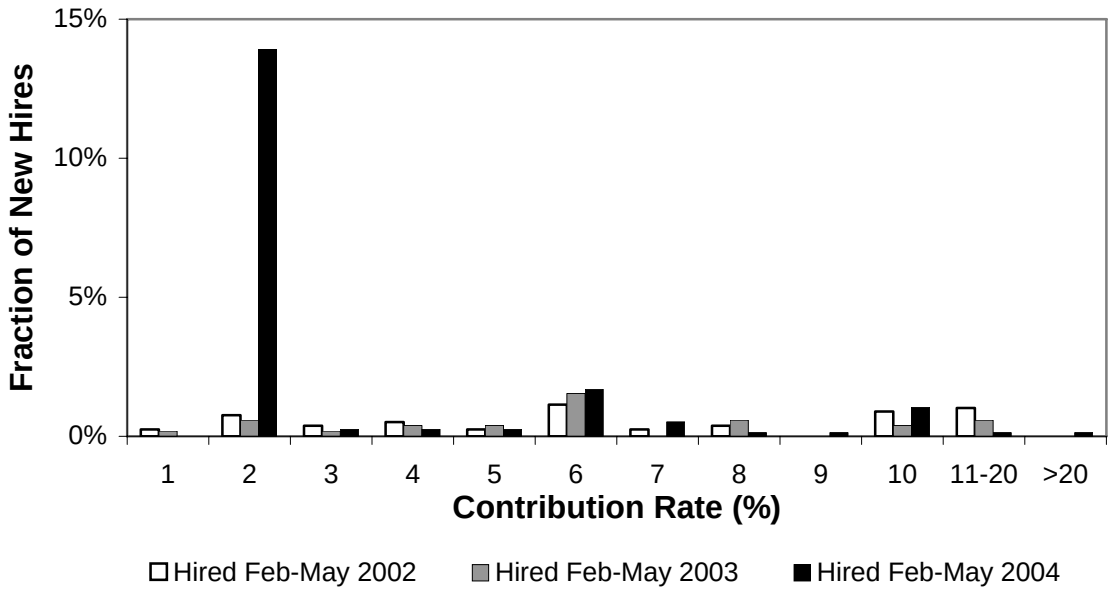
Note: The samples for each year are employees hired from February through May of that particular year.

FIGURE 2. Overall Savings Plan Participation Rate (Company A)



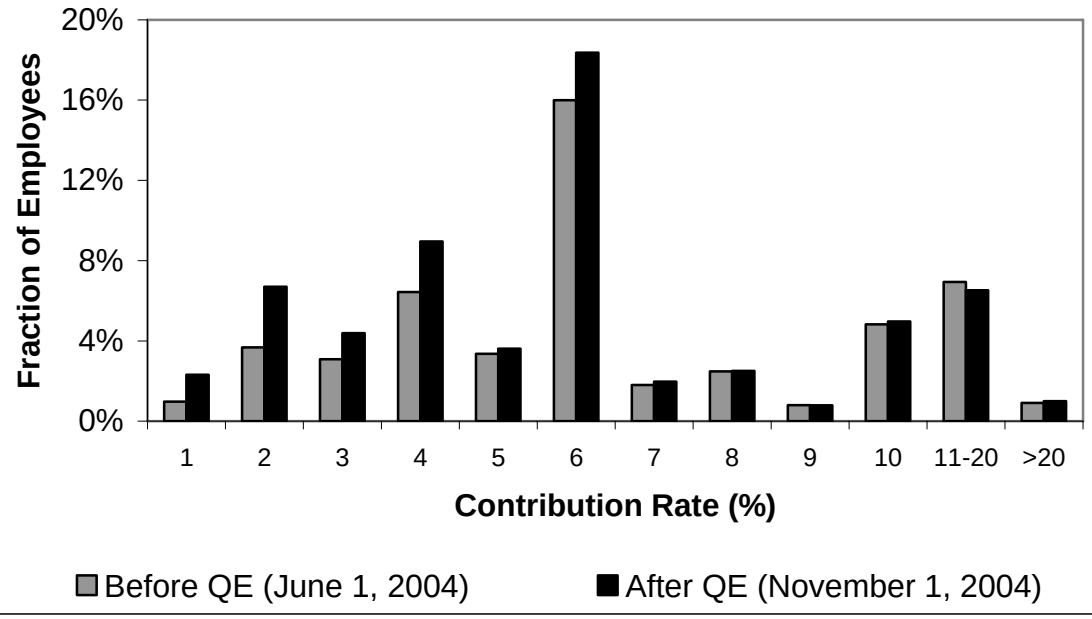
Note: The sample is employees active from 2002 through 2005 who are eligible for savings plan participation throughout this period.

FIGURE 3. Contribution Rate Distribution of New Hires Enrolling Within 30 Days (Company A, Main Location)



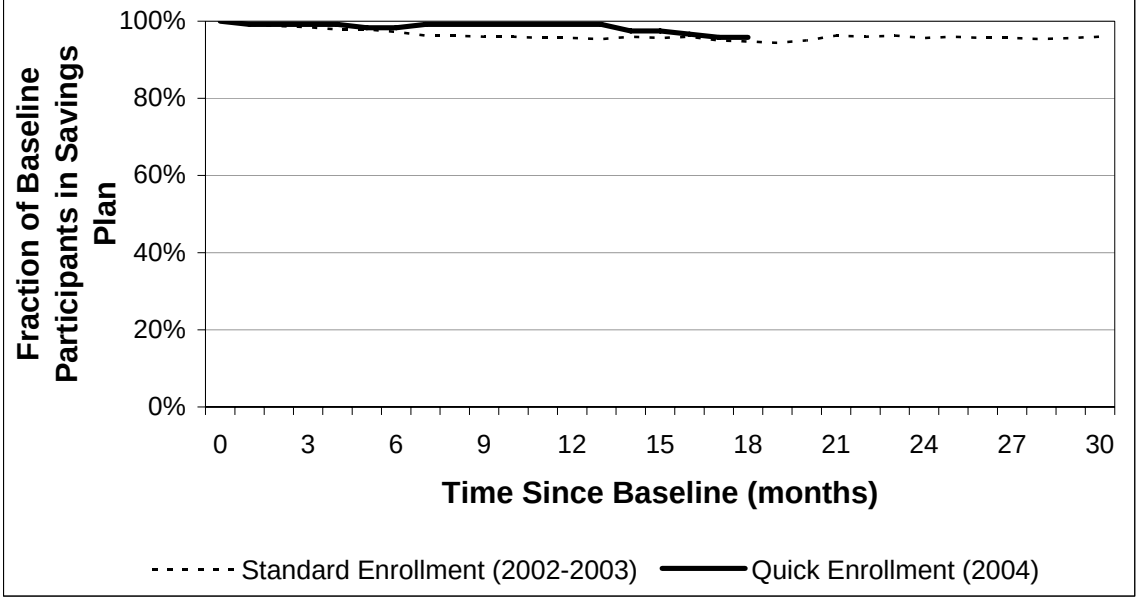
Note: Employees who did not enroll in the savings plan within 30 days of hire are classified as having a zero contribution rate and are included in calculating the fraction of new hires at a given contribution rate, although we do not show the fraction of new hires with a zero contribution rate in this figure.

FIGURE 4. Contribution Rate Distribution Before and After Quick Enrollment for All Employees (Company A)

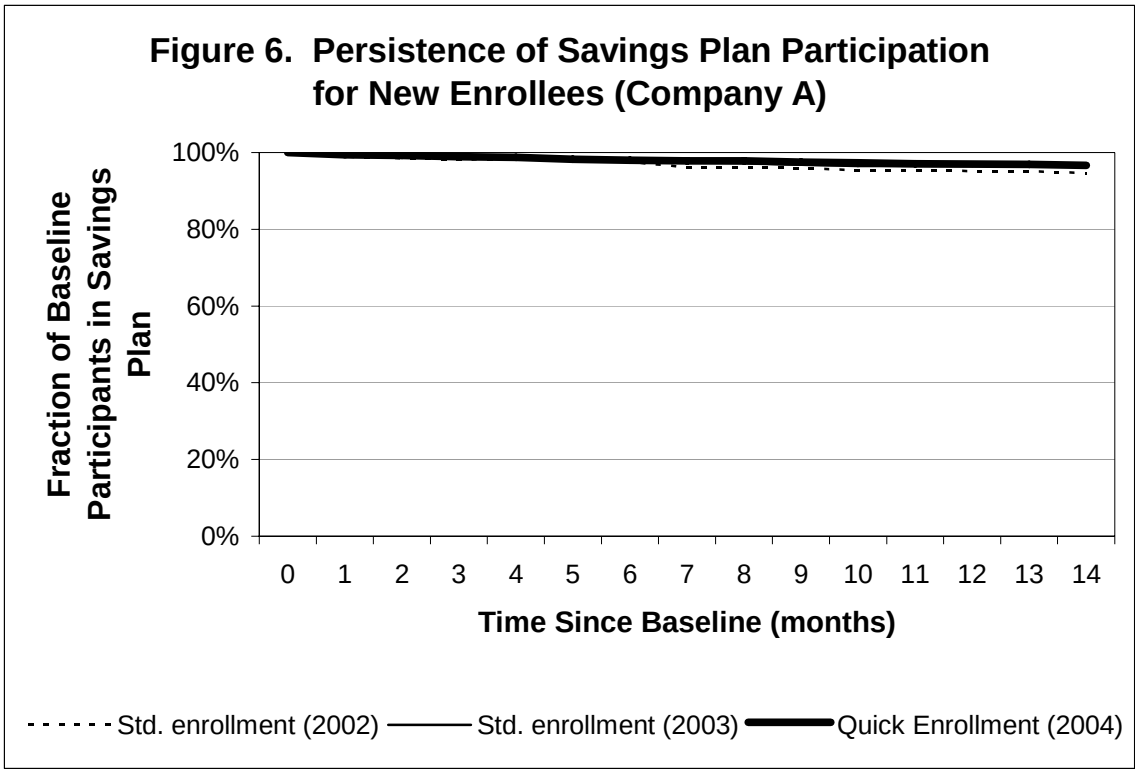


Note: Employees who had not enrolled in the savings plan as of the snapshot date are classified as having a zero contribution rate and are included in calculating the fraction of total employees at a given contribution rate, although we do not show the fraction of employees with a zero contribution rate in this figure.

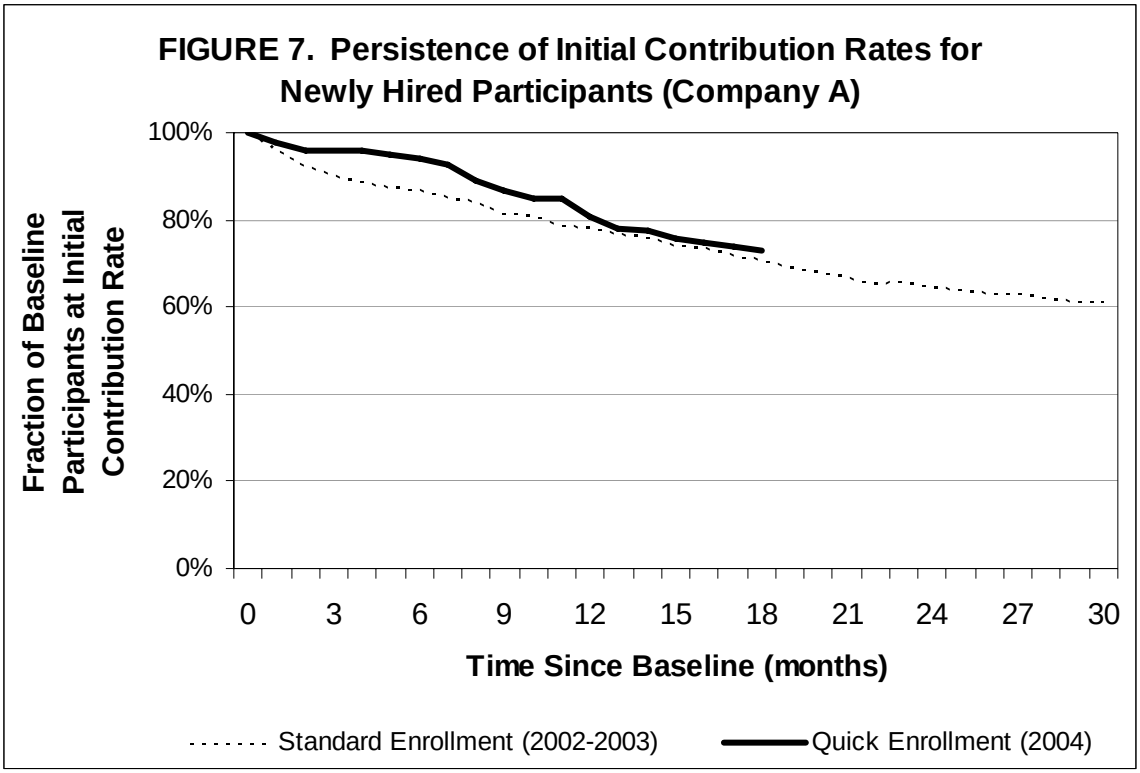
Figure 5. Persistence of Savings Plan Participation for Newly Hired Participants (Company A)



Note: The 2002-2003 sample is new hires from January 2002 through June 2003 who enrolled in the savings plan within 30 days of hire. The 2004 sample is new hires from February through May 2004 who enrolled in the savings plan within 30 days of hire.

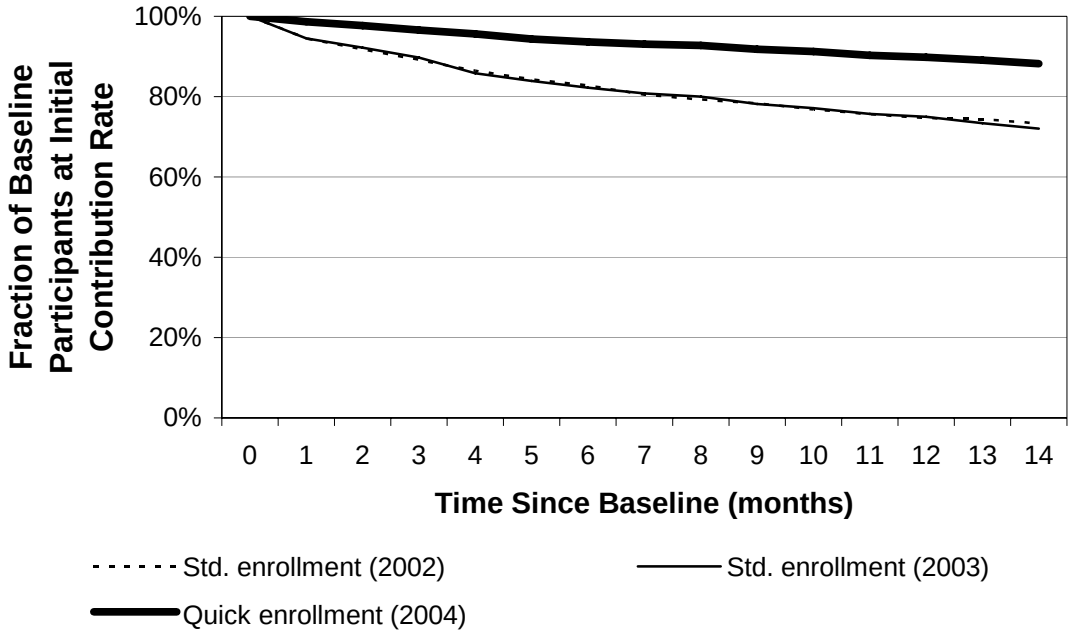


Note: The samples for each year are active employees who enrolled in the savings plan from June through November of that particular year.

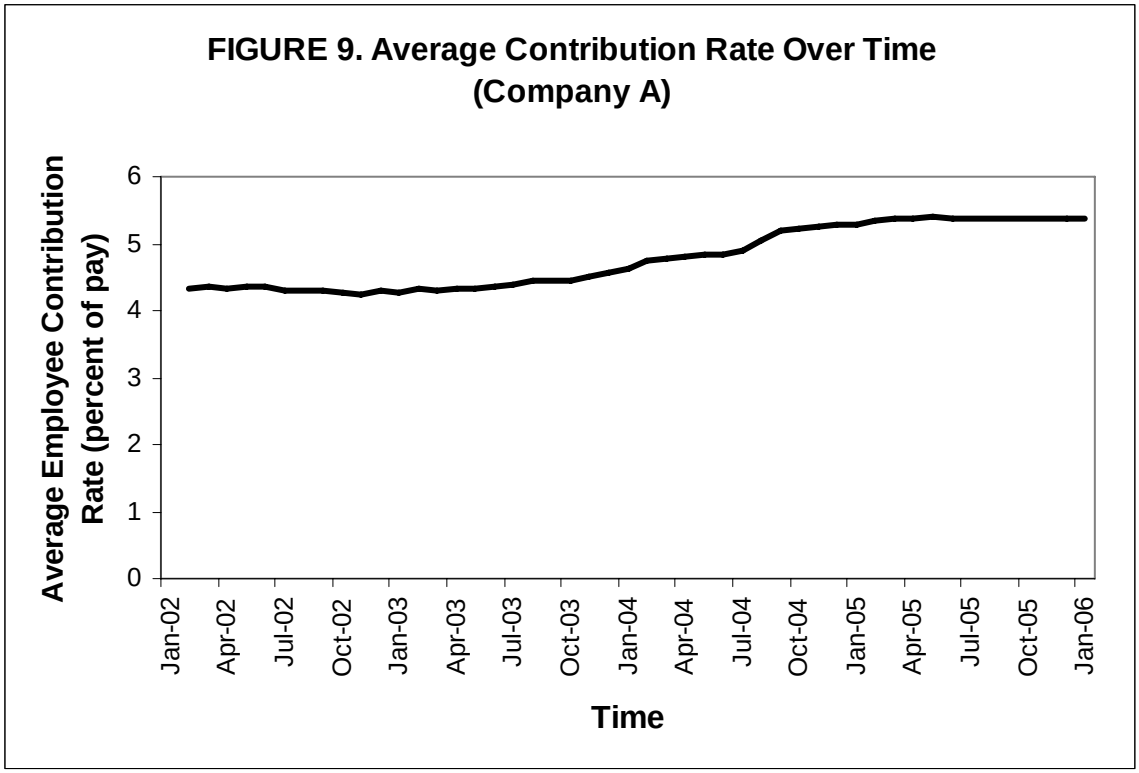


Note: The 2002-2003 sample is new hires from January 2002 through June 2003 who enrolled in the savings plan within 30 days of hire. The 2004 sample is new hires from February through May 2004 who enrolled in the savings plan within 30 days of hire.

FIGURE 8. Persistence of Initial Contribution Rates for New Enrollees (Company A)

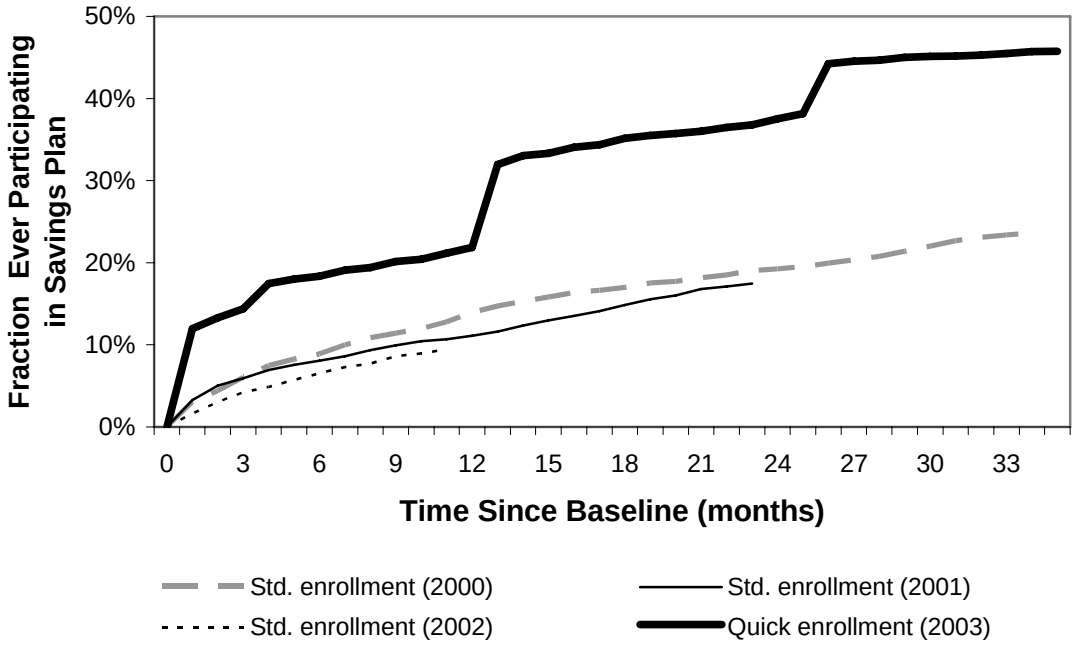


Note: The samples for each year are active employees who enrolled in the savings plan from June through November of that particular year.



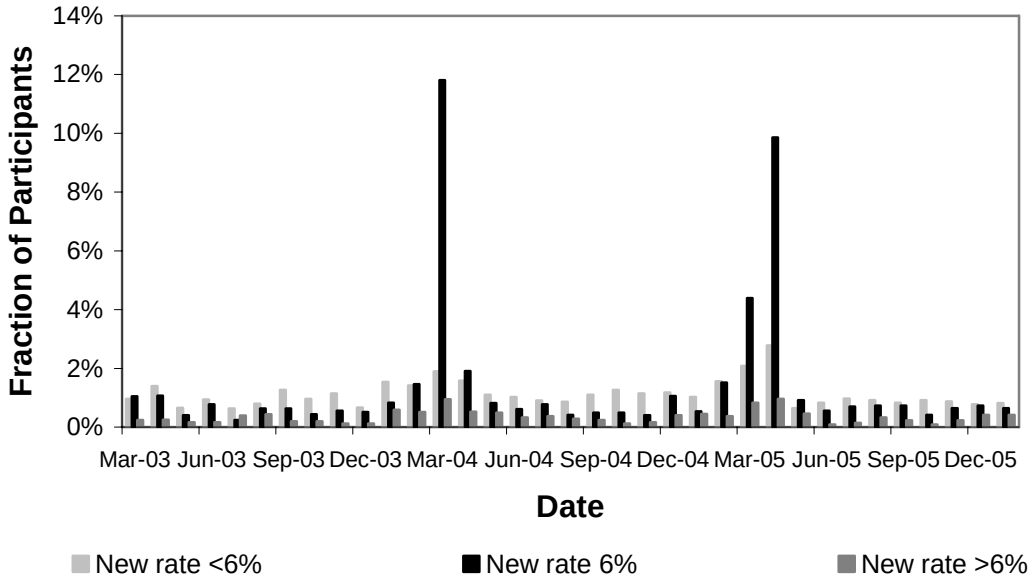
Note: The sample is employees active from 2002 through 2005 who are eligible for savings plan participation throughout this period. Employees who had not enrolled in the 401(k) plan as of the snapshot date are classified as having a zero contribution rate and are included in calculating the average contribution rate.

FIGURE 10. The Effect of Quick Enrollment on Savings Plan Participation of Already Hired Non-Participants (Company B)

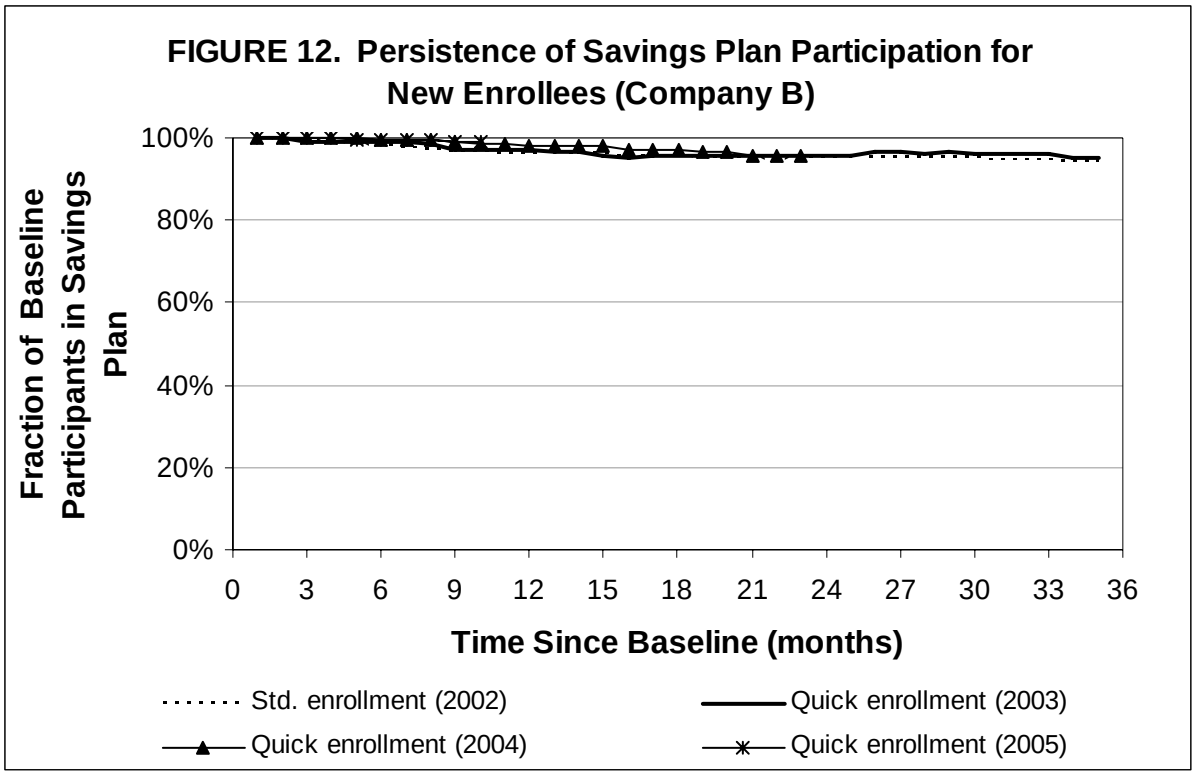


Note: The sample is all active employees who had never participated by February 1 of the year shown, which is the baseline period for each cohort. The graph depicts the fraction of these baseline non-participants who have ever participated in the savings plan by the time elapsed since the baseline for each cohort.

FIGURE 11. Contribution Rate Changes of Participants Contributing <6% in the Previous Month



Note: The sample is savings plan participants with a contribution rate of less than 6% in the month prior to the month shown on the x-axis. Participants are included in the calculations only if they have a positive contribution rate in both months. Participants whose contribution rate does not change are included in calculating the fraction of participants who move to a new contribution rate, although we do not show the fraction of participants who contribution rate does not change in this figure.



Note: The 2002 sample is all employees enrolling the savings plan in February 2002 who remained active employees until through year-end 2005. The 2003, 2004, 2005 samples are employees who enrolled in the savings plan through Quick Enrollment in the year shown and who remained active employees until year-end 2005.