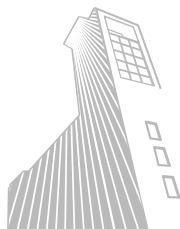


Automatic Enrollment: *Benefits and Costs of Adoption*

THE VANGUARD CENTER FOR RETIREMENT RESEARCH

Commentary ▶ May 2001



Executive Summary

Automatic enrollment appears to be an ideal strategy for addressing concerns with low participation in defined contribution plans. By boosting participation, automatic enrollment may ease problems with nondiscrimination testing and encourage new retirement savings.

Yet automatic enrollment is not the panacea it appears to be.

Concerns include:

- **Nondiscrimination testing.** Because of low default savings rates, automatic enrollment may fail to achieve the result sponsors are hoping for—the lifting of limits on highly compensated employees.
- **Retirement security.** Automatic enrollment is a useful way to introduce the savings habit to difficult-to-enroll populations. But it does not appear to offer a solution to the problem of long-term retirement security. Default savings rates are typically too low, and default investment options too conservative, to assure adequate savings. A related worry is whether automatically enrolled employees will spend, rather than save, plan assets when changing jobs.
- **Plan economics.** A large increase in the number of participants with low account balances can undermine the economics of a plan, leading to potentially higher fees.

Our recommendation to sponsors is to view automatic enrollment as one of several strategies needed to address plan concerns:

Nondiscrimination testing. Sponsors need to adopt a “preventive strategy” for dealing with nondiscrimination testing, including plan enhancements, alternative plan designs, improvements to the enrollment process, and personalized and targeted participant education.

Automatic enrollment strategies. For sponsors adopting automatic enrollment, we recommend: high deferral rates and a balanced/life-cycle option to enhance retirement security; a focus on newly eligible participants first—to minimize any sudden impact on plan financials; and ongoing education campaigns to counteract participant inertia and move participants to higher equity asset allocations and savings rates.

Automatic savings feature. To address concerns about retirement security and plan economics, we recommend that all sponsors consider a new “automatic savings” or “Smart” feature, in which participant deferral rates automatically rise over time.

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Definitions

Automatic enrollment is a plan provision in which the plan sponsor directly registers employees in a 401(k) or other employee contributory plan. Sponsors designate a default contribution rate and default investment option for automatically enrolled employees. Sponsors may choose to enroll all eligible employees, or just the newly eligible.¹

By law employees must be able to “opt out” of automatic enrollment. Hence the feature is sometimes called “negative election”—meaning that participants are enrolled unless they “say no.” Of course, most enrollees, as a result of simple inertia, do nothing, and end up as plan participants by default.

Today 20% of workers eligible to participate in a defined contribution plan fail to do so. (Fifty million workers have access to a defined contribution plan, but only 40 million participate.) In this environment, industry analysts and commentators, as well as former Treasury and Department of Labor heads, have supported automatic enrollment as an important strategy for boosting plan participation. Industry media and the popular press have also praised the automatic enrollment concept.

Regulatory Background

Internal Revenue Service. To encourage its use, the IRS has issued a regulatory bulletin on automatic enrollment.² These provisions require:

- Advance notice to the employee of the automatic enrollment feature and of the employee’s ability to “opt out.”
- Reasonable time for employees to “opt out” after getting the notice.
- Ability for the participant to stop or change contributions in the future.
- Annual notification to the participant of the deferral percentage and the right to change it.

In its bulletin, the IRS illustrated its rules using a plan with a 3% deferral rate, which has mistakenly led some commentators to conclude that 3% is the IRS’s “safe harbor” deferral rate. In subsequent media comments, the IRS has indicated that 3% is merely an example. Whether many employers will use a rate greater than 3% remains to be seen.

ERISA. Under ERISA, the sponsor retains fiduciary responsibility for selecting a default investment option under automatic enrollment. Sponsors are not afforded protection from liability under section 404(c) of ERISA. Although

Inertia is powerful, and the majority of participants stick with the default options set by the employer.

¹ “Automatic enrollment” is also the term applied to the routine recordkeeping service in which enrollment information is mailed or sent electronically to newly eligible employees. Under this service, participants must still make a positive election to join the plan.

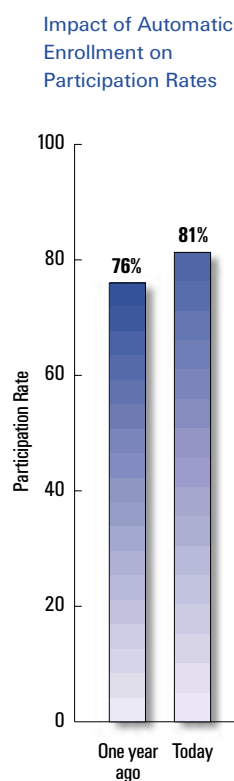
² IRS Revenue Ruling 2000-8, in *Internal Revenue Bulletin* No 2000-7, February 14, 2000, p. 617.



most sponsors select one option, there is nothing preventing sponsors from choosing a blend of funds as a default.

State law. Many states have laws prohibiting employers from deducting monies from employee paychecks without written authorization. These laws are often directed at deductions for business expenses, membership fees, and similar costs. Our view is that these state rules are not directed at retirement savings accounts registered in the employees' names. Nonetheless, employers considering automatic enrollment need to investigate the issue before offering the plan feature.

Figure 1.



Source: Profit Sharing/401(k) Council of America.

Industry and Academic Research

There are several sources of data on automatic enrollment. The feature is relatively new, however, and so most surveys are based on small samples. Thus, extrapolating trends from the data should be done with caution.

Profit Sharing/401(k) Council of America (PSCA).

In a report on automatic enrollment in 2001, the PSCA surveyed 25 plans in detail.³ Their key finding: Automatic enrollment boosted participation rates meaningfully, at least among the small sample of plans in this survey (see Figure 1). They also found that:

- 15 out of 25 plans chose a 3% deferral rate, and the average was 3.5%.
- Sponsors were twice as likely to choose money market/stable value funds over balanced/life-cycle funds.

A much broader survey of 808 plans by PSCA found that 4% of plans now offer automatic enrollment. Typical deferral rates were 2% or 3%. But 28% of plans surveyed had mandatory deferral rates of 4% or more.⁴

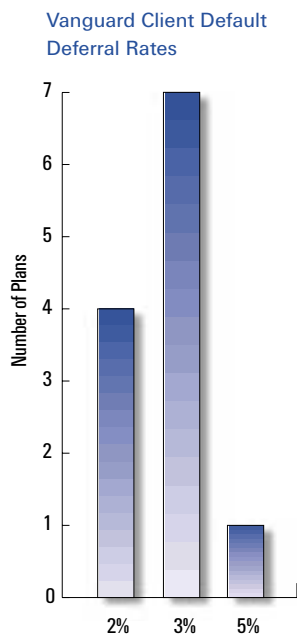
A synopsis of the two PSCA studies can be found in the Appendix on page 11.

3 Profit Sharing/401(k) Council of America, "Automatic Enrollment 2001: A Study of Automatic Enrollment Features in 401(k) Plans," Chicago, IL, 2001.

4 Profit Sharing/401(k) Council of America, *43rd Annual Survey of Profit Sharing and 401(k) Plans: Reflecting 1999 Plan Experience*, Chicago, IL, 2000.



Figure 2.



Source: The Vanguard Group.

Vanguard. In 2000 Vanguard's Plan Consulting Group gathered data on 14 clients using automatic enrollment. Most plans chose a 2% or 3% savings rate (see Figure 2). In this small sample, Vanguard clients were about equally divided in their choice of a money market fund or a balanced/life-cycle fund.

Hewitt Associates. Hewitt Associates looked at automatic enrollment at two companies with a combined population of 53,000 employees. Participation rates jumped 12% at the first company and 7% at the second.

However, one year after automatic enrollment, about 50% to 60% of participants remained invested at the default deferral rate and default investment option.⁵ The main conclusion: Inertia is powerful, and the majority of partici-

pants stick with the default options set by the employer. Education is therefore needed to boost savings rates and improve asset allocations following the adoption of automatic enrollment.⁶

Madrian and Shea. A study by Brigitte Madrian and Dennis Shea looked at the impact of automatic enrollment at a Fortune 500 health care company. Participation rates soared from 50% to 86% (for employees with at least one year of tenure). As a measure of the "signal effect" of plan design, a large number of participants stayed with default choices. (Prior to automatic enrollment, few participants actually saved or invested at the defaults.) Finally, the automatic enrollment program eliminated most of the differences in participation due to income, sex, job tenure, and race.⁷

Marketplace Developments

The interest in automatic enrollment is being driven, first, by sponsors looking to deal with nondiscrimination testing (NDT) concerns. Automatic enrollment is likely to boost participation and deferral rates among non-highly compensated, low-tenure employees (non-HCEs). As a result, NDT results will improve, and sponsors may be able to raise or eliminate contribution limits on highly compensated employees (HCEs).

A second driver is sponsors' desire to ensure an adequate retirement for participants. Many sponsors want their employees to take advantage of a savings plan when it is offered. Automatic enrollment seems like an effortless way to boost participation—a way to do something good for employees unwilling to take the time to sign up for themselves.

⁵ At the first company, 63% of participants hired after automatic enrollment contributed at the default rate and 57% remained in the default fund. At the second company, 62% contributed at the default rate and 67% kept with the default fund. Source: Hewitt Associates.

⁶ A synopsis of the Hewitt study can be found at www.hewitt.com. Source: Hewitt Associates.

⁷ Brigitte C. Madrian and Dennis F. Shea, "The Power of Suggestion: Inertia in 401(k) Participant and Savings Behavior," National Bureau of Economic Research, Working Paper 7682, May 2000. ©2000 by Brigitte C. Madrian and Dennis F. Shea.

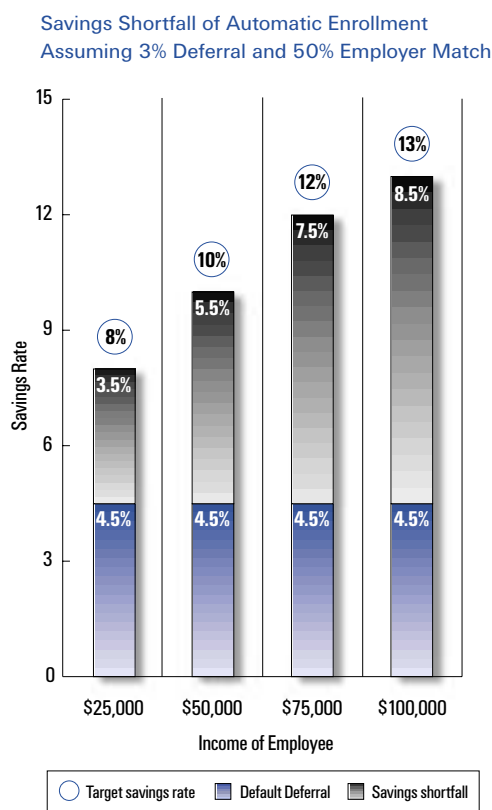


Analysis of Issues

Nondiscrimination testing. Automatic enrollment, while boosting participation, may not fully solve a sponsor’s testing concerns. Default deferral rates under automatic enrollment are typically set low. Thus, adopting the feature may boost the ability of HCEs to contribute. But it seems unlikely in many cases (depending on the plan’s situation) to eliminate all contribution limits on HCEs.

At the same time, automatic enrollment can be a costly strategy. The largest expense is the money needed to fund any employer match for new enrollees. As a result, employers wishing to solve a compliance concern, and looking to maximize contributions for all employees, need to think broadly and weigh all of their options. We recommend a “preventive approach” for dealing with NDT issues, including specific strategies in plan design, administration, and education (see Recommendations on page 8).

Figure 3.



Note: Target based on 75% replacement income ratio, retirement at age 67 with full Social Security benefits, 40-year working career and DC-only plan environment.

Source: The Vanguard Group.

Retirement security. Automatic enrollment encourages the habit of savings among difficult-to-enroll populations. But it does not appear to offer a long-term solution to the problem of retirement security. We have three concerns:

- *Inadequate defaults.* Most default savings rates (2% or 3%) are well below what participants need to save for retirement (see Figure 3). The shortfall is dramatic for higher-income employees, but is still significant at lower incomes. Also, the typical default investment option (a money market or investment contract fund) is inconsistent with the goal of long-term retirement savings.
- *A troublesome signal to participants.* There is some evidence, from academic studies in behavioral finance, that participants take plan design features as signals of appropriate behavior.⁸ Low deferral rates and conservative investment choices send exactly the wrong education messages to participants. As automatic enrollment takes hold, more employees may be saving at lower deferral rates, and investing in more conservative options, than is the case today.⁹ The unintended consequence could be lower savings rates and equity-oriented asset allocations—a reversal of the positive trends of the past two decades.

⁸ In one study, S. Benartzi and R. Thaler found that participants naively allocate their savings across all the available options within a plan. As a result, a plan with a large number of fixed income options will have more in fixed income savings than a plan with a large number of equity options. Kusko, Poterba, and Wilcox reported data showing that participants “bunch” their contributions at 0% (no contribution), the employer match, or the maximum—using plan limits as a guide to behavior.

⁹ Typical deferral rates under automatic enrollment are 2% or 3% (employee only)—versus an 8.3% average (7% median) deferral rate (employee only) for defined contribution plans today (Source: Vanguard). Also, many employers choose stable value or money market funds as default investment choices, while nearly 80% of all defined contribution assets are invested in equity-oriented options.



- *Will automatic enrollment add to retirement savings?* While no research has been done on this question to date, we estimate that automatic enrollment will fail to generate significant new savings for retirement. Automatic enrollment is typically intended to reach difficult-to-enroll populations—employees with lower incomes, shorter job tenure, or lower education levels. Yet these are the same employees who are more likely to spend, rather than save, retirement monies when changing jobs.

The financial impact. A final issue to consider is the financial impact of automatic enrollment. Automatic enrollment, depending on the situation, can substantially erode a plan's economics. In simple terms, automatic enrollment means adding a large number of low-revenue, low-balance accounts, while incurring costs for

recordkeeping, account services, and education. The impact is especially acute if a plan's participation rate is low, and automatic enrollment is extended to all eligible employees (see Implications on page 7).

Although it is true that the newly enrolled will see their balances grow over time, salary deferral rates remain too small for the plan's financials to recover. Automatic enrollment inevitably dilutes average plan balances and thus the financial attractiveness of a plan. The result can be higher fees for the sponsor or participants. We strongly encourage sponsors to address the impact of automatic enrollment on plan fees with their recordkeeper. Most published analyses on automatic enrollment have failed to assess this issue directly.

In simple terms, automatic enrollment means adding a large number of low-revenue, low-balance accounts, while incurring costs for recordkeeping, account services, and education.



Implications: *Impact on Plan Economics*

The impact of automatic enrollment on plan economics can be dramatic, depending on participation rates and the target population chosen for the service. In the following example, a \$300 million defined contribution plan with a 60% participation rate adopts automatic enrollment for all employees (both newly eligible employees and existing non-participants). Participation surges to 90% (10% of employees “opt out”). But average balances—a proxy for revenues per participant—plummet by one-third:

Possible “Worst Case” Impact of Automatic Enrollment (All Employees Enrolled)

Assumptions

- Scenario is based on an average salary of \$40,000 with 3% annual merit increases. No turnover is assumed.
- All employees are eligible and immediately enrolled; 10% “opt out.” Automatic enrollment is at 3% of pay; employer match is \$0.50 on the \$1.00 up to 6% of pay.
- Investment returns are 8% per year on end-of-year balances.
- Under an automatic savings program, the deferral rate rises by 2% in years 2, 3, 4, and 5, with no “opting out.”

Automatic Enrollment	Before	After
Eligible Employees	10,000	10,000
Participation Rate	60%	90%
Participants	6,000	9,000
Assets	\$300 MM	\$300 MM
Average Balance	\$50,000	\$33,333
Decline in Average Balance		-33%

Over time, the new participants will begin to build balances. But with a 3% contribution rate, the newly enrolled participants will never be able to “catch up” with the older participants, and the plan will never regain its relative financial attractiveness.

What can help minimize the impact of lower balances is the “auto save” or “Smart” feature, as the following summary of plan balances in five years illustrates.

Balances in Five Years Under Various Scenarios

(AE) Automatic Enrollment	Without AE	With AE	With AE + 2%/yr. auto savings
Average balance for 6,000 initial participants	\$98,300	\$98,300	\$107,700
Average balance of 3,000 new participants	n/a	11,200	23,300
Average balance for entire plan	98,300	69,200	79,600
Relative Impact		-30%	-19%



Vanguard Recommendations

Sponsors seeking a long-term solution to the problem of low participation need to consider a multidisciplinary approach—one that integrates strategies for plan design, education, and administration. To put it simply, automatic enrollment is not a “silver bullet” solution for alleviating concerns with nondiscrimination testing or participant retirement security.

As with any plan design change, sponsors need to weigh the benefits of higher participation and savings rates through automatic enrollment against the costs—both the cost of any employer match and the potential impact on plan fees due to declining average account balances. And they will want to compare automatic enrollment against other strategies that are designed to achieve similar aims.

Nondiscrimination testing. For dealing with testing concerns, we strongly encourage sponsors to adopt a “preventive strategy.” Critical items include:

- *Enhancements to the existing plan.* Sponsors should evaluate plan features known to boost participation, including the size and characteristics of the match and the availability of a loan feature.
- *Alternative plan designs.* There are alternative plan designs that can be used to boost benefits paid to HCEs. A safe harbor 401(k) is one strategy to consider; depending on the plan’s situation, its benefits and costs may be attractive compared with automatic enrollment. Other strategies include: multiple plan structures, qualified nonelective and matching contributions, and nonqualified plans.

- *Administrative improvements.* Automated processes for distributing enrollment information can strengthen the enrollment process. Immediate eligibility and integration of enrollment with new hire orientation will also help.
- *Targeted and personalized communications to non-participants.* A strong education campaign can dramatically boost participation. Effectiveness is increased when strong motivational messages are targeted directly at the nonparticipant population. Personalization techniques can also enhance effectiveness.

Automatic enrollment strategies. For sponsors introducing automatic enrollment as a plan feature, we recommend the following steps:

- *Appropriate default recommendations.* We encourage sponsors to adopt a default deferral rate of 3% or greater in light of concerns about inadequate savings rates. A default rate designed to capture the full employer match would be one option to weigh. We also recommend a balanced/life-cycle fund as the default investment option, in keeping with the retirement savings orientation of most employer plans. Both of these choices would send a strong signal to participants about the strategies needed to achieve retirement security, and would reinforce ongoing education programs.



Ongoing asset allocation and savings education programs are needed to reinforce the basic messages of any automatic enrollment program.

- *Targeted audience of newly eligibles.* A good compromise—between the benefits of plan participation and the worries about weaker plan financials—is to extend automatic enrollment to newly eligible employees first. This population can serve as a test case for the impact of automatic enrollment. After the first six months or one year, it would be appropriate to compare average savings and asset allocation decisions for this group with the plan as a whole, and see whether progress has been made in moving participants from default choices.
- *Ongoing education for the newly enrolled.* Ongoing asset allocation and savings education programs are needed to reinforce the basic messages of automatic enrollment. Some sponsors think of automatic enrollment as minimizing the need for education. But participant communications remain essential, especially given the tendency of automatic enrollment participants to stay with a plan's default options.
- *Targeted communications for job changers.* Finally, it's important to recognize that the population targeted through automatic enrollment is demographically similar to the group most likely to spend savings when changing jobs. This is one reason for sponsors to aggressively encourage departing employees to roll over plan assets into an IRA—and new employees to roll in assets from a prior employer's plan.

An automatic savings or Smart feature.

Whether or not automatic enrollment is under consideration, we strongly encourage sponsors to consider the benefits of an “automatic savings” or “Smart” feature for their plan.¹⁰

Under an “automatic savings” or “Smart” feature, a participant's deferral rate increases automatically at each merit review or pay increase. The savings increase is typically a set amount—e.g., 1% or 2% of pay.

Like enrollment, an automatic savings provision can be designed as a positive or negative election. Participants can be encouraged to sign up for an automatic savings program—or they can be automatically enrolled by the sponsor, with the right to opt out.

The Smart strategy has been proposed by Professor Shlomo Benartzi of UCLA and Professor Richard Thaler of the University of Chicago. Both are well-known proponents of behavioral finance—an academic discipline that attempts to integrate the tenets of human psychology with modern finance.

We are strongly supportive of any strategy designed to boost long-term retirement savings, especially one that builds on new findings from behavioral finance. We would therefore encourage all sponsors to weigh seriously the benefits of a “Smart” savings feature for their retirement program (see Strategies on the next page).

¹⁰ The discussion on this and the following page is based on S. Benartzi and R. Thaler's “Save More Tomorrow: Using Behavioral Economics to Increase Employee Savings” unpublished working paper, November 2000. The term “Smart” is short-hand for “Save More for Retirement Tomorrow.”



Strategies: *The Smart Plan*¹¹

Under an automatic savings or Smart feature, participants authorize an increase in their plan deferral rate at the time of future merit reviews or pay increases. Alternatively, in a variation of automatic enrollment, the plan enrolls participants in the Smart feature, and participants must opt out.

An automatic savings feature makes clever use of participant psychology in several ways:

- Participants find it easy to be part of an automatic savings feature because it has no current cost.
- When the participant's savings to the plan is increased, any pain from the higher deferral rate is offset by any merit or cost-of-living increase. Depending on the salary increase, a 1% or 2% boost in the participant's deferral rate may be invisible in his or her paycheck.
- Rather than reading about the hypothetical impact of saving more, participants observe it firsthand in their paychecks when the higher contribution goes into effect. They are able to see what financial planners preach—that a 2% change in savings rates has no material impact on their current standard of living and is easy to implement.

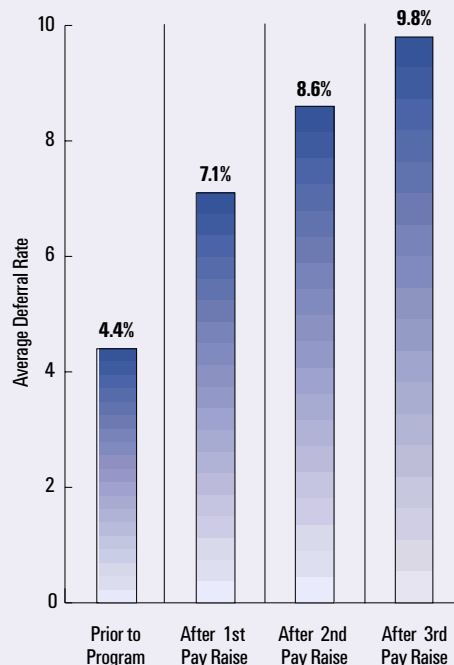
Benartzi and Thaler have tested the program at one medium-size company, a 300-person manufacturer. There, average deferral rates more than doubled over three pay raises—a period of about 28 months (see Figure 4). It remains to be seen whether these results can be replicated more broadly.

In thinking about implementing the feature, sponsors will want to consider:

- *Positive or negative election.* Sponsors will need to weigh whether to offer the feature as a positive election by participants, or as an automatic feature, with the right to opt out.

Figure 4.

Impact of Automatic Savings or Smart Feature



Source: Benartzi and Thaler.

- *Legal issues.* If implemented as an automatic plan provision, the Smart feature is an extension of the IRS's regulations on automatic enrollment, and will need to comply with advance notification and opt-out provisions.
- *Default choices.* Sponsors will want to tailor an automatic savings feature to their plan's demographics, income levels, and history of pay increases. Employers with lower-income positions or smaller pay increases might consider 1% increments. Employers with a higher average wage base or the likelihood of larger pay increases might consider a 2% or 3% increment. A staggered design is another possibility. Sponsors will also want to set maximum savings rates.
- *Communications and administrative implementation.* Like automatic enrollment, an automatic savings feature requires advance notification to employees, a procedure for "opting out," and a confirmation of the change once it has occurred.

¹¹ Benartzi and Thaler, *ibid.*



From the PSCA's 43rd Annual Survey of Profit Sharing and 401(k) Plans

The 43rd annual survey covers 806 plans and is based on 1999 plan data. In that study, 4.2% of plans (34 out of 806) offered automatic enrollment, with 7.4% of medium-size plans (1,000-5,000 participants) and 17.3% of large-size plans (5,000+ participants) in the survey reporting that they offered automatic enrollment.

The typical default deferral rate was 2% (24% of plans) and 3% (40% of plans). But a large group (28% of plans) had deferred higher rates of 4%, 5%, or more.

Plans with automatic enrollment had average participation rates of 86%; plans without, 82%. (The small difference in aggregate participation rates may be due to recent adoption of the provision or use of automatic enrollment with only newly eligible participants.)

From the PSCA's Survey, Automatic Enrollment 2001

The PSCA's survey in 2001 analyzed results from 25 plans offering automatic enrollment. Fifteen of the respondents were larger plans (seven with 5,000-9,999 participants, eight with 10,000+ participants); ten were smaller plans.

Impact on participation rate for this 25-plan group:

One year ago	76%
Today	81%

The average default rate was 3.2%, with the most common being 3% (15 out of 25 plans, or 60%). Sponsors were twice as likely to pick a stable/money market default option as balanced/life-cycle choices:

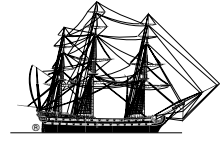
Default Investment Vehicles

Stable value	11	40%
Money market	5	21%
Balanced/bond	5	21%
Lifestyle fund	3	12%
Other (unidentified)	1	0%

Most plans (82%) applied automatic enrollment to new hires only.

Ninety-two percent of plans included automatic enrollment communication in enrollment kits. Twenty-five percent also used separate mailings; 8%, a statement message. In terms of responsibility for notifying participants, in 75% of cases it was the sponsor, 17% the recordkeeper, and 14% both sponsor and recordkeeper. Most common method for electing out was telephone response systems (70%), followed by telephone associates (48%), forms (39%) and the Web (35%).





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