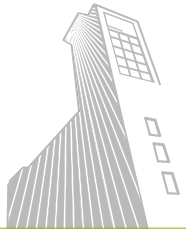
A Recent Successful Test of the SMarT Program



Executive Summary

A Vanguard recordkeeping client recently tested the SMarT automatic savings program with defined contribution plan participants at two U.S. divisions.

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Designed by two behavioral economists, Professors Shlomo Benartzi of UCLA and Richard Thaler of the University of Chicago, the SMarT program encourages participants to sign up for systematic increases in their plan deferral rates over time.

The test yielded impressive results, as measured by increases in both participant enrollment and aggregate savings rates:

Target audience and rollout. The invitation to join SMarT was targeted at 815 nonhighly compensated employees (non-HCEs) in two corporate divisions. These employees were saving at a rate significantly lower than a control group of other non-HCEs in the company. The SMarT feature was introduced to participants in January and February 2002 through printed pieces, meetings, and, at one division, optional one-on-ones with a Certified Financial Planner™. For those signing up for the SMarT plan, the first increase in deferral rates took place in April 2002.

SMarT sign-up. More than one-quarter of the target test group—27%—joined the SMarT plan. Of those signing up for SMarT, 54% agreed to increase their savings rates by 1% a year, 35% by 2% a year, and 11% by 3% a year.

Savings impact. For the test group, savings rates increased an impressive 36%—jumping from 3.40% prior to the communications program to 4.61% after the first payroll deferral rate changes, an increase of 1.21 percentage points. By comparison, in the control group not invited to join the SMarT program, savings rates increased minimally.

Divisional differences. The two divisions experienced similar increases in savings rates, though they differed in terms of overall business conditions, as well as the communications approaches used for the SMarT rollout. Division A, with the more buoyant business environment and the more extensive sign-up campaign, had higher enrollment in the SMarT plan. While Division B had fewer enrollees, Division B participants signed up for a higher SMarT increase.

Implications. These results suggest that the SMarT plan is an appealing strategy for sponsors seeking to boost savings rates in their retirement programs. Sponsors might consider this feature in situations where nondiscrimination testing or retirement savings adequacy are concerns. Because of the success of this beta test, the sponsor in the current study has decided to offer the SMarT feature to its 24,000 U.S. employees later in 2003.

Background: The Savings Challenge

Sponsors have a number of reasons for wanting to boost employee savings rates in defined contribution plans. First, and most practically, low savings rates (or nonparticipation) by non-HCEs can lead to restrictions on contributions by the highly paid.

Second, many sponsors are concerned about employee retirement security. National studies show that only 30% of people approaching retirement have saved adequately to achieve financial security; the remaining 70% need substantial savings to meet their retirement goals.[1]

The focus on participant savings rates is even more compelling because of the recent bear market in U.S. equities. Several years of negative market returns have challenged the belief that the capital markets alone can be counted on to deliver adequate retirement savings. With current equity market returns posting in the negative and future returns likely to be modest, participant savings behavior is now at center stage in the debate over retirement security.

Only 30% of people approaching retirement have saved sufficiently to achieve financial security.

In their efforts to encourage higher savings, sponsors face a critical obstacle: employee inertia. Inertia keeps employees from taking action—whether it means newly eligible employees failing to join the plan or existing participants failing to increase their savings over time. Inertia also is self-perpetuating: Employees can come to believe that their current contribution rate is the only rate they can afford, despite the fact that they may have seen their incomes grow over time.

Inertia is a major drawback of another technique designed to boost employee retirement savings—automatic enrollment. Studies of participants who are automatically enrolled in their savings plan show that participants remain at the default savings rate (typically 3%) and in conservative investment options.[2] This problem of inertia has led to questions about automatic enrollment as a technique for boosting retirement savings. For sponsors and providers, the problem has been compounded by the high administrative costs associated with many small accounts.

How might sponsors use participant inertia to their benefit, to move workers onto a path of higher savings? One solution is to institutionalize a "save your raise" philosophy as a plan feature. But most participants can't or won't do this on their own.

1 See Moore and Mitchell, 1997.

2 Choi, Laibson, Madrian, and Metrick, 2001.

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The SMarT Program

Professors Shlomo Benartzi of UCLA and Richard Thaler of the University of Chicago have designed a "save your raise" plan that relies on the principle of inertia. They call the program the SMarT plan—Save More Tomorrow.[3] The researchers are well-known proponents of behavioral finance—an academic discipline that attempts to integrate human psychology with economics and finance.

Under an automatic savings or SMarT feature, participants sign up today to have their deferral rate increased in the future, typically (though not necessarily) at the next merit review or pay increase. The increase is a set amount—for example, 1% or 2% of pay. There also may be a cap, such as 10% or 15%.

For example, a participant deferring 3% of salary into a defined contribution plan might sign up for a 1% SMarT feature. At the time of the next pay or merit increase, the participant's deferral rate would rise by 1 percentage point, to 4% of salary. In the following year it would increase to 5%; in the next to 6%; and so on, until reaching the cap of 10%.

With the SMarT program, once the initial commitment is made, regular increases to savings occur automatically.

The SMarT plan takes advantage of insights about participant psychology. Saving for retirement is like other difficult tasks in life, such as dieting, quitting smoking, or exercising—positive changes to behavior that require a high level of self-control and uncomfortable adjustments. The SMarT plan uses this principle by making the savings increases occur in the future. Participants find it easy to join because the plan has no immediate financial cost—the pain of behavioral change, as it were, is deferred to some future date.

In addition, with the SMarT plan, when the participant's contribution to the plan is increased, any reduction in pay from the higher deferral rate may be offset by a merit or cost-of-living increase. Participants also observe firsthand the modest impact that additional savings has on their paycheck. If they balk at the idea of higher savings, most—through inertia—don't take the time to cancel the program.

Initial SMarT Tests

Professors Benartzi and Thaler have tested the SMarT program in three settings (including the current test). In the first, a small 300-employee manufacturing company, the program raised the average plan savings rate from 4.4% to 9.8% over three years. This initial test, however, was somewhat exceptional. It was designed with an aggressive three-percentage-point annual increase in savings, and the program was delivered as part of a concentrated education campaign, including one-on-ones with a financial planner for all employees.

3 Thaler and Benartzi (forthcoming).

In a second test, the program was introduced to a unionized workforce at a manufacturing firm. It was communicated exclusively through a print campaign and endorsed by the local union leadership. About 20% of the employees signed up for the program, which required annual increases of 2% per year.

The Current Test

The third test of the SMarT plan is particularly valuable because it applies the technique to the environment of a typical large U.S. employer, with a number of geographically dispersed locations in a diverse set of businesses. In this test, the U.S. subsidiary of a European multinational firm, with 24,000 employees operating in 30 locations, was seeking new ways to boost retirement savings.

Besides offering a 401(k) plan with an employer matching contribution, the company provides a defined benefit program (either a traditional pension or cash balance program, depending on the specific division or employee group). In mid-2002 the 401(k) plan's participation rate was 71%, and its average plan deferral rate was more than 8%. The 401(k) plan offers 16 investment choices to participants. As of mid-2002, 57% of plan assets were invested in equities, with the balance invested in fixed income and cash investments.

In prior years the employer had encountered difficulties meeting nondiscrimination testing requirements within its 401(k) plan and had to cap contributions by HCEs. In 2001 the employer successfully used participant communications—in particular, personalized savings projections—to boost participation and savings rates among non-HCEs. As a result, the company was able to remove caps on pre-tax contributions by highly compensated workers. (However, caps on after-tax contributions remain.) Yet the sponsor remained concerned about future testing problems and the need to boost participant savings on a sustainable basis. As a result, the employer decided to test the SMarT program, targeting 815 non-HCEs in two of its U.S. divisions.

Division A is a thriving consumer products business located in the Pacific Northwest. Division B is a technology-oriented business in the desert Southwest. Like other technology businesses, it has been suffering through a severe recession, resulting in layoffs and poor financial results.

In both divisions, non-HCEs in the SMarT test group had savings rates significantly lower than a control group—their average savings rate before the SMarT offering was 3.40%, compared with an average savings rate of 5.65% for the control group (see Figure 1). The control group consisted of non-HCEs in the firm's other 28 divisions.

Figure 1.

Test and Control Groups

	Number of employees	Average deferral rate December 2001
Division A	366	3.74%
Division B	449	3.12%
Test group	815	3.40%
Control group	14,458	5.65%

Another characteristic of the employer's environment is that all pay raises are given at a single time—in the March/April time frame. This timing allowed for a single coordinated education campaign across the two divisions. In addition, it made the program's results relatively easy to measure.

Design of the SMarT Test

In designing the SMarT test, the employer faced four key decisions:

Decision 1. *Link to pay raise?*
The original Benartzi/Thaler design is to link SMarT increases directly with pay raises. The main benefit from SMarT comes from putting off savings to the future. A secondary benefit comes from pay raises offsetting higher contributions. Given the poor financial conditions at Division B, the employer chose not to link the introduction of the program directly with pay raises.

Indirectly, however, the employer did link SMarT with pay raises—increases in deferral rates took place in the March/April time frame, the same period during which pay raises are normally offered. But employee communications did not directly discuss a link between the SMarT feature and merit increases.

Decision 2. *Choice of SMarT increase?*
Prior tests of SMarT had specific increases of 2% or 3% per year. In this case, however, the employer chose to provide participants with a choice of annual SMarT increases of 1%, 2%, or 3%. It designated 2% as the default. So, if participants signed up, but didn't make a specific election, they were defaulted to 2%. By offering a range of choices, the middle choice of 2% was thus framed as the logical or middle-of-the-road choice. Though most participants chose a 1% annual increase in their savings rate, a large minority chose the 2% option as a result of this framing of the choice.

Decision 3. *Set a cap?*
As a result of pension reform, the employer had raised the maximum deferral rate in its savings plan to 50%. However, the employer recognized that there was a practical limit to the amount non-HCEs could be expected to save in the 401(k) plan. The employer also recognized that its defined benefit program already offered a meaningful level of retirement benefits to its workforce. As a result, it chose to cap annual savings under the SMarT feature at 10%. In other words, once a participant reached an annual deferral rate of 10%, future automatic SMarT increases would stop.

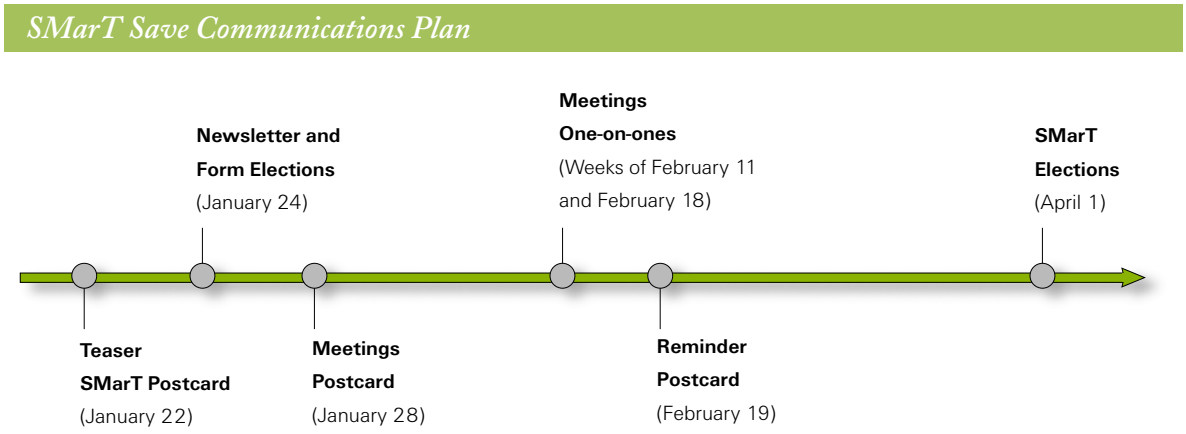
Decision 4. *How to communicate?*
Much of the employer's planning involved education strategy (see Figure 2). The print campaign, mailed directly to participants, consisted of a teaser postcard, a kit with a newsletter and form to sign up for SMarT, and a reminder postcard to join the SMarT plan. Posters also were placed in the workplace to encourage meeting attendance.

Another characteristic of the employer's environment is that all pay raises are given at a single time. This timing allowed for a single coordinated education campaign.

In Division A, the local management team decided to make employee meetings mandatory. They also had an established relationship with a local Certified Financial Planner™, who presented both meetings and optional one-on-one counseling sessions on the importance of savings. In Division B, the management team allowed optional meetings, but there were no one-on-ones. A Vanguard® representative was on-site to support all meetings. Both locations made use of incentives, including a random cash prize for enrolling in the SMarT plan, meeting attendance gifts, and company product raffles.

Figure 2.

Communications Timeline



SMarT Results

The employer's efforts surrounding SMarT yielded impressive results. In the test group, 27% of participants signed up for the SMarT program (see Figure 3). Sign-up was stronger at Division A, where nearly 4 in 10 non-HCEs joined SMarT. At Division B, just less than 2 in 10 targeted employees joined the program.

Figure 3.

SMarT Enrollment Results

	Number of employees	Number of SMarT enrollees	Percentage signing up for SMarT
Division A	366	140	38%
Division B	449	76	17%
Test group	815	216	27%

SMarT raised savings rates for the test group by 36% between December 2001 and May 2002, the period when results were measured (see Figures 4 and 5).

Figure 4.

Increase in Test Group Savings Rates

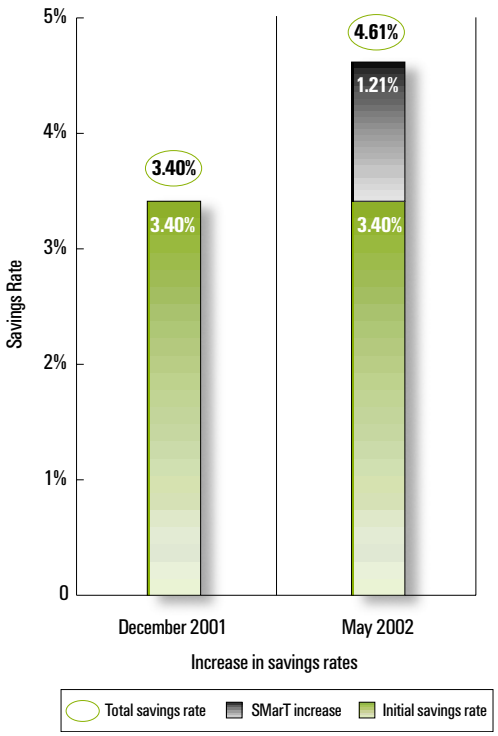


Figure 5.

Impact on Savings Rates

	Number of employees	Savings rate on December 2001	Savings rate on May 2002	Percentage-point Change	Percentage Increase
Among all targeted employees					
Division A	366	3.74%	4.89%	1.15%	
Division B	449	3.12%	4.38%	1.26%	
Total	815	3.40%	4.61%	1.21%	36%
Control group	14,458	5.65%	5.76%	0.11%	2%
Among those already saving and signing up for SMarT					
Division A	114	5.14%	6.55%	1.41%	
Division B	66	5.47%	7.32%	1.85%	
Total	180	5.26%	6.83%	1.57%	30%
Among those newly enrolled and signing up for SMarT					
Division A	26	0.00%	4.35%	4.35%	
Division B	10	0.00%	6.80%	6.80%	
Total	36	0.00%	5.03%	5.03%	N/A

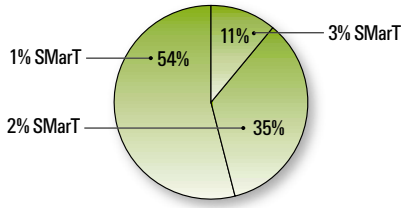
Specifically, average deferral rates for the group rose from 3.40% to 4.61%, an increase of 1.21 percentage points. Meanwhile, in the control group, average savings rates during the same period rose by a negligible amount—from 5.65% to 5.76%, or an increase of 0.11 percentage points.

Figure 6.

SMarT Increase Levels

Percentage of participants signing up for a given annual SMarT increase in their deferral rates.

All SMarT enrollees



	Division A	Division B	Test Group
Results by division			
1% SMarT	66%	32%	54%
2% SMarT	24%	55%	35%
3% SMarT	10%	13%	11%

While Division B had a lower sign-up rate for SMarT, its aggregate savings rose more than Division A's. This was due to the fact that while fewer people signed up for SMarT in Division B, they signed up at higher savings rates (see Figure 6). More than half (55%) of Division B's employees signed up for SMarT at the 2% level. By comparison, in Division A, only a quarter (24%) of employees chose the 2% annual increase.

Other Observations

Nondiscrimination testing. One possible use of SMarT is to improve nondiscrimination testing results. If SMarT is targeted successfully at the nonhighly compensated workforce, and if it raises savings among non-HCEs more than among HCEs, it should be easier for a plan to pass nondiscrimination testing. However, like any program devoted to increasing savings, it is important that the SMarT rollout be carefully targeted to the nonhighly compensated audience. Otherwise it will be only the highly compensated who join SMarT, making testing results worse, not better. Sponsors will want to communicate the SMarT feature to all participants. But to improve testing results, an important part of the rollout will be a particular focus on the nonhighly compensated population.

Communications. In this test, given the different economic circumstances of the two divisions, it is hard to draw firm conclusions about how the differences in communications approaches affected savings behavior. Division A, with mandatory meetings and one-on-ones, had a much higher sign-up rate for SMarT but a very similar overall increase in savings rate compared with Division B.

Sponsors will want to communicate the SMarT feature to all participants. But an important part of the rollout will be a particular focus on the nonhighly compensated population.

In Division A, where meetings were mandatory, 67% of the target group attended the meetings. In Division B, where the meetings were optional, 40% of the target group attended. In each division, about 90% of the SMarT enrollees actually attended a meeting, so it is possible that meetings encouraged SMarT enrollment. But it is equally likely that SMarT enrollees decided to attend meetings to understand more about the program and confirm their decision to enroll.

More work needs to be done on how SMarT's effectiveness would vary with different communications approaches, particularly the role of meetings. It is worth noting that in the second test of SMarT, the plan achieved a 20% sign-up rate with only a single letter to participants.

Dropout rate. Prior to the April/May pay changes in the current test, five individuals called to drop out of the SMarT program—an attrition rate of less than 2%. This affirms one of the important benefits of the SMarT program: Using inertia minimizes the numbers of individuals who drop out of the program over time.

Implications

Boosting retirement savings in defined contribution plans requires a multidisciplinary approach.[4] Traditional plan design elements, such as an employer match or loans, and education delivery are critical. But innovations such as the SMarT plan also play a key role. As this beta test with a large U.S. plan sponsor shows, the SMarT plan is likely a useful strategy for sponsors seeking to address concerns about nondiscrimination testing and retirement security.

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4 See "Boosting Participation and Savings Rates" in Vanguard, 2002.

Requirements for Introducing SMarT

The following checklist may assist plan sponsors considering introducing the Benartzi/Thaler SMarT feature to their participants.

Plan or Administrative Feature

One issue is whether the SMarT program is a simple administrative procedure or a benefit, right, or feature of the plan under Internal Revenue Code Section 401(a)(4), and therefore subject to coverage and nondiscrimination concerns. The latter would require, for example, a uniform offering to all employees, amendment of the plan, and disclosure in a plan's Summary Plan Description. Our interpretation is that the SMarT feature is an administrative convenience. Any participant, whether or not enrolled in SMarT, has the right to raise or lower his or her plan deferral rate in accordance with the plan's rules. Nonetheless, it is worth discussing this issue with a plan design consultant or legal counsel.

Design of Feature

Timing. The first issue in designing a SMarT plan is to consider whether it should be directly linked to an employer's merit review and pay cycle. An important factor influencing this decision will be the financial situation of the sponsor and the likelihood of future pay raises. If not linked to pay raises, sponsors might consider a standard SMarT day across the plan (e.g., all SMarT increases occur the first payday in January). One advantage of a uniform date across a company is that it is easier to communicate the program timeline and its implementation date. Another choice is to allow participants to select the day. This has the drawback of creating another decision point for participants, which can result in delay and confusion.

Range of choices or a single SMarT level. The simplest approach is a single 1% or 2% SMarT increase because it is standardized and easy to communicate. Another option, used by our test employer, is to offer a limited menu of choices—for example, a 1%, 2%, or 3% increase. Importantly, if a menu is offered, the sponsor should designate a default (e.g., 2%), so that a confused participant can still sign up for the plan.

Plan maximum or a SMarT maximum. Over time, the question arises: At what level should SMarT savings stop? One philosophy is to allow higher savings to continue indefinitely (until the IRS Section 415 limit or 402(G) limits are reached), with participants choosing when or if to opt out. Under pension reform, however, some sponsors have amended their plan for a 50% or 100% maximum deferral rate. As a result, another approach is to set a separate SMarT limit or maximum deferral rate, after which SMarT increases stop.

Communications Strategy

Communications are critical to the success of SMarT. The goal of such communications should be, above all, to engender action—to sign up for the SMarT program. The communications message should not include an extensive tutorial on the need for higher savings, because the target population typically has below-average savings and has likely heard these messages in a variety of ways already. Instead, SMarT communications should be designed with a strong call to action that is integrated with the key feature of the program—namely that SMarT is a simple, easy, and painless way of saving.

To date, two tests of the program have used meetings. At this juncture, it is hard to say whether meetings are essential or merely supplementary. Sponsors devising a strategy might want to pursue a combination of approaches that makes the most sense in their own environment and with the resources at hand.

SMarT is an opportunity to test incentives—like awards and product raffles—that are more typical of plan enrollment programs than ongoing savings education.

Recordkeeping Requirements

Some changes will need to be made to existing recordkeeping and administrative systems to accommodate SMarT. The typical process for setting and changing a participant's deferral rate election will need to be modified. Depending on the employer's environment, these modifications may need to take place in payroll systems or in outsourcing recordkeeping services.

Among the required changes to systems and procedures are:

- Changes to the medium by which participants make deferral elections (whether by form, the Web, or telephone center associate). The revised approach would need to accommodate the requirements for SMarT elections by participants.

- A method for tracking participants' deferral elections. The programming will vary with regard to whether SMarT occurs at a merit increase date varying by participant; on a standard date set by the plan; or on a date set by the participant.

- Programming changes, to run in the nightly or other systems cycle, to update participants' deferral rates when appropriate.

Measurement

Finally, we recommend that sponsors implement some systems reporting to track deferral rates over time—and, in particular, to flag those participants who have signed up for SMarT and those who have not. By combining this information with participant information (e.g., age, income, gender, division/location, plan, or employment tenure), the sponsor can monitor the population using SMarT.

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