

Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving

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Abstract

There is a growing concern that many people are not saving enough for retirement. This paper introduces a saving-enhancement plan called Save More Tomorrow (hereafter, the "SMarT" plan). The essence of the plan is straightforward: people commit in advance to allocate a portion of their future salary increases towards retirement savings. This paper also provides evidence on the first implementation of the SMarT plan. Our key findings are the following. 1. Most people (78%) who were offered the SMarT plan elected to use it. 2. Virtually everyone (98%) who joined the plan remained in it through two pay raises, and the vast majority (80%) remained in it through the third pay raise. 3. The average saving rates for SMarT plan participants increased from 3.5% to 11.6% over the course of 28 months. We are hopeful that the results of this first implementation will encourage other employers to implement the SMarT plan.

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1. Introduction

There is a growing concern that many Americans are not saving enough for retirement. The government has been trying to address this issue by offering tax-related incentives and education. Such initiatives are worthy of careful consideration, since there is at least some evidence that both tax incentives (Poterba et al, 1996) and education (Bernheim et al, 1997) affect savings. However, even in the presence of tax incentives and educational efforts, current saving rates are unlikely to provide sufficient income at retirement (Mitchell and Moore, 1998).

The low saving rates of employees is also a concern to many employers, either because of an altruistic concern about their employee's welfare, or because the low participation of lower paid workers restricts the benefits that can be given to higher paid workers. Some employers have taken steps to increase the saving rates of their employees, for example via education, and/or the offer to match employee contributions with additional contributions from the firm. The evidence on the effectiveness of such matches is mixed (Papke, 1995).

More recently some firms have tried "automatic enrollment plans." In such plans, when employees first become eligible for the saving plan they are automatically enrolled unless they explicitly opt out. So, unlike the typical plan where the default is not to join, here the default is to join. Specifically, employees who take no action are typically enrolled at a modest saving rate (such as 3%) and a conservative investment strategy. These plans are remarkably successful in increasing enrollments. In one plan studied by Madrian and Shea (1999) participation rates for newly eligible workers increased from 49% to 86%. Other plans have obtained participation rates over 90%. However, there is a down side to automatic enrollment. The very inertia that helps increase participation rates also can lower the saving rates of those who do participate. In the firm Madrian and Shea studied, the vast majority of new enrollees elected the default saving

rate (3%), and Madrian and Shea's analysis shows that many of these employees would have elected a higher saving rate if left to their own devices. How can the high enrollment rates from automatic enrollment be combined with higher saving rates?

One solution is what we call the Save More Tomorrow plan (hereafter, SMarT). This plan, like automatic enrollment, is grounded in findings about the psychology of decision making. In particular, four important psychological principles are employed. First, many people do want to save more, but lack the self-control. Second, restrictions on future choices are easier to accept if they take effect sometime in the future. We all plan our exercise and dieting regimes to start next week or month. Third, people are very sensitive to perceived losses in their well-being. Evidence shows that it is much easier to forego a gain than it is to accept a loss. Fourth, people tend to code gains and losses in nominal rather than real dollars, so, for example, a pay increase that is less than the rate of inflation may still be considered a gain rather than a loss. (see Kahneman, Knetsch and Thaler, 1986; Shafir, Diamond and Tversky, 1997).

Using a strategy based on these principles, employees are invited to join a plan that will gradually increase their saving rates over a period of a few years. (It is also possible to automatically enroll workers into the SMarT plan, though that is not necessary, as we will see.) Specifically, a few months before the next scheduled pay increase, workers are invited to participate in a plan where a portion of their raise is contributed to the saving plan. The amount could be a fixed percentage of their pay (say 23%) or a portion of their pay increase (say a third or a half). By timing the increase to coincide with the pay increase, workers are assured that their paycheck will not fall. In fact, since the contribution to the saving plan is tax deductible, only part of the increased saving is out-of-pocket, and the actual change in the paycheck is likely to be unnoticeable. The increases will continue until the worker reaches the maximum tax

sheltered contribution, or until the worker opts out of the plan. Once employees are in the plan, we expect inertia to help keep them in.

2. The First Implementation of the SMarT Plan

The first implementation of the SMarT plan took place in 1999 at a midsize manufacturing company.¹ Prior to the adoption of the SMarT plan, the company suffered from low participation rates as well as low saving rates. Given the Labor Department's anti-discrimination rules, this meant that higher paid employees were constrained regarding how much they could contribute to the plan. The company hoped that the SMarT plan would increase savings among the lower paid employees, so that contribution limits on the higher paid employees could be lifted.

The exact implementation of the SMarT plan in this company was somewhat idiosyncratic, but we think the results are nevertheless highly encouraging. To increase saving rates the company hired an investment consultant and offered his services to all employees. Of the 315 plan participants, all but 29 agreed to meet with the consultant and get his advice. The consultant used commercial software to compute a desired saving rate, but also discussed with each employee how much of an increase was feasible. If the employee seemed very reluctant to increase his or her saving rate substantially, the consultant would constrain the program to increase the saving contribution by no more than 5%.² The consultant justified his decision not to mechanically go with the advice from the program as follows: "In most cases with rank and file workers, the computer program calculates that workers contribute the maximum [allowed by

¹ The company prefers to remain anonymous.

² Here and elsewhere, when we mention an increase in the saving rate by some percentage amount we are referring

the IRS and the plan rules] and makes that recommendation. As a practical matter, when the average worker receives this recommendation from the computer program or the "financial planner", s/he shuts down and does nothing. So in all cases, after we reviewed their current plan but before I hit the "Get Advice" button, I would discuss willingness to save with each participant. As you can imagine, the majority of workers live pay check to pay check and can barely make ends meet, and they tell you that immediately. ... If a participant indicated a willingness to immediately increase their deferral level by more than 5%, I hit the "Get Advice" button. Otherwise, I would constrain the advice proposed to an increase of no more than 5%."

Of the 286 employees who talked to the investment consultant, only 79 (28%) were willing to accept the consultant's advice, even with this adjustment to constrain some of the increases to 5% increase in their saving rates. For the rest of the participants, the planner offered a version of the SMarT plan. Specifically, he proposed that they increase their saving rates by 3% a year starting with the next pay increase. This was quite aggressive advice since pay increases were barely more than this amount (averaging 3.25% for hourly employees and 3.47% for salaried employees). The pay increases were scheduled to occur roughly three months from the time the advice was being given. With the 3% a year increases, employees would typically reach the maximum tax deferred contribution after five pay increases, that is, in just over four years.

Even with this aggressive strategy of increasing saving rates, the SMarT plan proved to be extremely popular with the participants. Of the 207 participants who were unwilling to accept the saving rate proposed by the investment consultant, 162 (78%) agreed to join the SMarT plan. More importantly, the majority of these participants did not change their mind once the savings

to an increase of percentage points, e.g., from a 2% saving rate to a 7% saving rate.

increases took place. Only 4 (2%) participants dropped out of the plan prior to the second pay raise, with 29 more (18%) dropping out between the second and third pay raises³. Hence, the vast majority of the participants (80%) have remained in the plan through three pay raises. Furthermore, even those who withdrew from the plan did not reduce their contribution rates back to the original levels; they merely stopped the future increases from taking place. So, even these workers are saving significantly more than they were before joining the plan.

[Insert Table 1 About Here]

The impact of the SMarT plan on saving is shown in Table 2. All data refer only to those employees who have remained with the company for the entire period of study. When the investment consultant was introduced, overall saving in the plan was 4.4%. The employees who did not want to talk to the investment consultant were saving more than the average, 6.6%. The group that accepted the advice of the consultant started at exactly the group average, 4.4%, which was raised to 9.1%. At the end of our time period that had slipped slightly to 8.7%. Those who were unwilling to accept the advice were, not surprisingly, starting from a lower base of 3.5% (and so would find the advice harder to adopt). However, once they got their first pay raise their saving rate jumped to 6.5% and after their second and third pay raises it was up to 9.4% and 11.6%, respectively. In fact, those participating in the SMarT plan ended up with a higher saving rate than those who accepted the consultant's recommendation. We should note that the second and third increases are slightly lower than full three percentage points, because a total of 33 of the 162 SMarT participants changed their mind and bailed out of the SMarT plan.

³ Interestingly, most of the employees who dropped out between the second and third pay increase worked for a

These results are extremely encouraging. After only 28 months the participants in the SMarT plan more than tripled their saving rates to the highly respectable level of 11.6%. This is a group of workers who were not saving much before, and were unwilling to accept the advice from an investment consultant. Although the sample size is relatively small, we find the results strong enough to encourage other firms to try the program.

[Insert Table 2 About Here]

3. Conclusion

The initial experience with the SMarT plan has been remarkably successful. Most of the people who were offered the plan elected to use it. Furthermore, the majority of the people who joined the SMarT plan stick with the plan. Consequently, SMarT participants more than tripled their saving rates. Of course, the reason why the SMarT plan works so well is that inertia is so powerful. Once people enroll in the plan, few will ever get around to opting out. The SMarT plan takes precisely the same behavioral tendency that induces people to postpone saving indefinitely, (i.e., procrastination and inertia) and puts it to use. As the consultant has pointed out to us, there is an argument for offering the SMarT plan to all participants, even those who would have been willing to make their initial savings increase more than the first step of the SMarT plan (here 3%). Since even these eager savers never got around to changing their savings allocations again the following year, the SMarT plan participants were already saving more after just 16 months (see Table 2).

single supervisor who apparently disapproved of the SMarT plan.

One objection we sometimes hear about both the SMarT plan and automatic enrollment is that they amount to some kind of sneaky paternalism. We think such criticism is misplaced. Notice that no one is being forced to do anything here. The whole point of choosing a default rule rather than a mandatory rule is to give people choices. As to the choice of the specific default rule, there is no avoiding having some default rule. Policy makers always have to choose what happens to people who fail to make a choice. Making the default the one that the policy makers believe is the one most people would choose upon reflection is just being helpful.⁴ So we do not think that automatic enrollment is intrusive, and the SMarT plan as implemented in this case study is even less intrusive since it required the worker to actively join the plan. Of course, the SMarT plan works precisely because the default rule is to stay in the plan once having joined. We suppose that someone could argue that workers enrolled in the SMarT plan will end up saving “too much”, but we will not lose much sleep worrying about the workers who are having trouble deciding how to spend their vast wealth in retirement. We suggest spoiling the grandchildren and acquiring a taste for fine wine.

We conclude that increasing the saving rate of employees is indeed easy. Based on our first experimentation with the SMarT plan, it appears that firms could use the plan to dramatically increase the savings rate of their lower paid workers. This would be good for the workers themselves, good for the firm, and the widespread adoption of the plan has the potential to substantially increase the US saving rate without any government intervention. We hope other organizations try this plan, and we would personally be happy to help any organization

⁴ An example is when an employee is allowed by law to elect to make some payroll deduction (e.g., parking or health insurance) on a pretax basis. If most employees choose to do this, and it is an option for everyone, then courteous employers make this the default to help absent minded employees from forgetting to return the correct form. Would anyone object to this as paternalistic?

implement the SMarT program as long as they were willing to monitor the results so others can learn from their experience.

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Appendix A

SMarT Brochure to be Provided to Employees

(Assuming salary increases take place on July 1)

“You are currently contributing 3% a year to the company's saving plan. If you are like most of your fellow employees, you think you should be saving more but never seem to get around to it. You often think, well, next year I'll save more but right now my budget is just too tight. We have designed a plan with you in mind. As you know, next July you will be receiving your annual salary increase. We are offering you the option of deciding now to share some of your raise with your future. The plan is called “Save More Tomorrow” or SMarT for short. If you join, a portion of your raise in July is automatically contributed to the 401(k) saving plan. In your case, the 3% you are now contributing would be increased to 5%. Your take home pay will still increase, but slightly less than it would have without the SMarT plan. You will be saving more and you will pay less in taxes since contributions to the saving plan are tax deductible. The same thing would happen again the following July, when your savings rate would increase to 7%, and again each July until you were saving the maximum tax deferred amount allowed by law. We think that if you join the program now, you may never notice the difference in your take home pay, but in a few years you would certainly notice the difference in the amount of money you had saved for retirement. Of course, if you change your mind, you could always withdraw from the program and reduce the level of contributions you are making to the plan. We hope you will decide to Save More Tomorrow. Be SMarT.”

Table 1
Participation Data

The number of plan participants prior to the adoption of the SMarT plan	315
The number of plan participants who elected to receive a recommendation from the consultant	286
The number of plan participants who implemented the consultant's recommended saving rate	79
The number of plan participants who were offered the SMarT plan as an alternative	207
The number of plan participants who accepted the SMarT plan	162
The number of plan participants who bailed out of the SMarT plan between 1 st and 2 nd pay raise	4
The number of plan participants who bailed out of the SMarT plan between 2 nd and 3 rd pay raise	29
Overall participation rate prior to the advice	64%
Overall participation rate shortly after the advice	81%

Table 2
Average Saving Rates

	Participants who did not contact the financial consultant	Participants who accepted the consultant's recommended saving rate	Participants who jointed the SMarT plan	Participants who declined the SMarT plan	All
Number of participants	29	79	162	45	315
Pre-advice	6.6%	4.4%	3.5%	6.1%	4.4%
1 st Pay Raise	6.5%	9.1%	6.5%	6.3%	7.1%
2 nd Pay Raise	6.8%	8.9%	9.4%	6.2%	8.6%
3 rd Pay Raise	6.6%	8.7%	11.6%	6.1%	9.8%

Participants were offered access to an investment consultant. Many of those contacting the consultant found the recommended saving rates too high, and they were offered the SMarT plan as an alternative.