

TO SAVE

The Unfun Option

Vijaya was beautiful, and she was surrounded by beautiful flowers. She sat in the shadow cast by the crumbling east facade of the Koyamedu Market in Chennai, India. When Jake met her she was sitting at her table making garlands. It was repetitive work. She reached in front of her to pick out a single white jasmine bud from a pile of thousands, then she looped a piece of white nylon cord around its tiny stem and cinched it into a knot, sliding it down to join hundreds of others already tied. It was a growing strand of ancient DNA, pairs of opposing buds spiraling around a central axis. The finished portion lay coiled on the table like a wonderful and gentle snake.

The whole place smelled of wet flower petals and sweet incense, but nothing else about it suggested a luxury spa. Nor were the great ropes of fresh flowers destined for opulent hotel lobbies or the dining tables of the rich and famous. They were to be bought and disposed of by common people, who laid them at the feet or hung them around the neck of a religious icon in any one of the thousands of Hindu temples around the city. It takes some getting used to, but it is a fact: You will see a man walking barefoot, wearing a ripped and threadbare lungi, face dirty with soot, and he will be carrying half a yard of fresh roses. He might have spent his last twenty rupees on them.

Vijaya and her neighbors, who sat at similar tables making

similar garlands, were hardworking women. They had something to show for it. Hidden in the folds of their dusty saris were small wads of crumpled, sweaty bills. Ten rupees, fifty rupees. The rupees were usually not plentiful, but that made them all the more important.

Each morning Vijaya arrived at Koyamedu and bought three hundred rupees' worth (about \$6.50) of flowers from a wholesaler. She set her table upright, laid down her spool of white cord, and propped a wooden crate on its end for a stool. Then she dumped out the day's flowers on the tabletop and got to work, tying them automatically and efficiently. As long as Jake watched her, she never missed a knot or broke a stem. She took a break only when a customer approached her table. He would point to one of the coiled garlands and she would measure out the length he requested against her forearm. Then she would cut it off with a razor blade, take his money in her right hand, and deposit it in the folds of her sari.

By the day's end she might have sold four or five hundred rupees' worth. Jake asked her what she did with the profit. As it turns out, most of it never made it out of the market. Each evening, after all the flowers were gone, Vijaya was visited by a man who had no interest in garlands. He was there to collect a daily loan payment. A few daily loan payments, actually.

Vijaya had three or four loans outstanding at once. She used them for almost everything: to buy flowers in the morning, for the monthly rent on her family's house, for her children's school fees and hospital bills. The loans varied in amount and duration, but they had one thing in common: interest. That meant Vijaya was paying extra—usually about 3 percent extra per month—for most of her family's biggest expenses.

When Jake asked her roughly how much interest she paid in

total on all the loans, she demurred: "Interest?" If it was a considerable burden, she didn't let it show. "I give about one hundred or one fifty each day to the man who comes. If I have extra, maybe I give some extra. If I need more money, I ask for it. That is the rotation." She stressed that word, *rotation*. It suggested a smooth and continuous cycle, like the coming and going of the monsoon.

The system of borrowing for most big expenses was actually less like a monsoon and more like a leaky faucet. It meant rupees were constantly trickling out of Vijaya's sari—and ultimately out of her family's coffers—and spiraling down the money-lender's drain in the form of interest. Ironically, losing money in this fashion, day after day, is no mean feat. That Vijaya was even able to keep up with her loans proves that she was making more than enough (the *more* being the interest amount) to cover her expenses.

Therein lies the puzzle.

Why Saving Is Good

Taking small short-term loans over and over is rarely the best way to operate, economically speaking, but it is exactly the way many millions of people operate. The *rotation* is churning in the neon-lit offices of payday-loans outfits in Sioux Falls, South Dakota, as much as in the flower markets of Chennai.

Wherever it occurs, the borrowers engaged in it are making a statement: There is something I need, but I don't have enough cash on hand to buy it. So I will take it today on credit, and eventually I will pay extra for the privilege of getting it early.

But whence the extra? This is an especially important question for a repeat borrower, say, one who takes \$50 every Monday and pays back \$55 on Friday. To support this regular borrowing,

she must have found a way to consistently squeeze (at least) an additional \$5 from an initial outlay of \$50. So she knows how to put her money to work; unfortunately, it is working for the lender. But it is a powerful engine that turns \$50 into \$55 over the course of a week, and perhaps it could be refitted to serve her instead of her creditors.

Suppose she resolves to save a dollar each week and put it toward the next week's \$50 outlay. (For simplicity, assume throughout that her business remains the same size, always requiring a weekly investment of \$50 to buy goods to sell.) On Monday after the first week of saving she borrows \$49 instead of \$50. That Friday she will repay just \$53.90 (\$49 plus 10 percent interest of \$4.90), saving \$0.10 in interest. By the end of the week she has also put aside another dollar, now for a total of \$2.10. Next time she only needs to borrow \$47.90. As the cycle continues, the compounding interest savings and the growing weekly savings combine to eat away at the loan amount. It's all over sooner than you might expect: After twenty weeks she is completely debt-free. Now her powerful engine, which had been supporting the local moneylender, cranks out five dollars for her to keep once each week, like clockwork.

The example above is fairly realistic in terms of dollars, cents, and percentages, but it is also a fable. There is a moral in it. Saving—even a little at a time—can make a big difference.

Why Saving Is Hard

Like so many things right and good, saving is hard to practice. Most of us can find sufficient evidence of this in our own experience; still, it serves to list a few reasons why people in every corner of the world find it difficult to save.

For starters, on first inspection saving is not very attractive. It does not quench thirst, fill bellies, or prevent illness; nor is it shiny or fun to play with. It preaches abstinence and forbearance, always opts for the sensible shoes, and is probably registered with the local temperance union. Compared with the other things calling out to us and to our wallets, saving is just plain boring.

Second, for those who can see past its homely exterior, it still takes discipline to choose saving over buying something to be used right now, especially when the immediate purchase seems essential. One falls into thinking that today's needs and opportunities are really more pressing than future needs and opportunities will be. Procrastination often sneaks in and makes itself at home while discipline is taking a nap. Saving, like a stern old schoolmarm in a gray woolen frock, will always be there tomorrow, so it can wait.

As this happens repeatedly, the hazy future becomes a storehouse for all the good things we'll eventually do, and not-saving becomes a matter of momentum (or, more appropriately, of inertia). This is actually a pervasive phenomenon documented in psychology and behavioral economics. It happens to all of us, and not just with our piggy banks—the story also makes sense if you replace *saving* with *quitting smoking*, *eating healthier*, or *exercising regularly*.

Even for a person endowed with discipline and foresight, the road to saving is strewn with barriers and hazards. A few of these are transparent and predictable, like account-opening fees, withdrawal fees, and minimum balance requirements; but for the most part the obstacles are a sneaky, poorly behaved bunch. They are the devils on our shoulders, the monkeys on our backs, and the needy people with whom we are bound up. Your husband's weekly card game, a taste for fine wines, those persistent calls

from a cousin asking for a little cash—ferocious beasties all, they can devour a hundred times their weight and still be hungry.

Vijaya was grappling with one of these beasties. She said as much when Jake asked her whether she kept any savings at her house. Naturally, she didn't enjoy handing over the better part of her day's earnings to a collector instead of bringing it home to her family; but she didn't see an alternative. She laughed matter-of-factly and slapped the arm of the woman sitting next to her, who also chuckled and shook her head without looking up from the garland in her hand. Vijaya knotted another jasmine bud and said, "Of course we cannot save anything in the house. Whatever I bring home, my husband drinks it up."

She did the international pantomime for drinking. The adjacent flower sellers, who had overheard her comment, concurred. They also knew the pantomime.

Almost as Good as Keeping It Under the Mattress

Facing a steeply uphill battle at home and with limited access to formal banking, many are forced to develop alternative savings solutions. That's essentially what Vijaya was doing with her loans—using the agent's daily collection to stand in for a savings account she did not have.

Other circumstances have bred a great variety of informal savings schemes around the world. West Africa has *susu* associations, in which a collector takes daily deposits from clients in exchange for a monthly fee; and ROSCAs (short for "Rotating Savings and Credit Associations"), in which members get access to a pool of monthly savings on a rotating basis, flourish on six continents.

There are many varieties, but most informal savings schemes have at least one feature in common: a cost to the saver. In

developed countries, where interest-bearing savings accounts are widely available at no cost, solutions like these simply do not stack up. But half of the world's population—over 2.5 billion people—use no formal financial services for either saving or borrowing. The informal solutions survive because, although they're costly, they fill gaps that desperately need filling.

Those gaps are exactly where effective development programs can have a big impact. And we can learn a lot about what's needed by studying the way people use costly savings schemes in real life.

Pascaline Dupas of UCLA and Jonathan Robinson of UCSC undertook such a study in rural western Kenya in 2006. They designed an RCT to see whether obstacles to savings were responsible for low business growth among microentrepreneurs. Specifically, could gaining access to a bare-bones savings account make people better off?

First, Dupas and Robinson identified and surveyed a group of entrepreneurs—market vendors, bicycle taxi drivers, barbers, carpenters, hawkers, and others—and had them agree to keep detailed daily logs on their incomes, expenditures, and health status. Then they randomly selected half and offered to open savings accounts for them at the local cooperative, free of charge.

The account they pitched was no great shakes. It did not bear interest, and carried fees for all withdrawals. (Thus, it effectively had a *negative* interest rate.) It stands to reason that anyone who would actively use such an account must be facing some kinds of obstacles to savings; after all, the venerable under-the-mattress approach offers the same (zero) interest rate and no withdrawal fees. So their first question was: Would anybody even use it?

The answer was a resounding yes. Of those receiving offers, 89 percent opened an account, and 55 percent went on to make at least one deposit within six months. Such a strong response

suggests that, for many people, an expensive, no-frills account with the village cooperative was really the best thing going. To find out which participants fit that description, Dupas and Robinson looked at the data they had collected in the initial survey. One thing seemed clear: Women made use of the account far more than men did (although the sample of individuals in the study proved too small to say with statistical certainty why this was the case). Maybe, like Vijaya, they faced more savings obstacles at home.

But a less obvious dynamic also stood out. The strongest predictor of account usage was participation in a homegrown savings scheme, like the Rotating Savings and Credit Associations mentioned earlier. That is, people who were already saving (albeit not in a formal bank) at the time of the offer were significantly more likely to become active users of the new accounts. That's sort of a strange finding. Participants in homegrown saving schemes had already found a way to save; why did so many of them rush to sign up for the new accounts? One explanation is that the new accounts were actually better than the existing alternatives. The way to find out was to see how the village cooperative accounts had changed people's daily lives.

And so Dupas and Robinson came to the detailed daily logs, simple foolscap notebooks filled out in ballpoint pen and dull pencil. Despite their unassuming appearance, these were vast treasure troves of information, containing records of everything from purchases of business inventory to payment of hospital bills. Taken together, the logbooks told a coherent story: Saving in the village cooperative accounts, women invested more in their businesses and increased their spending on food and other goods.

There was also evidence that suggested the accounts improved women's abilities to cope with illness, both to themselves and to other household members. Women without accounts in Dupas

and Robinson's study reacted to serious illness by working less, drawing down their working capital, and giving away goods on credit (which was likely a tactic to prevent spoilage). This compounds the effect of sickness by interrupting the business—and the income it generates—precisely when it is needed most.

In contrast, women who had been offered accounts did better. They could draw on savings to pay for treatment right away, so they tended to keep their working hours up even during weeks with sickness. As a result, they were not forced to dip into their working capital or give goods away on credit. Those are steps in the right direction. But why did this happen only for the women in Dupas and Robinson's study? That is an open question worthy of further research. Their finding could be a fluke, or it could be a deep and important truth about the differences between women and men—a truth that has implications about how we should design future programs. Replicating their experiment is the best way to find out. To this end, Dupas and Robinson are currently working on follow-up studies in Kenya, and I am also working with them to replicate and scale their work in Uganda, Malawi, Chile, and the Philippines, through the generosity of the Bill & Melinda Gates Foundation.

Pascaline Dupas and Jonathan Robinson's study in Kenya showed us two things. First, aspiring savers were in a bad spot to begin with. That so many signed up for an account with a negative effective interest rate attests to the amount of obstacles they faced. Second, the fact that village cooperative accounts really did improve people's lives suggests that available alternatives were weak.

There is a much more positive way to look at these findings. Through their use of the village cooperative accounts, the people of western Kenya showed they had both the will and desire to save. If such a middling savings solution can do so much good,

then how much more could we do with a better product? The impacts Dupas and Robinson found are encouraging. Now we have to look for ways to get more people on board.

Sunny Saves

Even without a drunkard husband like Vijaya's to tear through our pocket money, many of us find ways to avoid saving. I recently performed a substantial feat of not-saving when I took a friend out for a fancy dinner to celebrate nothing in particular. That expense is easily dismissed as frivolous, but often our reasons for spending are, well, reasonable—repairs or improvements to a house, back-to-school shopping, sending money home to support extended family. These are not splurges.

Unfortunately, the view from inside the piggy bank is stark and simple: Either money gets deposited into the slot on top, or it doesn't. The account balance is no respecter of reasons or justifications. Just shake the thing and see how much is jingling inside. *Clink, clink*. The coins are few; their sound is sad and small. Buyer's remorse sets in. We wonder which recent purchases were unnecessary, which could have waited.

So it was with Sunny.

I met Sunny in the Philippines, in Butuan, a city in the north of Mindanao. Sunny had a few goals for her home. She wanted new plaster on her walls. She wanted to build a nice patio. She wanted to fix her bathroom. Each improvement would cost about two hundred dollars.

Sunny wasn't the poorest person on her block, nor was she the richest. She certainly did not have two hundred dollars. What Sunny did have was a savings account at the Green Bank of Caraga. So she set out depositing money into it, with an eye on

her goal. She put in five dollars at a time, and slowly but surely her account balance rose. But every time she reached fifty dollars, something seemed to come up. Nothing earth-shattering: One time her kids needed clothes. Another time her husband was agitating for a fancy new TV. What happened? There was a withdrawal, and Sunny went back to zero.

One day something changed.

The Green Bank came along and offered Sunny a new product called SEED (short for "Save Earn Enjoy Deposit"). SEED was identical to her existing savings account, with one exception: It had a commitment feature, which locked away her money until she reached a goal amount of her choosing.

Sunny signed up and set her goal at two hundred dollars. She saved two hundred dollars, withdrew it, and promptly signed up again. When I met her during a qualitative follow-up survey, she was on round three. She had never managed to save so much before in her life.

SEED was new to the Green Bank and to Sunny, but commitment savings is an old trick. In the United States, Christmas Club accounts have long helped people save little by little toward a big goal. What defines a commitment savings scheme is that deposits are locked up, either until a given date or until a specific account balance is reached.

What's surprising, from the perspective of standard economic theory, is that people actually sign up for these things. The reasoning behind the standard view is that having more options—like the freedom to withdraw money whenever you want—is better. After all, you're never *forced* to withdraw from a regular savings account. You are free to save toward a goal, or not. You can do what suits you. On the other hand, a saver in a commitment scheme has given up the withdrawal option. What could be good about that?

For one, it silences the voices of temptation. It snatches at the windpipes of all the things calling out to us and to our wallets. We cannot make impulse purchases when our money is locked away in a vault. That fact alone was enough to solve Sunny's problem. Is the same true for others? Can SEED, or other commitment savings schemes, help improve the lives of the poor?

Getting the Poor to Save

The fact is that most poor people do not have savings accounts, commitment-based or otherwise, and conventional wisdom has a simple explanation for this. They're not saving because they spend every last cent on the bare essentials. (They're poor, remember?)

I'll admit, there is something attractive about that reasoning. It's clean and it makes a kind of intuitive sense. But it leads to a dead end. If not-saving is simply an inescapable fact of poverty, then even if we find ways to help poor people control their impulses and resist temptation spending, we won't fix the root problem. They still won't have anything left after taking care of their immediate needs. So we should not waste time and money finding better ways for them to save.

Fortunately, we need not accept that line of reasoning on faith; we can test it in the real world.

While I was studying at MIT, I met Mary Kay Gugerty, then a Ph.D. student at the Harvard Kennedy School of Government. Mary Kay was writing her dissertation on informal savings clubs that Kenyan women used to overcome self-control problems. I had also been thinking a lot about temptation—not just with savings, but in other areas of life as well. We went to talk with David Laibson, a behavioral economist at Harvard who had done some pioneering research on self-control.

We went into the meeting hoping to find out how we could test his theories, but we walked out with a much more practical question: How can we use these theories to improve people's lives? Specifically, can we design a product that will help solve the temptation problem?

A week later, Mary Kay and I joined up with Nava Ashraf, another graduate student, and started looking for a product to test and a place to test it. We wrote up a brief proposal and blasted it out to our e-mail list. It turned out a lot of people were interested in temptation and self-control. We got dozens of responses.

Nava and I went to the Philippines in August 2002 to follow up on some of them. John Owens, manager of a USAID initiative to assist rural banks, and microfinance guru, set up a meeting with a dozen potential partners. I'll always remember that trip for one simple reason: Nava and I both had temptation on the brain. I thought about it every morning, when I had to fight to pass up a breakfast of French toast and banana bread while Nava effortlessly opted for a healthy bowl of fruit and cup of yogurt. She thought about it when we talked about clothes. It came out that I hadn't spent more than ten dollars on a shirt as long as I could remember (I usually wear tie-dyes and batiks from West Africa or kurtas from India), while Nava had to hide her credit cards from herself to keep from splurging.

So we had a lot to say when we met with the banks we might work with. The very next day we had a strong partner in the Green Bank of Caraga, the same bank I later worked with to study group- and individual-liability loans. They were eager to find and test new ways to mobilize savings.

Nava, Wesley Yin (a graduate student at Princeton), and I worked with the Green Bank to create SEED, the savings account that would later help Sunny make her home improvements. And

in the process we designed an RCT to find out whether a self-control product could really work. We wanted to know what kinds of people would sign up, and how SEED would affect overall savings.

We started by surveying about eighteen hundred current and former clients of the bank. Once the survey was complete, we randomly divided the respondents into three groups. Those in the first group were visited by a Green Bank employee, who spoke to them about the importance of saving and invited them to open a SEED account. Those in the second group were also visited by an employee and given an identical marketing spiel about saving, but were not offered SEED accounts. Finally, those in the third group received no visit and no offer. They were monitored for control.

Our initial survey captured more than the usual demographic and household information. It also included a battery of questions that measured "time-preferences": a person's willingness to pass up gains today for larger gains in the future. These are questions like "Would you prefer to get five dollars today, or six dollars a month from today? How about five dollars in a month versus six dollars in two months?" By probing across a variety of time frames and dollar amounts, we can sketch a good picture of a person's preferences for immediate versus delayed gratification. Or, in plain English, we can find out about patience. Impatient people, for instance, choose the five dollars now over the six dollars in a month.

Things get interesting when preferences change over different time frames. Consider people who are impatient now (i.e., prefer five dollars today over six dollars in a month), but claim they will be patient later (i.e., prefer six dollars in two months over five dollars in one month). You know people like this. They are the ones who never have time to begin their new exercise regimen

this week, but are sure they will next week. Or who are always going to start diverting a bigger part of their paycheck to retirement savings—next month. They have identified goals and ways to achieve them, but always find an excuse when the time comes to start. If you knew yourself to be such a person, you might jump at the chance to accomplish a goal by locking yourself into a commitment scheme. That is exactly what happened with SEED.

Overall, the product was a hit. More than a quarter of those invited to enroll did open an account. If that doesn't seem like a strong response, consider what the Green Bank was offering: a savings account identical to the normal one (which anyone was free to open), but *without* the option to withdraw. Seen in that light, the 28 percent take-up rate is impressive: It means 28 percent of people wanted to lock up their money where even they couldn't reach it.

We also confirmed our suspicions about the kinds of people who were opting in. Women with impatient-now-patient-later preferences were about 50 percent more likely to sign up as women without. So, on the whole, SEED was reaching the right people.

We were excited to see people signing up, but the big question was about impact. Would SEED really help people save? In a word, yes. We found that simply *offering* a SEED account caused the typical client's balance to increase by 47 percent over six months. That figure rose to 82 percent after twelve months. Keep in mind that this was the average change in savings balances for everyone offered the account—regardless of whether they accepted. In fact, the impact of SEED only on those who actually opened accounts was a remarkable 318 percent. That is, we found that the effect of offering a SEED account to a client *who will open it* is to increase her savings balance fourfold!

The findings from the SEED study are important for two reasons. First, they confirm that Sunny's experience is no mere anomaly: SEED accounts helped many Green Bank clients increase their savings. Second, and more fundamentally, they undermine conventional wisdom by demonstrating that, if given the right tools, the poor *can* save more, even without a boost to their overall incomes. This is a powerful and encouraging result, for it suggests that people can do better with their existing resources.

Maybe all they need is a behavioral push—or, to borrow a term from Richard Thaler and Cass Sunstein's eponymous book on behavioral solutions to everyday problems, a little *nudge*.

Insights from the Home Front

We have seen what's happening in a south Indian market, in the Kenyan bush, and amid the vast, wet checkerboard of Filipino rice paddies. But what about Decatur, Illinois? What about Astoria Boulevard, Queens, New York? Practical applications of behavioral economics are still, relatively speaking, in their infancy even in the developed world—and it's worth taking a look at the kind of nudges and commitment devices that are catching on over here, to inspire new ideas for what might be tried over there. What's more, as we find that behavioral solutions are adaptable to both rich and poor settings, we strengthen the case that they actually respond to something fundamental and shared, something that transcends the poverty line.

Evidence from the home front supports this view. It turns out that, when it comes to savings, even financial types and (gasp!) economics professors aren't immune to biases and shortcuts in their thinking. The behavioral economists Richard Thaler and Shlomo Benartzi noticed that most people—including their fellow

academics—tended to approach retirement savings contributions as they would a certain countertop rotisserie oven: Set it and forget it. When first joining a firm, employees chose a contribution level and an investment plan and tended not to change it. Ever.

From the standpoint of classical economics, this is puzzling. One's needs and resources vary enough over the course of a career that it's highly unlikely any single plan would be best throughout. So these people, savvy as they were, were not making the best economic decisions. What's more, they were failing by their own assessment. When surveyed, many said they were dissatisfied with the size and allocation of their monthly contributions. This came as a surprise; after all, they were the ones who originally set those parameters, and they were free to change them anytime.

What was to blame for these mistakes? Thaler and Benartzi could see procrastination and inertia, two behavioral barriers to saving we saw earlier in the chapter, at work. They devised a plan called Save More Tomorrow (SMarT) that turned these barriers on their heads.

Under SMarT, participants agree now to a series of future savings increases coincident with pay raises, so that saving steps up over time without ever decreasing take-home pay. Because savings will not increase until a pay raise, signing up for SMarT is painless now—that's good news for procrastinators. The plan is voluntary, so participants can opt out of the scheduled increases at any time. Of course, doing so requires some initiative and positive action; thus, for participants, inertia helps, rather than hinders, saving.

Thaler and Benartzi suspected they were onto something, so they partnered with a firm that agreed to offer SMarT and track its employees' saving progress. The implementation went as follows:

First, all employees eligible for the firm's retirement savings plan were offered a free meeting with a financial consultant. For those who accepted, the consultant computed a desired savings rate and recommended an appropriate on-the-spot savings increase to get there. Twenty-eight percent of those who met with the consultant took his recommendation; the rest were offered the SMarT plan. An impressive 78 percent signed up. After four pay raises, the picture was striking. Eighty percent of those who signed up were still enrolled in the SMarT program, and signers-up were saving 55 percent more than those who had accepted the consultant's advice.

Since the first implementation, SMarT has caught on. Fidelity Investments and Vanguard, two of America's largest retirement savings plan operators, now offer a version of the plan to their corporate clients. As a result, millions of employees have agreed to Save More Tomorrow.

One reason why SMarT is such a powerful tool is that it allows people to bind themselves (not too tightly—one can always opt out) to doing the right thing. Economically, participants are changing the relative prices of good and bad behavior. Without SMarT, good behavior (like increasing retirement savings) is costlier than bad: It requires visiting the HR office and filling out a form. Once enrolled, the tables are turned. Good behavior is free, and bad behavior (like freezing or lowering retirement savings) is now the time-consuming option.

What if we had a way to change relative prices of other things in our lives?

With this question in mind, I created stickK.com, a Web site where anyone can make commitment contracts to achieve goals of his or her choosing. StickK.com lets users define what they want to accomplish, what's at stake, and who will certify their success (or failure). This way people can change the relative

prices of good and bad behavior directly, using dollars and cents. (You can also put your reputation up as the stakes by committing to automatically notify your friends and family of your success or failure.) Suppose, for instance, you wanted to work out at the gym once a week. With a stickK.com contract, you could fine yourself a hundred dollars for every week you failed to show up.

The plot thickens when you consider the recipient of the money you put on the line. When you make a stickK.com contract, you choose whether your hundred dollars will be transferred to a specific person, a charity, or an "anticharity"—that is, a charity you'd rather not support. Would you try harder to make it to the gym if failing meant sending a check to, say, the Bill Clinton or George W. Bush Presidential Library, as opposed to UNICEF? I suspect so! Other pairs of opposing "anticharities" include the National Rifle Association and the Educational Fund to Stop Gun Violence; Nature Conservancy and the National Center for Public Policy Research; Americans United for Life and NARAL Pro-Choice America. For those in England, stickK.com offers charities on both sides of the great, eternally contentious soccer rivalries: the fan clubs of Arsenal and Chelsea, Liverpool and Manchester United.

It has been a fun process to watch. We have seen plenty of contracts for weight loss, exercise, and smoking cessation. But the Internet has a way of bringing out people's creative sides. With the power of incentives at their fingertips, people have used stickK.com to succeed in some unexpected ways. A few "custom" goals are worth noting:

- I will not call him for two weeks
- No more dating losers
- No more porn
- No more afternoon five-dollar lattes

- No cutting my hair
- Spit my gum in a trash can and not out the window

And a few longer ones, complete with explanations:

- I will wake up AND GET OUT OF BED each workday no later than six-thirty A.M. so that I will be at work no later than eight (goal being seven-thirty). I will e-mail my referee each workday morning so she can see that I am in by eight! I commit to taking a shower no longer than five minutes.
- Buy a car to replace the old POS I have. It will be manual transmission and it WILL be by the end of this year.
- Refrain from swearing even when Philly sports teams mess up if Katie is present. . . .
- Porn is destructive, unhealthy, and perverts my view of sex and relationships. It also can become obsessive-compulsive and an unhealthy release of stress. Watching porn also conditions you to the wrong types of women and the wrong kind of so-called physical "intimacy" instead of valuing their authentic feminine nature. So I commit to not watching porn more than once per week. [Note: Based on the vehement opening, I really thought this contract was heading for cold turkey on the porn!]

Gentler Nudges

Like SEED, stickK.com has some serious bite to it. There can be real money on the line, and money is a powerful tool for shaping our choices in the face of temptation. It makes sense: When you're on the fence about going to the gym, the mere thought of losing a hundred dollars (or having to notify your friends that you skipped) is likely to push you in the right direction. Here's a

question, though: How far can we go with less bite? What if the problem is less our weakness than our forgetfulness—and what if the solution lies, accordingly, in the *thought* of losing a hundred dollars rather than the actual loss? Then you might change your behavior just by managing your attention. And maybe you could keep that hundred dollars after all.

That's an idea we can test directly in the developing world. Maybe the poor don't need the bite of restrictive commitment accounts (like SEED) in order to behave better. If they could just *think* of saving at the right times, maybe they would do more of it. Maybe a lot more.

Maggie McConnell (a post doc at Harvard and a former research assistant for IPA in Peru), Sendhil Mullainathan, Jonathan Zinman, and I set up RCTs to test this proposition in three countries: Bolivia, Peru, and the Philippines. Replicating experiments in differing contexts helps us address the ever-present question of “external validity”—whether results from one country or project site can be applied to another. If you really want to know, test the idea in a few different environments! Learn when it works, when it does not, and what the driving factors are for success. This principle was one of the central motivations for creating IPA, and we are testing a number of interventions in multiple locations for exactly this reason.

In all three places, we worked with clients who had recently opened “goal” savings accounts and had made plans to save every month for the year. We randomly chose some of them to get a little nudge toward their goals—the simplest nudge we could think of: We reminded them, once a month, to save. In the Philippines and Bolivia, we sent text messages. In Peru, where cell phone use was less widespread, we sent the messages through the physical mail.

In Peru, we also tried what we thought was a neat idea: to give

people pieces of a jigsaw puzzle each time they made a deposit, so that after twelve deposits they would complete a picture of their savings goal, such as a vehicle, a home, or a student at graduation. We suspected that the simple act of depositing money was too abstract, and that a jigsaw puzzle piece would make their goal more salient—and thus provide an extra incentive to make the deposits. Every time we told people about this idea, we were enthused by positive feedback. Some early results even made us hope they would work.

But the jigsaw puzzles did not work. They didn't cause savings to increase or make savers any more likely to achieve their goals. Where did they fail? Perhaps they got the timing wrong: The salience of receiving a piece occurred *after* the deposit was made. So if the problem was one of attention—that individuals weren't thinking of their future goals—then the salience-enhancer needed to be done *before* they were to make their deposit, not as a reward for doing so.

Fortunately, the tiny little reminders really did work. Total savings increased by 6 percent, and people were also 6 percent more likely to reach their savings goals. The effect was even bigger for savers randomly assigned to receive mention of their specific goal (versus a vague reference to savings) in their reminder.

These messages cost the banks pennies apiece. It was practically a free lunch.

A practically free lunch is great, but how about an honest-to-God, zero-cost free lunch? Let's look at one more nudge—one that's even simpler (and cheaper) than sending text messages and *still* makes a big difference in people's behavior. This one is right in our backyard, at H & R Block tax preparation offices in St. Louis.

In 2005, economists Esther Duflo, William Gale, Jeffrey Liebman, Peter Orszag, and Emmanuel Saez partnered with H & R

Block to see how offering a one-time matching IRA contribution would affect retirement savings. They found, as expected, that larger matching contributions (say, 50 percent versus 20 percent) generate larger contributions from savers. But they also noticed something strange.

The tax code already contained a program called the federal saver's credit, which was economically equivalent to the matching IRA contributions they were studying. But the federal saver's credit was framed as a rebate instead of a match. Since the two were ultimately the same in dollar terms, they were surprised to find that people reacted to them very differently. In particular, an increase in the matching level generated far more savings than an equivalent increase in the rebate.

Emmanuel Saez returned to St. Louis in 2006 to see what was happening. Again, he partnered with H & R Block and designed an RCT on retirement savings, but this one was different. While the first study was mainly concerned with responses to a range of economic incentives (i.e., the different matching levels), this one focused on a single one. The only thing that varied was the way that incentive was presented.

Some tax filers would be offered a 50 percent match on IRA contributions, and some others an equivalent rebate. In the 2005 study, the federal saver's credit rebate was buried deep in the dense, forbidding tax code—so we might excuse filers if they were unaware of it. But this time he laid it out simply. All the offers were direct and transparent. Still, the results were similar: 10 percent of those offered the match made contributions, compared with 6 percent of those offered the rebate, and 3 percent of those receiving no special offers.

The findings of Saez's 2006 study fit into a growing body of evidence that matching is more effective than equivalent credits

or rebates at increasing contributions—to charities, to give one example. Knowing that gives us an easy opportunity to shape better products and policies. Just think: It costs nothing to describe a rebate as a matching contribution, but doing so could increase participation by two-thirds!

That's one reason why strong results about the little things are so exciting—because they point to ways in which we can do better without reinventing the wheel. We are harnessing our irrationality to improve lives.