On average, Social Security replaces only 40 percent of pre-retirement income in the United States – enough to keep recipients out of poverty, but hardly sufficient to sustain the good life. Luckily, many retirees have other assets on which to fall back, most notably, equity in their houses, money in IRA and 401(k) retirement accounts and conventional employer-sponsored pension plans.

The significance of this last source of retirement income – the employer-sponsored defined-benefit pension plan – has been declining. Indeed, most defined-benefit pensions are legacy plans adopted decades ago, when major corporations were more inclined
to paternalism and were generally viewed as too big to ever fail. Virtually every company setting up a new retirement-savings plan today opts for a 401(k)-style defined-contribution savings plan that limits the firm’s exposure to the vagaries of future investment returns and life expectancy.

Until very recently, the approach of both employers and the government to defined-contribution plan design was laissez-faire – if we offer it, they will save. The premise behind this thinking is that each individual knows what rate of savings is in his best interest and acts accordingly. Indeed, the hallmark of most defined-contribution savings plans is choice – employees choose whether to participate, how much to save, and how to allocate their savings among investment options.

However, a growing body of evidence (not to mention common sense) suggests that many individuals are poorly served by this approach. Consider the following responses to a survey of defined-contribution savings plan participants conducted by John Hancock Financial Services in 2002:

- Only 24 percent of the respondents considered themselves to be relatively knowledgeable investors, while 38 percent said that they had little or no investment knowledge.
- Two-thirds said that they would be better off
The reality for most workers is that although they understand that they ought to be saving (or saving more) for retirement, they have big problems following through.

Clearly, a large fraction of the population is poorly versed in the workings of financial markets. Of course, most of us are not doctors, yet we still manage to diagnose and treat ourselves quite well for any number of garden-variety illnesses. Is saving for retirement like dealing with the common cold – something that can be adequately treated by laymen with a little help from pharmacists – or is it more like a surgical procedure – not to be trusted to anyone lacking years of training?

Consider the results of a recent survey (by the authors) of the employees of one large company offering a 401(k) plan. More than two-thirds of the respondents reported that their retirement savings rate was too low. And it seems they were right: 36 percent of those individuals were saving less than 5 percent of their income in 401(k) plans, with another 36 percent saving only 5 to 8 percent. Yet, despite their admittedly anemic savings rates, only 35 percent reported that they planned to raise their rate in the next few months. What’s arguably worse, even among the small minority planning to make the change, less than one in seven actually followed through.

These results are consistent with a study at another large firm. Employees who attended financial-education seminars reported a surfeit of good intentions: all of those not participating in the company’s 401(k) offering said that they planned to join, while 28 percent of those already participating said they planned to increase their contribution rates, and 36 percent of those participating said they planned to change their asset allocations. However, only 14 percent of the nonparticipants actually signed up in the next few months, only 8 percent of participants increased their contribution rates, and only 10 percent of those planning to change the mix of assets in their accounts did so.

The reality for most workers, then, is that although they understand that they ought to be saving (or saving more) for retirement, they have big problems following through.

Consider a young worker earning $48,000...
a year. If she saves 10 percent of her income for 30 years and earns an 8 percent return on the accumulated assets, she will amass almost $600,000. If she puts off saving for just two years, however, her final nest egg will be nearly $100,000 less. Put off the savings for five years, and the accumulation will fall by nearly $220,000 – a loss of 36 percent.

Despite the major advantages of saving in a 401(k) plan, including the deferral of income taxes on contributions and, in most plans, a generous employer match, roughly one-third of eligible employees are not saving in such plans. Many of these non-participants will eventually join. But as previously noted, the delay undermines their hopes of a retirement with frills.

It is possible that some of these delays are rational – workers put off saving for tomorrow because they have more pressing needs today. But a growing body of research suggests that most of the non-participants could and would save if enrollment were simplified. In most companies, workers are not enrolled in their employers’ savings plans unless they take specific action – filling out a form, calling the benefits enrollment office, or enrolling online. In such companies, participation rates usually increase with tenure over the first few years of employment.

Some companies, however, have applied tactics to short-circuit the delay. In an approach now used by one in five large employers, employees are automatically enrolled in the savings plan unless they fill out forms saying they don’t want to participate. This increases participation dramatically, especially for young workers and those new to the job. Moreover, very few employees who are automatically enrolled subsequently opt out.

In another approach to savings plan enrollment, the “active-decision” approach, workers are given a deadline by which to make a decision on participation one way or the other. Our own study of this tactic finds that it significantly increases membership, especially for new employees. Total enrollment rates nearly doubled – rising from 40 percent to 70 percent – where there was an active-decision deadline.

The likely culprit behind enrollment delays in the standard opt-in plan is the complexity of the process. Evaluating the myriad choices – the contribution rate and asset-allocation possibilities – can be overwhelming to those who lack financial sophistication. For them, facing an active-decision deadline with
a required choice forecloses the option of continued procrastination. Although automatic enrollment allows employees to procrastinate in choosing their investment options, saving something is usually better than saving nothing, which is the common outcome in standard opt-in 401(k) plans. And – to beat this mortally wounded horse – neither approach compels anyone to participate.

A PRIMER ON PLAN DESIGN

For employers, a general principle that ought to be applied to defined-contribution plan design is to set a default that is a good fallback option for the vast majority of employees, particularly those with the least knowledge of financial matters. In other words, the path of least resistance should generate the greatest good. Another principle is to force employees to make a decision (with a deadline) when they face a problem that is important and that they have the ability to solve. These principles have implications for several aspects of savings plan design.

Enrollment. Because the Social Security income-replacement rate is low on average, because 401(k) contributions are often matched, and because most employees do not save much, other than what they manage to save through employer-sponsored plans, most employees ought to be participating in their employer-sponsored savings plan. Approaches like automatic enrollment (with a chance to opt out) or requiring employees to make an active participation election are much more effective at getting them into plans than simply making the plan available to anyone who takes the initiative to sign up. There will be exceptions where the greatest good may conceivably follow from the laissez-faire approach – for example, in firms without an employer match or with a generous defined-benefit plan. But they are just that: exceptions.

Another way to increase participation is to reduce plan complexity – for example, by creating a preselected contribution rate and asset allocation that allows employees to focus on the decision to participate or not participate. (Of course, the full range of contribution rates and asset allocations should still be available to workers who want to fine-tune their savings.) Our research suggests that simplifying enrollment can make a big difference, though not as big a difference as automatic enrollment with an opt-out option.

Contribution rates. In companies with an employer match, most employees ought, at the very least, to be saving up to the maximum match. Most employers provide a match sufficient to guarantee employees a rate of return on their contributions that is significantly higher than what they could get by investing their own money elsewhere. So, if companies use automatic enrollment, the default contribution rate should be set at least equal to the match threshold. Of course, this begs the question of how employers should set the company match. There is an obvious limit to how much companies are willing to spend on matching contributions. The “greatest good” for the employee – a generous employer match – is necessarily constrained by fiscal realities for the firm.

Suppose, then, that employers have a fixed sum that they are willing to spend on matching contributions. Employers face a trade-off between a high match rate and a low match threshold, or a low match rate and a high match threshold. How should employers set the rate and threshold to achieve the greatest good? It is easy (and sensible) for employees to choose to save at the match threshold. And indeed, in most companies with an employer match, the threshold is the most common contribution rate chosen by plan participants,
Employers can, and should, determine how much their employees ought to be saving for retirement, and then structure their plans to make this outcome not only feasible, but also the outcome that requires the least initiative.

While the vast majority of participants save at or above this threshold.

Firms can thus influence the savings rates of their employees by setting a higher match threshold. And the greatest good for the greatest number can be served by choosing a match threshold such that the total amount contributed to the plan at the threshold (employee contributions plus the employer match) gives employees a reasonable income-replacement rate in retirement, after accounting for Social Security benefits.

For firms employing primarily low-income workers, who can expect to replace a relatively large proportion of their earnings with Social Security checks, a high match rate with a low match threshold may make more sense. By contrast, for firms primarily employing high earners, a low match rate with a high match threshold is likely more appropriate. We think employers can, and should, determine how much their employees ought to be saving for retirement, and then structure their plans to make this outcome not only feasible, but also the outcome that requires the least initiative.

Another way to foster sufficient savings has been suggested by Richard Thaler of the University of Chicago and Shlomo Benartzi of UCLA. Under their system, employees are given the option of having their contribution rates automatically increase over time. Their rationale: Employees may be dissuaded from participating in a plan with a high match threshold if it comes with a lower match rate. Or they may decide that they simply cannot afford to save at a high contribution rate today, even if this choice involves foregoing some part of the employer match.

Obviously, saving more today has a higher long-term payoff in terms of retirement accumulations. But saving a little today and more tomorrow is surely better than not saving at all, or saving at a low rate for the duration.

Most employees revisit their savings plan choices infrequently, if ever. So their initial choices can have significant long-term consequences. If they know that they ought to be saving more for retirement than they believe they can afford to save today, allowing them to elect automatic future contribution rate increases today is likely to result in greater asset accumulation than relying on employee initiative to increase contribution rates down the road.

Fund menu. Recent research suggests that savings plan participation declines with the number of investment options offered. The
trend in most plans, however, has been to increase the number of mutual funds from which employees can choose. While this may benefit financially sophisticated employees who value choice, it comes at a cost for novice investors. Is there an optimal number of funds to have in a plan? Or is there a way that companies can structure their fund menus to ease the burden on novices without compromising the choices for everyone else?

One emerging approach is to offer a managed investment option in the plan – a fund of funds, in which someone else makes the investment choices for the employees who elect this option. When asked to rank different portfolios, most workers in one large firm preferred the investment portfolio chosen by an investment manager to the actual investment portfolio they had chosen on their own. Of course, managers do charge fees – sometimes, hefty fees – for such services. There may, however, be low-cost ways of achieving similar results.

Another alternative is to include time-related retirement funds that include both stocks and bonds, and in which the asset allocation is automatically changed over time to reflect a desirable tradeoff between risks and returns for individuals planning to retire in a specific year. So, a 30-year-old employee who expects to retire in 2045 could invest in the “Retirement 2045” fund, which reflects consensus views on the appropriate asset allocation for such an individual.

Yet another alternative is to offer a tiered investment menu, with a first tier of funds earmarked for novice investors, and a second (or even third) tier aimed at sophisticated participants who want the option to invest in more-esoteric instruments. Novices would then have a way to make choices themselves without risking major pitfalls.

**Employer stock.** The bankruptcies of Enron, WorldCom, Global Crossing and Kmart highlighted the substantial risks borne by employees when savings plan assets are heavily invested in employer stock. Not only does the lack of diversification within their savings plan accounts impose substantial risk on employees caught in a bankruptcy crunch, but the risk of a disaster to their nest eggs is also highly correlated with the risk they will lose their jobs. While companies typically believe they benefit from having employees hold their stock, it is not clear there are any benefits to employees. Indeed, the risks are sufficiently large to outweigh almost any plausible compensatory benefit to employees. Hence, there is every reason to prevent disproportionate investment in employer stock.

One solution that allows employers to include their own stock in their saving plan without exposing employees to excessive risk is to require automatic portfolio rebalancing at regular intervals, limiting the fraction of assets in employer stock to no more than some specified amount – perhaps no more than 20 percent of the total. Employees who wished to override this automated rebalancing could be allowed to do so. However, we expect that most workers would welcome the reallocation.

**Loans.** The option to borrow from savings plans is a double-edged sword. On the plus side, workers may be more likely to save (or save more) in retirement plans if they know they can tap into the money if they need it. The downside, of course, is that savings plan loans may reduce long-term accumulation if employees contribute less to the plan while they are paying back a loan, or if they eventually default on a loan.

To capture the benefits of (and minimize the drawbacks from) having savings plan loans available, it may help to introduce some ob-
stacles into the borrowing process – for example, a waiting period between the time of the loan request and the time the loan proceeds are received, with the option to cancel the request in the interim. Under this system, plan participants would be less likely to use loans for impulsive spending, both because taking out a loan requires special effort and because impulsive decisions can be reversed during the waiting period. However, participants would still retain the loan option for pressing needs, like medical care and tuition.

THE POLICY ANGLE

Along with what employers can do to encourage employees to put away adequate sums for retirement, there are also steps that the government can take. One example of a recent policy change toward this end is the revised treatment of the plan balances of former employees. When workers change employers, they have several options. They can roll their 401(k) balances into the new employer’s plan or into an IRA; they can leave the money in their former employer’s plan; or they can take a cash distribution, subject to the payment of income taxes and an additional 10 percent tax penalty (if they are under the age of 59½).

Until recently, when a former employee’s balance was less than $5,000, the company could compel a cash distribution if the employee did not elect a rollover. The least-effort option, doing nothing, thus resulted in balances in excess of $5,000 staying with the former employer, while balances below that threshold were distributed in cash.

Individuals with balances below $5,000 who received cash distributions still had the option of rolling them into an IRA or another employer’s 401(k) plan after the distribution was received. But the least-effort option was to cash the check and spend it – which is what happened in the vast majority of cases.
Starting last year, however, companies were restricted to compelling a cash distribution only for ex-employees whose balances are below $1,000. In the case of ex-employees with balances between $1,000 and $5,000, companies have the option of either retaining these accounts in their own savings plans, or automatically rolling them into an IRA in the employee’s name at an independent financial institution.

Another area in which there is a role for public policy to improve savings is regulation of employer stock in savings plans. Indeed, since the collapse of Enron, several bills have been introduced that would regulate the amount of employer stock in 401(k) plans. Curiously, current federal law precludes companies from investing more than 10 percent of the assets of a conventional defined-benefit pension plan in employer stock, but places no such restrictions on 401(k) plans.

The proposals attracting the most attention, however, are likely to be largely ineffective at solving problems linked to employer stock in 401(k) plans. That’s because the approach in most of these proposals is simply to require employers to allow plan participants to diversify out of employer stock after a specified length of time. But the least-effort outcome for employees – doing nothing – will result in little change. The more practical fix here would bar companies from offering their stock in 401(k) plans, or to place restrictions on the fraction of assets that can be held in employer stock.

Regulation could also be used to encourage employers to adopt other plan features that benefit employees. The House and Senate pension-reform bills that are currently before a Congressional conference committee for reconciliation would create incentives for companies to adopt automatic enrollment and contribution-escalation features, and to provide a basic match.

These bills would also reduce the potential legal liability employers face in selecting the default fund associated with their plans. Today, prudent employers don’t want to run the risk of lawsuits, should employees lose money in the default fund. So they typically choose as their default an investment vehicle that has
little risk of losing principal (e.g., a money market fund). Unfortunately, such funds also have very low rates of return – typically, barely sufficient to keep up with inflation.

The principles discussed here also have implications for public policy toward other types of saving. For example, they could play a big role in Social Security, should Washington ever add personal accounts to Social Security.

Two issues are particularly relevant here. First, participation under a voluntary plan would depend substantially on whether the default status is participation (workers can opt out) or non-participation (workers can opt in). Second, the choice of the default asset allocation would have important effects on results. A good illustration comes from Sweden, which recently incorporated private accounts into its social insurance system. Extensive educational efforts at the time of this change led most employees to make investment elections for themselves. Subsequently, however, new employees entering the system – who were not subject to the media barrage at the time of the change – have overwhelmingly remained in the default investment. Fortunately, the Swedish government selected a well-diversified default fund containing a mix of bonds and stocks, both domestic and international. Indeed, the default has performed better on average than the portfolios of employees who actually exercised a choice.

For better or worse, the trend toward asking workers to take more initiative and bear more risk in planning retirement is probably unstoppable. But the consequences of this shift are far from clear. At the very least, employers that are shedding risk, and the government that is implicitly encouraging the switch, owe Americans a gentle push in the right direction.