Some people believe that more choice is always better. Choice does confer major benefits. It can satisfy people’s varied tastes and promote competition among providers that lowers price and improves quality. Studies of the psychology of decision-making find, however, that expanded choices can also impose costs on decision-makers. It can absorb scarce time that people would prefer to spend on other activities, result in decision errors, and produce anxiety and regret. Using proposals for Social Security reform as an example, this brief suggests that the costs can outweigh the benefits when new choices require expertise that people lack, introduce new risks when people want security, and require that people predict an inherently unpredictable future.

Benefits of More Choice

Expanded choices can benefit people in at least two ways. First, when people have highly differentiated tastes and needs, more choices let them satisfy their own particular wants. For example, different people have different tastes in movies and the same person may like different movies at different times. After a hard week of work you might be in the mood for a comedy; by Sunday you might be ready for a serious drama. Movie theaters that offer patrons a diverse choice of movies satisfy these diverse wants and needs.

Second, even when people have similar needs, more choice can be beneficial if it promotes competition among providers that leads to lower prices or improved quality. Gasoline, for example, is a fairly standard product — with about three different grades and prices that are easy to compare. While consumers may not have a strong preference for, say Amoco or Texaco, they benefit when given a choice among companies because competition can drive down prices.

For the benefits of competition to be realized, however, consumers must be reasonably well informed about price and quality. This condition is more likely to be satisfied when prices and quality-levels of alternatives are easy to evaluate. To the degree that consumers can be easily misled, however, competition is likely to focus on marketing rather than on price and quality.
For example, long distance phone companies spend vast amounts to convince consumers that they provide the least expensive service, while most consumers remain bewildered by the competing claims.

Costs of More Choice

Expanded choices can impose three kinds of costs: (1) **time** — the opportunity costs of spending time making decisions that could be used for other activities; (2) **error** — the tendency to choose badly when people lack expertise; and (3) **psychic costs** — anxiety about making decisions under conditions of uncertainty, and regret if they turn out badly. To illustrate the costs, consider a choice that the private market does not ask consumers to make — that is, the type of internal seat belt mechanism they want when they buy a car. Manufacturers offer many choices to satisfy buyers' tastes — in paint color, engine size, upholstery, and so on. But they do not offer choices about internal seat belt mechanisms. They don't because consumers lack expertise about seat belt design, don't want to invest time learning about it, and would feel serious regret if an accident proved their decision to be wrong. Public policies that introduce more choice need to be mindful of the costs as well as the benefits.

**Time Costs:** Time is a scarce commodity for most people. The more time one spends on decision making, the less time one has for other valued pursuits. The time required for decision making can also impose psychic costs, over and above the loss of activities one no longer has time for. As the demands on their time increase, people become increasingly anxious about whether they are making the best use of scarce hours and minutes, regretful about tasks left undone, and guilty about relationships that are neglected. As a result they are likely to experience a general decline in enjoyment of even those activities they continue to find time for. When researching investments on the web, for example, one might worry that one hasn't spent enough time with the family, but when one shuts off the computer to devote time to the family, the worry remains that one hasn't devoted enough attention to financial planning.

Expert advice does not offer a simple solution to the problem of scarce time. While one could hire experts to make some decisions, expert advice often has a price and the expert's interests might diverge from one's own. Choosing which expert's advice to follow introduces yet a new decision. Because experts often disagree among themselves, choosing an expert can be tantamount to making the decision oneself. The lack of agreement between experts may reflect the limits of expertise as well as the inherent difficulty of complex decisions.

**Error costs:** Decision researchers have identified a number of common errors in decision making that are exacerbated by decision-overload. First, as choices expand, people consider a progressively shrinking number of them (Sethi-Iyengar and Lepper, 1998). Second, as decisions become more complex, consumers use ever more simple decision rules (Payne, Johnson and Bettman, 1993) such as choosing the cheapest, in the hope that it is the best bargain, or the most expensive, in the hope that it is the best quality.

Third, as decisions become more difficult, consumers try to avoid them altogether by procrastinating or choosing arbitrary default options. A natural experiment illustrates the attraction of default options. Buyers of auto insurance in New Jersey and Pennsylvania were given a choice of whether to pay lower insurance rates in exchange for a reduced right to sue for pain and suffering. In Pennsylvania, the default was the full right to sue, with a rebate for accepting reduced rights. In New Jersey, the default was a limited right to sue with a surcharge to get the full rights. In both states, about 75-80 percent of drivers took the default option (Johnson, Hershey, Meszaros and Kunreuther, 1993). While consumers had a choice in both states, the popularity of the default suggests that most were deciding not to decide.

Fourth, people tend to be short-sighted when they face choices between immediate gratification and...
long-term gains. In principle, people want their lives to improve over time; they want increasing income and consumption over their life-course (Loewenstein and Sicherman, 1991). In practice, they are often driven by short-term temptations and costs. Such short-sightedness can be seen in choices that people make with respect to credit cards. Many credit card users expect to maintain a zero credit balance on their credit cards, yet in 1991 the average card-holder owed about $6,000 in outstanding balances. Because they expect to maintain a zero balance, consumers don’t care much about the interest rate associated with the cards they are offered (Ausubel, 1991). This reduces competitive pressures on card-issuers to reduce interest rates. Furthermore, to the extent that consumers do care about interest rates, they are highly attracted by cards that offer low introductory rates at the expense of much higher long-term rates, even though the long-term rates have a far greater impact on their total interest charges (Ausubel, 1998).

Fifth, when they face choices where the outcome is uncertain, people tend to be highly security-prone (or risk averse). This risk aversion results, in part, from people’s extreme dislike of losses. In general, people are far more distressed by prospective losses than they are pleased by the prospect of gains of equal, or even larger, size (Tversky and Kahneman, 1991).1

Although most people are risk averse in the face of uncertainty, others over-estimate their own expertise. While long-term stock market returns have been about 7.9 percent per year, on average, (Ibbotson Associates, 1999) a survey of investors found that those under the age of 55 expect, on average, to earn 20 percent per year over the next 10 years (Opinion Research Corporation International, 1998). Many investors seem convinced that they can time the market, as indicated by the huge volume of buying and selling. In 1997, the turnover rate on the New York Stock Exchange was a mind-boggling 69 per-

Psychic costs: Risk aversion is driven in part by a desire for economic security. It is also driven by the desire to avoid regret and self-recrimination. People dislike losing, but they feel worse about it when they feel personally responsible — that is, when they see that they could have done better if they had made a different decision (Sugden, 1985). Such feelings of regret and recrimination are exacerbated by what Fischhoff (1975) refers to as “hindsight bias” — the tendency to view outcomes, after the fact, as having been more predictable than they actually were when the decision was made. While people tend to avoid decisions with a high potential for regret, some such decisions are unavoidable, and feelings of regret about decisions that turned out badly remain an important source of personal misery and thus an added potential cost of expanding choice.

In addition to regrets, that are experienced when the consequences of one’s decisions are realized, people also often experience anxiety at the time they make decisions. Decision researchers have found that the anxiety induced by decision making tends to be particularly acute in two situations: (1) when decision makers feel that they lack expertise in a particular domain (Heath and Tversky, 1991), and (2) when decisions require difficult tradeoffs — e.g., between investment options that are safe but offer a low return and those with a higher expected value but a substantial downside risk.

Summary

Whether expansion of choice is desirable in a particular domain depends on the relative magnitude of these benefits and costs. Expanded choices are beneficial when they satisfy people’s highly varied wants and needs and when they promote competition that lowers price or improves quality. The gains from competition are best realized when consumers are well-informed, and when price and quality are easy to compare. Expanded choices are inadvisable when they require expertise that people don’t possess. In such situations: (1) the benefits from competition are likely to be minimal; (2) the decisions are likely to take

Expanded choices are beneficial when they satisfy people’s highly varied wants and needs and when they promote competition that lowers price or improves quality.
considerable time to make; (3) people are more likely to make bad decisions; and (4) decision making is likely to be a considerable source of anxiety and anticipated regret.

An Example: Social Security

One can apply these criteria to the question of whether to add more choice to Social Security. Social Security now offers almost no choice: workers are covered automatically; their employers deduct their taxes from their wages routinely; workers don’t have a choice about how the funds are managed. Their benefits derive solely from the success of their work lives, not from the success of past financial decisions. The only choice they face is when to claim benefits once they are eligible.

Proponents of more choice propose to substitute individual savings accounts for all or part of Social Security’s existing benefits. Such plans would give workers new responsibility for managing their individual Social Security funds. American workers would have new choices about how their individual Social Security funds are invested during their work lives (investment choice) and whether and when their funds would be turned into monthly benefits — or annuities — at retirement (annuitization choice). On each new choice, we can ask, “what trade-off would people be offered?” and “how might they respond?”

Investment choice. While plans differ in their details, most would offer workers a choice between putting their Social Security accounts in the stock market or in long-term government bonds. Stocks bring the chance of higher returns — but also pose risks that values will decline. Many plans would reduce these risks by prohibiting investment in individual company stocks — which can be highly volatile — and instead allow stock investments only in broadly diversified funds. Some would permit stock investments only in broad index funds, such as the Standard & Poor’s 500 (S&P 500), that track the experience of a large segment of the market.

What trade-offs would workers face? Using historical experience over the last 73 years (1926–98) as a guide, large company stocks (the S&P 500 index and its predecessor) produced a real compound annual return of 7.9 percent after adjusting for inflation, while long-term government bonds had a real return of 2.2 percent (Ibbotson Associates, 1999). These long-term trends suggest that a broad stock index fund is, by far, the wiser choice, on average. Yet, even broad index funds can decline in value. In about 20 of the last 73 years, the S&P 500 had negative real returns. In some periods, the declines were large and persistent. Between 1972 and 1974, for example, large company stocks lost nearly half their value and did not rebound to their 1972 level until a decade later. At the other extreme are periods of very rapid growth, such as between 1995 and 1998 when the S&P 500 index nearly doubled in value, after adjusting for inflation.

How might workers react to new investment choices in Social Security? Research on the psychology of decision making suggests a variety of responses. First, many people are highly risk averse — they are far more troubled by losses than by gains of equal (or even larger) size. They might be inclined to avoid risky stock investments and choose safer, lower yield government bonds. Other people might over-estimate their own expertise and try to time the market to maximize their returns. The research by Odean (1998) discussed earlier suggests that, on average, they would end up with lower returns than if they had followed a steady course. Some might follow experts’ advice — heavy investment in stocks while young, and gradually shifting to safer investments at older ages. Still others might procrastinate or decide not to decide. They would end up in whatever default investment option policy makers put in the plan.

Because many people tend to avoid complex decisions in the face of uncertainty, the design of a default investment for Social Security accounts would be important. Other large plans tend to use the safest investment as the default. For example, the federal employees’ Thrift Savings Plan (TSP) uses government securities as the default investment, while
TIAA-CREF, which covers many university employees, uses a money market fund as the default. The rationale for using the safest investment is to avoid exposing participants to market risks when they have not agreed to accept that risk. Policy makers might follow a similar strategy with Social Security. Or, they might set up a default that matches experts’ prudent advice — heavy investments in stocks at young ages, and automatically shifting to safer investments at older ages.

In any case, introducing investment choice would mean more financial risk for workers and greater disparities in the benefits realized by retirees. Furthermore, the inherent uncertainty of financial markets would result in increased anxiety because any particular investment strategy — risk averse, aggressive or prudent — could end up producing results that were better or worse than the participant had expected or hoped. People who prefer not to make these decisions could not avoid feelings of anxiety and regret. Even those who accepted the default investment plan could end up comparing their results with what they could have experienced had they made a different decision.

While even under the current system, retirees may be disappointed with the level of their retirement benefits, those feelings of disappointment may be less personally painful than the feelings of regret and recrimination that could accompany bad outcomes when people made their own investment decisions. For example, a recent study of retirees found that feelings of regret were associated with low levels of income from personal savings and pensions — both of which are influenced to some degree by choices that workers had made during their careers. But feelings of regret were not associated with the level of Social Security income, where little or no choice was involved (Loewenstein, Prelec and Weber, 1999).

**Annuity choice.** Social Security reforms that create individual investment accounts also pose new choices about whether and how retirees would turn their accounts into monthly benefits. The standard way to do that is to buy an annuity from an insurance company. The retiree pays his/ her lump sum savings to the insurance company, and in return, the company has a contractual obligation to pay the retiree a guaranteed monthly benefit for the rest of his or her life. The company bears the mortality risk (that the person will outlive his or her life expectancy) and the investment risk (that its investment returns on the lump sum will be less than it anticipated when it entered into the contract).

What trade-off would retirees face? Annuities offered by the federal employees’ Thrift Savings Plan, which are quite favorable by industry standards, provide examples. In exchange for a lump-sum payment of $30,000, a 65-year-old individual could purchase a monthly annuity (with no inflation protection) of $255 a month, and a 65-year-old couple could purchase an annuity that would last as long as either spouse lived of $221 per month. The same policies with limited inflation protection (capped at 3 percent a year) would pay $198 per month for the individual and $166 a month for the couple (FRTIB, 1997). With full inflation protection, the benefits would start out lower.

How might retirees deal with a choice to annuitize? The choice is likely to pose difficult dilemmas. The vast majority of people are not experts in annuity calculations. Even with an actuarially fair annuity, the lump sum one is giving up looms large in relation to the rather modest monthly payment it would provide, particularly if it is guaranteed to go up with inflation. At the same time, people want the security of knowing that the purchasing power of their retirement income will last as long as they live. Yet, as illustrated by their behavior with respect to credit cards, people can be short-sighted when weighing short-term sacrifices against long-term gains. And they don’t like losing. When buying an annuity, the sacrifice is tangible and immediate — one’s lifetime savings in the account — while the gains are uncertain and distant — guaranteed income through the end of a long life in retirement. Adding to the dilemma is the realization that an annuity purchase is irrevocable. Having chosen an annuity forecloses the option of undoing that decision later. And the stakes can be very high. If, shortly after the purchase, a person learns that her life span is likely to be shorter than anticipated, she is likely to experience serious regret. Had she delayed...
the decision, she would have chosen not to annuitize. On the other hand, if a person had decided not to annuitize and then outlived his savings, he would also experience serious regret as well as financial hardship.

People would face similar painful dilemmas in deciding whether or not to buy annuities that are inflation adjusted, or that would continue to pay income to a widowed spouse. These choices require gambling about the future rate of inflation, how long one will live, and how long one’s spouse will live. The choice not to annuitize also requires one to predict one’s success in investing the money during retirement and resisting the temptation to spend it too fast.

In brief, Social Security reforms that introduce choice about whether and when to annuitize one’s lifetime savings require complex predictions about an inherently unpredictable future. Some reform plans that would set up investment accounts in Social Security would avoid the pain of choosing by simply requiring that all retirees buy inflation-adjusted annuities and that all married retirees buy annuities that would cover widowed spouses. While mandates such as these would eliminate the pain of choosing, they are not particularly consistent with the notions of ownership and expanded choice that prompted interest in personal savings accounts in the first place.

Conclusions

In considering new choices in public policy, it is useful to ask: Do the new choices respond to people’s highly varied wants and needs (as in the case of movies). Or do the costs outweigh the benefits (as would be true for choices of internal seat belt mechanisms)? Do new choices promote competition that lowers price or improves quality? Or do they give people new options that they don’t feel competent to evaluate? When people are forced to make decisions for which they lack the requisite expertise, the consequences are likely to be lost time, bad choices, anxiety and self-recrimination.

Endnotes

1. Also contributing to risk aversion is narrow choice bracketing — people’s tendency to make risky decisions one-at-a-time instead of taking a portfolio perspective that puts each risk in a lifetime perspective (Read, Loewenstein and Rabin, 1999). For example, when offered the opportunity to play what should be a very attractive gamble — a 50/50 chance of losing $25 or winning $40 — a single time, most people reject the offer. However most people who reject the single gamble are willing to play the same gamble 5 times, presumably because the likelihood of experiencing a net loss becomes so small (Redelmeier and Tversky, 1992). This pattern of choice is difficult to defend as optimal, since most people face many gambles of this magnitude on any given day — for example, if you own financial assets or real estate — most of which offer much less favorable odds. Benartzi and Thaler (1995) conclude that this combination of loss aversion and narrow choice bracketing may help to explain the equity premium puzzle — the tendency for stocks to earn a much higher rate of return than bonds. They argue that stocks are unattractive to many investors because they bracket narrowly — they look at their portfolios frequently, say monthly or even daily — even though they are saving for a distant retirement. Over brief periods, stock prices are almost as likely to fall as to rise. For loss-averse investors, the falls will be extremely painful and the rises only mildly enjoyable, so the overall experience might not be worth undertaking.

2. If the person lives a long time in retirement, the company may lose money on that particular annuity contract. By issuing a lot of annuity contracts, the company can average the risk between long-lived and short-lived annuities.

3. The Federal Retiree Thrift Investment Board contracts with a private annuity provider, under competitive bidding, to provide annuities for plan participants. Metropolitan Life Insurance Company is the current annuity provider. The Board specifies the types of annuities to be offered within guidelines in the law.

4. To date, annuities that are fully indexed for inflation are not offered by the federal employees’ TSP and are very rarely offered elsewhere in the private annuities market.
References


Financial support for the Brief series is provided by the John D. and Catherine T. MacArthur Foundation and the Public Welfare Foundation.

Now Available...

Framing the Social Security Debate: Values, Politics, and Economics
R. Douglas Arnold, Michael J. Graetz and Alicia H. Munnell, editors
Insightful analysis from a diverse group of experts on key issues in the current reform debate - the economics and politics of moving toward individual accounts; political stability of reform alternatives; public support and confidence in Social Security; regulatory issues raised by trust fund investment in stocks or setting up individual investment accounts; and insights from pension reform abroad.

Evaluating Issues in Privatizing Social Security
Report of the Panel on Privatization of Social Security
Analysis and recommendations on issues raised by proposals to “privatize” Social Security - either by investing the trust fund in stocks, or by setting up individual savings accounts as a substitute for part of Social Security’s traditional benefits - from a blue-ribbon panel of economists, actuaries, attorneys, political scientists and public administrators.