
Behavioral Economics and Public Policy: Reflections on the Past and Lessons for the Future

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Insights from behavioral economics have already influenced several areas of public policy, and these contributions are likely to continue to have important effects in the future. Regulatory policies and tax policies toward private pensions are examples of this influence. In the last decade policymakers have drawn heavily on findings from behavioral economics in designing regulations for defined contribution retirement saving plans. This is particularly evident in a series of policy changes that have enabled firms to adopt automatic enrollment strategies in their 401(k) plans. My comments will chronicle developments in this area and then describe some of the fundamental challenges that arise in applying behavioral economics to make welfare prescriptions for policy analysis. I close by speculating about future research directions that may be influenced by the growing importance of behavioral economics.

1. The Emergence of Automatic Enrollment Policies

In the mid-1990s benefits managers at many private-sector firms were struggling to encourage low-income and junior employees to participate in voluntary retirement saving programs such as 401(k) plans. Achieving broad participation in these plans is important because the Internal Revenue Service (IRS) has nondiscrimination rules that condition the tax-deductible status of a pension plan on a broad pattern of employee participation, and in particular on the absence of a participation pattern that is skewed toward highly paid employees. Most firms tried to encourage participation of low-income workers by subsidizing their participation with

generous matching contributions or by making specific contributions on their behalf. Both of these approaches can be expensive. Benefit managers searching for low-cost ways to increase participation often tried education programs to inform employees about the benefits of tax-deferred retirement saving, but such efforts were only modestly successful. Moreover, firms were reluctant to make recommendations about retirement saving that might cross the line from providing education to giving financial advice, because the latter could expose them to potential liability risks.

“Automatic enrollment” emerged from the search for low-cost ways to raise 401(k) participation. Several firms experimented with programs that automatically enrolled new workers in their 401(k) plans and that assigned such workers a default asset allocation. These firms sought IRS approval for their approach, and in 1998 the IRS issued a favorable letter ruling. About the same time, the academic research community began to study the effect of these early automatic enrollment plans on worker behavior. Madrian and Shea’s seminal (2001) paper analyzed data from a firm that had implemented automatic enrollment. The study found that automatic enrollment increased 401(k) participation rates by as much as 40 percentage points. Other behavioral economists began designing plans that would use worker inertia to increase saving rates, rather than depress them. Thaler and Benartzi (2004) describe experiences with one such plan, the Save More Tomorrow™ (SMART) program, which commits workers to an increasing savings rate as their job tenure lengthens. A large and expanding literature now examines how various features of 401(k) plans affect participant behavior. Several recent studies, including Beshears et al. (2008) and Mitchell and Utkus (2004), review this literature.

One important feature of the empirical work on firms’ experiences with default plans is that it is relatively easy to describe and communicate these issues to a nonspecialist audience. Simple comparisons of employee participation and contribution rates before and after the adoption of automatic enrollment provide compelling evidence that these programs matter. The findings of such studies can be analyzed and interpreted without complicated statistical tools or a detailed economic model. Anyone who has ever inadvertently purchased something through a “product of the month” club knows that inertia can affect consumer behavior. The surprise finding of these studies, however, is that inertial behavior affects

consumer behavior with first-order consequences, such as choosing the amount to save for retirement, in much the way that it affects less significant decisions such as the purchase of a book or a DVD.

Policymakers’ rapid embrace of the findings from automatic enrollment pilot projects at several firms and the associated academic research reflected a fortuitous coincidence. Private-sector benefits managers interested in satisfying nondiscrimination rules and senior public officials interested in adopting programs that would increase private saving and retirement security had a common interest in moving forward. In the summer of 2000, Secretary of the Treasury Lawrence Summers and Secretary of Labor Alexis Herman held a joint press conference at which they committed their departments to facilitate broader adoption of automatic enrollment and other initiatives that would encourage employee participation in employer-sponsored retirement saving plans. Shortly thereafter, the IRS ruled that firms could apply automatic enrollment to existing workers as well as new hires. The Department of Labor took roughly coincident action to streamline regulations that could discourage firms from adopting automatic enrollment. Support for automatic enrollment and related programs has, if anything, grown since the early years of this decade. The Pension Protection Act of 2006, for example, provides a nondiscrimination testing “safe harbor” for plans that use various automatic enrollment strategies.

The modification of enrollment rules for employer-sponsored retirement savings plans suggests that policymakers have drawn two conclusions from the behavioral economics literature. One is that standard neoclassical tools such as subsidies are not the only way to affect behavior. The other is that modifying the way a decision is framed can have an important effect on the decisionmaking outcome. This insight has generated broad interest in understanding how public policies can affect decision frames.

Recent academic research has explored subtle aspects of how automatic enrollment plans affect the behavior of retirement plan participants. Some studies consider how automatic enrollment influences asset allocation decisions. Others explore the relationship between job tenure and 401(k) participation. The potential of default options to encourage particular types of behavior has also been extended beyond the enrollment context. Gale, Iwry, and Orszag (2005) propose defaults for a

number of stages of the retirement-saving process, including automatic rollover of 401(k) balances to an individual retirement account when an employee changes jobs and automatic annuitization at retirement.

Leading financial services firms have responded to the growth of interest in default policies by offering “lifecycle” mutual funds. These funds have been one of the most popular new mutual fund products of the last decade. Life-cycle mutual funds alter the asset allocation of a retirement saver automatically as she ages, thereby avoiding the need for any active rebalancing decision. Research on participant behavior in retirement saving programs, such as Samuelson and Zeckhauser (1988), suggests that most retirement savers never adjust the allocation of their account. This finding is surprising because asset price fluctuations generate substantial changes in asset allocation, which optimizing households might trade to offset. Moreover, many models of optimal household financial behavior suggest that age-varying asset allocation strategies are appropriate for many individuals.

Several significant factors contributed to make the transformation from research to policy application particularly prompt in the retirement saving case. First, the academic research on automatic enrollment was directly related to a subject of immediate policy concern. Policymakers were searching for tools that could increase private retirement saving, and promoting automatic enrollment in employer-sponsored plans emerged as one of their most effective options. Second, the empirical work on automatic enrollment was straightforward to interpret and very persuasive. Third, academics could offer a theoretical justification, one grounded in insights from psychology that seemed reasonable to non-experts, to explain why the empirical patterns emerged. This may have given managers and policymakers greater confidence in promoting automatic enrollment as a policy innovation.

2. The Challenge of Behavioral Welfare Economics

Behavioral economics was widely embraced by policymakers who were confident that a higher savings rate was an attractive goal. In many settings, however, recognizing the key insights of behavioral economics can make it difficult to draw firm conclusions about what constitutes a

welfare-improving policy. When preferences are subject to modification through education or other means, is there a natural default set of preferences to use for welfare economics? Behavioral economics also suggests that consumers may be altruistic, rather than the self-interested individuals assumed by standard neoclassical economic theory. Bernheim and Rangel (2007, 2008) offer a broad overview of these issues and other difficulties that surround behavioral welfare economics.

The first challenge confronting behavioral welfare economics arises from the finding that consumer choices are frame-sensitive and subject to influence by various environmental factors. This finding undermines the assumption of consistent and stable preferences that is central to neoclassical economics, and the associated reliance on revealed preference that is the touchstone of preference formation in neoclassical economics. One way to find a middle ground between behavioral and neoclassical economics is to search for some decisions for which it is possible to rely on consumer choices, and to embrace revealed preference analysis in these cases. An alternative approach must be developed in other settings, where external factors bearing on preferences seem more important. Some researchers suggest distinguishing between decision utility, the potentially imperfect preferences that individuals use in making their decisions, and “true utility,” the preferences that a benevolent social planner might assign to individuals when constructing a social welfare function. The difficulty with this approach is that virtually any observed set of consumer choices might be justified as coming from a decision utility that differs from true utility. Developing criteria for distinguishing these two sets of preferences in a manner that is neither arbitrary nor vacuous is a key challenge for further research.

The insights of behavioral economics can turn a standard welfare-analytic result on its head. Consider the problem of measuring the welfare cost of taxing a commodity like cigarettes. The standard public finance analysis suggests that the welfare cost of the tax is an increasing function of the absolute value of the compensated demand elasticity. Behavioral economists might argue, however, that cigarette consumption is the result of a past or present divergence between true and decision utility, which admits the possibility that each cigarette smoked has a negative impact on true utility. The case of cigarettes is particularly complicated

because in many cases, as a result of nicotine's addictive properties, the decisionmaking failure occurred when the smoker was a teenager but the choice is difficult to reverse even when he or she is a more rationally thinking but still chemically dependent adult. The behavioral economics approach may imply that a larger decline in cigarette consumption, after controlling for income effects, represents a larger *gain* to consumers rather than a larger welfare loss. Gruber and Kőszegi (2004) develop arguments like this in their analysis of cigarette taxes.

A second challenge to traditional welfare economic analysis arises from the finding that individuals may be altruistic. When utilities are interdependent in the way that most models of altruism suggest, then computing the change in social welfare associated with a policy change requires not only estimates of how the general equilibrium allocation of goods will be affected, but also estimates of the cross-effects of one person's utility on that of another individual. Rotemberg (2003) illustrates the implications of altruistic consumers for designing tariff policy. If the degree of altruism can be affected by framing and other factors, then the challenges to behavioral welfare economics become doubly complex.

Finally, a third challenge to behavioral welfare economics, and one that has received less discussion in the literature, concerns the behavior of policymakers and the way they process information and choose among policy options. The same behavioral biases and decision difficulties that consumers display are also likely to affect policymakers. This idea suggests that how policy choices are framed may affect policy outcomes. Some empirical evidence suggests that fiscal institutions such as balanced-budget rules and legislative supermajority provisions for the passage of bills that increase indebtedness affect fiscal policy. The position of a candidate's name on a ballot may affect the likelihood of winning an election. One suspects that the analog of automatic enrollment in the political setting, identifying a "default" vote recipient for all voters, would have substantial and much-decried effects. Standard choice-based microeconomic approaches to collective decisionmaking may not offer easy solutions to the challenges of ranking alternative policy outcomes, which suggests that behavioral political economy is a promising area for future research.

3. Future Directions

I shall conclude by offering several speculations about future developments in the field of behavioral economics and the role that behavioral economics will play in enhancing the development of public policy. First, I am confident that empirical researchers will continue to document behavioral anomalies that are inconsistent with the standard neoclassical paradigm of decisionmaking. This evidence will probably become ever more persuasive as a result of a move toward using controlled experiments within economics. This process will in all likelihood draw research attention to places where decisions do not fit the standard postulates of neoclassical economics. In some settings, these anomalies may be of little consequence, but in others, such as the retirement savings field, they may be substantively important. The significant findings should serve as starting points for future research.

Second, I expect that theoretical research on the foundations of behavioral economics will continue to advance. Researchers will continue to search for simple but general models that can explain a large fraction of the behavioral anomalies we observe. Today some view behavioral economics as a collection of interesting and convincing anecdotes about economic choices and a set of corresponding theoretical models that lack a well-organized unifying framework. There is a clear need to develop theoretical models that not only explain what we observe but that also can make predictions about outcomes in settings we have not yet observed. Whether such a unified model can be developed for behavioral economics remains an open question.

Finally, neoclassical economics will, and must, contribute to the advance of behavioral economics. The critical role for neoclassical economic theory is to find ways to expand the standard paradigm to see whether behavioral anomalies can be explained with minimal disturbance to traditional postulates. The case for modifying the standard neoclassical paradigm, or potentially replacing it, must hinge on a body of empirical findings which are extremely difficult to reconcile with standard theory. Traditional neoclassical theorizing is essential to determining just how difficult such reconciliation may be.

The retirement saving context illustrates the importance of trying to explain observed behavior in standard models. At least two potential mechanisms, one behavioral and one neoclassical, might be advanced to explain the substantial impact of default options on retirement saving. The behavioral explanation argues that decisionmaking costs lead to substantial inertia and that workers find it too expensive to invest in resolving whether or not saving in a 401(k) plan makes sense. This approach suggests that education about the importance of saving, or training that reduces the cost of making choices in a retirement plan, might affect retirement saving outcomes. The second explanation for observed behavior, which appeals to standard microeconomic theory, is that prospective 401(k) participants recognize that they do not know very much about retirement saving and that when offered a default to opt into the plan, infer that some more informed person—a human resources manager or a financial planner—has evaluated typical saving needs and distilled these findings into the default recommendation. If this explanation—which follows from neoclassical models with asymmetric information—is a more accurate account of why default options matter, then the natural way to affect decisionmaking may be to provide employees with more detailed information on optimal saving rates for particular age, income, and family structure combinations. The choice between these alternative explanations of what we observe thus matters for the design of policy to influence discretionary saving decisions.

There are many exciting research challenges that remain to be addressed using the tools and insights of behavioral economics. Policymakers are likely to rely increasingly on the empirical findings that emerge from studies in the behavioral economics field. I am confident that the future will bring continued fruitful interplay between research in behavioral economics and research in more traditional neoclassical economics, and that behavioral economics will continue to inform the design of public policy.

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