Professors Bubb and Pildes raise a seeming paradox: how is it that the recognition of limits on human rationality associated with behavioral economics has led to the nudge-like policy prescriptions of behavioral law and economics (BLE), which appear doomed in light of those very limits? The authors hypothesize that BLE scholars “trim their sails,” limiting their policy prescriptions to choice-preserving interventions, based on an ideological predisposition toward libertarian policies or a preoccupation with political feasibility.

Although there may be instances of sail trimming, we believe that this explanation is incomplete. In this short piece, we present two additional accounts of this seeming paradox. First, we show how Bubb and Pildes’s leading example may simply reflect the full-throated application of a model that overlooks important behavioral biases. This example represents not sail trimming, but sailing in the wrong direction — a risk inherent in any exercise of model-informed policymaking. Second, we argue that an inclination toward incorporating choice-preserving approaches into policymaking may reflect the recognition of uncertainty about the accuracy of behavioral models. If this is sail trimming, it reflects a rationally cautious approach to navigating unknown and potentially treacherous policymaking seas, not internally imposed ideological or political constraints. Our first account, then, provides an explanation for the existence of choice-preserving policies in the BLE literature; our second account provides both an explanation and a justification of those policies.

Not only do our two accounts help explain the sail-trimming paradox; they also apply to policymaking informed by conventional neoclassical economic models, an approach with its own ideological predispositions. Indeed, the living memory of the limitations of the neoclassical paradigm could explain why BLE scholars might be

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1 Whatever explains the direction that some BLE scholarship has taken, it is worth noting that when the concept of asymmetric paternalism was introduced, see Colin Camerer et al., Regulation for Conservatives: Behavioral Economics and the Case for “Asymmetric Paternalism,” 151 U. PENN. L. REV. 1211 (2003), its proponents did not emphasize preserving choice for its own sake; they were concerned solely with weighing the welfare costs and benefits of policy interventions. The sail-trimming hypothesis does not apply to this foundational BLE piece. Many of Bubb and Pildes’s concerns would be remedied if the field returned to these roots.
averse to pushing their new models too far and too fast. In our view, *How Behavioral Economics Trims Its Sails and Why* most clearly points to the need for policymaking to be rigorously evidence-based, whether it is informed by neoclassical, psychological, or old-fashioned intuitive models.

## I. MODELS AND MISTAKES

Enacted policies rarely (never?) exactly mimic the prescriptions generated by economic models. These prescriptions are stylized, simplified, abstract from details of implementation, and reflect a normative commitment to welfare maximization that is not shared by all political constituencies. Bubb and Pildes’s central argument, however, is that the prescriptions of BLE scholars reflect compromises made between the implications of their models and political reality. This need not be so. For example, the desirability of a 401(k) opt-out program follows straightforwardly from a well-motivated, although perhaps inadequate, economic model. The problem in this context is that some (but not all) individuals save less for retirement than they should. We cannot observe who is saving suboptimally, so any policy intervention must treat all individuals in the same way. One possible intervention is to mandate a certain level of savings for everyone. Another possibility is to automatically enroll everyone into 401(k) savings plans and allow them to opt out if they choose. Evaluating these policies requires a model of behavior. One such model assumes that the world includes two types of individuals: *choosers* and *defaulters*. Choosers costlessly select the course of action that is in their best interest, whereas defaulters incur significant costs to change their savings decisions and so tend not to opt out of their default situation. This cost is one way of formalizing a particular psychological phenomenon, namely status quo bias.

If the model accurately captures the key features of retirement savings decisions then we would predict that mandating that all individuals save at a certain rate will impose costs on anyone who would have been better off saving at a different rate, whereas automatically enrolling everyone into a 401(k) plan and allowing opt-out imposes costs only on those defaulters who would have been better off saving at a different rate. The costs are less for the opt-out policy. This conclusion follows straightforwardly from the assumptions of the model.

But people are much more varied than this model allows, and Bubb and Pildes rightly encourage researchers to collect evidence on who, other than choosers, might opt out. For example, there may be

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other classes of individuals who will opt out of a voluntary 401(k) plan regardless of whether it is in their interests, perhaps because they have self-control problems that make saving seem unattractive in the short term. With these individuals in the mix, a mandated savings rate would impose costs on everyone who would be better off saving at a different rate, while providing an opt-out would make some individuals worse off by allowing them to flee a savings regime that is in their long-term best interests.

Whether a mandate or a default would be better in the presence of such individuals depends on the relative size of the groups and magnitude of the costs. A policy based on a model with only choosers and defaulters may be wrong, but it is wrong because the model was wrong. Of course, all models are wrong, to some degree, because they do not aim to capture the full richness of individual psychology. Instead, they are judged by whether they are tractable, insightful, and generate novel implications. But the inadequacy of a model is a perfectly ordinary reason for a policy recommendation to be mistaken and is in no way unique to behavioral economics. Reams of regulations create disclosure obligations directed at consumers on the mistaken neoclassical assumption that consumers will rationally respond to information made available at low cost. The key, then, is not to eschew (or cling to) choice-preserving policies, but to create models that are consistent with the best evidence about the relevant features of human behavior and update those models when the available evidence changes. Where BLE has strayed from this goal, Bubb and Pildes correctly point out the shortfall.

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3 This leaves open the possibility that modeling assumptions may encode prior ideological commitments. While this could explain model incompleteness, it requires that political motivations be read into the assumptions that frame behavioral models. Economics models must be tractable and generate clear predictions in order to be useful, and they are often structured to explain particular phenomena rather than provide a comprehensive guide to behavior. While ideological predisposition cannot be ruled out as a factor, more ordinary limitations are often sufficient to explain model error.

4 Bubb and Pildes critique disclosures in the consumer finance context as an ineffective choice-preserving policy. We suspect that they are right and that pure disclosures are almost never an optimal policy response given the assumptions of most BLE models. The consumer disclosure context also provides Bubb and Pildes’s most direct evidence that, at least in the case of one scholar, BLE researchers have limited their policy prescriptions primarily on political grounds. Bubb and Pildes, supra note 2, at 1597 n.10. Of course, there is a substantial distinction between disclosure policies, which are generally supportable within a neoclassical framework, and the opt-out policies in the savings context that rely critically on the insights of behavioral economics.

5 Regulators may draw comfort from choice-preserving policies, since participants are free to opt out of the default; thus regulators may be more eager to implement such policies and less apt to change them. Although we suggest below that opt-out provisions may provide a limited safety valve in cases of model error, we agree that, in light of the strong effect of defaults, policymakers ought to be more sensitive to poorly chosen defaults. Bubb and Pildes deserve credit for emphasizing this problem.
As Bubb and Pildes note, choice-preserving policies may be more politically viable, and this political reality may indeed influence BLE scholars. But political considerations are not the only reason that policy outcomes may differ from model outputs. An additional challenge is uncertainty about the model. It is not always possible to anticipate the impact of variables that the model does not accommodate, and it is reasonable to act with caution in rolling out a new policy. This may sometimes favor choice preservation for reasons external to BLE.

Policymakers are often asked to trade off costs and benefits that are imprecisely measured and hard to predict. There are at least two prudential considerations that may incline policymakers toward choice preservation in these circumstances.

First, implementing a choice-preserving version of a policy may help gather information about the real costs and benefits of that policy. When choice is preserved, it is possible to observe behavior and learn whether parties are acting in ways that are likely to be welfare diminishing or welfare enhancing. Bubb and Pildes, in fact, rely on the characteristics of retirement plan participants who are observed to opt out of 401(k) plans within a choice-preserving regime to argue that a mandate may be preferable. This does not amount to a case for continuing the choice-preserving policy if the evidence indicates it is not welfare maximizing, but it does suggest that adopting a choice-preserving policy may have ancillary benefits.

A second reason to favor choice-preserving policies is that they provide an (admittedly imperfect) safety valve in the case of regulatory mistake. If there are unanticipated costs, those most affected may opt out, potentially limiting the damage done. Bubb and Pildes properly point out that the capacity to opt out is hardly a cure-all for poorly constructed defaults, but the availability of an opt-out at least places an upper bound on the costs that a particular individual must bear from an ill-fitting mandate. Such opt-outs are distinct from Bubb and Pildes’s sail-trimming because they incorporate choice preservation not out of an ideological reluctance to embrace mandates, but to address the possibility that the model motivating the mandate may be wrong or incomplete. We do share Bubb and Pildes’s worry that the availability of opt-outs has encouraged policymakers to be negligent in doing ex ante testing or ex post evaluations of default interventions. Carefully chosen defaults have a place in the regulator’s toolkit, but Bubb and Pildes rightly observe that policymakers should not be lulled into complacency by the availability of an opt-out.

Importantly, these prudential reasons for incorporating choice preservation into policymaking are unrelated to BLE. Any proposed policy might trade off these considerations against other goals. But to the extent that these prudential concerns favor choice preservation,
they may cause policymakers to reach for the policy outputs of BLE models, since behavioral economics explains how choice-preserving interventions can orient individuals to particular outcomes.

A recent set of rulemakings by the EPA, discussed by Bubb and Pildes, provides a useful example. In one rule, the agency chose to revise fuel-economy labels for new vehicles to present information in a more easily digestible manner, a choice-preserving intervention. But at the same time, in a different rule, the agency maintained and strengthened fleet-wide fuel-economy benchmarks that automobile manufacturers are required to meet. This mix of policies nicely demonstrates both the prudential value of choice-preserving policies and how behavioral economics has been used to support limits on market behavior.

There are two elements of choice preservation in the EPA’s approach to fuel economy. First, the fleet-wide standards leave a great deal of flexibility in the marketplace for manufacturers to offer cars with a wide variety of attributes, including fuel economy. Second, the revision to the label responds to the “MPG illusion” in which consumers believe that fuel savings respond in a linear fashion to increases in miles-per-gallon ratings. This information-processing heuristic is straight out of the behavioral economics playbook and the label is a choice-preserving response.

These choice-preserving features of the EPA’s approach can be justified by reference to the two prudential concerns mentioned above. First, there are information collection benefits. Regulators can observe how consumers react to the new label in an environment in which they are presented with a variety of consumption choices. This information can be used to refine future fuel economy standards to bring them more closely in line with consumer preferences. Second, there is a safety-valve benefit as well. If some consumers have very high willingness to pay for low fuel economy vehicles, they can, in essence, subsidize the high fuel economy models for other consumers, thereby vindicating their preferences in the marketplace, although at increased cost.

But although the EPA’s approach allows substantial room for consumer choice, it does place real limits on the marketplace. In doing so, the agency explicitly referenced behavioral economics research on the “Energy Paradox” — a phenomenon in which consumers appear to systematically undervalue energy efficiency investments. The EPA, at least, has not fallen prey to the sail-trimming problem. Rather, after

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6 CASS R. SUNSTEIN, SIMPLER 81–89 (2013) (discussing the deliberative process in the Obama Administration concerning revisions to the fuel-economy label).

an extensive examination of costs and benefits, the agency followed through on the implications of the energy paradox research by maintaining and strengthening binding fleet-wide limits on fuel economy.\textsuperscript{8} This outcome is consistent with the approach advocated by Bubb and Pildes and illustrates how an overly pessimistic view of mandates could result in constricted policy space that excludes important regulatory options.

\textbf{CONCLUSION}

Bubb and Pildes deserve credit for bringing attention to deficiencies in the application of behavioral economics to policymaking and helping to illuminate cases where choice-preserving policies may have generated complacency among policymakers and ultimately undesirable results. Behavioral economics provides a richer picture of human behavior, but has reduced neither the need to continually verify that the world reflects the assumptions of our models nor the need to act with caution when moving from economic theory to policy reality. But the faults they identify should not obscure the capacity of well-designed choice-preserving policies to increase welfare when carefully applied. An ideological predisposition to choice-preservation need not be seen as the sole or even the primary attraction of choice-preserving policies. In many cases, preserving choice can be a welfare-maximizing option, even when our all-too-human cognitive limits are taken into account.

\textsuperscript{8} It is worth noting that the agency subjected the fuel-economy mandate to substantially greater ex ante analysis than the label revision, even after having received outside comments explaining how rigorous, evidence-based, quantitative analysis of the label revision could be carried out. \textit{See Letter from Inst. for Policy Integrity, N.Y. Univ. Sch. of Law, to Lucie Audette, Office of Transp. & Air Quality, Envtl. Prot. Agency (Nov. 22, 2010)} available at http://policyintegrity.org/documents/Policy_Integrity_Final_Comments_on_Vehicle_Labels.pdf, archived at http://perma.cc/X42L-9CXV. This may reflect the lulling effect noted by Bubb and Pildes, either because the agency itself was less concerned about the consequences of the label design or because the EPA anticipated less probing scrutiny of the label revision by courts. Whatever the motive, the public is best served when analytic resources within the agency are allocated in a way that most improves the quality of regulation, free of any bias toward under-analyzing choice-preserving policies.