

# **Reapplying behavioral symmetry: public choice and choice architecture**

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**Abstract** New justifications for government intervention based on behavioral psychology rely on a behavioral asymmetry between expert policymakers and market participants. Public choice theory applied the behavioral symmetry assumption to policy making in order to illustrate how special interests corrupt the suppositions of benevolence on the part of policy makers. Cognitive problems associated with market choices have been used to argue for even more intervention. If behavioral symmetry is applied to the experts and not just to market participants, problems with this approach to public policy formation become clear. Manipulation, cognitive capture, and expert bias are among the problems associated with a behavioral theory of market failure. The application of behavioral symmetry to the expanding role of choice architecture will help to limit the bias in behavioral policy. Since experts are also subject to cognitive failures, policy must include an evaluation of expert error. Like the rent-seeking literature before it, a theory of cognitive capture points out the systematic problems with a theory of asymmetry between policy experts and citizens when it comes to policy making.

Keywords Experts · Behavioral symmetry · Behavioral policy · Policy failure

JEL Classification H10 · H23 · H39 · H77

# **1** Introduction

Over the last several decades, a new justification for regulation has developed that emphasizes the cognitive limitations of economic actors. The most important contribution to this literature by Tversky and Kahneman (1974) disputes the cognitive assumptions underlying the rational actor model of neoclassical economics. They argue that the heuristics employed

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by individuals when they make decisions under conditions of uncertainty introduce systematic biases leading to systematic cognitive errors. The subsequent literature in behavioral psychology has had significant influence on behavioral finance and behavioral economics as evidenced by three Nobel prizes awarded in those areas in 2003, 2013 and 2017.<sup>1</sup> In addition to its theoretical contribution, research in behavioral finance and economics also has had an impact on public policy, which is best exemplified by the appointment of Cass Sunstein to head the Office of Information and Regulatory Affairs (OIRA) in 2009. During Sunstein's time in office, behavioral psychology was officially included in the evaluation of regulation, legislation and guidance documents promulgated by executive branch agencies. I argue here that the use of behavioral psychology to inform policy is based on an assumption of cognitive differences between policymakers and market participants.

The public choice critique of economic orthodoxy regarding intervention first articulated a standard of behavioral symmetry, which assumed that "the average individual acts on the basis of the same over-all value scale when he participates in market activity and political activity" (Buchanan and Tullock 1962, p. 23). In making differing assumptions regarding the rationality of policymakers as opposed to market actors, policy based on behavioral economics implicitly returns to an assumption of behavioral asymmetry, similar to that underlying the naïve public-interest theory of regulation, which was exploded by the "Chicago School" (e.g., Stigler 1971). Unlike the benevolence assumption underlying the public interest theory of regulation, these new justifications for intervention effectively assume near omniscience on the part of policymakers as experts.

Similar to Pigouvian market failure, the new behavioral market failure represents a revival of justifications for interventions by experts. The cognitive errors of market participants are understood as "behavioral market failures", which policymakers uniquely are able to correct (Bar-Gill 2012, p. 13). I argue here, in contrast, that cognitive asymmetry favoring a policymaking elite cannot just be assumed. Considering how often the new behavioral insights are applied, an exploration of the systematic harms of policy justified by behavioral psychology is appropriate.

Adding behavioral market failures to the policymaker's toolkit has allowed for the list of market failures to be expanded, thereby justifying more frequent interventions. But like markets, policy also fails and Datta-Chudhuri (1990), Montgomery and Bean (1999) and Sobel and Leeson (2006) demand formal comparisons between market failure and policy failure. Behaviorally based policy prescriptions can magnify many of the problems it seeks to eliminate, if policy makers are as vulnerable to bias as market actors.<sup>2</sup> The application of behavioral symmetry to policy by public choice scholars originally restrained the ability to rationalize intervention because of policymakers' greater benevolence and helped to uncover policy defects that were obscured by that assumption.<sup>3</sup> A consistent application of behavioral symmetry to behavioral policy making similarly will limit systematic policy mistakes based on purported cognitive asymmetries between elites and ordinary people.

<sup>&</sup>lt;sup>1</sup> Kahneman survived Tversky to win the prize in 2003, Robert J. Shiller won the prize in 2013 for work on asset prices informed by behavioral finance, and Richard Thaler won in 2017 for work in behavioral economics.

<sup>&</sup>lt;sup>2</sup> Lee and Clark (2018) argue that Thaler's behavioral approach affects the way political decisions are made far more widely and deeply than the ways in which market decisions are made, despite the focus on behavioral market failure.

<sup>&</sup>lt;sup>3</sup> Buchanan (1999, p. 46) called the assumption of behavioral symmetry "Politics without Romance". Brennan (2008, p. 480) discusses Buchanan's contribution in terms of behavioral symmetry as opposed to motivational symmetry.

Section 2 compares behavioral symmetry applied to interests with behavioral symmetry of cognition. Section 3 describes the implications of policy based on asymmetric behavioral assumptions. By justifying policy manipulation on the basis of cognitive biases, policymakers create a monopoly of expert advice, thereby capturing the cognitive space and magnifying the downside of cognitive errors by experts. Section 4 argues that aggregation of knowledge has important limitations and that expanding the influence of exports will proliferate policy errors. Because experts, like market actors, cannot avoid cognitive bias, the scope of behavioral policy is limited severely. Section 5 concludes.

## 2 Public interest and behavioral market failure

The orthodoxy in public economics assumes that government can intervene surgically and unbiasedly to fix market failure problems. Examples of market failure that were presumed to require government intervention included problems of (1) externality, which could be fixed through taxes, subsidies, or regulation (Pigou 1932); (2) asymmetric information between buyers and sellers (Akerlof 1970), fixable by public information provision; (3) weak incentives for production or preservation because of a lack of clearly defined property rights and resulting free rider problems, which government could address by producing underprovided public goods (Samuelson 1954); and (4) monopoly, which required government regulation of prices or the forceful dissolution of firms that had acquired too much market power (Kaysen and Turner 1959).<sup>4</sup> The public interest theory of intervention focused on the ability of policymakers to search out and correct market failures (Shughart and Thomas 2017).

The public choice critique (Buchanan and Tullock 1962) revolutionized thought in economics and political science because it rejected the idea that policymakers sit outside the structure of the political economy as impartial referees.<sup>5</sup> By applying behavioral symmetry, market failure could be compared to "government failure", the failures of policy interventions designed to address market failure.

Like the public interest theory of regulation, behavioral market failure arguments fail to adopt symmetric assumptions about the motives of market participants and policymakers. Market participants may commit systematic errors in judgment and face many cognitive limitations, but what about policymakers? Behavioral market failure arguments assume that policymakers are benevolent and subject to fewer—perhaps no—cognitive biases. But that assumption fails to recognize that "the same individual participates in both processes" (Buchanan and Tullock 1962, p. 19). In their strongest form, arguments for government intervention based on behavioral economics assume that policymakers are omniscient experts<sup>6</sup> and, as a result, justify a much larger role for behavioral policy prescriptions than is warranted. A consistent application of the behavioral symmetry assumption can provide a more nuanced perspective on behavioral market failure arguments like it did for traditional market failure arguments.

<sup>&</sup>lt;sup>4</sup> Posner (1979, p. 929) points to Kaysen and Turner (1959) as an articulation of antitrust policy that represented the Harvard School, for which Aaron Director organized the Chicago School response.

<sup>&</sup>lt;sup>5</sup> Boettke (2011, p. 265, 269) argues when "policy experts who act like saviors" they become players in the game seeking better outcomes rather than acting like referees that merely call fouls.

<sup>&</sup>lt;sup>6</sup> Boettke and Lopez (2002, p. 112) characterize our assumptions about policymakers in terms of *benevolence* and *omniscience*; this analysis adopts that distinction.

In athletic events, a good referee intervenes uniformly to improve the state of play; policymakers, as experts, intervene to correct perceived market inefficiencies and inequities. Sometimes, however, the policymaker is more of a player than a referee. For example, economists expect firms to make every effort to dominate an industry in order to extract extra-normal profit based on the assumption that producers are profit maximizers. In the extreme, such producers can become monopolists, which would constitute a market failure according to economic orthodoxy.

Antitrust policy, is predicated on the assumption that law enforcement agencies, legislators, and courts can undo the inefficient and inequitable outcomes that result from profit seeking behavior on the part of market participants, but that requires government agents to act as neutral referees. Tullock (1967) applies the assumption of profit seeking behavior symmetrically and suggests that antitust policy is used by incumbent producers to reduce competition.<sup>7</sup> He points to rent seeking activities directed at obtaining a tariff on foreign competitors as an example of profit seeking behavior. Suppressing the influence of selfinterest on policymaking masks how policy can be used to promote rent seeking Public choice scholarship revealed not only that political decisions fail to remain impartial, but also that interest groups influence policy.<sup>8</sup> That insight largely has been accepted in rational choice models in political science and in economics. The consistent application of behavioral symmetry has made the assumption that policymakers are systematically benevolent untenable.

In the 1980s, economists, applying insights from cognitive psychology, discovered a new source of market failure arguments in the cognitive limitations of "intuitive judgments" (Tversky and Kahneman 1974, p. 1130). Individuals in markets face "problems of self-control and errors in judgment", which can be improved by policy (Sunstein 2014, p. 37). Pesendorfer (2006, p. 712) suggests that the most significant experimental findings in behavioral economics include (1) a failure of expected utility theory, which suggests that agents in markets evaluate gains and losses differently and exhibit risk aversion; (2) the endowment effect, which suggests that agents value goods in their possession more than goods that they do not possess; (3) hyperbolic discounting, which suggests that agents discount future rewards too heavily and (4) social preferences, which suggests that agents care not just about themselves, but also about others.

These cognitive failures on the part of market participants presumably allow for the possibility that impartial specialists who better understand what is at stake can help to structure incentives in ways that improve outcomes.<sup>9</sup> Deliberate judgment by experts, it is argued, can reduce errors and problems of self-control. Behavioral interventions can take the form of rather crude techniques, such as prohibition or taxes ("hard paternalism"), or they can take the form of softer types of paternalism, such as "nudges" (Thaler and Sunstein 2008). Nudges are one of many ways in which behavioral intervention seeks to alter the "choice architecture" in markets to improve outcomes to promote the public's interest. Following Sunstein (2017, p. 21) nudges can (a) inform people, (b) cause a preferred choice easier for

<sup>&</sup>lt;sup>7</sup> This insight is later developed by Stigler (1971) and others.

<sup>&</sup>lt;sup>8</sup> Carrigan and Coglianese (2016), argue that no "Iron law of business control" requires perfect substitution between markets and policy, but nonetheless reinforce the idea that the naïve public interest theory of regulation was weakened by Stigler's (1971) article.

<sup>&</sup>lt;sup>9</sup> Kahneman and Frederick (2007, p. 46) outline a two-system framework. System one is the more commonly used set of heuristics, rule-based judgment. System two is the deliberate rational analysis that more often is assumed to flow from expert judgment.

assuming expertise in policymaking.

# 3 The problem with behavioral policymaking

As the scope of intervention based on insights from behavioral economics has expanded, the role of expert discretion becomes more significant.<sup>10</sup> If experts are also biased, as behavioral symmetry would suggest, they are replacing the decisions of market participants with their own policy biases rather than deciding from a position of better knowledge, which is a type of manipulation.<sup>11</sup> The literature on how people respond to choice architecture, mostly from research in behavioral psychology, has only limited applicability to policymaking because market orders are not laboratories. When behavioral research informs policy, policy often fails to consider the potential of behavioral policy failure. Berggren (2012, p. 209) finds that cognitive error on the part of policymakers is considered only 4.5% of the time even in academic scholarship calling for behavioral policy to be implemented. Proceeding with behavioral policy without a critical analysis of how it biases outcomes creates potential for cognitive capture rather than good social policy.

### 3.1 Manipulation

One justification for behavioral intervention is that policy, while admittedly manipulative, simply replaces much more arbitrary and pernicious manipulation already existing in markets. Firms can take advantage of the cognitive limits of their customers and profit by inducing errors in judgment and self-control. An example of such manipulation is advertising. Sunstein (2017, p. 117) argues that forbearance on the part of policymakers is unnecessary because manipulation is ubiquitous. According to that line of reasoning, replacing arbitrary market manipulation with well-crafted policy manipulation improves on market incentives. Appropriate manipulation by expert policymakers can be used to reach socially preferred ends.

Ethical choice requires understanding and then implementing remedies to the patterns of abuse by firms or the systematic mistakes of market participants. The choice architecture approach, like the public interest theory of regulation before it, seeks to engineer the legislative, regulatory and legal frameworks of choice. Arguments for intervention based on behavioral market failure ideas expand the scope of government with no clear limits on the applicability of that justification.

Two specific problems arise with manipulation of choice architectures: first, it is prone to confusing unusual preferences with error. Second, it underestimates the importance of

<sup>&</sup>lt;sup>10</sup> Viscusi and Gayer (2015, p. 981) question the ability of behavioral policy to improve on errors in the market through reliance on "well-meaning technocrats".

<sup>&</sup>lt;sup>11</sup> Manipulation here is defined by Joseph Raz (1986): "Manipulation, unlike coercion, does not interfere with a person's options. It instead perverts the way that person reaches decisions, forms preferences, or adopts goals" (quoted in full by Sunstein 2017, p. 117).

the status quo and thereby creates uncertainty. Differences in preferences between market participants and policymakers can result in policymakers over-identifying behavioral market failures and substituting their own preferences for those of market participants. Akerlof (1989) offers an early example of identifying such a cognitive bias among policymakers when policymakers make judgment calls. Congdon et al. (2011, p. 76) point to policymakers failing to distinguish between situations where "behavior reflects errors and when it simply expresses unusual preferences." Relying heavily on expert judgment introduces the potential for more systematic error, discussed in the next section, but because impartiality is assumed implicitly, it obscures the explicit recognition of errors in judgment. If policymakers have cognitive limitations similar to those of market participants, such limitations impede their ability to fine-tune the behavior of market actors. In addition, giving greater power to experts, who usually are members of the economic elite, will bias the political process further in favor of elite preferences. Research by Gilens and Page (2014) suggests that public policy already reflects the preferences of economic elites. Expanding the scope of policy maker influence by greater use of regulatory, legislative and guidance documents gives greater weight to the preferences of the elites at the expense of those who have weaker voices.<sup>12</sup> Schubert (2017) suggests that the very complexities of interpreting and applying behavioral insights from scholarly research allow policymakers a way to mask their own policy preferences independent of the evidence. Policy that reflects policymakers' own goals faces unreliable feedback from within the system and creates a situation of cognitive capture, whereby policy reflects the particular biases of a small group of experts.

To justify behavioral public policy as a benign type of manipulation is to recognize the hierarchical assumption that policymakers make fewer errors both in cognition and in judgment over ends than individual actors. Sunstein (2017, p. 117) suggests that the ultimate check on errors by policymakers will be "electoral self-interest". If that check is weak or weakened, as another strand of the public choice literature suggests, policymakers remain unconstrained.<sup>13</sup>

It is important, then, to consider how little the public seems to understand even the least interventionist behavioral policy tool, nudging. Schubert (2017, p. 505) argues that much of the widespread support for nudging is an artifact of the way that opinion polls are administered. Respondents prefer nudges when they (a) agree with the policy goal and (b) see nudging as an effective alternative to policies that are harder to evade like taxes and prohibitions.<sup>14</sup> Sunstein (2017, p. 117) agrees that respondents' preferences hinge on favoring nudges to policy options that are harder to avoid. The problem comes when respondents are systematically manipulated with regard to how they understand a policy goal. Tannenbaum et al. (2016, p. 3) call the identification of a policy with a political party

<sup>&</sup>lt;sup>12</sup> Clark and Lee (2016, p. 44) support the notion that politicians ignore the promises they make when they get elected in favor of the priorities set by interest groups. Stigler (1970) named the tendency for public expenditure to reflect the interests of the middle class, "Director's law". To generalize that insight, policy always will reflect the preferences of those with the strongest political voices. Shughart and Thomas (2015) argue that "regulatory rents" are distributed according to the loudest voice.

<sup>&</sup>lt;sup>13</sup> Schubert's (2017, p. 513) "is-ought-heuristic" suggests that use of manipulation by the state gives legitimacy to policy interventions based on the fact that they are enshrined in law or enacted by government agencies.

<sup>&</sup>lt;sup>14</sup> If the same outcome were possible with a nudge or a tax, a nudge might be preferred because people value the ability to opt-out as representing respect for individual autonomy. Schubert (2017, p. 510) also discusses how nudges are more popular than taxes, but less effective in delivering policy aims. This choice of popularity over ends should result in more policy that reflects politically popular beliefs. If popular beliefs are enshrined in choice architecture, they become a form of manipulation.

a "partisan nudge bias". When a respondent identifies a proposed nudge with a policy goal endorsed by their preferred party, they are more likely to support it than another, neutral nudge. When respondents perceive a proposed nudge to be associated with a non-preferred party, they support it less strongly than another, neutral nudge. Tannenbaum et al. (2016) conclude that support for a particular nudge can be constructed through the appropriate framing of the survey questions by drawing on partisan bias.

Allowing the expert to choose relies heavily on the assumption that experts can become the institutional equivalent of Kahneman and Frederick's (2007) higher-order thinking. Sunstein (2017, p. 117) argues that public policy can correct for failures in "reflection and deliberation". Such policy works best when it replaces exploitive market nudging with educative policy nudging.<sup>15</sup> Making higher-order thinking a matter of policy has another effect, however. It determines the goals. Behavioral policy harnesses the legislative, regulatory and legal structure to create a new *status quo*, developed by the expert hands of the policymaker.

The second objection to allowing for expert capture of the status quo is the argument in Buchanan (2004) summarizing a decades-long debate with Warren Samuels over the "status of the status quo". Buchanan (2004, p. 136) argues that to give greater latitude to policymakers to rewrite rules is equivalent to giving them "carte blanche" in framing the rules of the game. Kahneman, Knetsch and Thaler (1991, p. 199) suggest, in contrast, that resistance to changing background features is a behavioral anomaly they call "status quo bias". Since the status quo was arrived at arbitrarily, preference for it is a cognitive error.<sup>16</sup> The justification for explicitly constructing choice architecture relies on the replacement of an arbitrary status quo with an ethically chosen choice architecture.<sup>17</sup>

Discounting the status quo as arbitrary, Buchanan (2004) argued, would generate a great deal of uncertainty over the rules of the game, as more people sought to influence the rules. When the rules are subject to manipulation, plan formation by individual market participants is frustrated. Choice architects believe that a superior process for selecting the rules reduces uncertainty by creating more objective rules, but that logic fundamentally ignores the risks that come with monopolizing rule making (Tullock 1967).

When experts decide for everyone, the cost of error rises and the benefits of lobbying to influence policy also rise. Just like market failure arguments failed to anticipate that profitseeking in markets could be translated into policy rent-seeking, behavioral market failure arguments fail to appreciate the risk of *cognitive capture* of experts by special interests. Consider the case of how the Office of Information and Regulatory Affairs (OIRA) has been used by the last two administrations. Cass Sunstein's appointment to OIRA by President Obama in 2009 expanded greatly the role of behavioral economics and psychology in evaluating all federal regulations. During the Trump administration, by contrast, Neomi

<sup>&</sup>lt;sup>15</sup> Amir and Lobel (2008, p. 2126) make a distinction between "education, manipulation, and coercion". To educate is to give the information necessary for judgment; much of behavioral policy simply replaces judgment entirely. The whole justification for nudges is that opt-outs are low-cost, which if true would merely identify a policy maker's preferred option as the default.

<sup>&</sup>lt;sup>16</sup> The claim that the status quo is arbitrary implies a ranking of the deliberate and rational construction of rules above any sort of evolutionary process that uncovers inarticulate information. It is a preference for the explicit over the tacit. See Smith's (2003) discussion of "Constructivist and Ecological Rationality". Smith shared the 2003 Nobel Prize with Daniel Kahneman, who was recognized for the effect his ideas had on behavioral economics.

<sup>&</sup>lt;sup>17</sup> An ethically chosen status quo includes considerations of "welfare, autonomy, dignity, and self-government" (Sunstein 2017, p. 117).

Rao has used OIRA to impede as many new regulations as possible. With so much at stake, competition to control the cognitive space of policy making will intensify.

#### 3.2 Monopoly

In the marketplace, different firms seek to manipulate consumers by advertising differentiated products, which results in varied and competing types of manipulations. Because they have market power, large firms that try to leverage behavioral errors on the part of their customers in an attempt to increase profit are an example of market failure. For similar reasons, it is a policy failure if intervention produces a monopoly of choice architectures.

Two specific problems arise with monopolization or cognitive capture of the policy space by behavioral policy: The first is that it undermines existing political structures that otherwise allow for the integration and moderation of diverse views by relying on bureaucratic experts rather than on more traditional channels of democratic rule making (i.e., the legislative branch of government).

Wittman (1989, p. 1396) argues that democratic political markets are efficient because competition for political office and competition over access to political resources ensure an "efficient exchange of political rights." Similarly, the literature on logrolling explains how legislators trade votes in order to gain support for their pet proposals (Riker and Brams 1973; Tullock 1981). That perspective on legislation suggests that efforts to gain support for a policy proposal mitigate the extremes of legislator bias. Walker (2017) suggests, on the other hand, that policy increasingly is written by executive branch agency staff rather than being a result of the legislative process. He calls the trend towards greater centralization of power over policy content in the hands of bureaucrats "Legislating in the Shadows". Walker describes two major reasons why agencies' influence is growing: agency staff take an expanding role in offering "technical drafting assistance" and advice on subsequent legal interpretations of legislation. Further, OIRA's wider scope in evaluating not only legislation, but also other regulation and guidance documents, has expanded the significance of behavioral policy prescriptions outside of the traditional channels of government. As agencies gain more influence, policy is less subject to the moderating influence of legislative bargaining. That is particularly true for behavioral policy because it explicitly relies on expert judgment.

The second problem with monopolization of the cognitive space is that much of the information needed to make policy decisions depends on context and is hard to aggregate. Any gains from expertise have to be weighed against losses in the ability to aggregate information. The process of discovering what works results from competition at lower levels of governance. Policy based on behavioral insights, on the other hand, is more likely to be centralized at the level of national government, far removed from its context. As a result, the polycentric systems that benefit from a trial-and-error discovery process are replaced by federal mandates, legislation and guidance documents that limit degrees of freedom.

The concept of nonlinearity helps explain why collective decision-making should occur at different governance levels (Raudla 2010, p. 208): expertise faces diminishing returns; as a result, a disaggregated structure that incorporates the knowledge appropriate to each

level is preferred. Polycentric orders help to overcome limits on aggregating knowledge (Wagner 2012, p. 44).<sup>18</sup>

Policymaking monopolies also impose the risk of weakening competition and undermining lower levels of government, further frustrating the collection of information about what works. Ostrom (2000, p. 142) suggests that the movement towards greater centralization of policymaking leads to "downward cascades", wherein lower levels of government become weakened by losing the ability to set priorities for collective action. From her perspective, competition that reveals information at local levels is replaced with policy monopolies that eliminate local knowledge.

Powell and Stringham (2009, p. 506) suggest that for many governance problems private parties have a comparative advantage in discovering error and forming innovative cooperative solutions that meet the needs of the affected parties. Beyond its effect on state and local government, behavioral policy and subsequent aggregation of decision making at the federal level might come to dominate private solutions to collective action problems.

Even if we assume that expertise reduces the frequency of errors in a monopolized version of policymaking, when errors do occur, they are going to be more significant, harder to recognize and correct, and will have larger overall effects. Competition over rule making, on the other hand, increases the frequency of errors at smaller scale, with correspondingly less significant global effects.

Finally, disaggregation allows for learning to take place because competing jurisdictions have to incorporate feedback in order to continue to attract customers. Monopoly providers of policy, on the other hand, have no incentive to update and incorporate feedback.

Boettke et al. (2013) argue that, despite assertions by behavioral economists to the contrary, cognitive errors always were obvious to economists. They argue that error is useful in creating new strategies for coordination and learning. Following Simon (1955, 1956), economists have modeled individual action as taking advantage only of available information. That bias has been called "approximate' rationality" (Simon 1956, p. 129). Mistakes are common, but they are corrected when plans are frustrated and actors imagine alternative courses of action. Feedback is necessary for learning. The quality of feedback in markets is superior to that in the political process because of the superior adaptability of market institutions to error (Glaeser 2006; Martin 2010). To expand the scope of policymaking through behavioral interventions is to weaken feedback and hope for improvements in cognitive error by allowing experts to choose. Such nonlinearity would require significant gains to expertise in order to compensate for losses in terms of feedback.

#### 4 Error is systematic, symmetrically

Justifications for using behavioral manipulation to select the legislative, regulatory and legal framework make heroic assumptions about the experts who control choice architecture. When errors occur, they potentially will be magnified further through manipulation by experts and through capture of the cognitive space by expert monopolies. The remaining question is: do policymakers have fewer cognitive limitations than ordinary market participants? Existing evidence suggests that policymakers are better than market participants

<sup>&</sup>lt;sup>18</sup> The knowledge problem is at the core of the rejection of the new paternalism. Rizzo and Whitman (2009, p. 905), note that most policymakers simply assume away the problem of articulating and aggregating information.

only in a narrow range of their expertise. Since policy is complex, it is unlikely that experts will have the full complement of knowledge they need in order to improve on market outcomes.

#### 4.1 Expert error

Koppl (2012, p. 172) argues that the recognition of cognitive errors on the part of individuals interacting in markets also requires a theory of expert failure.<sup>19</sup> Tasic (2011) applies the behavioral psychology literature to policymaking and lists the following biases that have specific significance for experts: (1) action bias, which is defined as a tendency to overact in the face of risk and uncertainty. (2) Motivated reasoning, which is a tendency to reach the conclusions we prefer for other reasons. (3) Focusing illusion, which is a bias that appears when experts consider the impact of one particular factor and overestimate its significance. (4) Affect heuristics, which suggest that our reasoning is to a great extent the product of our emotions, and (5) illusions of competence, which is overconfidence with respect to one's own knowledge. Tasic (2011, p. 14) argues that in order for policy to improve on market actors. He argues that far from being immune to irrationality, regulators are more likely to experience information cascades which are "self-reinforcing cycles of excessive risk regulation and excessive risk perception spurred by availability bias" (Tasic 2011, p. 2).

It is also important to consider cascade effects for the policy environment more generally. Kaufmann and Witteloostuijn (2016, p. 2) argue that vertical hierarchies of experts can create cascade effects or excessive "rule breeding" in federal systems, where rulemaking at one level results in "rule production at lower rule-making levels." Experts are superior in rationality only if learning is better in policymaking than in market participation.<sup>20</sup> The models experts apply can only ever exhibit a partial understanding of human behavior and seldom account for the differences between the models themselves and the constrained optimization of those affected by the policy.<sup>21</sup>

An additional complication is that institutions can reinforce the biases introduced by expert policymakers. Walker (2017) describes the process that enshrines the biases of different agencies in lawmaking and then later in legal interpretation by courts. When the models of experts depart from the models of individuals on the ground, the cumulative cost of policy error over time will be greater if erroneous laws cannot be repealed easily. "Agency drift" can further aggravate such problems of expert bias (McCubbins et al.

<sup>&</sup>lt;sup>19</sup> Viscusi and Gayer (2015, p. 981) question the ability of behavioral policy to improve on errors in the market by relying on "well-meaning technocrats".

<sup>&</sup>lt;sup>20</sup> One reason for this difference is a misunderstanding of the word "rational." Following Foley (1987) a distinction exists between the "epistemic rationality" of the policymakers fully informed by scientific literature and the "instrumental rationality" of the individual actors making market decisions. The claim that policy is epistemically rational works only if omniscient policymakers write policy. By contrast, Simon (1955, p. 1956) proposed more of a trial-and-error approach to rationality based on cost of correcting flawed heuristics. For example, Kahneman and Frederick's (2007) discussion of systems one and two fails to account for how people may update their heuristics when holding them is particularly costly. North (1993) suggests that policy is just a set of heuristics, and subject to the same test of validity—does it reduce transaction costs?

<sup>&</sup>lt;sup>21</sup> An important reason can be found for being skeptical of policy prescriptions based on laboratory experiments. Viscusi and Gayer (2015, p. 976) invoke Gary Becker's statement on the limitations of behavioral economics and its insights into actual market actors.

1999, p. 184). If the legislative branch of government generally is hesitant to give agencies expansive intervention authority, as may be presumed given that the legislature represents a more diverse set of interests than each particular agency, but policy implementation drifts in the direction of the preferences of biased experts over time, then agency error will become more influential. That is true both with respect to budgets and the desires of agency directors to maximize their discretion (Niskanen 1968, 1971).

#### 4.2 Local knowledge

Unlike more traditional types of market failures, the knowledge and information that are important for behavioral policy to work are not as easily articulated and cannot be reduced to simple inputs into an aggregate policy decision. Behavioral economics gives short shrift to how information is created and diffused. For example, deficient saving results in too little money for retirement, but lifecycle investment funds, which change the composition of an investor's portfolio periodically, do not consider any information except current age and retirement age.<sup>22</sup> Rather than educating the chooser, lifecycle funds reinforce a generalization. Much of current behavioral policy therefore has to be based on generalized information about behavioral market failure obtained from laboratory experiments. As a result, such policy underappreciates local knowledge. Hayek (1945, pp. 522–523, 526) called the loss of information owing to aggregation of preferences in that manner, the knowledge problem.

Behavioral policy often employs surveys to measure what people say about their preferences, their stated preferences, rather than using a more traditional revealed-preference approach, which deduces how individuals respond to incentives in real-world markets by examining their actual choices. It might be common to complain about high popcorn prices at movie theatres, yet that business model has few alternatives among competitors and people still buy popcorn. The switch from taking market data as given to relying on survey evidence eliminates any information obtained from the coordination process of the market. In doing so, it destroys at least some of the feedback that is necessary for a well-functioning political economy. Policy that relies on expert knowledge or even surveys of what people say is desirable policy forgoes local knowledge by constraining the information set to what is articulable. The expert models the world differently than individual actors (Levy and Peart 2008). Because such policy does not take into consideration the actual causeand-effect relationship between opinions about policy and individual choices in the marketplace, policy proposals can represent radical departures from the status quo in the marketplace, which leaves a lot of room for expert manipulation.

Sunstein (2014, p. 17) argues that a long-standing bias toward non-intervention in the face of ambiguity is misguided. Instead, it would be better to nudge in the direction of policymaker's goals and allow individuals to opt out when policy is mistaken.<sup>23</sup> If the same cognitive limitations like endowment effects and the failure of expected utility theory describe individual behavior in the status quo accurately, we should expect people to opt-out of the new choice architecture much less often than what might be efficient. This

<sup>&</sup>lt;sup>22</sup> For a description of how life-cycle funds have become the default investment strategy see (Viceira 2009, pp. 142–148).

 $<sup>^{23}</sup>$  Sunstein (2014, p. 17) writes "In the face of behavioral market failures, nudges are usually the best response, at least when there is no harm to others." He purposely invokes Mill's bias against action, the harm principle, and argues that the bias should be to nudge when behavioral errors are identified.

problem is aggravated when opting-out involves bureaucratic hurdles. As a result, feedback for failed policy will be weak at best. In a market context, feedback might be limited, but feedback is likely to be even more limited in a policy context.

Behavioral psychology has offered important insights into individual behavior. Ironically, behavioral *policy* acts as a constraint on our descriptions of complex individuals. When policy treats individuals as homogenous, its model of agency under is reductive rather than comprehensive. Non-standard preferences are viewed as mistakes rather than part of human diversity and often are penalized by a one-size-sits-all policy approach.<sup>24</sup> Those who have weak political voices will not systematically be made better off by such policies (Thomas 2012).

One key reason to care about local knowledge is that behavioral policies often are so regressive, as the other contributions in this issue suggest. Consumer demand frequently is far more inelastic than either other individuals or policymakers can anticipate (Hoffer et al. 2017). With junk food, consumption is remarkably consistent as income changes, which implies that people substitute away from other purchases when their after-tax incomes decline (despite what they say). Take, for example, a disfavored good that is taxed, cigarettes. Gruber and Koszegi (2004) acknowledge that inelastic demands for cigarettes among the poor is in fact going to magnify the impact of taxes on those consumers because they do not quit smoking.<sup>25</sup> Instead of being evidence of regressive policy effects, this response is considered to be a virtue, as it penalizes non-standard preferences.<sup>26</sup> The result of inelasticity in the face of paternalism is an income effect because of the disproportion-ate percentages of income that the very poor spend on disfavored items, such as cigarettes.

# 5 Conclusion

The literature on behavioral policy recommendations fundamentally assumes that cognitive limitations are asymmetric between market participants and policymakers. That assumption widens the scope for public policy interventions through regulation, legislation and guidance documents, as well as by agencies supplying expert advice to lawmakers and the judiciary. Applying the insight of behavioral symmetry, this paper argues that policymakers are biased. Failure to recognize the potential for bias among both market participants and experts has resulted in unwarranted levels of intervention and excessive trust in expertise. As I have argued above, the growing predominance of behavioral policy proposals has resulted in an increase in the returns to cognitive capture of a group of experts whose

<sup>&</sup>lt;sup>24</sup> Congdon et al. (2011, p. 66) suggest that policymakers have a duty to structure educational choices for low-information parents. This is a great example of how policymakers might have pedagogical expertise, but undermines any consideration of when experts lack the local knowledge parents might have about their children and their local educational options.

<sup>&</sup>lt;sup>25</sup> Farelley et al. (2012) detail the rather substantial effects that cigarette taxes in New York State and New York City had on the lowest income earners, doubling the fraction of disposable income spent on smoking. See Hoffer et al. (2014) for a description of the rise of disfavored taxation as an attempt to increase tax revenues at all levels of government.

<sup>&</sup>lt;sup>26</sup> The literature on the regressive effects of regulation emphasizes that low-income persons are likely to have non-standard preferences from the point of view of policymakers. That asymmetry systematically will intensify the regulatory burden on lower income individuals and households. For an example of regressive effects in childcare policy, see Gorry and Thomas (2017); for entry regulations, see McLaughlin and Stanley (2016).

preferences will be reflected in the resulting policy. Put differently, with greater expected probabilities of governmental intervention come more rent seeking to influence proposed policies. Because of problems in feedback that are intensified through aggregation in the policy process, systematic effects on those with weak political voice will result. Policy under the assumptions of behavioral symmetry will exhibit systematic bias sufficient to warrant a public choice critique of behavioral policy failure.

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# References

- Akerlof, G. A. (1970). The market for "lemons": Quality, uncertainty, and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500.
- Akerlof, G. A. (1989). The economics of illusion. Economics and Politics, 1(1), 1-15.
- Amir, O., & Lobel, O. (2008). Stumble, predict, nudge: How behavioral economics informs law and policy. Columbia Law Review, 108(8), 2098–2137.
- Bar-Gill, O. (2012). Competition and consumer protection: A behavioral economics account. In *The pros* and cons of consumer protection, pp. 12–43. Swedish Competition Authority. http://www.konkurrens verket.se/globalassets/english/publications-and-decisions/the-pros-and-cons-of-consumer-protection .pdf#page=12. Accessed March 15, 2018.
- Berggren, N. (2012). Time for behavioral political economy? An analysis of articles in behavioral economics. *The Review of Austrian Economics*, 25, 199–221.
- Boettke, P. J. (2011). Teaching economics, appreciating spontaneous order, and economics as a public science. Journal of Economic Behavior & Organization, 80(2), 265–274.
- Boettke, P. J., Caceres, Z., & Martin, A. G. (2013). Error is obvious, Coordination is the puzzle. In R. Frantz & R. Leeson (Eds.), *Hayek and behavioral economics*. New York: Palgrave Macmillian UK.
- Boettke, P. J., & Lopez, E. (2002). Austrian economics and public choice. *The Review of Austrian Economics*, 15(2–3), 111–119.
- Brennan, G. (2008). Psychological dimensions in voter choice. Public Choice, 137(3/4), 475-489.
- Buchanan, J. M. (1999). In: G. Brennan, H. Kliemt & R. D. Tollison (Eds.), *The collected works of James M. Buchanan. The logical foundations of constitutional liberty* (Vol. 1). Indianapolis: Liberty Fund.
- Buchanan, J. M. (2004). The status of the status quo. Constitutional Political Economy, 15(2), 133-144.
- Buchanan, J. M., & Tullock, G. (1962). The calculus of consent: Logical foundations of constitutional democracy. Ann Arbor: University of Michigan Press.
- Carrigan, C. & Coglianese, C. (2016). Capturing regulatory reality: Stigler's the theory of economic regulation. *Faculty Scholarship* Paper 1650. http://scholarship.law.upenn.edu/faculty\_scholarship/1650. Accessed March 15, 2018.
- Clark, J. R., & Lee, D. R. (2016). Higher cost appeals to voters: Implications of expressive voting. *Public Choice*, 167(1), 37–45.
- Congdon, W. J., Kling, J., & Mullaninathan, S. (2011). Policy and choice: Public finance through the lens of behavioral economics. Washington: Brookings Institution Press.
- Datta-Chudhuri, M. (1990). Market failure and government failure. *Journal of Economic Perspectives*, 4(3), 25–39.
- Farelley, M. C., Nonnemaker, J. M., & Watson, K. A. (2012). The Consequences of high cigarette excise taxes for low-income smokers. *PLoS ONE*, 7(9), e43838. https://doi.org/10.1371/journal.pone.00438 38.
- Foley, R. (1987). The theory of epistemic rationality. Cambridge: Harvard University Press.
- Gilens, M., & Page, B. I. (2014). Testing theories of American politics: Elites, interest groups, and average citizens. *Perspectives on Politics*, 12(3), 564–581.
- Glaeser, E. (2006). Paternalism and psychology. The University of Chicago Law Review, 73(1), 1333-156.
- Gorry, D., & Thomas, D. W. (2017). Regulation and the cost of childcare. Applied Economics, 49(41), 4138–4147.

- Gruber, J., & Koszegi, B. (2004). Tax incidence when individuals are time-inconsistent: The case of cigarette excise taxes. *Journal of Public Economics*, 88(9–10), 1959–1987.
- Hayek, F. A. (1945). The use of knowledge in society. *The American Economic Review*, 35(4), 519–530. Hoffer, A. J., Gvillo, R., Shughart, W. F., II, & Thomas, M. D. (2017). Income-expenditure elasticities
- of less-healthy consumption goods. Journal of Entrepreneurship and Public Policy, 6(1), 127–148.
- Hoffer, A. J., Shughart, W. F., & Thomas, M. D. (2014). Sin taxes and sindustry: Revenue, paternalism, and political interest. *The Independent Review*, 19(1), 47–64.
- Kahneman, D., & Frederick, S. (2007). Frames and brains: Elicitation and control of response tendencies. Trends in Cognative Sciences, 11(2), 45–46.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The endowment effect, loss aversion, and status quo bias. *Journal of Economic Perspectives*, 5(1), 193–206.
- Kaufmann, W., & Witteloostuijn, A. V. (2016). Do rules breed rules? Vertical rule-making cascades at the superanational, national, and organizational level. *International Public Management Journal*. https://doi.org/10.1080/10967494.2016.1143420.
- Kaysen, C., & Turner, D. (1959). Antitrust policy: An economic and legal analysis. Cambridge: Harvard University Press.
- Koppl, R. (2012). Experts and information choice. In R. Kopple, S. Horwitz, & L. Doubzinskis (Eds.), *Experts and epistemic monopolies. Advances in Austrian economics* (Vol. 17, pp. 171–202). Bingley: Emerald Publishing Group Limited.
- Lee, D. R., & Clark, J. R. (2018). Can behavioral economists improve economic rationality. *Public Choice*, 174(1–2), 23–40.
- Levy, D. M., & Peart, S. J. (2008). Thinking about analytical egalitarianism. American Journal of Economics and Sociology, 67(3), 473–480.
- Martin, A. (2010). Emergent politics and the power of ideas. Studies in Emergent Order, 3, 212–245.
- McCubbins, M., Weingast, B. R., & Noll, R. G. (1999). The political origins of the administrative procedure act. Journal of Law Economics and Organization, 15(1), 180–217.
- McLaughlin, P. A. & Stanley, L. (2016). Regulation and income inequality: The regressive effects of entry regulations. Mercatus working paper. https://www.mercatus.org/publication/regulation-andincome-inequality-regressive-effects-entry-regulations-0. Accessed March 15, 2018.
- Montgomery, M. R., & Bean, R. (1999). Market failure, government failure, and the private supply of public goods: The case of climate-controlled walkway networks. *Public Choice*, 99(3/4), 403–437.
- Niskanen, W. A. (1968). The peculiar economics of bureaucracy. *The American Economic Review*, 58(2), 293–305.
- Niskanen, W. A. (1971). *Bureaucracy and representative government*. New Brunswick and London: Transaction Publishers.
- North, D. C. (1993). What do we mean by rationality? Public Choice, 77(1), 159-162.
- Ostrom, E. (2000). Collective action and the evolution of social norms. The Journal of Economic Perspectives, 14(3), 137–158.
- Pesendorfer, W. (2006). Behavioral economics comes of age: A review essay on advances in behavioral economics. *Journal of Economic Literature*, 44(3), 712–721.
- Pigou, A. C. (1932). The economics of welfare. London: Macmillan and Co.
- Posner, R. A. (1979). The Chicago school of antitrust analysis. University of Pennsylvania Law Review, 127(4), 925–948.
- Powell, B., & Stringham, E. P. (2009). Public choice and the economic analysis of anarchy: A survey. *Public Choice*, 140(3), 503–538.
- Raudla, R. (2010). Governing budgetary commons: What can we learn from Elinor Ostrom? European Journal of Law and Economics, 30(3), 201–221.
- Riker, W. H., & Brams, S. J. (1973). The paradox of vote trading. The American Political Science Review, 67(4), 1235–1247.
- Rizzo, M. J., & Whitman, D. G. (2009). The knowledge problem of new paternalism. BYU Law Review, 4(4), 905–968.
- Samuelson, P. A. (1954). The pure theory of public expenditure. The Review of Economics and Statistics, 36(4), 387–389.
- Schubert, C. (2017). Exploring the (behavioral) political economy of nudging. Journal of Institutional Economics, 13(3), 499–522.
- Shughart, W. F., II, & Thomas, D. (2015). Regulatory rent seeking. In R. D. Congleton & A. L. Hillman (Eds.), *Companion to the political economy of rent seeking* (pp. 167–186). Cheltenham: Edward Elgar Publishing.
- Shughart, W. F. II & Thomas, D. (2017). Interest groups and regulatory capture (forthcoming).

- Simon, H. A. (1955). A behavioral model of rational choice. The Quarterly Journal of Economics, 69(1), 99–118.
- Simon, H. A. (1956). Rational choice and the structure of the environment. *Psychological Review*, 63(2), 129–138.
- Smith, V. L. (2003). Constructivist and ecological rationality in economics. The American Economic Review, 93(3), 465–508.
- Sobel, R., & Leeson, P. T. (2006). Government's response to hurricane Katrina: A public choice analysis. Public Choice, 127(1–2), 55–73.
- Stigler, G. (1970). Director's law of public income redistribution. The Journal of Law and Economics, 13(1), 1–10.
- Stigler, G. (1971). The economic theory of regulation. The Bell Journal of Economics and Management Science, 2(1), 3–21.
- Sunstein, C. R. (2014). Why Nudge? The politics of pibertarian paternalism. Princeton: Yale University Press.
- Sunstein, C. R. (2017). *The ethics of influence: Government in the age of behavioral science*. New York: Cabridge University Press.
- Tannenbaum, D., Fox, C. R., & Rogers, T. (2016). On the misplaced politics of behavioral policy interventions. *Nature*, 1, 130.
- Tasic, S. (2011). Are regulators rational? Journal des Economistes et des Etudes Humaines, 17(1), 1–21.
- Thaler, R., & Sunstein, C. (2008). Nudge: Improving decisions about health, wealth, and happiness. Princeton: Yale University Press.
- Thomas, D. (2012). Regressive effects of regulation. *Mercatus working paper* no. 12-35. https://www.mercatus.org/publication/regressive-effects-regulation. Accessed March 15, 2018.
- Tullock, G. (1967). The welfare costs of tariffs, monopolies, and theft. *Western Economic Journal*, 5(3), 224–232.
- Tullock, G. (1981). Why so much stability? Public Choice, 37(2), 189-204.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. Science, 185(4157), 1124–1131.
- Viceira, L. M. (2009). Life cycle funds. In A. Lusardi (Ed.), Overcoming the savings slump: How to increase the effectiveness of financial education and savings programs. Chicago: University of Chicago Press.
- Viscusi, W. K., & Gayer, T. (2015). Behavioral public choice: The behavioral paradox of government policy. *Harvard Journal of Law and Policy*, 38(3), 973–1007.
- Wagner, R. E. (2012). Deficits, debt, and democracy: Wrestling with tragedy on the fiscal commons. Cheltenham: Edward Elgar Publishing.
- Walker, C. J. (2017). Legislating in the shadows. University of Pennslyvania Law Review, 165, 1377–1433.
- Wittman, D. (1989). Why democracies produce efficient results. Journal of Political Economy, 97(6), 1395–1424.
- Wittman, D. (1995). The myth of democratic failure: Why political institutions are efficient. Chicago: University of Chicago Press.