

ISSN 1936-5349 (print)
ISSN 1936-5357 (online)

HARVARD

JOHN M. OLIN CENTER FOR LAW, ECONOMICS, AND BUSINESS

DO PEOPLE LIKE NUDGES?

Cass R. Sunstein

Discussion Paper No. 854

02/2016

Harvard Law School
Cambridge, MA 02138

This paper can be downloaded without charge from:

The Harvard John M. Olin Discussion Paper Series:
http://www.law.harvard.edu/programs/olin_center/

The Social Science Research Network Electronic Paper Collection:
<http://ssrn.com/abstract=2604084>

Do People Like Nudges?

Cass R. Sunstein*

Abstract

In recent years, there has been a great deal of debate about the ethical questions associated with “nudges,” understood as approaches that steer people in certain directions while maintaining their freedom of choice. Evidence about people’s views cannot resolve the ethical questions, but in democratic societies (and nondemocratic ones as well), those views will inevitably affect what public officials are willing to do. Existing evidence, including a nationally representative survey, supports six general conclusions. First, there is widespread support for nudges of the kind that democratic societies have adopted or seriously considered in the recent past; surprisingly, that support can be found across partisan lines. While people tend to have serious objections to mandates as such, they do not have similar objections to nudges. Second, the support evaporates when people suspect the motivations of those who are engaged in nudging, and when they fear that because of inertia and inattention, citizens might end up with outcomes that are inconsistent with their interests or their values. Third, there appears to be somewhat greater support for nudges that appeal to conscious, deliberative thinking than for nudges that affect subconscious or unconscious processing, though there can be widespread approval of the latter as well (especially if they are meant to combat self-control problems). Fourth, people’s assessment of nudges in general will be greatly affected by the political valence of the particular nudges that they have in mind (or that are brought to their minds). Fifth, transparency about nudging will not, in general, reduce the effectiveness of nudges, because most nudges are already transparent, and because people will not, in general, rebel against nudges. But this last conclusion must be taken with caution in light of preliminary but suggestive evidence of potential “reactance” against certain nudges.

I. Introduction

* Robert Walmsley University Professor, Harvard University. Many thanks to Arevik Avedian for assistance with the survey presented here, and to Heidi Liu for indispensable research help (including help with the statistical analyses). Many thanks as well to participants in a superb workshop at the New York University Law School and to Maya Bar-Hillel, Craig Fox, Jacob Goldin, Lucia Reisch, Adam Samaha, and Richard Thaler for exceptionally valuable comments and suggestions. Final thanks to the Program on Behavioral Economics and Public Policy at Harvard Law School.

The last several years have seen an outpouring of work on “nudges,” understood as interventions that steer people in particular directions but that also allow them to go their own way.¹ A reminder is a nudge; so is a warning. A GPS nudges; a default rule nudges. Disclosure of relevant information (about the risks of smoking or the costs of borrowing) counts as a nudge. Save More Tomorrow plans, allowing employees to sign up to give some portion of their future earnings to pension programs, are nudges²; so are Give More Tomorrow Plans,³ allowing employees to sign up to give some portion of their future earnings to charities.³ A recommendation is a nudge; so is a warning. A criminal penalty, a civil fine, a tax, and a subsidy are not nudges, because they impose significant material incentives on people’s choices.⁴

In many nations, public officials have been drawn to nudges, especially in recent years.⁵ In 2009, the United Kingdom created a Behavioural Insights Team, focused largely on uses of nudges, and choice architecture, to improve social outcomes; its results have been impressive.⁶ Nudges play a large role in recent American initiatives in multiple areas, including environmental protection, financial regulation, anti-obesity policies, and education.⁷ In 2012, the United States created its own Social and Behavioral Sciences Team.⁸ In 2015, Germany did so as well.⁹ With an emphasis on poverty and development, the World Bank devoted its entire 2015 report to behaviorally informed tools, with a particular focus on nudging.¹⁰

The reason for the mounting interest should not be obscure. If governments can achieve policy goals with tools that do not impose high costs, and that preserve freedom of choice, they

¹ See generally, e.g., Richard Thaler and Cass R. Sunstein, *NUDGE* (2008); Richard Thaler, *MISBEHAVING* (2015); David Halpern, *INSIDE THE NUDGE UNIT* (forthcoming 2015); The World Bank, *WORLD DEVELOPMENT REPORT 2015: MIND, SOCIETY, AND BEHAVIOR* (2015), available at <http://www.worldbank.org/en/publication/wdr2015>; OECD, *REGULATORY POLICY AND BEHAVIORAL ECONOMICS* (2014); Rhys Jones et al., *CHANGING BEHAVIOURS: THE RISE OF THE PSYCHOLOGICAL STATE* (2013); Review of Philosophy and Psychology, Special Issue on Nudges (forthcoming 2015), available in part at <http://link.springer.com/article/10.1007/s13164-015-0248-1>; Riccardo Rebonato, *TAKING LIBERTIES* (2011); Mark White, *THE MANIPULATION OF CHOICE* (2013).

² See Thaler, *supra* note 1, at 309-322; see generally Shlomo Benartzi, *Save More Tomorrow* (2012).

³ Anna Breman, *Give More Tomorrow: Two Field Experiments on Altruism and Intertemporal Choice*, 95 *J. Public Econ.* 1349 (2011).

⁴ On some of the complexities here, see Cass R. Sunstein, *WHY NUDGE?* 84 (2014).

⁵ See generally Halpern, *supra* note 1; OECD, *supra* note 1; Rhys Jones et al., *supra* note 1; Cass R. Sunstein, *SIMPLER: THE FUTURE OF GOVERNMENT* (2013); House of Lords, Science and Technology Select Committee, *BEHAVIOR CHANGE* (2011), <http://www.publications.parliament.uk/pa/ld201012/ldselect/ldsctech/179/179.pdf>.

⁶ See generally Halpern, *supra* note 1.

⁷ See generally Sunstein, *supra* note 5.

⁸ <https://www.whitehouse.gov/blog/2015/02/09/using-behavioral-science-insights-make-government-more-effective-simpler-and-more-us>

⁹ <http://www.nytimes.com/2015/03/04/opinion/anna-sauerbrey-the-german-nanny-state.html>

¹⁰ See World Bank, *supra* note 1.

will take those tools seriously. In domains that include savings policy,¹¹ climate change,¹² poverty,¹³ and health care,¹⁴ among others, behaviorally informed approaches have attracted considerable attention, and often led to concrete reforms.¹⁵ At the same time, some people have raised serious ethical concerns and objections.¹⁶ An evident question is whether nudges should be counted as unacceptably manipulative or as an interference with freedom, rightly understood.¹⁷ To make progress on the ethical questions, it would be possible to refer to defining commitments of various kinds – involving autonomy, dignity, welfare, and self-government – and to ask whether some, many, or all nudges run afoul of those commitments.¹⁸ It would also be possible to imagine cases in which nudges might have illicit goals, in which case the question would be how to identify the category of goals that count as illicit.

This is a normative task, not an empirical one. But while the normative discussions continue, it is worthwhile to ask some empirical questions. What do people actually think about nudging and choice architecture? Do they have serious ethical objections to official nudges, or to nudges that take the form of law? Or do they believe that nudges are acceptable or desirable, even morally obligatory? Do they distinguish among nudges? What kinds of distinctions do they make?

The answers cannot, of course, dispose of the ethical questions. The issue is how to resolve those questions in principle, and empirical findings about people's answers are not decisive. Perhaps those answers are confused, insufficiently considered, or wrong. There is a risk that if people are responding to survey questions, they will not have time or opportunity to reflect, especially if those questions do not offer relevant facts (for example, about the costs and the benefits of the policies in question¹⁹). Even if their answers are reflective, perhaps people do

¹¹ See Thaler, *supra* note 1, at 309-322.

¹² See generally NEW PERSPECTIVES FOR ENVIRONMENTAL POLICIES THROUGH BEHAVIORAL ECONOMICS (Frank Beckenbach and Walter Kahlenborn eds., forthcoming 2015); HANDBOOK OF RESEARCH ON SUSTAINABLE CONSUMPTION (Lucia Reisch and John Thøgersen eds., 2015).

¹³ See generally Sendhil Mullainathan and Eldar Shafir, SCARCITY (2013).

¹⁴ See generally Douglas Hough, IRRATIONALITY IN HEALTH CARE: WHAT BEHAVIORAL ECONOMICS REVEALS ABOUT WHAT WE DO AND WHY (2014).

¹⁵ See generally Sunstein, *supra* note 5.

¹⁶ The best discussion is Riccardo Rebonato, TAKING LIBERTIES (2012). See also the various contributions to Special Issue, Review of Philosophy and Psychology (forthcoming 2015); White, *supra* note 1; Jeremy Waldron, "It's All For Your Own Good," NEW YORK REVIEW OF BOOKS (2014), <http://www.nybooks.com/articles/archives/2014/oct/09/cass-sunstein-its-all-your-own-good/>. Consider in particular this question: "Deeper even than this is a prickly concern about dignity. What becomes of the self-respect we invest in our own willed actions, flawed and misguided though they often are, when so many of our choices are manipulated to promote what someone else sees (perhaps rightly) as our best interest?"

¹⁷ T. M. Wilkinson, Nudging and Manipulation, 61 Political Studies 341, 354 (2013).

¹⁸ For a preliminary effort, see generally Cass R. Sunstein, *The Ethics of Nudging*, Yale J. Reg. (forthcoming 2015).

¹⁹ This is a reasonable concern about people's general approval of compulsory labeling of genetically modified organisms, see *infra* note 35, and also about their favorable attitude toward

not value autonomy or dignity highly enough, or perhaps they do not quite know what those concepts means. Perhaps people pay too little attention to social welfare,²⁰ or perhaps their judgments about social welfare are off the mark, at least if they are not provided with a great deal of information. Perhaps different nations, and different groups within the same nation, offer different answers, suggesting an absence of consensus. Behavioral scientists would emphasize a related point: People's answers to ethical questions, or questions about moral approval or disapproval, might well depend on how such questions are framed; slight differences in framing can yield dramatically different answers. Those differences are themselves a nudge; they can have major effects, and they are not easy to avoid.²¹

Here is a small example of how ethical judgments can depend on framing.²² If people are asked whether they think that young people should be valued more than old people, they will usually say, "certainly not." They will strenuously resist the idea that government should give a higher value to young lives than to old ones. But suppose that people are asked whether they want either (1) to save 70 people under age of 5 or (2) to save 75 people over the age of 80. It is reasonable to speculate (and evidence confirms) that most people will choose (1), thus demonstrating that they are willing to value a young person more than an old one.²³ It would be child's play to frame nudges so as to elicit one's preferred answer to ethical questions.²⁴

Notwithstanding these points, people's answers to carefully designed questions are interesting in themselves, because they show patterns of thinking among those who are not required to spend a great deal of time on them. They can also help to illuminate political, legal, and ethical problems, and for three different reasons. The first and most important is that in a democratic society, it is inevitable that public officials will attend to what citizens actually think. If citizens have strong ethical objections, democratic governments will hesitate before proceeding (if only because of electoral self-interest). Such objections can operate as a kind of presumptive or de facto veto. No public official will entirely disregard a strongly felt moral concern on the part of significant segments of the public. And if people do not have moral objections, and if they welcome nudges as helpful and desirable, public officials will be attentive to their views. Widespread public approval can operate as a license or a permission slip, or perhaps as a spur or a prod.²⁵

mandatory automatic enrollment in "green" energy (in a question that does not specify the costs or benefits of such energy).

²⁰ See Louis Kaplow and Steven Shavell, *Fairness Versus Welfare* (2006).

²¹ See generally *Perspectives On Framing* (Gideon Keren ed. 2010)

²² See also Shane Frederick, *Measuring Intergenerational Time Preference: Are Future Lives Valued Less?*, 26 *J. Risk and Uncertainty* 39, 40 (2003) (showing that people's preferences for life-saving programs depend on framing).

²³ See Maureen L. Cropper, Sema K. Aydede and Paul R. Portney, "Preference for Life Saving Programs: How the Public Discounts Time and Age," 8 *J. RISK AND UNCERTAINTY* 243, 258-259.

²⁴ For evidence, see *id.*

²⁵ I am bracketing here questions about interest-group dynamics and coalition formation, which can of course complicate official judgments. Politicians are interested in many things that bear on reelection, not merely the views of the median voter. And of course there are important differences between the legislative and executive branches on this count, with the latter

The second reason is epistemic: People’s judgments provide relevant information about to think about the ethical issues even if that information is not conclusive. It is not necessary to make strong claims about the wisdom of crowds, especially on contested ethical issues, in order to believe that an ethical judgment, on the part of those who might be subject to nudges, deserves respectful attention. Public officials should be humble and attentive to the views of others, and if strong majorities favor or oppose nudges, then their views are entitled to consideration.

The third reason involves the commitment to democratic self-government. If that commitment matters, officials should pay attention to what people think, even if they disagree.²⁶ It is true that people’s considered judgments might diverge from what emerges from brief surveys. And if public officials have a clear sense that an approach would reduce social welfare, there is a strong argument that they should not adopt that approach even if people would like them to do so – just as there is a strong argument that they should adopt an approach that increases social welfare even if people oppose it.²⁷ But when public officials are uncertain about whether an approach is desirable, it would be reasonable, in the name of self-government, for them to give consideration to the views of members of the public.

As we shall see, current research, including a nationally representative survey outlined here, supports a single conclusion: In general, people have no views, either positive or negative, about nudging in general; their assessment turns on whether they approve of the purposes and effects of particular nudges. As we shall see, strong majorities tend to be supportive of nudges of the kind that have been seriously proposed, or acted on, by actual institutions in recent years.²⁸ This enthusiasm extends across standard partisan lines; perhaps surprisingly, it unifies Democrats, Republicans, and independents. So long people believe that the end is both legitimate and important, they are likely to favor nudges in its direction. This is an important finding, because it suggests that most people do not share the concern that nudges, as such, should be taken as manipulative or as an objectionable interference with autonomy.²⁹ Revealingly, they are

frequently having more “space” for technocratic judgment. See Cass R. Sunstein, *The Most Knowledgeable Branch*, U Pa L Rev (forthcoming 2016).

²⁶ This statement is not meant to take a stand on contested issues about the precise role of the representative. The classic study is Hanna Pitkin, *THE CONCEPT OF REPRESENTATION* (1972).

²⁷ Public approval or disapproval might also be counted as an ingredient in social welfare, but at least in general, it is likely to be a modest one. Outside of highly unusual circumstances, the welfare effect of a requirement of calorie labels, or of automatic enrollment in a savings plan, will depend on its consequences for behavior and outcomes, not on whether people like those policies in the abstract.

²⁸ As discussed below, we could easily imagine nudges that would not attract much support; in fact we will encounter many such nudges. As we shall also see, ethical judgments about nudges in general might well be a product of examples that readily come to mind (a point suggesting the potential value of research into the psychology of ethical reactions to nudges and other policy tools, such as cap-and-trade and taxes).

²⁹ See White, *supra* note 1, at xiii; Edward Glaeser, *Paternalism and Psychology*, 73 U. Chi. L. Rev. 133, 135 (2006). This conclusion is a qualified one. As we shall see, there is preliminary evidence of some preference for educative over noneducative nudges, and also for a concern

far more negative about mandates and bans, even when they are taken to have perfectly legitimate ends; many people do care about freedom of choice as such, and they will reject many well-motivated policies that do not allow for it.³⁰

People are most likely to oppose those nudges that (a) promote what they see as illicit goals or (b) are perceived as inconsistent with either the interests or values of most choosers. A more particular finding, one that counts against some default rules, is that people *do not want choice architects to produce economic or other losses by using people's inertia or inattention against them*. In addition, people tend to prefer nudges that target deliberative processes to those that target unconscious or subconscious processes, and may react against the latter – though they do not by any means rule the latter out of bounds, and will often approve of them as well. When the political valence of nudging is clear, their evaluation of nudges much turns on that valence, which reinforces the general view that in most cases, it is people's assessment of the ends of particular nudges, rather than of nudging as such, that settles their judgments.

If people focus on particular nudges that they think to be ill-motivated, intrusive, threatening, or otherwise objectionable, they become likely to oppose nudges as such, and if they focus on particular nudges of which they approve, their overall evaluation tends to be positive. Moreover, transparency about nudging does not, in general, reduce the effectiveness of nudges, because most nudges are already transparent, and because people will not, in general, rebel against nudges. But this last conclusion must be taken with caution in light of ambiguities in the very idea of transparency and preliminary but suggestive evidence of potential “reactance”³¹ against certain nudges.

II. A Principled Public?

I devised a nationally representative survey involving thirty-four nudges. The survey was administered by Survey Sampling International and included 563 Americans, with a margin of error of plus or minus 4.1 percentage points. From their responses, two dominant principles emerge. *First*, Americans reject nudges that promote what they see as illicit ends (such as religious or political favoritism). *Second*, Americans reject nudges that they view as inconsistent with the interests or values of most choosers. By contrast, there is widespread support for nudges that are taken to have legitimate ends and to be consistent with the interests and the values of most choosers.

It follows that numerous nudges – default rules, warnings, and public education campaigns – are likely to attract bipartisan support, so long as people approve of their ends, and

with nudges that seem to target unconscious or nondeliberative processes. *See* Arad and Rubinstein, *supra* note 20, and *see generally infra*.

³⁰ *See* Ayala Arad and Ariel Rubinstein, *The People's Perspective on Libertarian Paternalistic Policies* (2015), <http://www.tau.ac.il/~aradayal/LP.pdf>. My own data, discussed below, finds widespread approval of nudges designed to promote savings and sex education, but widespread disapproval of mandates with exactly the same goals.

³¹ *See generally* Sharon Brehm and Jack Brehm, *PSYCHOLOGICAL REACTANCE: A THEORY OF FREEDOM AND CONTROL* (1981).

think that they are consistent with choosers' values and interests. Several of the policies tested here can be counted as highly tendentious and arguably manipulative. Nonetheless, they attracted majority support, with the single (and highly exotic) exception of subliminal advertising (which, surprisingly, receives substantial minority support in the context of efforts to combat smoking and overeating). It follows that Americans are reluctant to reject nudges as unacceptably manipulative. Their evaluations are dominated by their assessment of the legitimacy of the underlying ends.³²

As we will see, political divisions sometimes affect the *level* of support, because Democrats are more favorably disposed toward certain health and safety nudges than Republicans. And in cases that raise strong partisan differences, such divisions will map onto nudges as well. But across a wide range, clear majorities of Democrats and Republicans (and also independents) are in full agreement about what they support and what they reject.

A. Popular Nudges

In recent years, the federal government has adopted or promoted a large number of nudges.³³ Three of the most prominent include (1) mandatory calorie labels at chain restaurants;³⁴ (2) mandatory graphic warnings on cigarette packages³⁵ (struck down by a federal court of appeals³⁶); and (3) automatic enrollment in savings plans, subject to opt out.³⁷ The nationally representative sample found substantial majority support for all three policies, including support for (3) regardless of whether it consists of federal "encouragement" of such enrollment or a federal mandate for automatic enrollment, imposed on large employers.

About 87 percent of Americans favored calorie labels³⁸ and 74 percent favored graphic warnings. Both policies had strong majority support from Democrats, Republicans and

³² To be sure, provision of information about the consequences of nudges might unsettle some of people's responses, and perhaps move people in the direction of what follows from an all-things-considered welfare assessment. If so, any such movements would be consistent with the general claim here; they would merely reflect a more informed judgment about what ends would, in fact, be promoted by nudges. For example, people might be less enthusiastic about compulsory disclosure of uses of GMOs if they were convinced that such disclosure did not provide useful information and might mislead people.

³³ For examples, *see generally* Sunstein, *supra* note 5.

³⁴ 79 Fed. Reg. 71156.

³⁵ 75 Fed. Reg. 69524.

³⁶ On the FDA's effort to require graphic warnings on packages, *see* R.J. Reynolds Tobacco Co. v. U.S. Food & Drug Admin., 823 F. Supp. 2d 36 (D.D.C. 2011), *aff'd on other grounds*, 696 F.3d 1205 (D.C. Cir. 2012).

³⁷ For discussion of relevant laws and policies, *see generally* AUTOMATIC: CHANGING THE WAY AMERICA SAVES (William Gale et al. eds., 2009).

³⁸ Note that there were statistically significant differences with respect to calorie labels between Republicans (77 percent approval) and both Democrats (92 percent approval) and independents (88 percent approval).

independents. Overall, 80 and 71 percent respectively approved of encouraged and mandatory enrollment in savings plans. Here as well, all three groups showed strong majority support.³⁹

Table 1: American Attitudes Toward Prominent Recent Nudges

	Calorie labels	Graphic warnings (cigarettes)	Federal encouragement: auto-enrollment	Federal mandate: auto-enrollment
Total support (in percentages)	87/13	74/26	80/20	71/29
Democrats	92/8	77/23	88/12	78/22
Independents	88/12	74/26	75/25	67/33
Republicans	77/23	68/32	73/27	62/38

Three educational campaigns also attracted widespread approval. Respondents were overwhelmingly supportive of a public education campaign from the federal government to combat childhood obesity (82 percent approval, again with strong support from Democrats, Republicans, and independents). Similarly, they were highly supportive of a public education campaign from the federal government designed to combat distracted driving, with graphic stories and images (85 percent approval). About 75 percent of people favored a federal education campaign to encourage people not to discriminate on the basis of sexual orientation, though here there was a noteworthy division across party lines (85 percent of Democrats, 57 percent of Republicans, and 75 percent of independents).

Three other educational campaigns attracted majority support, but at significantly lower levels, and with only minority approval from Republicans. About 53 percent of Americans favored a federal requirement that movie theaters run public education messages to discourage people from smoking and overeating. Democrats showed higher approval ratings than Republicans (61 percent as opposed to 41 percent, with independents at 51 percent). By a very small majority (52 percent), Americans supported a public education campaign, by the federal government itself, to encourage people to give money to the Animal Welfare Society of America (a hypothetical organization) (59 percent of Democrats, 34 percent of Republicans, and 55 percent of independents; party was a statistically significant factor). This latter finding seems surprising; it could not easily be predicted that respondents would want their government to design a campaign to promote donations to an animal welfare society.

About 57 percent of people supported an aggressive public education campaign from the federal government to combat obesity, showing obese children struggling to exercise, and also

³⁹ Here as well, there were statistically significant differences between Democrats and Republicans for both policies and between Democrats and independents with respect to encouragement. (Encouraged: 88 percent of Democrats, 73 percent of Republicans, and 75 percent of independents. Mandated: 78 percent of Democrats, 62 percent of Republicans, and 67 percent of independents).

showing interviews with obese adults, who are saying such things as, "My biggest regret in life is that I have not managed to control my weight," and "To me, obesity is like a terrible curse." This question was designed to test people's reactions to a tendentious and arguably manipulative campaign, which might have been expected to receive widespread disapproval, as it did not. Indeed, one of the goals of the question was to establish such disapproval – but it was not found here. Here there was a significant disparity between Democrats (61 percent approval) and independents (60 percent approval) on the one hand and Republicans on the other (47 percent approval); the difference between the views of Democrats and those of Republicans views was statistically significant.

Table 2: American Attitudes Toward Five Educational Campaigns⁴⁰

	Childhood obesity	Distracted driving	Sexual orientation discrimination	Movie theaters	Animal Welfare Society	Obesity (arguably manipulative)
Total support (in percentages)	82/18	85/15	75/25	53/47	52/48	57/43
Democrats	90/11	88/12	85/15	61/39	59/41	61/40
Independents	81/19	84/16	75/25	51/49	55/45	60/40
Republicans	70/30	80/20	57/43	41/59	34/66	47/53

Most Americans were also supportive of multiple efforts to use choice architecture to promote public health and environmental protection. In recent years, there has been considerable discussion of “traffic lights” systems for food, which would use the familiar red, yellow, and green to demarcate health rankings.⁴¹ In the United States, the national government has shown no official interest in these initiatives, but with respondents in the nationally representative survey, the idea attracted strong support (64 percent). There was also majority approval of automatic use of “green” energy providers, subject to opt out⁴² – perhaps surprisingly, with support for automatic use of green energy whether it consisted of federal “encouragement” (72 percent) or instead a federal mandate on large electricity providers (67 percent).⁴³ In these cases, there were significant differences across partisan lines, but majorities of Democrats, Republicans, and independents were all supportive.

Most respondents were in favor of requiring companies to disclose whether the food they sell contains genetically modified organisms (GMOs) (86 percent approval).⁴⁴ There was strong

⁴⁰ Percentages may not total 100 due to rounding.

⁴¹ See Anne Thorndike et al., *Traffic-Light Labels and Choice Architecture*, 46 AM J. PREVENTIVE MEDICINE 143, 143 (2014).

⁴² See Cass R. Sunstein and Lucia Reisch, *Automatically Green*, 38 HARV. ENV. L. REV. 128, 134-135 (2014).

⁴³ On the difficulty of this question, see Sunstein and Reisch, *supra* note 33 at 156-157.

⁴⁴ In my view, this is not a good idea. See *id.* at 130; Cass R. Sunstein, “Don’t Mandate Labeling for Gene-Altered Foods,” BLOOMBERG VIEW (2013),

majority support (73 percent) for a mandatory warning label on products that have unusually high levels of salt, as in, "This product has been found to contain unusually high levels of salt, which may be harmful to your health." Perhaps surprisingly, most respondents (but not most Republicans) approved of a state requirement that grocery stores put their most healthy foods in prominent, visible locations (56 percent approval; 63 percent from Democrats, 43 percent from Republicans, 57 percent from independents). Respondents also supported a state requirement that people must say, when they obtain their drivers' license, whether they want to be organ donors (70 percent approval; 75 percent from Democrats, 62 percent from Republicans, 69 percent from independents).⁴⁵ For all of these policies, the differences between Democrats and Republicans were statistically significant.

Five other forms of choice architecture, which might be expected to be far more controversial, nonetheless obtained majority support. The first would list the name of the incumbent politician first on every ballot. It might be expected that this pro-incumbent nudge would be widely rejected, because respondents might not want the voting process to be skewed in favor of incumbents, and because any effort to enlist order effects might be seen as manipulative (as indeed it should be⁴⁶). But a bare majority (53 percent) approved of this approach, perhaps because most people believed that it would promote clarity, perhaps because they did not see the risk of bias from order effects.⁴⁷

There was also majority approval (53 percent) for the approach, recently adopted in Oregon, of automatically registering eligible citizens as voters, subject to opt-out.⁴⁸ Interestingly, most Republicans (61 percent) rejected this approach. One reason might be that they believe that people who do not take the time to register to vote ought not to be counted as voters. Another reason is that they might believe that Oregon's approach would favor Democrats. Yet another reason is that they might believe that such an approach would increase the risk of fraud.

By a modest majority, most people (58 percent) also approved of an approach by which women's last names would automatically be changed to that of their husband, subject to opt-out. This approach obtained majority support from Democrats, Republicans, and independents. This result is especially noteworthy in view of the fact that an approach to this effect would almost certainly be unconstitutional as a form of sex discrimination, even if it tracked behavior and

<http://www.bloomberg.com/news/articles/2013-05-12/don-t-mandate-labeling-for-gene-altered-foods>.

⁴⁵ Another study, discussed below, finds that most Americans reject a default rule to the effect that people would be presumed to be organ donors, subject to opt out. William Haggman et al., *Public Views on Policies Involving Nudges*, REV. OF PHIL. AND PSYCHOL. (forthcoming 2015).

⁴⁶ I am grateful to Richard Thaler for suggesting that I test this example, though I expected, wrongly, that Americans would disapprove of it.

⁴⁷ This is a case in which it might be confidently predicted that people's judgments would change if they were provided with more information.

⁴⁸ See Russell Berman, "Should Voter Registration be Automatic?", THE ATLANTIC (2015), <http://www.theatlantic.com/politics/archive/2015/03/should-voter-registration-be-automatic/388258/>.

preferences.⁴⁹ We might expect a difference between men and women on this question, but notably, 58 percent of both groups approved of this approach.

Finally, there was majority support for a federal labeling requirement for products that come from companies that have repeatedly violated the nation's labor laws (such as laws requiring occupational safety or forbidding discrimination). About 60 percent of participants supported that policy, with a significant difference between Democrats (67 percent approval) and Republicans (50 percent approval). There was also majority support for federally required labels on products that come from countries that have recently harbored terrorists. This approach attracted 54 percent approval – 56 percent from Democrats, 58 percent from Republicans, and 49 percent from independents.

Table 3: American Attitudes Toward Environmental and Public Health Nudges

	GMO labels	Salt labels	Healthy food placement	Traffic Lights	Organ donor choice	Encouragement: Green energy	Mandate: Green energy
Total support (in percentages)	86/14	73/27	56/44	64/36	70/30	72/28	67/33
Democrats	89/11	79/21	63/37	71/29	75/25	82/18	79/21
Independents	87/13	72/28	57/43	61/39	69/31	66/34	63/37
Republicans	80/20	61/39	43/57	57/43	62/38	61/39	51/49

Table 4: American Attitudes Toward Some Potentially Provocative Nudges⁵⁰

	Listing incumbent politician first	Automatic voter registration	Husband's last name	Mandatory manufacturing label: labor violations	Mandatory manufacturing label: aiding terrorists
Total support (in percentages)	53/47	53/47	58/42	60/40	54/46
Democrats	58/42	63/37	61/40	67/33	56/44
Independents	51/49	50/50	56/44	57/43	49/51
Republicans	47/53	39/61	57/43	50/50	58/42

B. Unpopular Nudges

⁴⁹ See *Craig v. Boren*, 429 U.S. 190, 200-204 (1978). For valuable discussion of the general topic, see Elizabeth F. Emens, *Changing Name Changing: Framing Rules and the Future of Marital Names*, 74 U Chi. L. Rev. 761, 772-774 (2007).

⁵⁰ Percentages may not total 100 due to rounding.

By contrast, twelve nudges were widely disapproved. Of these, seven involved uses of default rules. Two of these defaults were designed so as to be not merely provocative but also highly offensive, in the sense of violative of widely held principles of neutrality, and strong majorities took them exactly as they were designed.

Under the first, a state would assume that people want to register as Democrats, subject to opt out if people explicitly say that they want to register as Republicans or Independent. Of course a default rule of this kind should be taken as an effort to skew the political process (and it would certainly be unconstitutional for that reason).⁵¹ The overwhelming majority of people, including three-quarters of Democrats, rejected this approach (26 percent total approval; 32 percent of Democrats, 16 percent of Republicans, and 26 percent of independents, with statistically significant differences between Democrats and Republicans). The second was a state law assuming that people are Christian, for purposes of the census, unless they specifically state otherwise. Such a default rule could also be seen as an attempt to push religious affiliations in preferred directions (and it would similarly be unconstitutional).⁵² Here too there was widespread disapproval (21 percent overall approval; 22 percent of Democrats, 27 percent of Republicans, 17 percent of independents).

The third unpopular default rule (completing the set of unconstitutional nudges) involved a state law assuming that upon marriage, husbands would automatically change their last names to that of their wives, subject to opt out (24 percent total approval; 28 percent of Democrats, 18 percent of Republicans and 23 percent of independents). Interestingly, there was no gender disparity here (just as with the question that involved the opposite defaults⁵³); 24 percent of both men and women approved. With the fourth, the federal government would assume, on tax returns, that people want to donate \$50 to the Red Cross, subject to opt out if people explicitly say that they do not want to make that donation (27 percent approval; 30 percent of Democrats, 20 percent of Republicans, 28 percent of independents). The fifth was identical but substituted the Animal Welfare Society for the Red Cross. Not surprisingly, that question also produced widespread disapproval (26 percent approval; 30 percent of Democrats, 20 percent of

⁵¹ In principle, the problem would be most interesting in an area in which the default rule tracked reality. If most people are, in fact, Democrats, is it clearly objectionable if a city or state assumes that they are, for purposes of registration? The answer is almost certainly yes; political affiliations should be actively chosen, not assumed by government. This principle almost certainly has constitutional foundations (though it has not been tested): If a voting district consisted of 80 percent Democratic voters, it would not be acceptable to assume that all voters intend to register as Democrats. But I am aware that this brief comment does not give anything like an adequate answer to some complex questions about the use of “mass” default rules that track majority preferences and values. For discussion, *see* Cass R. Sunstein, CHOOSING NOT TO CHOOSE 77 (2015).

⁵² Here as well we could imagine interesting questions if the default rule tracked reality. If most people in a city or state are Christians, is it so clearly illegitimate to presume, for purposes of the census, that most people are Christians, subject to opt out? But with respect to religion, as with respect to politics, there is a strong social and constitutional norm in favor of official neutrality, which would be violated even if a particular default reflected majority preferences and values.

⁵³ *See supra*.

Republicans, and 25 percent of independents). Somewhat surprisingly, and revealingly, the numbers were essentially the same for two charities, even though it might be expected that presumed donations for the Red Cross would be more popular.

With the sixth, state government assumed that state employees would give \$20 per month to the United Way, subject to opt out. It might be expected that because state government and state employees were involved, approval rates might grow. But they did not (24 percent approval; 26 percent of Democrats, 17 percent of Republicans, and 25 percent of independents). With the seventh, a majority (64 percent) disapproved of a federal requirement that airlines charge people, with their airline tickets, a specific amount to offset their carbon emissions (about \$10 per ticket), subject to opt out if passengers said that they did not want to pay. Interestingly, a strong majority of Democrats (57 percent) disapproved of this approach, although the number for Republicans was significantly higher (75 percent).

Table 5: Unpopular Defaults

	Democrat registration	Christian on census	Wife's last name	Red Cross	Animal Welfare Society	United Way	Carbon emissions charge
Total support (in percentages)	26/74	21/79	24/76	27/73	26/74	24/76	36/64
Democrats	32/68	22/78	28/72	30/70	30/70	26/74	43/57
Independents	26/74	17/83	23/77	28/72	25/75	25/75	34/66
Republicans	16/84	27/73	18/82	20/80	20/80	17/83	25/75

The five other unpopular nudges involved information and education. With the first (and most extreme), a newly elected president adopted a public education campaign designed to convince people that criticism of his decisions is unpatriotic and potentially damaging to national security. There was overwhelming disapproval of this campaign (23 percent approval; 24 percent of Democrats, 21 percent of Republicans, 22 percent of independents). What is perhaps most noteworthy here is not majority disapproval, but the fact that over one-fifth of Americans, on essentially a nonpartisan basis, were in favor of this most unusual public campaign.

With the second, the federal government adopted a public education campaign designed to convince mothers to stay home to take care of their young children. Over two-thirds of respondents rejected this nudge (33 percent approval; 33 percent of Democrats, 31 percent of Republicans, 34 percent of independents). The third involved a government requirement that movie theaters run subliminal advertisements to discourage smoking and overeating. Here too, there was majority disapproval (41 percent approval; 47 percent of Democrats, 42 percent of Republicans, 35 percent of independents). It is noteworthy and surprising, however, that over two-fifths of people actually supported this requirement.

With the fourth, the federal government would require all products that come from a Communist country (such as China or Cuba) to be sold with the label, "Made in whole or in part under Communism." Slightly over half of respondents disapproved of this requirement (44 percent approval; 47 percent of Democrats, 43 percent of Republicans, 42 percent of independents). With the fifth, a majority (59 percent) also rejected a public education campaign from the federal government, informing people that it is possible for people to change their gender from male to female or from female to male, and encouraging people to consider that possibility "if that is really what they want to do." There is yet another surprise here, which is that this somewhat adventurous campaign was endorsed by 41 percent of respondents; note that approval rates differed between Democrats (49 percent) and Republicans (29 percent; independents, 38 percent).

Table 6: Unpopular Education Campaigns and Disclosure⁵⁴

	Unpatriotic criticism	Stay-at-home-mothers	Subliminal advertising	Mandatory manufacturing label: Communism	Transgender
Total support (in percentages)	23/77	33/67	41/59	44/56	41/59
Democrats	24/76	33/67	47/53	47/53	49/51
Independents	22/78	34/67	35/65	42/58	38/62
Republicans	21/79	31/69	42/58	43/57	29/71

C. Why Are Some Nudges Unpopular?

1. Implicit Principles

What separates the approved nudges from the rejected ones? Two principles seem to dominate the cases. First, people *reject nudges that are taken to have illegitimate goals*. In a self-governing society, it is illegitimate to attempt to convince people that criticism of a public official is unpatriotic. At least in the United States, nudges that favor a particular religion or political party will meet with widespread disapproval, even among people of that very religion or party.⁵⁵ This simple principle justifies a prediction: Whenever people think that the motivations of the choice architect are illicit, they will disapprove of the nudge. To be sure, that prediction might not seem terribly surprising, but it suggests an important point, which is that people will

⁵⁴ Percentages may not total 100 due to rounding.

⁵⁵ We could, of course, imagine a nation in which favoritism on the basis of religion or party would attract widespread support, and might be seen as analogous to a default rule in which women's last name changes to that of their husband (which approved, it will be recalled, by a majority of respondents here). In such a nation, a default rule in favor of the most popular party, or the dominant religion, might be taken to track people's preferences and values, and not to be a violation of the governing conception of neutrality at all. *See notes supra*, for brief accounts of the competing view.

not oppose (for example) default rules and warnings as such; everything will turn on what they are nudging people *toward*.⁵⁶ By contrast, mandates do run into some opposition simply because they are mandates.⁵⁷ When there are partisan differences in judgments about nudges, it is often because of partisan disagreement about whether the relevant motivations are legitimate. Resolution of such disagreements would of course depend on judgments having nothing to do with nudging as such.

Second, people oppose nudges *that are inconsistent with the interests or values of most choosers*. The most direct evidence is the finding that while most people support automatic name change for women, they reject automatic name change for men. The evident reason is that the former tracks people's interests and values (at least in general), while the latter countermands them.⁵⁸ Any default rule, of course, is likely to harm at least some people; some people will want, for good reason, to opt out, and some people who want to opt out will not do so, perhaps because of inertia and procrastination. This point is a potential objection to default rules in general.⁵⁹ By itself, however, that fact is not enough to produce public opprobrium. Recall that there is majority approval for automatic voter registration and automatic enrollment in pension plans and green energy, apparently because respondents think that those nudges are in most people's interests.⁶⁰ Recall too that most respondents are favorably disposed public education campaigns designed to combat obesity and discrimination on the basis of sexual orientation. By contrast, most people oppose public education campaigns to encourage women to stay at home and to inform people that they can change their gender, apparently on the ground that those campaigns are inconsistent with what people regard as prevailing interests and values.⁶¹

⁵⁶ The striking findings of "partisan nudge bias" are fully consistent with this claim. See the discussion below of David Tannenbaum, Craig Fox and Todd Rogers, *On the Misplaced Politics of Behavioral Policy Interventions* (2014), <http://home.uchicago.edu/~davetannenbaum/documents/partisan%20nudge%20bias.pdf>.

⁵⁷ See note supra.

⁵⁸ Here as well, we could easily imagine a population that would reverse these results. Suppose that one believes that automatically assuming that wives take their husbands' last names undermines sex equality, and the automatically assuming that husbands take their wives' last names promotes sex equality. For those who have these beliefs, and are committed to sex equality, reversing the majority's views might seem attractive.

⁵⁹ See Rebonato, supra note 1, at 82-83; Ryan Bubb and Richard Pildes, *How Behavioral Economics Trims its Sails and Why*, 127 Harv. L. Rev. 1593, 1599 (2014).

⁶⁰ Note, however, that savings defaults are importantly different from green defaults. The former are adopted because they are in the interest of choosers; money that would go to take-home pay goes into savings, and so choosers do not lose anything on net (while also saving for retirement). The latter are adopted because they help to solve a collective action problem. With respect to green defaults, the question did not specify whether people would have to pay for green energy. Not surprisingly, people are more likely to opt out if they would. See Simon Hedlin and Cass R. Sunstein. Does Active Choosing Promote Green Energy Use? Experimental Evidence, *Ecology L.Q.* (forthcoming 2016).

⁶¹ To be sure, there is an ambiguity in these findings. Do respondents reject nudges that are (a) inconsistent with *their own* interests or values or (b) inconsistent with the interests or values of *most choosers*? On this question, the findings here do not provide a clear test. When respondents

When people are deciding whether to favor default rules, the size of the group of disadvantaged people undoubtedly matters. If a default rule harms a majority, it is unlikely to have much appeal. If the disadvantaged group is large (but not a majority), people might reject a default rule and favor active choosing instead. The precise nature of this principle remains to be tested, but most respondents appear to accept a third principle: *Before certain losses can occur, people must affirmatively express their wishes*. The principle forbids the state from taking certain goods by default.⁶² It is relevant here that most respondents favor a state requirement that when obtaining their drivers' license, people indicate whether they want to be organ donors (and thus favor active choosing), even though another survey, discussed below, finds that most Americans reject a default rule in favor of being an organ donor.⁶³

Note in this regard that strong majorities of people reject automatic charitable donations of diverse kinds. The apparent concern is that as a result of inertia, procrastination, or inattention, people might find themselves giving money to a charity even though they do not wish to do so. We might therefore complement the third principle with a fourth and narrower one, which can be seen as a specification: *Most people reject automatic enrollment in charitable giving programs, at least if they are operated by public institutions*. Though it does not involve money, the case of carbon offsets can be understood in similar terms; while it does not involve a charitable donation, and instead might be seen as an effort to prevent a harmful act, people appear to want active consent.⁶⁴ We do not yet know the exact boundaries of apparent public skepticism about default rules that would give away people's money without their active consent,⁶⁵ but there is no doubt that such skepticism exists.

We have seen that people generally favor disclosures that, in their view, bear on health and safety (salt content, GMOs). At the same time, the results leave open the question whether and when people will favor mandatory disclosures that involve political issues associated with production of a product rather than the health and environmental effects of product itself. Americans seem closely divided on that question. With repeated violations of the nation's labor laws, and nations that harbor terrorism, such disclosure achieved majority support – but not with products coming from Communist nations. People might well demand a certain threshold of

reject nudges, they probably believe that the nudges that are inconsistent with their own interests or values are also inconsistent with the interests or values of most choosers. It would be interesting, and possible, to pose questions that would enable us to choose between (a) and (b).

⁶² Whether this principle is triggered will depend on a theory of entitlement, from which any account of “losses” will flow. In the questions here, that issue is not especially complicated. If a default rule will ensure that people give money to specified charities (subject to opt out), it will impose a loss. But we could imagine harder cases – as, for example, with adjustments in the social security program, where losses and gains might not be self-evident, and might be subject to framing.

⁶³ See page 18 *infra*.

⁶⁴ Framing might matter here, and note that in most Sweden, citizens are supportive. See Hagman et al., *supra* note 36, discussed below.

⁶⁵ A natural question is whether people would reject an automatic donation program from private employers, subject to opt-out.

egregiousness, in terms of the behavior of those who produce a good or service, before they will want to require disclosure of that behavior. On this question, partisan differences are to be expected, because people will disagree about whether the relevant threshold has been met, and about what it exactly is.

It is tempting, and not inconsistent with the data, to suggest that people's reactions to nudges also show the influence of a fifth principle: People reject nudges *that they regard as unacceptably manipulative*.⁶⁶ The subliminal advertising finding can be taken as support for this principle. But what counts as unacceptable manipulation? Most people are in favor of graphic warning labels on cigarettes; they like default rules (if consistent with people's values and interests); a majority favors a mandatory cafeteria design to promote healthy eating; people approve of a graphic campaign to discourage distracted driving; with respect to obesity, a majority favors a somewhat tendentious public education, one that could plausibly be characterized as manipulative. No one likes manipulation in the abstract, but there do not appear to be many cases in which people are willing to reject nudges as unacceptably manipulative, at least if they have legitimate ends and are taken to be in the interest of most choosers.

2. Partisanship

What is the role of partisan differences? Democrats and Republicans will sometimes disagree, of course, about whether the goals of a particular nudge are illicit, and they will also disagree, on occasion, about whether a nudge is consistent with the interests or values of choosers.⁶⁷ For example, those who disapprove of abortion will be especially likely to support nudges that are designed to discourage abortion; those who do not disapprove of abortion will be unlikely to support such nudges. Imagine an anti-abortion nudge in the form of a law requiring pregnant women seeking abortions to be presented with a fetal heartbeat or a sonogram. We can predict, with a high degree of confidence, that Democrats would show lower approval ratings than Republicans. My own study, on Amazon's Mechanical Turk, finds exactly that: About 28 percent of Democrats approve but 70 percent of Republicans.⁶⁸ With respect to a public education campaign informing people that they can change genders, the significant difference between Democrats and Republicans should not come as a big surprise.

But there is another and more general division as well. Even when majorities of Democrats, Republicans, and independents support a particular initiative, the level of support is sometimes higher within one group than within another.⁶⁹ Even if the underlying end is broadly shared – as it is, for example, in the area of public health – some subset of Republicans

⁶⁶ In fact I hoped to provide general support for that principle, but was unable to do so.

⁶⁷ See the discussion of partisan nudge bias in *id.*

⁶⁸ The precise question asked people whether they approve or disapprove of a “state requirement that pregnant women must see a sonogram of their fetus, and hear its heartbeat, before proceeding to have an abortion.” Interestingly, only about one-third of independents approved, essentially the same as Democrats.

⁶⁹ It would of course be easy to design nudges that would show an opposite pattern, as with nudges that influence people in directions that are most favored by Republicans. See Tannenbaum et al., *supra* note.

sometimes seem skeptical of government nudges, taken as such, and *will therefore disapprove of them even if they do accept the legitimacy of the end and do not think that the nudge is inconsistent with choosers' interests or values*. Some Republicans, and undoubtedly some Democrats and independents, appear to support another principle: *There should be a rebuttable presumption against nudging, at least if the government can avoid it*. The survey does not provide conclusive evidence that some people embrace this principle, but it is highly suggestive. Many people reject graphic health warnings on cigarette packages (26 percent), an educational campaign for childhood obesity (18 percent), an educational campaign for distracted driving (15 percent), and a traffic lights system for food (36 percent). It is reasonable to infer that those who oppose such nudges agree that they have legitimate ends and are in the interest of most choosers – but nonetheless do not favor government intervention.

It is important to see that the strength of any anti-nudge presumption will vary with the particular issue, with partisan affiliations, and with competing views about the role of government.⁷⁰ In some of the cases, Republicans are more skeptical of nudges than are Democrats. With calorie labels and childhood obesity campaigns, for example, there are significant differences in the levels of support within the two groups, even though majorities of both are supportive. But in some cases, Republicans are undoubtedly more enthusiastic about nudges than are Democrats, as in the case of the anti-abortion nudge.⁷¹ The fact that few such cases are found here is an artifact of the particular questions. If the issue involved automatic enrollment in programs by which high-income earners automatically receive capital gains tax benefits, for example, we can predict, with some confidence, that Republicans would be more supportive than Democrats. Evidence supports that prediction.⁷²

Nationally representative surveys in Europe find strikingly similar results. In the United Kingdom, Germany, Denmark, Hungary, France, and Italy, citizens are broadly supportive of nudges that attract support in the United States, and generally oppose nudges that Americans oppose (such as subliminal advertising and default payments to charities). Indeed, the levels of support are close to those in the United States, suggesting the possibility that in a wide array of nations, people are in essential agreement.⁷³ To be sure, there are some differences. Puzzlingly, nudges attract somewhat lower levels of support in Denmark and Hungary than in other nations. But the basic story seems to be one of an international consensus, at least across those nations for which we have data.

3. Nudges vs. Mandates

I have suggested that many people are skeptical of mandates, even if they have legitimate ends. To test that proposition, I used Amazon's Mechanical Turk (with 309 participants) to test people's reactions to three pairs of initiatives, with exactly the same goals but either nudges or

⁷⁰ Hagman, *supra* note, offers some supportive findings on this count. For example, those with an individualistic worldview, as such, were more likely to disapprove of nudges. See *id.*

⁷¹ See Tannenbaum et al., *supra* note, at 8, discussed below.

⁷² *Id.*

⁷³ See Reisch and Sunstein, *supra* note.

mandates. The initiatives involved savings (with a 3 percent contribution rate); safe sex education; and education about intelligent design. In all cases, the nudge was far more popular than the mandate (and received majority support), and indeed, in all cases, the mandate ran into majority disapproval. So long as people could opt out, the savings initiative received 69 percent approval; same-sex education, 77 percent; and intelligent design, 56 percent. As mandates, the three fell to approval rates of 19 percent, 43 percent, and 24 percent respectively.

It follows that many people do oppose mandates as such, even when they are enthusiastic about the underlying ends, and are supportive of nudges that are designed to promote those ends. We have seen majorities of Americans have no general view about nudges as such; their assessments turn on the principles outlined here. With mandates, people do have a general view, and it is not favorable. Of course it is also true that people would support mandates of various kinds, especially when harm to others is involved (as in the case of the criminal law and many regulatory requirements).

An independent study by Janice Jung and Barbara Mellers reaches similar conclusions.⁷⁴ They ask about twenty-three nudges, including automatic enrollment in savings plans, graphic warnings on cigarettes, spending alerts for consumers whose credit card use is approaching the limit, default displays in grocery stores that make healthy goods conspicuous and easier to reach, and default food orderings in school cafeterias, with salads and lower calorie foods to promote healthy choices. One of their central findings was that majorities of Americans supported most of these nudges. I will return to their study, because it has some important wrinkles.

D. Sweden and the United States

Surveying 952 people in Sweden and the United States, William Hagman, David Anderson, Daniel Vastfjall and Gustav Tinghog similarly find that strong majorities of both Swedes and Americans support a variety of nudges.⁷⁵ The significance of the conclusion is fortified by the fact that along many dimensions, Swedes and Americans differ – and yet their ethical evaluations are remarkably similar. Consider five examples, each involving classic nudges from private or public institutions:

1. Avoiding tax evasion (appealing to conscience). *Many countries have a problem with its citizens not paying taxes, which costs society a considerable amount of money. Some countries have therefore started to send out information to the taxpayers with the encouraging message “To pay your taxes is the right thing to do”. The idea with this intervention is to give tax evaders a bad conscience and therefore increase their motivation to pay their taxes.*

2. Smoking discouragement (graphic warnings). *Smoking often leads to addiction and has a negative effect on the health of the individual. To more clearly show the negative effects of smoking, many countries have started to add deterrent pictures on the cigarette packages. These*

⁷⁴ See Janice Jung and Barbara A. Mellers, American Attitudes Toward Nudges, *Journal of Judgment and Decision Making* (forthcoming 2015).

⁷⁵ Hagman, *supra* note.

images display damaged organs that can be a consequence of long term smoking. The idea with this intervention is to discourage people to start smoking and motivate people that are smokers to quit.

3. Cafeteria (accessibility). *Overconsumption of calorie rich food can lead to a deteriorating health. In an attempt to get their employees to eat healthier, a company rearranged its cafeteria. Healthy food was placed at eye-level and easily available for the visitors of the cafeteria. Unhealthy food, such as candy or snacks was placed behind the counter to make them less visible and accessible for the visitors in the cafeteria. The idea with this intervention is to encourage the consumption of healthier alternatives to improve the health of the employees.*

4. Energy conservation (social norms). *Most households today are over consuming energy, which leads to a waste of resources both for the household and society. Therefore energy companies that succeed in decreasing the average energy consumption among households receive government subsidies. To motivate households to lower energy consumption, an energy company attached some complementary information to the energy bill. The information added contained a comparison of energy consumption between the customer's household and other households in the neighborhood.*

If the customer's energy consumption was lower than the neighbors', a happy smiley face was shown on the bill. However, if the customer's energy consumption was higher than the neighbors', a sad face was shown. The idea with this intervention is that the feedback that these faces give will have a positive effect on the energy consumption of the households.

5. Food labeling (disclosure). *It can be difficult to tell which food products that are healthy and which are not, therefore a food chain started to label their products with stickers which look similar to a green and red stoplight or traffic signal. Healthy food, which is rich in minerals, vitamins, and has a low amount of fat and sugar are marked with a green tag. Unhealthy food, which is rich in fat and sugar, and has a low amount for minerals and vitamins receive a red tag. The idea with this intervention is to make it easier to make healthy choices.*

Hagman et al. find that over 80 percent of both Swedes and Americans think that the tax evasion policy is acceptable. Over eighty percent favor disclosure to promote healthy choices (86.9 percent of Swedes, 83.8 of Americans). Hagman et al. find comparably high levels of support for both smoking discouragement policy (81 percent of Swedes, 72.6 percent of Americans) and cafeteria redesign (82.6 percent of Swedes and 76.4 percent of Americans). About two-thirds of both Swedes (66.4 percent) and Americans (67.1 percent) support the energy conservation nudge.

Consistent with expectations, Swedes are somewhat more enthusiastic than Americans about nudges, but only two of the tested nudges fail to attract majority support in either country, with 42.9 percent and 45.7 percent of Americans (but over 60 percent of Swedes) favoring these:

4. Organ donation (default rule). *There is currently a lack of organ donors in many countries. In some places, to become an organ donor the individual has to make an active choice and register as an organ donor with the appropriate authority. If no choice is registered, the*

individual is assumed to be unwilling to donate in event of an accident (so called Opt-In). In previous surveys most people report that they are willing to be an organ donor but have not registered.

One way to increase the number of organ donors could be to automatically enroll people as organ donors unless otherwise specified (so called Opt-Out). In other words, it is up to the individual to register at the appropriate authority if they are unwilling to donate their organs in the event of an accident. The aim with this intervention (Opt-Out) is to increase the number of organ donors.

5. Climate compensation (default rule). *Carbon dioxide emissions in connection with flying have a negative effect on the environment. To compensate for this, there is usually a voluntary fee that travelers can add to the final price. The money from this fee goes to projects to reduce emissions of carbon dioxide to a corresponding level of the emission caused by the flight. To increase the number of travelers that choose to pay the climate compensation fee, it can automatically be added to the final price. Then, if a traveler does not want to pay the fee, the traveler instead has to make an active choice not to pay the fee (also known as Opt-Out). The idea with this intervention (Opt-Out) is to increase the number of travelers that compensate for climate.*

What accounts for the majority's rejection of these nudges in the United States (and significant opposition in Sweden as well)? It is reasonable to speculate that the answer lies in this ethical principle, consistent with my own study presented above: *choice architects should not produce losses by using people's inertia or inattention against them.* For decisions that have a significant degree of moral sensitivity (organ donation) or sheer cost (climate change compensation), many people reject a default and favor active choosing. The apparent idea – for which more empirical testing would be desirable -- is that if a default rule would lead people to end up with an outcome that is morally troubling (to them) or expensive (for them), that rule is objectionable and active choosing is much better.⁷⁶

We could confidently predict widespread disapproval of a default rule announcing that voters will, by default, be taken to support incumbent politicians (subject to opt out), or that employees will, by default, give 10 percent of their earnings to their employer's children, or to their employer's favorite charity. Consistent with the findings in Part I, it is reasonable to think that in evaluating defaults, people are sensitive to the question whether the result is to track the desires and values of all or most of the population that is subject to them.

That lesson is a significant one, but the most important finding is the apparently widespread endorsement of nudges, whether the goal is to protect third parties (as in the case of tax evasion) or the self (as in the case of smoking discouragement).⁷⁷ In general, Hagman et al.

⁷⁶ For relevant discussion, see Sunstein, *supra* note 41, at 88.

⁷⁷ A qualitative study in the specific context of health behavior finds similar results. See Astrid F Junghans et al., *Under consumers' scrutiny - an investigation into consumers' attitudes and concerns about nudging in the realm of health behavior*, 15 BMC PUB. HEALTH 336 (2015). The central conclusion is that "most consumers approve of the concept, especially in the realm of

find that larger percentages of people are more supportive of third-party nudges, but the difference is not large, and many nudges that are designed to protect the self receive substantial support. Not surprisingly, Hagman et al. also find that those with an individualistic worldview are (somewhat) less likely to embrace nudges. More strikingly, they find that respondents *who are more prone to analytical thinking are less likely to see nudges as intruding on freedom of choice*. It may be that analytical thinkers are more able to see that the relevant nudges sufficiently preserve freedom, whereas others have a more immediate and visceral reaction, leading to a more skeptical (and erroneous) conclusion.

The Swedish-U.S. differences remain noteworthy even in the midst of the general agreement between people in the two nations. It would of course be valuable to test diverse categories of nudges and to see what kinds of division might emerge. We could explore whether there are systematic differences between “harm-to-self” nudges and “harm-to-others” nudges. For reason suggested above, the former might well be more controversial than the latter, at least as a general rule. But everything is likely to depend on the nature of the particular nudge. Some “harm-to-self” nudges, such as calorie labels and automatic enrollment in pension plans, might well attract more support than some “harm-to-others” nudges, such as default rules that promote use of environmentally-friendly (but expensive) energy providers.⁷⁸

We could also see whether people reject particular categories of nudges -- for example, those that seem to involve especially personal or intimate choices. It is fair to assume that both Swedes and Americans would be unhappy with a system of “default spouses.” Consistent with the national survey presented above, it is also fair to assume that Swedes and Americans would reject nudges that seem not to promote, or to reduce, the welfare of those they affect. Consider nudges that would promote dangerous activities or unhealthy eating, or that would encourage behavior that people generally believe to be harmful to third parties or otherwise unethical. We could easily imagine a nationally representative survey that would find widespread opposition to nudges that fall in such categories.

III. Nudging System 1

A. Two Systems

health behavior, given particular conditions: 1. Nudges should be designed for benefiting individuals and society; 2. consumers comprehend the decision-making context and the reasoning behind the promotion of the targeted behavior. Interviews revealed very limited concerns with manipulative aspects of nudges.” *Id.* at 336. The authors add: “For governments currently employing or considering the implementation of nudges and paternalistic strategies into their range of policy instruments the findings speak in favor of such strategies despite criticisms from some scholars and media while simultaneously call for more information about nudges.” *Id.* at 349.

⁷⁸ See generally Simon Hedlin and Cass R. Sunstein, *Does Active Choosing Promote Green Energy Use? Experimental Evidence* (2015), *Ecology Law Quarterly* (forthcoming 2016), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2624359.

In behavioral science, it has become standard to distinguish between two families of cognitive operations in the human mind: System 1, which is fast, automatic, and intuitive, and System 2, which is slow, calculative, and deliberative.⁷⁹ System 1 is distinctly associated with identifiable behavioral biases, especially in unfamiliar or unusual situations.⁸⁰ To be sure, System 2 can and does err; some math problems are hard, and people can perform exceedingly well through fast and frugal heuristics.⁸¹ Professional tennis players have educated Systems 1, and they tend to know exactly what shot to hit in an instant; something similar can be said about experienced doctors, lawyers, and engineers.⁸² But there is a close connection between behavioral biases and the automatic system.

Because of the operation of System 1, for example, many people show “present bias,” focusing on the short-term and downplaying the future.⁸³ People sometimes deal poorly with probability, in part because they use heuristics, or mental shortcuts, that sometimes lead them in unfortunate directions.⁸⁴ With respect to probability, people’s intuitions can go badly wrong, in the sense that they can produce serious mistakes, including life-altering ones.⁸⁵ Most people also tend to be unrealistically optimistic.⁸⁶

With the distinction between deliberative and automatic processing in mind, we might want to distinguish between nudges that address System 1 and nudges that address System 2.⁸⁷ Many of the most powerful arguments against nudging appear to focus on “System 1 nudges” and to suggest that they are distinctly objectionable.⁸⁸ If government or the private sector is attempting to influence people by targeting or exploiting their automatic systems, or by enlisting their biases, it might seem to be engaged in manipulation, and to be treating people without respect.⁸⁹ It might also appear to be disparaging their agency. On this view, nudges that inform System 2 might seem far better, because they help people to reflect, or to improve their deliberative capacities.⁹⁰

B. Which Nudges Do People Prefer?

⁷⁹ See Daniel Kahneman, *THINKING, FAST AND SLOW* 20 (2011).

⁸⁰ See *id.* at 415-416.

⁸¹ See generally Gerd Gigerenzer et al., *SIMPLE HEURISTICS THAT MAKE US SMART* (2000). An excellent discussion of the underlying debate is Mark Kelman, *THE HEURISTICS DEBATE* (2010).

⁸² See Gary Klein, *SEEING WHAT OTHERS DON’T* (2015); Gary Klein, *SOURCES OF POWER* 33-34 (1999).

⁸³ For references and discussion, see Sunstein, *supra* note, at 35-36.

⁸⁴ See Kahneman, *supra* note, at 428-430.

⁸⁵ For a powerful demonstration, see Daniel Chen et al., *Decision-Making under the Gambler’s Fallacy: Evidence from Asylum Judges, Loan Officers, and Baseball Umpires* 1-2 (2014), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2538147.

⁸⁶ See generally Tali Sharot, *THE OPTIMISM BIAS* (2011).

⁸⁷ This distinction is tested at least indirectly in Arad and Rubinstein, *supra* note 20.

⁸⁸ This is one way to read Till Grine-Yanoff and Ralph Hertwig, “Nudge Versus Boost: How Coherent Are Policy and Theory?,” *25 MIND & MACHINES* (2015).

⁸⁹ See Waldron, *supra* note.

⁹⁰ See Grine-Yanoff and Hertwig, *supra* note.

But do people actually care about the difference? Exactly when and how? These questions can be tested, as Gidon Felsen and his colleagues have shown.⁹¹ Notice, for example, the difference between two scenarios, involving nudges that are designed to increase savings.⁹²

(1) The new design works like this—with every annual salary increase you are provided information in the form of a series of icons representing tropical beaches that shows how much extra leisure you are likely to be able to afford during your retirement by investing different percentages of your increased salary; larger investments now translate into more retirement savings later. You can still choose to keep the entire salary increase instead of investing it, but the information provided results in a subconsciously-driven bias towards investment; in other words, the decision to invest is made more likely as a result of subconscious deliberation. Studies have shown that implementing this policy leads to an increase in retirement savings.

(2) The new design works like this—with every annual salary increase you are provided information in the form of a detailed table of your earnings that shows how much extra money you are likely to have during your retirement by investing different percentages of your increased salary; larger investments now translate into more retirement savings later. You can still choose to keep the entire salary increase instead of investing it, but the information provided results in a consciously-driven bias towards long-term investment; in other words, the decision to invest is made more likely as a result of conscious deliberation. Studies have shown that implementing this policy leads to an increase in retirement savings.

The difference is that (1) exploits a “subconsciously-driven bias” whereas (2) does not. Or consider the difference between two approaches designed to promote healthy eating:

(1) The new design works like this — the cafeteria has been revamped so that unhealthy foods, such as candy bars, potato chips, and the like are not as conveniently located. You can still choose whichever foods you would like, but moving the location of the unhealthy food in the cafeteria results in a subconsciously-driven bias towards healthy eating choices; in other words, the decision to eat healthy foods is made more likely without the need for conscious deliberation. Studies have shown that implementing this policy leads to healthier eating habits.

(2) The new design works like this - the cafeteria has been revamped so that all foods have their nutritional content clearly displayed. You can still choose whichever foods you would like, but the nutritional information results in a consciously-driven bias towards healthy eating choices; in other words, the decision to eat healthy foods is made more likely as a result of conscious deliberation. Studies have shown that implementing this policy leads to healthier eating habits.

Here as well, the difference is between an approach that targets “a subconsciously-driven bias” and one that focuses on “conscious deliberation.” Such questions allow for a test of this

⁹¹ See Gidon Felsen et al., *Decisional Enhancement and Autonomy: Public Attitudes Toward Overt and Covert Nudges*, 8 *Judgment and Decision Making* 203, 203 (2012).

⁹² *Id.* at 211.

hypothesis, connected with the earlier discussion of manipulation: *people are more likely to object to nudges that appeal to unconscious or subconscious processes*. Surveying 2,775 people in Canada and the United States, Felsen et al. find that people do indeed show a modest preference for nudges that lack that characteristic.⁹³ In a range of cases – involving not only healthy eating and savings but also wise investing and prudent online purchasing – people are moderately more likely to favor approaches that involve reflection and deliberation.

In the experimental design, subjects were not asked directly whether they preferred one nudge to another. Instead they were asked whether they would be more or less likely to accept a job offer from a company that offered a particular nudge or a company that did not (the neutral condition). For about half of the respondents, the comparison was between a System 1 nudge and the neutral condition. For the other half, the comparison was between a System 2 nudge and the neutral condition. The relevant scale ranged from 1-10, with 1 meaning “much less” likely to accept a job offer, and 10 meaning “much more.” The authors compared the effect of the System 1 nudge and the System 2 nudge on people’s likelihood of accepting a job offer. They found that in aggregate, people showed an increased willingness to accept job offers with a System 2 nudge (on average, around 8 on the 1-10 scale) as compared to those with an System 1 nudge (on average, around 6 on the 1-10 scale).⁹⁴

It is important to see that while people were more favorably disposed to System 2 nudges, they found System 1 nudges to be a positive inducement as well, generally concluding that they would increase the likelihood that they would accept a job offer.⁹⁵ Nonetheless, System 2 nudges were preferred. Why? A possible reason is that people do not like being manipulated and think that when nudges appeal to unconscious or subconscious processes, they compromise individual agency. In strong support of this speculation, Felsen et al. find that when conscious processing is involved, people believe that the resulting decisions are more “authentic,” evidently in the sense that those decisions reflect the chooser’s own agency. They conclude that their evidence supports “the idea that preserving the individual’s capacity for making authentic decisions is an important condition for the acceptability of decisional enhancement programs.”⁹⁶

Recall, however, that the difference in people’s reactions is modest; it is not as if people systematically approve System 2 nudges and systematically disapprove System 1 nudges. Moreover, there is reason to suspect that when people believe that some kind of behavioral bias – such as a self-control problem -- is genuinely at work, they will become more receptive to nudges that target unconscious or subconscious processes. Felsen et al. find intriguing support for this suspicion, for in one scenario (involving eating), people were equally favorable to System 1 and System 2 nudges *when they wanted help*.⁹⁷ (The particular question, with answers

⁹³ *Id.* at 205, 208.

⁹⁴ *Id.* at 205. I am simplifying some aspects of their analysis; *see id.* at 203-205 for details.

⁹⁵ *Id.* at 205.

⁹⁶ *Id.* at 206.

⁹⁷ *Id.* at 206-207. Note that when people wanted help, they were (not surprisingly) more likely to favor some kind of nudge over the neutral option. *Id.* at 206. But in most of the scenarios, they continued to show a relative preference for the System 2 nudge; the healthy eating scenario was

on a 9-point scale, was “To what extent do you feel like you could use help making healthier eating choices in the face of the availability of unhealthy but tasty foods?”) If people are aware that they are suffering from a problem of self-control, and if they want to overcome that problem, an approach that targets System 1 might be unobjectionable or even welcome. The conclusion might well be fortified if people believe that existing decisions are already a product of unconscious processing. In such cases, it might be acceptable to meet fire with fire.

As Felsen et al. suggest, “covertly influencing decision processes such that the resulting decision is *aligned with higher-order* desires may actually enhance autonomy, especially in situations in which the target population is known to want help with a given behavior.”⁹⁸ They suggest that “respondents who wanted help with eating decisions may have been more likely to recognize that food choices are often subconsciously driven, and were therefore just as likely to favor the decisional enhancement program with covert influences as the program with overt influences, whereas respondents who did not want help with food choices reverted to the expected preference for overt influences.”⁹⁹

It would be valuable to obtain much more evidence on this question, but we might speculate that people’s evaluations of System 1 nudges would very much depend on whether they believe that it is necessary to counteract a self-control problem. Interestingly, a study in Denmark finds no link between support for nudges and self-control – but it does find that people with strong self-control are more favorable toward mandates and bans.¹⁰⁰ This is a somewhat surprising finding. One might expect that people with self-control problems would be more enthusiastic about mandates, at least if they could provide real help. But perhaps those who suffer from poor self-control do not want to be coerced by the state. Findings on this topic continue to emerge, with some evidence that smokers who seek to quit are more likely to support mandates than are smokers who have no such plans.¹⁰¹

C. Values and Reactance

What if people are asked more direct questions, asking them to compare System 1 nudges to System 2 nudges? Recall that Janice Jung and Barbara Mellers studied twenty-three nudges and found that Americans supported most of them.¹⁰² At the same time, they gave System 1 and System 2 versions of essentially the same nudges. For example, consider this:

a) System 1. Suppose that when you pay your credit card bills online, the government requires the credit card companies to select the default payment option of full payment. You can

the exception. *Id.* at 207 (“the less respondents wanted help, the more favorable they were to the conscious than the subconscious influence”).

⁹⁸ *Id.* at 207.

⁹⁹ *Id.* at 208.

¹⁰⁰ See Pederson et al., *supra* note.

¹⁰¹ See Joni Hersch, Smoking Restrictions As A Self-Control Mechanism, 31 J Risk and Uncertainty 5 (2005).

¹⁰² See Jung and Mellers, *supra* note.

pay other amounts, but you need to specify those by selecting different options. The default policy is designed to help you enjoy the benefits of no interest fees and good credit scores.

b) System 2. Suppose that when you pay your credit card bills online, the government requires the credit card companies to provide information that makes it easy to understand the benefits of paying the total amount due. The information encourages you to pay the entire bill by telling you that full payment helps you enjoy the benefits of no interest fees and good credit scores.

Or this:

a) System 1. Suppose that when you are at a hotel, the government requires the hotel to select a default policy of “environment-friendly rooms” in which towels left on the racks are not washed. If you want your towels washed, you must place them on the floor. The plan helps you save water and avoid water waste that leads to a less sustainable environment.

b) System 2. Suppose that when you are at a hotel, the government requires the hotel to provide you with information about “environment-friendly” policy in which towels left on the racks are not washed. To get towels washed, you must place them on the floor. The information makes it easier to understand how to participate in the water conservation program. You are encouraged to take part and told that the policy is designed to help you save water and avoid water waste that results in a less sustainable environment.

Jung and Mellers found significantly more support for System 2 nudges than for System 1 nudges. To be sure, people often approved of System 1 nudges as well. Majorities supported System 1 nudges (in the form of default rules) to promote health insurance coverage, retirement savings, credit card payments, and water conservation – and also to promote healthy eating at cafeterias and grocery stores and to increase privacy on the Internet. But for the most part, the level of approval was higher for System 2 nudges. People are apparently a bit more comfortable with them. In the authors’ words, Americans “distinguish between System 1 and System 2 nudges and prefer System 2 nudges with informational reminders and educational opportunities over System 1 nudges with defaults and sequential ordering.”¹⁰³ This conclusion is important, but it must be qualified by a recognition of the sparse informational foundations of people’s reactions in the surveys (what if a System 1 nudge is, in fact, more effective?) and by a reminder that many System 1 nudges also attract majority support.

Jung and Mellers also found some intriguing differences among people with varying attitudes and political orientations. They asked participants to take certain tests for individualism (similar to that in Hagman et al.), for reactance, for empathy, and for “desire to control.” They also tested for differences between liberals and conservatives. Not surprisingly, they found that individualists opposed both System 1 and System 2 nudges, and that conservatives tended to oppose them as well. (Recall, however, that it would be possible to design a set of nudges that conservatives would be more likely to support than liberals; the finding here by Jung and Mellers is an artifact of the particular nudges that were tested, which are more likely to be favored by

¹⁰³ Id. at 22.

liberals than conservatives.) Those who showed empathy tended to support both System 1 and System 2 nudges. Participants who showed an inclination to reactance were fine with System 2 nudges – but they opposed System 1 nudges. The same was true for those who showed a strong desire for control. In general, people said that System 1 nudges were more threatening to autonomy than System 2 nudges. (Recall, however, that many System 1 nudges attracted majority support.)

Surveying students in Israel, the United States, and Germany, Ayala Arad and Ariel Rubinstein tested people’s reactions to educative nudges (which target System 1) and to noneducative ones (which arguably target System 2).¹⁰⁴ They also tested people’s evaluations of hard mandates, which are of course not nudges at all.

Their central finding is that people are more likely to approve of System 2 nudges than System 1 nudges. Educative interventions receive widespread endorsement in all three nations. Strong majorities favor an informational campaign about healthy foods and also a smartphone App created by the government, which includes information on the nutritional value of items on every restaurant’s menu. By contrast, participants are significantly less likely to favor a law requiring restaurants to order the items on a menu from healthiest to unhealthiest, or a law forcing employers to set 8 percent as a default saving rate for their employees, with participants needing to decide whether or not to opt-out of the arrangement. There are also intriguing and relatively consistent differences across the three nations.

With respect to savings, significant numbers of people said that they felt “negatively” about a law mandating the default – 42 percent of Americans, 28 percent of Israelis, and 66 percent of Germans. With respect to healthy food choices, significant minorities of people were willing to prefer the educational intervention to the “menu order” requirement at restaurants even if the former was less effective.¹⁰⁵ About 37 percent of Germans showed that preference, compared to 35 percent of Americans and 21 percent of Israelis. Importantly, however, majorities in the United States (66 percent) and Israel (55 percent), and 50 percent in Germany, would favor the more effective intervention.¹⁰⁶ And interestingly, small minorities favored the “menu order” requirement even if it was less effective (9 percent of Israelis and 13 percent of both Germans and Americans).

Arad and Rubinstein also find that people in all three countries are relatively averse to both mandates and taxes. About eighty-three percent of Germans prefer the app to a prohibition on extremely fatty foods, even if the latter is more effective. The same is true for about 66 percent of Americans and about 73 percent of Israelis. About 51 percent of Germans prefer the app to a “fat tax” even if the latter is more effective; the same is true for 41 percent of Americans and 51 percent of Germans.¹⁰⁷ In both Israel and Germany, majorities prefer information to a tax

¹⁰⁴ Ayala Arad and Ariel Rubinstein, *The People’s Perspective on Libertarian-Paternalistic Policies* 8 (2015), <http://www.tau.ac.il/~araday/LP.pdf>

¹⁰⁵ *Id.* at 17.

¹⁰⁶ *Id.* at 17.

¹⁰⁷ *Id.* at 18.

even if the latter is more effective (65 percent and 59 percent respectively), as do nearly half of Americans (48 percent).

Do the negative reactions to noneducative nudges translate into behavior? Arad and Rubinstein find that it does, at least of the survey. With respect to savings, a significant percentage of people in all three countries say that they would opt out of the default, apparently in “reactance”¹⁰⁸ against a government mandate. According to reactance theory, people rebel against constraints, and hence they act contrary to an order precisely because it is an order. A default rule is not an order; people can opt out. Nonetheless, reactance might occur, at least on the part of those people who regard a default as a kind of top-down imposition. Arad and Rubinstein thus offer a surprising result, which is that an opt-in design produces a higher participation rate than does opt-out.¹⁰⁹ From this, they draw reach a bold conclusion, which is that *if people are informed that the government is nudging them, a significant number will respond negatively and opt out for that very reason.*¹¹⁰

If this is so, it is the mirror image of a common explanation for the effectiveness of defaults. Under that explanation, a default contains an informational signal about what it makes sense for people to do, and people do not opt out because they hear that signal¹¹¹; we might call that mechanism “receptance.” Arad and Rubinstein suggest a contrary possibility, which is that some people will not much like that signal and will act accordingly.

An experimental study, conducted by Simon Hedlin and me, offers a related (and quite surprising) finding,¹¹² which is that *active choosing had significantly larger effects in producing green energy use than did green energy defaults.* This result appears to be a product of the interaction between guilt and reactance.¹¹³ The active choice frame led participants to feel particularly guilty about not enrolling (as we also found by asking a direct question about guilt¹¹⁴), whereas some participants in the green energy default groups were resentful that the government automatically enrolled them in the program. At the same time, and interestingly, we found that respondents were less likely to *approve* of the forced choice policy than of the green energy default policy. The reason might be that the active choosing required them to make a decision—and also to feel guilty about not enrolling. The upshot is that compared to green energy defaults and standard energy defaults, active choosing was the most effective policy and the most guilt-inducing policy – and the least popular policy.

These findings suggest that if people see default rules as some kind of imposition, they might rebel, and hence the nudge will be less effective than would otherwise be anticipated. But experimental findings of this kind should be taken with caution. There might well be a large

¹⁰⁸ On the basic idea, *see generally* Brehm and Brehm, *supra* note.

¹⁰⁹ Arad and Rubinstein, *supra* note, at 12.

¹¹⁰ *Id.* at 22.

¹¹¹ Eric Johnson and Daniel Goldstein, *Decisions By Default*, in *THE BEHAVIORAL FOUNDATIONS OF PUBLIC POLICY* 429 (Eldar Shafir ed. 2012).

¹¹² Hedlin and Sunstein, *supra* note, at 14-16.

¹¹³ *Id.* at 8.

¹¹⁴ *Id.* at 13.

difference between what people say what they would do and what they would actually do. Asked in surveys whether they would opt out of a policy produced by government, they might say “yes,” even if they would not do so in reality -- either because of inertia and procrastination or because of social norms and guilt (“receptance”). The real-world evidence is that green defaults are very sticky indeed,¹¹⁵ and contrary to what Arad and Rubinstein find, opt-out savings policies are much more effective than opt-in policies.¹¹⁶

Would these findings reverse if people were made aware that any such defaults were a product of government? Would they reverse if people were made aware that defaults tend to stick, and that government is aware of that fact? It is possible – but as we shall see, it is doubtful.

III. Partisan Nudge Bias

Do political judgments matter to people’s assessment of nudges?¹¹⁷ Casual observation suggests that that they do. When the Obama Administration uses behaviorally informed tools, those who are inclined to oppose the Obama Administration are not likely to love those tools.¹¹⁸ Consider this hypothesis: *At least across a wide range, people have no considered view on nudges as such. Their evaluations turn on whether they approve of the politics of the particular nudge, or the particular nudges that come to mind.* The hypothesis draws support from related evidence that on many general questions, including institutional ones, people lack clear convictions, and their judgments turn on what they think about the underlying political substance.¹¹⁹

More specific evidence supports this view.¹²⁰ In a series of studies, David Tannenbaum, Craig Fox, and Todd Rogers have found what they call “partisan nudge bias.” Focusing on policies favoring automatic enrollment in pension plans, they randomly assigned people to conditions in which they learned that such policies had been implemented by the Bush Administration, the Obama Administration, or an unnamed Administration. After informing participants about the policy nudge, Tannenbaum et al. specifically reminded them that defaults could be used “across a wide range of policies beyond the illustration above” and asked how they felt, setting the particular application aside, “about actively setting default options as a general approach to public policy.”¹²¹

¹¹⁵ See Felix Ebeling and Sebastian Lotz, *Domestic uptake of green energy promoted by opt-out tariffs*, NATURE CLIMATE CHANGE (2015), <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2681.html>

¹¹⁶ Thaler and Sunstein, *supra* note 1, at 109; Benartzi, *supra* note 1, at 12.

¹¹⁷ Tannenbaum et al., *supra* note 46, at 2.

¹¹⁸ See Alex Newman, “Obama Behavior Team to ‘Nudge’ U.S. Toward Government Goals,” THE NEW AMERICAN (2013), <http://www.thenewamerican.com/usnews/constitution/item/16408-obama-behavior-team-to-nudge-u-s-toward-government-goals>.

¹¹⁹ See Eric Posner and Cass R. Sunstein, *Institutional Flip-Flops*, TEXAS L. REV. (forthcoming 2015).

¹²⁰ Tannenbaum et al., *supra* note 46.

¹²¹ *Id.* at 3.

The basic finding was that on the *general* question, people were much influenced by whether Bush or Obama was responsible for the particular nudge that they read about. When participants were informed that the pension default had been implemented by Obama, liberals tended to display relative support for the use of defaults as a general policy tool, whereas conservatives tended to oppose them. But when told that the same policy had been implemented by Bush, that pattern was eliminated; liberals displayed relative opposition to the use of defaults, whereas conservatives supported them.

Tannenbaum et al. also asked respondents about a series of nudges that had an identifiable political valence, immediately triggering disparate reactions from liberals and conservatives. These included increasing participation by low-income individuals in existing food stamp and supplemental nutrition assistance programs (liberal valence); increasing claims by high-income individuals for existing capital gains tax breaks (conservative valence); increasing participation in safe sex and effective contraception use educational programs for high-school children (liberal valence); increasing participation in intelligent design educational programs for high-school children (conservative valence); and a generic, context-free policy illustration (no valence). There were five different types of policy nudges: (1) automatic enrollment defaults, (2) implementation intentions, (3) public commitments, (4) highlighting losses, and (5) descriptive social norms. As in their first study, Tannenbaum et al. asked people about their *general* views about nudges, after seeing the relevant example. Participants were specifically reminded that the approach was general and could be used across a wide range of policies.

The result was unambiguous: People are significantly more likely to approve of nudges in general when they favor the particular political objectives used to illustrate them.¹²² When the nudges were applied to traditionally liberal policies (food stamps, safe sex), liberals were relatively supportive of nudges as policy tools, while conservatives were relatively opposed to their general use.¹²³ This pattern reversed when those same nudges were applied to traditionally conservative policy goals (capital gains programs, intelligent design education programs).¹²⁴

Interestingly, and importantly, when nudges were attached to a *generic* policy objective, there was no association between political orientation and people's evaluation of nudges; apparently conservatives and liberals do not disagree on the general question. A particularly striking finding: While libertarians were less likely to approve of nudges than those without libertarian dispositions, attitudes about particular policies turned out to be a far more significant predictor than attitudes about libertarianism in general.

Tannenbaum et al. used the same basic strategy to test the responses of actual policymakers, consisting of U.S. city mayors and high-level public servants in state and local governments. They asked the participants to read about two kinds of automatic enrollment defaults. Half read a scenario in which low-income earners were automatically defaulted to receive supplemental food assistance benefits, and half read a scenario in which high-income

¹²² *Id.* at 6-8.

¹²³ *Id.*

¹²⁴ *Id.*

earners were automatically defaulted to receive capital gains tax benefits. Policymakers were explicitly reminded that the task was the evaluation of nudges as general-purpose policy tools. The usual pattern held: The overall assessments of policymakers were greatly affected by the political valence of the examples.¹²⁵

In sum, “people find nudges more ethically problematic when they are applied to policy objectives they oppose, or when applied by policymakers they oppose, while they find the same nudges more acceptable when they are applied to political objectives they support or by policymakers they support.”¹²⁶ It would not of course be surprising to find that people favor nudges that support their own goals and reject nudges that undermine those goals. What is more interesting is that many people seem not to have strong or firm judgments about nudges, taken simply as such. Particular examples drive their general views -- perhaps because the examples create some kind of affective reaction to the broad category, perhaps because the examples are taken to convey information about how nudges would actually be used (which should of course bear on the overall evaluation). In this respect, people use the examples as heuristics, or mental shortcuts, in answering the broader and more difficult question. (This finding reflects a form of “attribute substitution,” of the kind that has been found in many contexts.¹²⁷)

There is a clear implication here for the political economy of nudging: Citizens’ judgments about the ethics of nudging, and even the general enterprise, are likely to be, in significant part, an artifact of their substantive judgments about the specific directions in which they think that people are likely to be nudged. It is noteworthy that in the United Kingdom, nudging has been prominently associated with the Conservative Party (and Prime Minister David Cameron), which has likely reduced concern from the right (and perhaps heightened concern from the left).¹²⁸ To be sure, this point should not be taken too far. As we have seen, even those who strongly support an incumbent president would be likely to object strenuously if he imposed a nudge that entrenched himself (as, for example, through a system of default voting). In egregious cases of self-dealing, or of violations of widely held social norms, citizens of a free society (or even an unfree one) might well be outraged whatever they think of the underlying substance. But within certain limits, political assessments are likely to reflect political judgments.

IV. The Effects of Transparency About Nudging

If people are explicitly informed that they are being nudged, does their behavior change? This question does not ask about people’s ethical evaluations – at least not directly. Instead it tests a seemingly plausible hypothesis, which is that if people are told that they are being nudged, they will react adversely and resist (and hence be nudged less or not at all). That hypothesis is

¹²⁵ *Id.* at 3-5.

¹²⁶ *Id.* at 1.

¹²⁷ See Daniel Kahneman and Shane Frederick, *Representativeness Revisited: Attribute Substitution in Intuitive Judgment*, in *HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT* 53 (Thomas Gilovich et al. eds. 2002).

¹²⁸ On the experience in the United Kingdom, see David Halpern, *INSIDE THE NUDGE UNIT* (forthcoming 2015).

closely connected with ethical issues: If people resist nudges when they are told about them, then we have some reason to think that they believe that nudges are ethically questionable, at least in some relevant respects.

On one view, the effectiveness of (some) nudging depends on at least a degree of nontransparency. The philosopher Luc Bovens contends broadly that the underlying psychological mechanisms “typically work better in the dark. If we tell students that the order of the food in the Cafeteria is rearranged for dietary purposes, then the intervention may be less successful. If we explain the endowment effect to employees, they may be less inclined to Save More Tomorrow.”¹²⁹ And indeed, some people have contended that nudging is ethically questionable for that reason.¹³⁰

Even without empirical testing, we should be careful before accepting this claim. Most nudges are fully transparent, and all of them should be; they are hardly in the dark. Disclosure, reminders, warnings, uses of social norms – none of these is exactly hidden, and they need to be transparent in order to work. In general, public officials should inform people about what they are doing. But the idea of transparency is not self-defining. Is a transparency requirement satisfied merely because the nudge itself is not secret? Is there also an obligation to inform people that they are being nudged? What, exactly, does that mean? Is there an obligation to inform people about the specific psychological mechanisms that make nudges effective? (That appears to be Bovens’ concern.) Is there any such obligation at the time that people are choosing?

We might ask, with Bovens, whether explicit warnings (“you are about to be nudged” or “we are exploiting the endowment effect”) would turn out to undermine the whole enterprise. It is reasonable to wonder about the effects of certain kinds of transparency. Consider this: “We know that people tend to do what other people do, and so we are telling you about the social norm in order to get you to do what other people do.” Would that kind of transparency prove self-defeating? Or consider this: “We know that because of inertia, default rules stick. So we are using a default rule to affect your life -- in the hope that it will stick.” A statement of this kind might well make the nudge less effective, but perhaps not; perhaps the disclosure would increase the effect, or perhaps it would be immaterial.

There is not a great deal of evidence on these questions, but an important study by George Loewenstein, Cindy Bryce, and David Hagmann offers the following finding, at least in the context of end-of-life care: *When people are specifically informed that a default rule has*

¹²⁹ Luc Bovens, *The Ethics of Nudge*, in PREFERENCE CHANGE 207 (Till Grune-Yanoff and S.O. Hansson eds. 2008).

¹³⁰ See generally Rebonato, *supra* note 1, for a series of objections, some of which involve this claim. In a related vein, Sarah Conly contends that when nudges are at work, “Rather than regarding people as generally capable of making good choices, we outmaneuver them by appealing to their irrationality, just in more fruitful ways. We concede that people can’t generally make good decisions when left to their own devices, and this runs against the basic premise of liberalism, which is that we are basically rational, prudent creatures who may thus, and should thus, direct themselves autonomously.” Sarah Conly, AGAINST AUTONOMY 30 (2011).

*been put in place, and that it might be otherwise, that information has little effect on what people end up doing.*¹³¹

As Loewenstein et al. designed the experiment, people were given one of these default options. (a) “I want my health care providers and agent to pursue treatments that help me to live as long as possible, even if that means I might have more pain and suffering.” (b) “I want my health care providers and agent to pursue treatments that help relieve my pain and suffering, even if that means I might not live as long.” In the experiment, one or the other of these was pre-selected as the default, but participants could change it by selecting a different alternative and confirming the change with their initials. Note that this is an exceedingly weak default, not only in the sense that it is exceptionally simple to change it, but also in the sense that the option to switch is made highly salient to participants, so that the problem of procrastination and inertia, which often makes defaults “sticky,” is greatly reduced. More familiar defaults (for example, automatic enrollment in pension or health care plans) are more likely to stick, in part because it is simple for people to ignore the question whether to depart from them, or to decide that they will consider that question at some future time.¹³²

Here is the disclosure provided by Loewenstein et al., letting people know that they have been defaulted: “The specific focus of this research is on ‘defaults’ – decisions that go into effect if people don’t take actions to do something different. Participants in this research project have been divided into two experimental groups.” Having received this information, participants were also told: “If you have been assigned to one group, the Advance Directive you complete will have answers to questions checked that will direct health care providers to help relieve pain and suffering even it means not living as long. If you want to choose different options, you will be asked to check off different option and place your initials beside the different option you select.” Participants were informed as well that “if you have been assigned to the other group, the Advance Directive you complete will have answers to questions checked that will direct health care providers to prolong your life as much as possible, even if it means you may experience greater pain and suffering.”

Notably, this information had little effect on participants’ ultimate choices. To be sure, nudges worked: The default itself had a significant effect; as predicted, more people chose “comfort” when it was the default. But even when people were specifically given the disclosure, signaling “the specific focus of this research” *before* they made their choices, there was no significant consequence for where they ended up, thus “suggesting that pre-informing respondents does not diminish their tendency of sticking with the default.”¹³³ A possible explanation is that participants thought something like “yeah, whatever” when they read the disclosure. For some of the same reasons that default rules stick -- inertia and inattention -- disclosures of this kind might have little influence on people’s decisions. Here, then, is a general

¹³¹ See George Loewenstein, Cindy Bryce, David Hagmann & Sachin Rajpal, *Warning: You Are About To Be Nudged*, 1 Behavioral Science and Pol. (2015) (“[I]nforming people about default interventions in advance . . . does not significantly diminish the impact of defaults on expressed preferences in advance directives.”).

¹³² See Johnson and Goldstein, *supra* note, at 434.

¹³³ Loewenstein, Bryce, Hagmann & Rajpal, *supra* note.

hypothesis: *Even if people are informed that they are being nudged, the effects of the nudge will usually not be reduced, either because people do not care, or because they will not expend the effort to focus on that information.*

In some contexts, the hypothesis probably will not hold. Suppose, for example, that people were told, “Over 70 percent of people engage in behavior X. We are telling you that because we want you to engage in behavior X, and because people like to do what most people do.” In that case, the disclosure of the specific motivation for the nudge might reduce its impact. Recall that Bovens is concerned with the psychological mechanisms behind nudges. He thinks that if those mechanisms are not “in the dark,” nudges will be less effective, and Arad and Rubinstein, discussed above, find some indirect support for this claim, especially in Germany.

On this count, Loewenstein et al. did not offer an empirical test. It would be interesting to know if the results found by Loewenstein et al. would have been different if people had been told something like this: “Default rules often have significant effects on behavior, because of the force of inertia, and because people often think that such rules reflect what most people do.” We cannot exclude the possibility that people would rebel if they were informed of the mechanisms that account for the effects of defaults. An understanding of those mechanisms might lead people to be on their guard.

If so, we would want to distinguish between two kinds of nudges: those for which disclosure of the psychological mechanisms would be perceived as innocuous and those for which such disclosure might arouse suspicion. Provision of information, reminders, and warnings generally fall in the first category. For them, the psychological mechanisms are fairly obvious, and it is hard to see why anyone would be troubled by them. For default rules and uses of social norms, it is possible that disclosure of the mechanisms would produce at least a degree of concern. That question remains to be tested.

It would also be valuable to know if the setting of end-of-life care is distinctive in this respect, and if larger effects, from the disclosure in the Loewenstein et al. experiment, would be found in other contexts. The topic of end-of-life care is both complex and unpleasant to think about, and for that reason, a default might be especially likely to stick whatever the accompanying disclosures. Consider in this regard the fact that some disclosures have little impact precisely because it is effortful to process them.¹³⁴ In contexts that involve less effort, and clearer antecedent preferences, default rules are less likely to stick,¹³⁵ and disclosures might make them less sticky still.

Almost certainly, a great deal depends on whether participants believe that choice architects are trustworthy, and also on whether they are generally rebellious “types.” If people are told that a self-interested choice architect has chosen a default rule for them, and that default rules usually stick and were chosen for that very reason, they might be willing to reject the rule in question. Again the idea of “reactance” points to this possibility: People do not like being

¹³⁴ Ryan Bubb, *TMI? Why the Optimal Architecture of Disclosure Remains TBD*, 113 MICH. L. REV. 1021, 1022 (2015).

¹³⁵ See Sunstein, *supra* note, at 77.

controlled or coerced, and if they think that their options have been truncated, they might do whatever they can to take their own path.¹³⁶

Even for default rules, the possibility of reactance must be taken into account.¹³⁷ But the findings by Loewenstein et al. make it reasonable to speculate that at least in many contexts, disclosure that a nudge is in place, and could be otherwise, would not much affect outcomes.

V. Five Conclusions

A great deal remains to be learned about people's assessment of nudges, but five conclusions seem likely to hold. First, there is widespread support for nudges of the kind that democratic societies have adopted or seriously considered in the recent past. Second, that support diminishes when people distrust the motivations of the choice architects, or when they fear that because of inertia and inattention, citizens might end up with outcomes that are inconsistent with their values or their interests. In particular, people do not believe that choice architects should produce outcomes by which people lose money, or other things of importance, without their explicit consent. Third, there appears to be mildly greater support for System 2 nudges than for System 1 nudges, though there can be widespread approval of the latter as well, especially if they are meant to combat self-control problems; recall broad support for graphic warning labels for cigarettes.

Fourth, people's assessment of nudges in general will be greatly affected by the political valence of the particular nudges that they have in mind (or that are brought to their minds). Fifth, transparency about nudging should not, in general, reduce the effectiveness of nudges, because most nudges are already transparent, and because people will not, in general, rebel against nudges. The principal qualification to the last point, supported by preliminary evidence, is that in some cases, reactance cannot be ruled out, especially if people do not like or trust the choice architect, and if they believe that they are being tricked or manipulated.

¹³⁶ See generally Brehm and Brehm, *supra* note; see Louisa Pavey and Paul Sparks, *Reactance, Autonomy and Paths to Persuasion: Examining Perceptions of Threats to Freedom and Informational Value*, 33 MOTIVATION AND EMOTION 277, 278 (2009).

¹³⁷ See Arad and Rubinstein, *supra* note, at 4.

Appendix A

Approved and Disapproved Nudges

Nudge	All		Democrat		Republican		Independent	
	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove
1. Mandatory calorie labels	87%	13%	92%	8%	77%	23%	88%	12%
2. Mandatory labeling: GMOs	86%	14%	89%	11%	80%	20%	87%	13%
3. Public education campaign: distracted driving	85%	15%	88%	12%	80%	20%	84%	16%
4. Public education campaign: childhood obesity	82%	18%	89%	11%	70%	30%	81%	19%
5. Government-encouraged automatic enrollment: pension plan	80%	20%	88%	12%	73%	27%	75%	25%
6. Public education campaign: sexual orientation discrimination	75%	25%	85%	15%	57%	43%	75%	25%

Nudge	All		Democrat		Republican		Independent	
	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove
7. Mandatory graphic warnings on cigarettes	74%	26%	77%	23%	68%	32%	74%	26%
8. Mandatory labels for high salt content	73%	27%	79%	21%	61%	39%	72%	28%
9. Government-encouraged automatic enrollment: "green energy"	72%	28%	82%	18%	61%	39%	66%	34%
10. Mandatory automatic enrollment: pension plan	71%	29%	78%	22%	62%	38%	67%	33%
11. Mandatory choice: organ donors during driver's license registration	70%	30%	75%	25%	62%	38%	69%	31%
12. Mandatory automatic enrollment: green energy	67%	33%	79%	21%	51%	49%	63%	37%
13. Mandatory "traffic lights"	64%	36%	71%	29%	57%	43%	61%	39%

Nudge	All		Democrat		Republican		Independent	
	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove
14. Mandatory manufacturing labels for countries that violate labor laws	60%	40%	67%	33%	50%	50%	57%	43%
15. Default last name change upon marriage to that of husband	58%	42%	61%	39%	57%	43%	56%	44%
16. Public education campaign: obesity as "terrible curse"	57%	43%	61%	40%	47%	53%	60%	40%
17. Mandatory healthy food placement	56%	44%	63%	37%	43%	57%	57%	43%
18. Mandatory manufacturing labels for countries that have recently harbored terrorists	54%	46%	56%	44%	58%	42%	49%	51%
19. Mandatory public education in movie theaters for healthy eating	53%	47%	61%	39%	41%	59%	51%	49%
20. Automatic enrollment: voting	53%	47%	63%	37%	39%	61%	50%	50%

Nudge	All		Democrat		Republican		Independent	
	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove
21. Automatically listing the incumbent politician first on ballots	53%	47%	58%	42%	47%	53%	51%	49%
22. Public education campaign: Animal Welfare Society	52%	48%	59%	41%	34%	66%	55%	45%
23. Mandatory manufacturing Communist country labels	44%	56%	47%	53%	43%	57%	42%	58%
24. Mandatory subliminal ads in movie theaters	41%	59%	47%	53%	42%	58%	35%	65%
25. Public education campaign: transgender	41%	59%	49%	51%	29%	71%	38%	62%
26. Default charge for carbon emissions on airplane tickets	36%	64%	43%	57%	25%	75%	34%	66%
27. Public education campaign: stay-at-home mothers	33%	67%	33%	67%	31%	69%	34%	67%

Nudge	All		Democrat		Republican		Independent	
	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove	Approve	Disapprove
28. Default donation to Red Cross	27%	73%	30%	70%	20%	80%	28%	72%
29. Default Democratic party registration	26%	74%	32%	68%	16%	84%	26%	74%
30. Default donation to Animal Welfare Society	26%	74%	30%	70%	20%	80%	25%	75%
31. Default last name change upon marriage to that of wife	24%	76%	28%	72%	18%	82%	23%	77%
32. Default employee donations to the United Way (majority of employees have agreed)	24%	76%	26%	74%	17%	83%	25%	75%
33. Public education campaign: unpatriotic criticism	23%	77%	24%	76%	21%	79%	22%	78%
34. Default assumption of Christianity for census data	21%	79%	22%	78%	27%	73%	17%	83%

Note: Pairwise significance was obtained for those nudges with significant differences by party, using a Bonferroni correction. Percentages may not total 100 due to rounding.

Appendix B

Survey Questions

1. Do you approve or disapprove of the following hypothetical policy?

The federal government requires calorie labels at chain restaurants (such as McDonald's and Burger King).

2. Do you approve or disapprove of the following hypothetical policy?

The federal government requires graphic warnings on cigarette packages (where the graphic warnings include pictures of people suffering from smoking-related diseases, such as cancer).

3. Do you approve or disapprove of the following hypothetical policy?

The federal government requires a "traffic lights" system for food, by which healthy foods would be sold with a small green label, unhealthy foods with a small red label, and foods that are neither especially healthy nor especially unhealthy with a small yellow label.

4. Do you approve or disapprove of the following hypothetical policy?

The federal government encourages (without requiring) employers to adopt a system in which employees would be automatically enrolled in a pension plan, but could opt out if they wish.

5. Do you approve or disapprove of the following hypothetical policy?

The federal government encourages (without requiring) electricity providers to adopt a system in which consumers would be automatically enrolled in a "green" (environmentally friendly) energy supplier, but could opt out if they wished.

6. Do you approve or disapprove of the following hypothetical policy?

A state law saying that on the ballot, the current senator, governor, president, or mayor must always be listed first.

7. Do you approve or disapprove of the following hypothetical policy?

A state law saying that citizens of a state are automatically enrolled as voters, and do not have to register as voters.

8. Do you approve or disapprove of the following hypothetical policy?

A state law requiring people to say, when they obtain their drivers' license, whether they want to be organ donors.

9. Do you approve or disapprove of the following hypothetical policy?

A federal law requiring companies to disclose whether the food they sell contains genetically modified organisms (GMOs).

10. Do you approve or disapprove of the following hypothetical policy?

A federal law assuming that people are Christian, for purposes of the census, unless they specifically state otherwise.

11. Do you approve or disapprove of the following hypothetical policy?

The federal government assumes, on tax returns, that people want to donate \$50 to the Animal Welfare Society of America, subject to opt out if people explicitly say that they do not want to make that donation.

12. Do you approve or disapprove of the following hypothetical policy?

A state law requires all large grocery stores to place their most healthy foods in a prominent, visible location.

13. Do you approve or disapprove of the following hypothetical policy?

A state law assumes that women want to take their husbands' last name upon marriage, while assuming that men want to retain their own last names; it also allows both women and men to retain or change their names if they explicitly say what they want.

14. Do you approve or disapprove of the following hypothetical policy?

A state law assumes that people want to register as Democrats, subject to opt out if people explicitly say that they want to register as Republicans or Independents.

15. Do you approve or disapprove of the following hypothetical policy?

To reduce deaths and injuries associated with distracted driving, the national government adopts a public education campaign, consisting of vivid and sometimes graphic stories and images, designed to discourage people from texting, emailing, or talking on their cellphones while driving.

16. Do you approve or disapprove of the following hypothetical policy?

To reduce childhood obesity, the national government adopts a public education campaign, consisting of information that parents can use to make healthier choices for their children.

17. Do you approve or disapprove of the following hypothetical policy?

The federal government requires movie theaters to provide subliminal advertisements (that is, advertisements that go by so quickly that people are not consciously aware of them) designed to discourage people from smoking and overeating.

18. Do you approve or disapprove of the following hypothetical policy?

A newly elected President is concerned that the public, and the press, will be unduly critical of what he does. He adopts a public education campaign designed to convince people that criticism of his decisions is "unpatriotic" and potentially "damaging to national security."

19. Do you approve or disapprove of the following hypothetical policy?

The federal government requires airlines to charge people, with their airline tickets, a specific amount to offset their carbon emissions (about \$10 per ticket); under the program, people can opt out of the payment if they explicitly say that they do not want to pay it.

20. Do you approve or disapprove of the following hypothetical policy?

The federal government engages in a public education campaign to encourage people to donate to the Animal Welfare Society of America.

21. Do you approve or disapprove of the following hypothetical policy?

The federal government requires labels on products that have unusually high levels of salt, as in, "This product has been found to contain unusually high levels of salt, which may be harmful to your health."

22. Do you approve or disapprove of the following hypothetical policy?

The federal government engages in a public education campaign designed to encourage people not to discriminate on the basis of sexual orientation.

23. Do you approve or disapprove of the following hypothetical policy?

The federal government engages in a public education campaign designed to encourage mothers of young children to stay home to take care of their kids.

24. Do you approve or disapprove of the following hypothetical policy?

Your state enacts a law by which husbands automatically change their last names to that of their wives upon marriage, but they can retain their names if they explicitly say that they want to do so.

25. Do you approve or disapprove of the following hypothetical policy?

The federal government assumes, on tax returns, that people want to donate \$50 to the Red Cross, subject to opt out if people explicitly say that they do not want to make that donation.

26. Do you approve or disapprove of the following hypothetical policy?

Your state government assumes that its employees want to donate money to the United Way, and it deducts \$20 per month from their paychecks for that purpose; but it allows employees to opt out of the program if they explicitly say that they do not want to participate. (Assume that at least 60 percent of state employees have said that they do, in fact, want to give this amount to the United Way.)

27. Do you approve or disapprove of the following hypothetical policy?

The federal government requires all products that come from a Communist country (such as China or Cuba) to be sold with the label, "Made in whole or in part under Communism" in the specified country. (Assume that this label would not substitute for or displace any existing labels identifying where products are made.)

28. Do you approve or disapprove of the following hypothetical policy?

The federal government requires labels on products that come from companies that have repeatedly violated the nation's labor laws (such as laws requiring occupational safety or forbidding discrimination), as in, "This product is made by a company that has repeatedly violated the nation's labor laws."

29. Do you approve or disapprove of the following hypothetical policy?

The federal government requires labels on products that come from countries that have recently harbored terrorists, as in, "This product comes from a nation that was recently found to harbor terrorists."

30. Do you approve or disapprove the following hypothetical policy?

The federal government requires movie theaters to run public education messages designed to discourage people from smoking and overeating.

31. Do you approve or disapprove of the following hypothetical policy?

The federal government engages in a public education campaign designed to combat obesity, showing obese children struggling to exercise, and also showing interviews with obese adults, who are saying such things as, "My biggest regret in life is that I have not managed to control my weight," and "To me, obesity is like a terrible curse."

32. Do you approve or disapprove of the following hypothetical policy?

The federal government requires large employers (more than 200 employees) to adopt a system in which employees would be automatically enrolled in a pension plan, but could opt out if they wish.

33. Do you approve or disapprove of the following hypothetical policy?

The federal government requires large electricity providers (serving at least 500,000 people) to adopt a system in which consumers would be automatically enrolled in a "green" (environmentally friendly) energy supplier, but could opt out if they wished.

34. Do you approve or disapprove of the following hypothetical policy?

The federal government adopts a public education campaign informing people that it is possible for people to change their gender from male to female or from female to male, and encouraging people to consider that possibility "if that is really what they want to do."

35. With which political party do you most closely identify?

36. What is your race?

37. What is your gender?

38. What is your age?

39. What is the highest level of education you have completed?

40. In which state do you currently reside?

41. What is your combined annual household income?

