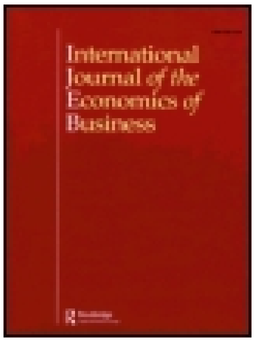

ISSN: 1357-1516 (Print) 1466-1829 (Online) Journal homepage: https://www.tandfonline.com/loi/cijb20

On Nudging: A Review of *Nudge: Improving Decisions About Health, Wealth and Happiness* by Richard H. Thaler and Cass R. Sunstein

Robert Sugden

To cite this article: Robert Sugden (2009) On Nudging: A Review of *Nudge: Improving Decisions About Health, Wealth and Happiness* by Richard H. Thaler and Cass R. Sunstein, , 16:3, 365-373, DOI: 10.1080/13571510903227064

To link to this article: https://doi.org/10.1080/13571510903227064

Published online: 30 Oct 2009.

Int. J. of the Economics of Business,
Vol. 16, No. 3, November 2009, pp. 365–373

Routledge
Taylor & Francis Group

On Nudging: A Review of *Nudge: Improving Decisions About Health, Wealth and Happiness* by Richard H. Thaler and Cass R. Sunstein

ROBERT SUGDEN

ABSTRACT *This paper reviews the case for libertarian paternalism presented by Thaler and Sunstein in* Nudge. *Thaler and Sunstein argue that individuals' preferences are often incoherent, making paternalism is unavoidable; however, paternalistic interventions should 'nudge' individuals without restricting their choices, and should nudge them towards what they would have chosen had they not been subject to specific limitations of rationality. I argue that the latter criterion provides inadequate guidance to nudgers. It is inescapably normative, and so allows nudgers' conceptions of well-being to override those of nudgees. Even if nudgees' rationality were unbounded, their revealed preferences might still be incoherent.*

Key Words: Libertarian Paternalism; Soft Paternalism; Nudging.

JEL classifications: D60, K20, L50.

A recent book about law and economics has created a stir in the US, has been featured on the BBC radio programme *Start the Week*, and has even appeared on a summer reading list for Conservative MPs. The book is *Nudge: Improving Decisions About Health, Wealth, and Happiness*. Its authors are two distinguished professors at the University of Chicago – the economist Richard Thaler, and the legal scholar Cass Sunstein. It popularises the idea of *libertarian paternalism* that Thaler and Sunstein have previously presented in academic publications, and which has already aroused considerable interest among economists. Not believing in false modesty, Thaler and Sunstein (2008: 252) present libertarian paternalism as the 'real Third Way.'

Libertarian paternalism is a response to *behavioural economics* – the growing body of research which imports into economics theories and experimental methods from psychology, and which is showing that individual decision-making is

This paper is an extended version of an article which appeared as 'Do we need to be nudged?' in the *Centre for Competition Policy Newsletter* (no. 15, November 2008, University of East Anglia).
Robert Sugden, School of Economics, University of East Anglia, Norwich NR4 7TJ, UK; email: r.sugen@uea.ac.uk

1357-1516 Print/1466-1829 Online/09/030365–09

DOI: 10.1080/13571510903227064

rather less rational than economists have usually assumed. It is only relatively recently that behavioural economists have started to think seriously about the implications of their findings for public policy. Traditionally, economic policy advice has been based on the assumption that individuals act rationally within whatever constraints they face. Individuals have been assumed to have consistent preferences, and the satisfaction of those preferences has been taken as the appropriate criterion for evaluating alternative policies. But what if those assumptions are false? How then should economists set about giving policy advice?

Among behavioural economists, a consensus seems to be forming around a general approach that is coming to be called *soft paternalism*. Libertarian paternalism, first proposed by Sunstein and Thaler (2003a, 2003b), is one version of this approach. Its influence is perhaps partly attributable to Thaler's authority as a pioneer of behavioural economics and as one of its leading practitioners. (His 1980 paper on status quo effects is one of the classic texts of behavioural economics.) A remarkably similar approach, 'asymmetric paternalism', was simultaneously proposed by four other leading American behavioural economists and another legal scholar (Camerer *et al.*, 2003); one of those economists has also teamed up with a psychologist to offer a more nuanced account of soft paternalism (Loewenstein and Ubel, 2008). The task of revising theoretical welfare economics to make it compatible with soft paternalism has been begun by Bernheim and Rangel (2007). So, although *Nudge* is written in the breezy style of books targeted at business travellers, it can be read– and I shall read it– as a serious work of advocacy in support of a method of normative analysis that commands widespread support among behavioural economists.

Before going on, I should declare an interest. I regard myself as a behavioural economist (my activities in this field going back almost as far as Thaler's), and much of my recent work has focused on the problem of reconciling normative and behavioural economics. I have proposed an approach that is very different from soft paternalism, and whose principal objective is to retain the liberal, anti-paternalist thrust of traditional welfare economics while recognising that individuals' choices often contravene standard rationality assumptions (Sugden, 2004, 2009). I have written critiques of soft paternalism (e.g. Sugden, 2008). Obviously, I do not come to *Nudge* with an open mind – although I shall try to be as open-minded a reviewer as I can.

Thaler and Sunstein start from the proposition that 'individuals make pretty bad decisions – decisions they would not have made if they had paid full attention and possessed complete information, unlimited cognitive abilities, and complete self-control.' Because of these limitations of human decision-making, there is a role for what Thaler and Sunstein call a *choice architect* – someone who 'has the responsibility for organizing the context in which people make decisions.' Thaler and Sunstein have invented this term, but they claim that the corresponding job description already exists – for example, a doctor who has to describe alternative treatments to a patient is acting as a choice architect (2008: 5). The idea behind the metaphor is that an architect has special expertise in designing buildings so that they 'work' for the people who use them. Significantly, architects are hired by clients who recognise that they do not quite know what they want from the architect's design. Analogously, we are told, a choice architect designs the interfaces between decision problems and decision-makers so that individuals' choices work well for them.

Thaler and Sunstein concede that they are recommending paternalism: 'The paternalistic aspect lies in the claim that it is legitimate for choice architects to try to influence people's behavior in order to make their lives longer, healthier and better.' But, they insist, their recommendations are designed to 'make choosers better off, *as judged by themselves*' (2008: 5, italics in original). The implication of the italicised clause, which is repeated with minor variations at other places in the book (e.g. pp. 10, 12, 80), is that a choice architect uses the choosers' own judgements about what makes them better off, rather than imposing her own. However, Sunstein and Thaler provide very little guidance about how she is to discover those judgements. I shall say more about this later.

The libertarian component of the approach is the principle that choice architects must not significantly obstruct individuals' freedom of choice – they must rely on 'nudges.' I shall call this the *free choice condition*. The idea is to take advantage of what behavioural economics has shown to be the malleability of people's preferences. Well-designed choice architecture nudges people towards the choices that are in their best interests, while leaving them free to choose otherwise if they really want to. Sunstein and Thaler try to allay potential concerns about the intrusiveness of choice architecture by pointing to many familiar examples in everyday life, such as automatic switches for car headlights, designed to make it more difficult for a driver to leave the lights on by mistake, and cash machines which return the customer's card before delivering the cash, an order of operations which makes it less likely that the customer will forget to retrieve the card (pp. 84–88).

The book opens with what seems to be Thaler and Sunstein's favourite example of libertarian paternalism, their 'cafeteria' story. In *Nudge*, the cafeteria is in a school, but the authors later suggest that this is not essential to the story (p. 11); in an earlier version of the story, the customers seem to be adults (Sunstein and Thaler, 2003b). Food items in the cafeteria are displayed along a line, which customers move along to approach the checkout. The director of the cafeteria discovers a framing effect that is related to status quo bias: given items are more likely to be chosen, the earlier in the line (or the closer to eye level) they are displayed. This allows her to nudge the customers towards particular choices, without constraining their freedom to choose whatever they want. Thaler and Sunstein recommend that she should arrange the food so as to make the customers 'best off, all things considered'; the suggestion is that she should be particularly concerned to ensure that they eat healthily (pp. 1–2).

One of Thaler and Sunstein's recurring argumentative strategies is to claim that the findings of behavioural economics make paternalism inevitable – that any principled opposition to paternalism is 'a literal nonstarter' (p. 11). To reach this conclusion, they begin by representing the anti-paternalist position as premised on the claim that, as in the model of *Homo economicus*, 'each of us thinks and chooses unfailingly well' (p. 6). (Not wanting to overstretch their readers, they refer to this imaginary species as 'Econs', in contrast to 'Humans'). They do not have much difficulty in showing that real people are not Econs. They also consider another interpretation of the anti-paternalist position, according to which individuals' revealed preferences should be respected. But if (as the behavioural evidence suggests is often the case) individuals' preferences are unstable or context-dependent, that criterion ceases to have meaning. For any decision problem, there has to be *some* choice architecture. If different architectures can be predicted to lead to different decisions, every architecture nudges people in one way or another. So (Thaler and Sunstein ask rhetorically) what sensible alternative is there to the principle of nudging people towards the choices that are best for them (pp. 4–11)?

Thaler and Sunstein offer many practical proposals for nudges. I shall focus on two policy areas, which I have chosen for their economic significance and for the detail in which treated in *Nudge*.

The first is the design of occupational pension plans – a branch of choice architecture in which Thaler has considerable expertise. Thaler and Sunstein take it as self-evident that many people are saving too little for retirement, and explain this as the result of failures of willpower (pp. 103–7). Their proposals are designed to nudge workers towards saving more. One proposed nudge is to make a substantial level of contribution the default plan for new employees, from which individuals can opt out if they so choose. A second, stealthier nudge is the 'Save More Tomorrow' plan, by which a worker chooses a default rate of contribution that is initially quite low, but which increases over time with salary increases (with a continuing opt-out provision). These nudges take advantage of normal human biases in favour of the status quo and the immediately present.

Sunstein and Thaler (or perhaps only Thaler, since we are told on p. 123 that Sunstein has consistently failed to follow Thaler's advice on personal finance) also feel confident in declaring that many individuals make bad choices about how to invest their lifetime savings, and would be better off if they followed the recommendations of financial experts. (I shall describe those recommendations later.) So Sunstein and Thaler propose a further level of nudging, in which a limited number of 'model portfolios' are designed by 'knowledgeable experts' to match particular planned retirement dates and broadly-defined lifestyle choices (such as 'conservative' or 'aggressive' attitudes to risk); plans based on these model portfolios are to be presented as defaults, from which savers can opt out to design their own portfolios if they so choose (pp. 118–31).

The second policy area is competition and regulation. Thaler and Sunstein argue that, in many markets (their examples include mobile phones and credit cards), the complexity of tariff structures and the slowness of feedback make it difficult for consumers to make rational choices between competing suppliers. Firms may exploit consumers' cognitive limitations by creating unnecessarily complex tariffs, or by loading charges onto service components that consumers tend not to find salient or (as in the case of charges for exceeding credit limits) do not anticipate using. Thaler and Sunstein propose forms of choice architecture that facilitate realistic price comparisons. These proposals are in the same spirit as existing US and EU regulations which standardise price and quantity information, such as the requirement to convert interest charges into annual percentage rates and rules which require supermarkets to display per-unit prices. Thaler and Sunstein are attracted by proposals which go one step further, restricting the specifications of products that can be sold so as to make price comparisons more transparent (as in EU regulations which require staple products to be sold only in standardised weights or volumes); but, following their self-imposed principle of not restricting choice, they do not explicitly recommend such measures (p. 137).

Among their concrete proposals is a requirement on certain classes of service providers to give what they call RECAP (Record, Evaluate and Compare Alternative Prices) reports to their customers. A RECAP report is a personalised electronic summary of the customer's use of the firm's services, structured in a standardised way so that it can be combined with any other firm's tariff to show

how much the same bundle of services would have cost if bought from that firm. Thaler and Sunstein predict that private websites would emerge to produce price comparisons for downloaded RECAP reports. (One might advocate the further step of requiring firms to respond to individual consumers' requests for information about how much a given pattern of usage, as recorded in a RECAP report, would cost on any of that firm's tariffs). An interesting feature of this proposal, not discussed explicitly by Thaler and Sunstein, is that the information that is made available in this standardised form is the customer's own usage of the service, and not the firm's prices. This neutralises the risk, common to many regulations whose purpose is to simplify price comparisons, that standardisation and disclosure of tariffs may facilitate collusion.

As these examples may suggest, many of Thaler and Sunstein's specific proposals are both sensible and ingenious. But I cannot avoid a feeling of unease about the general thrust of libertarian paternalism. Here it is useful to distinguish between the 'libertarian' and 'paternalistic' components of this approach. These components are conceptually distinct and pull in opposite directions. The paternalistic component of Thaler and Sunstein's position is a radical revision of traditional welfare economics, sweeping away much of the traditional presumption in favour of consumer sovereignty. Whenever individuals' preferences are incoherent, we have been told, the idea of respecting individuals' preferences is meaningless; there is no viable alternative to paternalism (see also Sunstein and Thaler, 2003b: 1163–5). If it turns out that incoherence is a normal property of individuals' preferences, most of economic life will fall into a domain in which paternalism is legitimate. In its libertarian aspect, however, Thaler and Sunstein's position imposes a strict constraint on the form that paternalistic interventions may take, namely the free choice condition. As they point out, this condition greatly reduces the risks that liberals have traditionally associated with the licensing of paternalism (p. 237). Or, to be more accurate: that would be the case if one could be confident that the condition would be respected.

Even in Thaler and Sunstein's own work, one can detect some reluctance to treat the free choice condition as a binding constraint. Realistically, the application of libertarian paternalism will involve trade-offs between the welfare gains resulting from the reduction of errors in decision-making and the costs that result from restrictions on choice. Thaler and Sunstein recognise that their policy proposals will have *some* such costs, but they 'want those costs to be small.' They express some sympathy with the form of soft paternalism proposed by Camerer *et al*. (2003), which allows paternalistic interventions provided the benefit–cost ratio is sufficiently high. And they point to many existing and widely accepted laws – for example, in relation to health and safety – which are paternalistic in intent and which *do* restrict freedom of choice. While not claiming that such laws can be supported on libertarian paternalist grounds, they do not advocate their repeal; speaking on their own behalf, they acknowledge that non-libertarian paternalism sometimes 'makes sense' and 'might well be best'; it is 'justified in some contexts, but [raises] distinctive concerns' (pp. 249–51). My point here is not to criticise Thaler and Sunstein for not being more thoroughgoing libertarians, but only to question the credibility of the idea that the free choice condition can be used as a defence against excesses of paternalism.

If libertarian paternalism is to be a practical basis for normative economics, it must provide a clear criterion for policy choice. Even if the free choice condition is rigorously upheld, such a criterion is needed. If that condition is weakened to the principle that the costs of paternalism must be small relative to the benefits, definitions of 'cost' and 'benefit' are essential. Notice that libertarian paternalism cannot piggyback on the concepts of cost and benefit that are used in conventional cost–benefit analysis: those are defined relative to individuals' coherent preferences, while the paternalistic interventions that are to be evaluated are premised on the incoherence of preferences. So what is the criterion to be? At this point, Thaler and Sunstein are frustratingly vague. *Nudge* is full of practical ideas about how choice architects can nudge individuals in particular directions, but provides little concrete guidance on how those directions are to be chosen.

As I pointed out earlier, Thaler and Sunstein repeatedly claim that their criterion is the well-being of the person being nudged, *as judged by him*. Given their account (quoted above) of the 'pretty bad decisions' that individuals are liable to make, it seems clear that they want the choice architect to try to work out what the individual would have chosen, had his decision-making not been subject to limitations of attention, information, cognitive ability or self-control, and then nudge him in that direction. But working that out is not just a matter of discovering given facts about the individual. The concepts of full attention, perfect information, unimpaired cognitive ability and complete self-control do not have objective definitions; they are inescapably normative. Just about any intervention that a paternalist sincerely judges to be in the individual's best interests can be justified in this way if the paternalist is allowed to define what counts as attention, information, cognitive ability and self-control. The claim that the paternalist is merely implementing what the individual would have chosen for himself under ideal conditions is a common theme in paternalistic arguments, but should always be treated with suspicion.

Even if Thaler and Sunstein's concept of perfect rationality (that is, no limitations of attention, information, cognitive ability or self-control) could be defined objectively, there might still be no determinate answer to the question of what an individual would have chosen, had he been fully rational. Thaler and Sunstein seem to be assuming that inside every Human there is an Econ – that, deep down, each of us has coherent preferences, of the kind that economic theory has traditionally assumed, and that these can be found be stripping away specific failures of rationality. But if one takes the behavioural approach seriously, one must ask whether this hypothesis is an implication of received psychological theory, and how far it is supported by experimental evidence. The answers to these questions, I suggest, are 'No' and 'Only partially.'

Thaler and Sunstein do offer some general principles for identifying situations in which there is 'potential for beneficial nudging.' This potential is greatest, they argue, when individuals' decisions are difficult and infrequent, when feedback to individuals is poor and slow, when would-be nudgers have much more 'expertise' than the individuals themselves, and when differences in 'tastes and needs' between individuals are either small or 'can easily be detected' (pp. 72–6, 247). These principles are sensible enough, but they do not provide much guidance about how nudgers are to establish that they do indeed have expertise, or about how they are to detect the tastes or needs of nudgees (or, indeed, about how they should decide whether it is tastes or needs that they should be detecting).

So how do Thaler and Sunstein justify the particular interventions they propose? Rather casually. For example, they argue for nudges against obesity-inducing diets, smoking and drinking. To justify these nudges, they simply report familiar statistics about the associated health risks and then conclude: 'With respect to diet, smoking, and drinking, people's current choices cannot reasonably be claimed to be the best means of promoting their well-being' (pp. 7, 44). Similarly, to justify nudges towards saving, they report statistics about the low rate of saving in the US, and assert: 'It seems clear that the costs of saving too little are greater than the costs of saving too much' (pp. 44, 103–7). Probably most readers of this review will agree that there are many people who would be well-advised to eat less saturated fat, drink less alcohol, stop smoking and save more. But that is not the point. What, according to their own account, Thaler and Sunstein have to show is that those people are making bad choices *as judged by themselves*.

To support the claim that nudgees really want to be nudged, Thaler and Sunstein sometimes appeal to the 'New Year's resolution test.' For example: '[H]ow many people vow to smoke more cigarettes, drink more martinis, or have more chocolate donuts in the morning next year?' (p. 73). More substantially, they cite survey evidence that two-thirds of employees describe their savings rate as 'too low' while only 1% describe it as 'too high.' Such statements are, they say, 'not meaningless or random' (p. 107). That is true, but the test that has been satisfied is not exactly stringent. One might have hoped for a criterion that could discriminate between the New Year's resolutions that many of us make without seriously expecting (or even trying) to keep and genuine personal commitments that fail only under intense psychological pressure.

Thaler and Sunstein say very little about how 'expertise' is to be identified, implicitly assuming that their own judgements, as reported in *Nudge*, would satisfy whatever test was imposed. (Notice that they need to claim that what they classify as expertise is acknowledged as such *by nudgees*, and not merely by a community of mutually certified experts). For example, they are unnervingly confident in the supposedly expert judgement that long-term savers should invest almost all of their resources in equities. On the strength of the evidence that equities have out-performed fixed-interest bonds in every 20-year period up to now, Thaler and Sunstein assert: 'Over a twenty-year period, stocks are almost certain to go up.' Savers who adopt less risky strategies are deemed to be making a 'mistake', which they should be nudged away from (p. 121). No doubt most financial economists would give much the same practical advice as Thaler and Sunstein do, but is the prediction of long-term trends in asset markets really a matter on which anyone can be *almost certain*?

Thaler and Sunstein do not seem to notice – or at least, do not acknowledge – the lack of precision in their criteria for assessing the considered judgements of nudgees. Reading between the lines, I sometimes detect a suggestion that precision isn't really required, since individuals are 'only' being nudged. For example, after appealing to the New Year's resolution test and after conceding its obvious limitations, Thaler and Sunstein say that they interpret statements of the form 'I should be saving/dieting/exercising more' as implying that the individuals who make them 'are open to a nudge' (a usefully vague notion) and 'might even be grateful for one' (p. 107). In other words, Thaler and Sunstein do not claim that such self-critical statements provide evidence that the individuals who make them *do* want to be nudged, but only they *might* want to be nudged; and that, it seems, is good enough.

Having expressed so many reservations about Thaler and Sunstein's argument, I ought to make some attempt to explain the undoubted fact that it has struck a chord with many readers, both inside and outside academia. Why are so many people so excited about libertarian paternalism? I conjecture that its primary appeal is to an anti-market sensibility.

Many people – and certainly, many of the all-too-small group of people who read intellectual books – distrust the market system. They are suspicious of arguments which purport to show that individual choice in markets leads to generally beneficial results, or that this is an important component of individual freedom. Because they know that many of those arguments have been worked out, often in abstract and mathematically difficult formulations, by economists, their distrust of the market economy extends to a distrust of economics. For a person with such a mind-set, it is exciting to discover a new form of economics – one which is scientifically respectable and yet readily comprehensible – which appears to show flaws in traditional arguments in favour of the market. It is especially gratifying if this new economics supports ideas which one has always found attractive, but has had difficulty in articulating or defending. Viewed in this perspective, libertarian paternalism has two particularly appealing features. First, it seems to show that the market is not, after all, an efficient mechanism for satisfying preferences: the coherent preferences which the market has been claimed to satisfy may not even exist. In this sense, libertarian paternalism legitimates a wide range of interventionist policies that have traditionally been opposed by economists. Second, it provides a defence against the charge that such policies restrict individual freedom: because individuals' preferences are malleable, the benefits of intervention can be achieved without compromising freedom of choice.

Against all this, however, are the negative connotations of paternalism. Implicit in the libertarian paternalist position is a trust in expert judgement: as consumers, we are being asked to acknowledge our own irrationality and to allow ourselves to be nudged towards doing what experts judge to be good for us. This kind of deference to expertise seems contrary to prevailing currents of thought. (Think of how attitudes to doctors, teachers, lawyers, clergy, scientists and politicians have changed over the last decades.) How have Thaler and Sunstein succeeded in making paternalism acceptable to the modern reader?

Part of the answer, I suggest, is that they consistently encourage us (as readers) to imagine that libertarian paternalist interventions will implement the views of experts who happen to agree with us, and that it will be other people who will end up being nudged to do what they would not have done anyway. Revealingly, Thaler and Sunstein almost always write from the perspective of the experts who have supposedly been licensed to do the nudging, not from that of the nudgees who are supposedly licensing them. This aspect of *Nudge* is encapsulated in the final words of the chapter on nudging people to save more: 'In an environment in which people have to make only one decision per lifetime, *we* should surely try harder to help *them* get it right' (p. 117; italics added). Many similar passages could be quoted.

When thinking about paternalism in the abstract, it is easy for each of us to imagine that *we* are choosing the constraints (or nudges) that will impact on us, rather than authorising others to decide these for us. For example, a familiar anti-market argument maintains that the market system overloads us with pointless choices. This argument is not part of *Nudge*, but Sunstein and Thaler appear to endorse it in other work: 'How much choice should people be given? Libertarian paternalists want to promote freedom of choice, but they need not seek to provide bad options, and among the set of reasonable ones, they need not argue that more is necessarily better' (2003b: 1196). There is perhaps a hint of the same idea in

Thaler and Sunstein's discussion of dining out: '[I]t can be smart to let someone else choose for you. Two of the best restaurants in Chicago … give their diners the fewest choices. …. The benefit of having so little choice is that the chef is authorized to cook you things you would never have thought to order' (p. 76). The suggestion, I take it, is that diners can benefit by deferring to the expertise of the chef. But notice that the customers at those restaurants are subjecting themselves, not to expertise in the abstract, but to the expertise of a particular chef – one whom they themselves have chosen in a market offering a vast range of alternative dining experiences. This is very different from the nudges that Thaler and Sunstein are actually advocating.

If you are attracted by the agenda of libertarian paternalism, I urge you to think carefully about whom you are authorising to nudge you, what criteria they will use to decide when and how your own decisions are capable of being improved on, and what incentives there are to induce them to follow those criteria. You might ask yourself whether, all things considered, the market system works to your benefit – even if your preferences fail to meet the unrealistic standards of rationality set out in old-fashioned economics textbooks.

References

Bernheim, Douglas and Rangel, Antonio (2007) Toward choice-theoretic foundations for behavioral welfare economics, *American Economic Review: Papers and Proceedings,* 97, pp. 464–70.

Camerer, Colin F., Issacharoff, Samuel, Loewenstein, George, O'Donaghue, Ted, and Rabin, Matthew (2003) Regulation for conservatives: behavioral economics and the case for 'asymmetric paternalism', *University of Pennsylvania Law Review,* 151, pp. 1211–54.

Loewenstein, George and Ubel, Peter A. (2008) Hedonic adaptation and the role of decision and experience utility in public policy, *Journal of Public Economics,* 92, pp. 1795–810.

Sugden, Robert (2004) The opportunity criterion: consumer sovereignty without the assumption of coherent preferences, *American Economic Review,* 94, pp. 1014–33.

Sugden, Robert (2008). Why incoherent preferences do not justify paternalism, *Constitutional Political Economy,* 19, pp. 226–48.

Sugden, Robert (2009) Market simulation and the provision of public goods: a non-paternalistic response to anomalies in environmental evaluation, *Journal of Environmental Economics and Management,* 57, pp. 87–103.

Sunstein, Cass R. and Thaler, Richard H. (2003a) Libertarian paternalism, *American Economic Review, Papers and Proceedings,* 93(2), pp. 175–79.

Sunstein, Cass R. and Thaler, Richard H. (2003b) Libertarian paternalism is not an oxymoron, *University of Chicago Law Review,* 70, pp. 1159–202.

Thaler, Richard H. (1980) Toward a positive theory of consumer choice, *Journal of Economic Behavior and Organization,* 1, pp. 39–60.

Thaler, Richard H. and Sunstein, Cass R. (2008) *Nudge: Improving Decisions About Health, Wealth, and Happiness* (New Haven, CT: Yale University Press).