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Smart Defaults: From Hidden  
Persuaders to Adaptive Helpers

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**From Hidden Persuaders to Adaptive Helpers**

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## **Smart Defaults: From Hidden Persuaders to Adaptive Helpers**

### Abstract

Defaults have such powerful, pervasive and unrecognized effects on consumer behavior that in some settings they may be considered ‘hidden persuaders’. Looking at defaults from the perspective of consumer welfare, consumer autonomy and marketing ethics, this paper shows that ignoring defaults is not an option. It identifies three theoretical causes of default effects—implied endorsement, cognitive biases, and effort—to guide thought on the appropriate marketer response to the issues posed for consumer autonomy and welfare. We propose the concepts of “smart defaults” and “adaptive defaults” as welfare-enhancing and market-oriented alternatives to the current practice of generally ignoring default effects, in addition to other remedies. Our analysis highlights how an ethical market orientation would consider the process of consumer decision making as well as its outcomes: marketers bear responsibility for consumer buying mistakes arising from the marketer’s inept neglect or misuse of defaults. As well as recommendations for marketing practice, we also identify policymaker and research implications of defaults and consider, more broadly, the ethics of using techniques that influence consumer choice without consumer awareness.

Keywords: default effects, marketing ethics, consumer choice, consumer welfare, consumer autonomy

“...many of us are being influenced and manipulated—far more than we realize—in the patterns of our everyday lives. Large scale efforts are being made, often with impressive success, to channel our unthinking habits, our purchasing decisions, and our thought processes by the use of insights gleaned from psychiatry and the social sciences.”

Vance Packard, *The Hidden Persuaders*  
(1960: 11; first published 1957)

Vance Packard’s 1957 book, *The Hidden Persuaders*, dealt a major blow to the image of marketing. Allegations that movie-goers drank more Coke when the name of the brand was subliminally spliced within movies made consumers suspicious of advertisers, even though the claims turned out to be fabricated. Nonetheless, the book sold millions of copies and the term “hidden persuaders” entered the language as almost synonymous with marketing. The central claim of the book, as implied by the title, is that marketers can change consumer behavior without crossing the threshold of consumer awareness. The ability to carry out hidden persuasion would represent a major challenge to the twin ideals of *caveat emptor* and *consumer sovereignty*: How can a buyer beware when the causes of their behavior are unknown to them, and how can consumers rule marketplaces if they are subject to manipulation without awareness?

While the 1950s scare over subliminal advertising turned out to be baseless, half a century later, there may be good reason to be concerned about hidden persuaders. Research of recent years has identified a great number of psychological and environmental manipulations that exercise considerable influence over unaware consumers (Fitzsimons et al. 2002). For example, Wansink and Van Ittersum’s (2003) work on area perceptions and consumption volumes could be used by marketers of liquid detergent to encourage over-pouring by providing short, wide containers rather than tall, slender ones. Regardless of whether they are used with malign intent, such unconscious influences pose profound questions of marketing ethics. While many argue

that the role of marketing is to discover and meet consumer needs, the existence of these effects raises issues about the identity of marketing as a demand discovery enterprise.

In this paper we focus on a factor that affects consumer choice in every domain: the setting of defaults. What are defaults? Brown and Krishna (2004: 529) characterize a default as “the choice alternative a consumer receives if he/she does not explicitly specify otherwise,” and other authors view them similarly (Johnson, Bellman and Lohse, 2002; Camerer et al. 2003; Sunstein and Thaler 2003). Empirically, default effects are both powerful and law-like (see Johnson and Goldstein, in press, for a review). They have been demonstrated in specific marketing contexts as both hurting and helping consumers. For instance, just before Christmas 2007, the popular social network Facebook began a practice of announcing to members’ friends, the products the members had purchased on other Web sites. Since this program was activated for all Facebook members by default, many customers saw it as a violation of privacy and tens of thousands joined a petition group within a week. The company capitulated soon after and made the program strictly opt-in. On the positive side, defaults can promote consumer welfare, for instance by increasing enrollment into employee pension plans (Madrian & Shea 2001).

We examine defaults as a case study to understand more broadly the ethics of using techniques that influence consumer choice without consumer awareness. We start by reviewing defaults’ surprisingly strong effects on consumer behavior and examining three theoretical explanations for their power. We then introduce the concept of consumer autonomy as an ethical, welfare-relevant consideration in setting defaults and consider the ethics of defaults in light of these possible causes of default effects. Having demonstrated the power and pervasiveness of defaults, we suggest how they can be used to enhance consumer welfare by identifying remedies to their potential misuse; the idea of “smart defaults” and “adaptive defaults” being promising

candidates precisely because they draw upon marketing know-how. We close with a discussion of why firms may wish to adopt consumer welfare-maximizing strategies for long-term success.

### **DEFAULTS MAKE A DIFFERENCE**

Suppose a customer has two options when completing a purchase: they can enroll in a “rewards” program (and receive promotional offers by telephone, post, and email) or not. In these situations it is common to speak of “opt in” and “opt out” policies. In the opt-in system, the default is to *not* automatically enroll new customers, and no person is enrolled unless they actively request it. In the opt-out system, every new customer *is* enrolled by default and stays enrolled unless they take active steps to quit.

Defaults are surprisingly powerful in a number of consequential domains, including matters of life or death. Johnson and Goldstein (2003) found that in European countries with opt-in organ donor pools, often less than a quarter of the population opted in. However, in opt-out systems, typically over 99 percent of the population did not opt-out, leading to enormous differences in donor pool size between otherwise similar countries. Studies show that default enrollment in 401(k) retirement plans can lead to 95% participation within a few months of employment, compared to about 60% participation without the default (Beshears et al. 2006). Defaults can also sell millions of dollars of insurance. In the early 1990s, in New Jersey and Pennsylvania, a sweeping change in legislation required every driver to choose between two alternatives: i) a high-cost insurance policy that provided the right to sue or ii) a low-cost insurance policy which lacked this right. Defaults exerted tremendous influence in this choice. As it turns out, New Jersey chose the inexpensive policy as the default and Pennsylvania chose the more expensive one. As a result 21% of New Jerseyans purchased the right to sue, compared to 70% of people on the opposite side of the river in Pennsylvania (Johnson et al 1993). It is

estimated that \$140 million more auto insurance is purchased annually in Pennsylvania (over \$2 billion since the law was changed) because of the default.

Beyond two-alternative choice, defaults exhibit strong (or sometimes stronger) effects in the presence of several or thousands of alternatives. Cronqvist and Thaler (2004) document how under privatization of social security, Swedish citizens were sent a catalog of mutual funds and given instructions on how to invest for their own retirement. Of the 456 possible funds, a full third of participants ended up with their entire investment in the default fund, despite an extensive educational campaign encouraging them to make active decisions. Park, Jun and MacInnis (2000) found that consumers chose a car with a more expensive set of features if the default was a fully loaded car from which they could remove features versus a basic car to which they could add features for more money. Similar results were found for treadmills and personal computers. This scenario illustrates the scope and power of defaults beyond fixed and captive consumers: consumers buying a car can compare across offerings from competing car manufacturers (e.g., manufacturer A with the fully loaded default versus B with the base model default) or even across categories (e.g., computers versus cars, with different default offerings).

In some cases, defaults are so well hidden that people may not be aware they even have a choice. Many people do not change default settings on software (Mackay 1991), so a Web browser's default search engine can influence how a person will search the Internet for years. Since operating systems have default Web browsers, which have default home pages and search engines, many computer users might not be aware that alternative browsers and search engines exist. Though changing them is trivial for many of us, software defaults have enormous economic impact. It has been argued that AOL's four billion dollar purchase of Netscape was motivated less by its software and more by its enormously popular home page, which was

preserved as the default by some 40% of Netscape users (Kesan and Shah 2006). Software defaults are increasingly legally contested. Since search engines like Google and MSN make billions of dollars by placing ads among search results, the dispute over default search engines has found its way to the US Department of Justice, the US Federal Trade Commission, and the European Commission (Johnson and Goldstein, 2006).

### **WHY DO DEFAULTS WORK?**

Three mechanisms are often thought to drive default effects. Because they have different ethical and practical implications, we discuss them separately.

*Implied endorsement.* One view of defaults is that the public perceives them as implied endorsements by those who select them. In the case of policy defaults, such as for organ donor status or pension plan membership, McKenzie, Liersch, and Finkelstein (2006) argue that people interpret the default as the recommended course of action set out by policymakers. Thaler and Sunstein (2003) propose that the default selected by policymakers might be interpreted as an indication of what the majority chooses, and that following a heuristic of imitation (Henrich et al. 2001) could lead to its widespread adoption. In a marketplace context, Brown and Krishna (2004) posit that defaults set by marketers may be perceived as suggestions, and in the case of suspicious vendors, as manipulation attempts that consumers will reject. When viewed as endorsements, default effects are not seen as arising from cognitive limitations; on the contrary, it suggests that agents react to defaults with a kind of developed social intelligence or “marketplace metacognition” (Wright 2002).

*Cognitive bias.* Several labels have been given to supposed cognitive biases that might explain default effects, and many of these imply loss aversion as a root cause. For instance, comparisons have been drawn between the default effect and the status quo bias (Ritov and

Baron 1990; Samuelson and Zeckhauser 1988), and the endowment effect (Park et al. 2000), all of which have been explained in terms of loss aversion (Thaler, Kahneman and Knetsch 1992). Thaler et al. (1992) state that the endowment effect and the status quo bias (which they explicitly liken to default effects, p. 69) “are a manifestation of an asymmetry of value that Kahneman and Tversky (1984) call loss aversion” (p. 63). The gist of this explanation is that people may feel as if they somehow possess the default option and that giving it up would be perceived as a loss. Under loss aversion, such a loss would matter more than the equivalent gain achieved by changing to the non-default option. This account predicts that people would feel the same way if they were endowed with the opposite default and as such, presents itself as a human fallibility. We do not concern ourselves with the debate “on the reality of cognitive illusions” (Gigerenzer, 1996; Kahneman and Tversky, 1996). Rather, we ask what the ethical implications are *when* default effects are attributable to cognitive processes over which consumers have no awareness or conscious control.

*Effort.* Some of the default effect on expressed preferences is surely due to effort (Samuelson and Zeckhauser 1988). For instance, many people living under opt-out policies for organ donation, might not bother to opt out because of the effort involved in acquiring and mailing a change-of-consent form (Johnson and Goldstein 2003). However, effort is not the whole story. In experiments where choosing to keep or abandon the default required the same number of mouse clicks, Johnson and Goldstein (2003) still found differences in organ donor pool enrollment that resembled those found in the real world (42% for opt in and 82% for opt out). Similarly, other scholars have argued that rational calculations of the efforts of switching compared to the gains of switching cannot explain the range of default effects observed (Thaler and Sunstein 2003; Samuelson and Zeckhauser 1988). We do not wish to brush aside effort-

based explanations: Increasing effort clearly can affect choice, however, effort alone cannot explain all default effects.

While all three causes may contribute to the impact of defaults, their importance may differ across situations. As the causes of default effects change, so too will possible interventions and ethical implications

### **MARKETING ETHICS AND DEFAULTS**

Questions about marketing ethics were commonplace well before Packard (1960). As Farmer (1967: 1) observed: “For the past 6,000 years the field of marketing has been thought of as made up of fast-buck artists... Too many of us have been ‘taken’ by the tout or con-man; and all of us at times have been prodded into buying all sorts of ‘things’ we really did not need, and which we found later on we did not even want.”

The classic reply to such criticisms is *caveat emptor* (buyer beware) subject to the marketer operating within the law; plus an assertion of market discipline, recognizing that most companies rely on repeat purchase and favorable word-of-mouth (Smith 1995). This reply can be criticized on many grounds. However, it is clearly inadequate if the consumer response to the marketer is the result not of illegal and deceptive practices, but through “hidden persuaders,” a manipulation of which the consumer is unaware. Caveat emptor is presumed to rely upon consumers having some capacity to identify marketer influence strategies.

The ethical challenges of marketing have prompted efforts to provide normative guidance to marketers, often drawing on theories of moral philosophy. Two especially prevalent approaches have been: 1) theories based on consequences, such as utilitarianism; and, 2) nonconsequentialist theories that are typically duty-based (Dunfee, Smith and Ross 1999). Ethical evaluations of marketing practices often rely, if only implicitly, on a consequentialist

analysis. Thus one criterion used to ethically evaluate the use of a default might be the overall goodness of the consequences. Our discussion of default effects indicates that they can have major good and bad consequences (e.g., automatic pension plan enrollment; adding overpriced warranties to all orders) and they may be ethically evaluated accordingly.

### **A Consequentialist Perspective: Using Defaults to Maximize Consumer Welfare**

One possible resolution of the quandary presented by defaults would be to pick the default that would maximize consumer welfare, or be in the consumer's best interest. However appealing, there are at least two problems with this approach. The first is that the firm's and the consumer's interests are not necessarily aligned. Firms, seeking to increase profit may set a default inconsistent with consumer welfare maximization, which might benefit some consumers while the majority is dissatisfied and possibly harmed, and welfare, on average, is reduced.

The second is that what is best for consumers depends upon characteristics of the consumer: An outcome that maximizes consumer welfare overall may be suboptimal for some consumers in a context where there is heterogeneity in preferences. Thus, a marketer may set a default consistent with consumer welfare maximization, but some minority of consumers will be dissatisfied and possibly harmed. For example, the default for auto purchasers in the US is to have an air bag installed in all new vehicles. While this has clearly produced a net savings in lives, it has endangered small-framed women as well as children. The welfare producing benefits have mostly accrued to large-framed men and some have speculated that those who are more likely to be in accidents—such as those who are inebriated—are particular beneficiaries. Thus, while welfare is improved on average, there are identifiable winners and losers, and questions of responsibility. Moreover, as we show in the next section, even if defaults enhanced consumer

welfare for all consumers, they would remain ethically problematic because of their implications for consumer autonomy.

### **A Nonconsequentialist Perspective: Defaults Should Not Violate Consumer Autonomy**

Defaults can both enhance and reduce consumer welfare. Setting defaults to maximize consumer welfare might appear to resolve ethical issues. However, a nonconsequentialist perspective suggests otherwise.

Various marketing ethicists have identified a duty of marketers not to mislead consumers (e.g., Laczniak and Murphy 1993) and the American Marketing Association Statement of Ethics identifies honesty and openness as basic values required of marketers.<sup>1</sup> The implied endorsement theory of defaults suggests they may mislead consumers (e.g., the default is incorrectly assumed to indicate what the majority chooses). Though equally, some consumers (e.g., the “market savvy”) will be skeptical of marketer persuasion attempts and alert to their use of self-serving defaults rather than be misled (Brown and Krishna 2004). Defaults also can be at odds with the consumer’s right to choice, one of the four basic rights identified in a landmark speech by President Kennedy in 1962 (Lampman and Douthitt 1997). Smith (1995), in reference to social contract theory, proposed a marketer duty to ensure that consumers are capable of exercising informed choice. All three theories of defaults suggest they can be inconsistent with consumers exercising choice and thus fail Smith’s (1995) “consumer sovereignty test” (under which marketers ascertain whether consumers have sufficient capability, information and choice). More fundamentally, a nonconsequentialist perspective highlights a need to examine the implications of defaults for consumer autonomy, which we define as the right of consumers to make their own decisions.

The term autonomy comes from the Greek words “autos” (self) and “nomos” (rule or law) and, when applied to persons, refers to their decisions and actions being their own. As Dworkin (1988) observed, it is a moral, political and social ideal. Autonomous persons are self-determining but it is much more than this, as Dworkin’s (1988: 20) seminal analysis observes:

... autonomy is conceived of as a second-order capacity of persons to reflect critically upon their first-order preferences, desires, wishes, and so forth and the capacity to accept or attempt to change these in light of higher-order preferences and values. By exercising such a capacity, persons define their nature, give meaning and coherence to their lives, and take responsibility for the kind of person they are.

Dworkin uses the classic story of Odysseus—tied to his ship’s mast so that he can resist the calls of the sirens—to explain the second-order reflection inherent in his conception of autonomy. Autonomy means that we can have a preference about our preferences (in light of how we wish to live our lives). For this reason, it is possible for autonomy to be maintained in the face of interference that infringes on the voluntary character of one’s actions (or even coercion). As Dworkin (1988: 14) writes, “not every interference with the voluntary character of one’s actions interferes with a person’s ability to choose his mode of life.” Thus some loss of liberty still may be consistent with Dworkin’s conception of autonomy. Consider, for example, life-saving medical treatment rendered without patient consent in emergency situations (Dworkin 1988: 116).

Consumer autonomy has to do with our self-determination as consumers. It reflects preferences about preferences as well as immediate needs and wants. Thus, it can be conceived as accommodating consumers who would wish to always have as much choice as possible and those who might prefer to have their consumer choices curbed (e.g., because of anti-materialistic values). Defaults may challenge consumer autonomy.

In the case of manipulation through defaults, the consumer cedes some independence of choice to the marketer and consumer autonomy is diminished (even where consumers might have a preference for the convenience and ease of decision-making provided by defaults over an active choice alternative). This is clear where consumers do not frame the default as a choice (e.g., the costs of opting out are seen as prohibitively high) or where consumers are not aware as to the possibility of choice (e.g., not knowing one can switch long-distance providers). However, is autonomy always maintained where choice is recognized by consumers? We take up this question when we look further at the possible causes of default effects but first discuss autonomy in relation to paternalistic uses of defaults, because this highlights the potential clash between the possible policy goals of consumer autonomy and maximizing consumer welfare.

### **Paternalism in Setting Defaults**

Since defaults change choices, they can violate consumer autonomy by serving the marketer's interest and not the consumer's. Yet this violation can be "for their own good," serving a paternalistic intent. Paternalism is the "interference with a person's liberty of action justified by reasons referring exclusively to the welfare, good, happiness, needs, interests, or values of the person being coerced" (Dworkin 1972). This tradeoff between maximizing autonomy and consumer welfare is shown in classic illustrations of paternalistic interventions by the state include laws requiring seat-belt use in cars or helmets of motorcycle riders. Dworkin (1988: 123) explained: "There must be a usurpation of decision making, either by preventing people from doing what they have decided or by interfering with the way in which they arrive at their decisions."

Sunstein and Thaler (2003: 1161) have argued strongly in favor of a form of paternalism, urging that default rules "should be chosen with the explicit goal of improving the welfare of the

people affected by them.” Their rationale (2003: 1162) is that “in some cases individuals make inferior decisions in terms of their own welfare—decisions that they would change if they had complete information, unlimited cognitive abilities, and no lack of self-control.” Moreover, given their belief in constructed preferences, they suggest that in many situations there is no alternative to a kind of paternalism. Somebody must set the default. This “weak paternalism” is still impossible to avoid even where planners avoid defaults and require active choices, because some people would choose not to choose.

Sunstein and Thaler (2003: 1162) advocate “libertarian paternalism,” under which, they suggest, paternalistic policies that are “self-consciously attempting to move people” would be acceptable from a libertarian perspective if choices are not blocked off and impose only “trivial costs on those who seek to depart from the planner’s preferred option.” Thus, in setting defaults, marketers potentially could have “libertarian benevolence” in mind whereby default rules are “enlisted in the interest of vulnerable parties” (2003: 1162). It remains libertarian because the design makes it easy to take the non-default option.

Even libertarian paternalism violates autonomy. Sunstein and Thaler (2003: 1167, fn. 22) acknowledge this concern up to a point, though they assert that it is “fanatical” in settings such as obesity “to treat autonomy... as a kind of trump not to be overridden on consequentialist grounds.” They continue by claiming respect for autonomy in saying that “autonomy is adequately accommodated by the libertarian aspect of libertarian paternalism.” If the effect of defaults comes from effort or implied endorsement, then perhaps giving people the ability to change their choice does provide sufficiently for autonomy. However, this is not the case for our third theory of default effects and Sunstein and Thaler (2003: 1168) maintain that human judgment is profoundly biased: “People fail to make forecasts that are consistent with Bayes's

rule, use heuristics that lead them to make systematic blunders, exhibit preference reversals (that is that prefer A to B and B to A), suffer from problems of self-control and make different choices depending on the framing of the problem.”

Consumers meeting this characterization would not be as “free to choose” as Sunstein and Thaler would have it (2003: 1161) because of the very biases that they say need to be acknowledged. If the bias of loss aversion underlies the preference for default options (as argued by Thaler, Kahneman and Knetsch, 1992), then using defaults as instruments of policy inevitably compromises autonomy. In a real sense, the freedom to choose provided by libertarian paternalism is an illusion, at least to those who are unaware of the effects of defaults.

### **REMEDIES TO ENHANCE CONSUMER WELFARE**

One response to the dilemma of defaults might be to place a premium on consumer autonomy and require active choices wherever possible. However, defaults can provide greater efficiency in consumer decision-making and can assist consumers in making good decisions. Thus, under certain circumstances, defaults can be consumer welfare enhancing. In some sense, defaults are also inescapable, if one views the choices made by producers about product attributes as all potentially consumer choices. Default effects are certainly more prevalent as consumer choice has expanded; contrast Ford’s Model T (“any color so long as it’s black”) with the multiplicity of choices provided to computer customers today on Dell’s website (“create your own system”). As has been demonstrated by work on reason-based choice (Shafir, Simonson and Tversky, 1993) adding options increases the tendency to remain with the status-quo default. Most important, perhaps, is that the expansion significantly increases the effort involved in making a decision, even if decision-makers use adaptive strategies (Payne, Bettman, and

Johnson, 1993). Is it possible to create new kinds of defaults that can both preserve autonomy and lead to good outcomes?

One obvious conclusion from a welfare perspective is that ignoring defaults can be a mistake for both firms and consumers. Welfare may be reduced where defaults are set without regard to the consequences for choice, referred to as “inept neglect” by Sunstein and Thaler (2003: 1202). We know of a large manufacturer that allowed its consumers to configure their order using a web site. The manufacturer had, inadvertently, set the default alternative to the least expensive option for every choice. Not only did this fail to maximize profits for the firm, it also destroyed consumer welfare: When making choices in the absence of a default, customers systematically chose more expensive options. Thus the wrong default left both the marketer *and* the customer worse off. A better choice of default would generate a pareto improvement in welfare to both parties. Arguably, in this case, an overweighting of consumer autonomy resulted in losses to both parties.

Ultimately, while autonomy is an important value, it requires that consumers (1) are aware of the effects of marketplace characteristics such as defaults, and (2) know how to overcome their effect by spending an appropriate amount of effort. If both of these conditions exist, then the threat posed to autonomy by defaults is less of a concern. However, if they do not exist, consumers, policy-makers and firms may wish to examine other alternatives. Since ignoring defaults is not an option, we discuss some possible remedies, and propose two new kinds of defaults: “smart defaults” and “adaptive defaults”.

### **Benign Defaults**

Consistent with Sunstein and Thaler (2003), we feel that the most problematic cases are those in which defaults are chosen in a way that does not maximize consumer welfare. A

certain number of people will be dissatisfied under most any default. However, if the default is set to the preference most people would make when faced with making an active choice, the greatest number benefit.

Implementing such policies is not as simple as it seems, because giving someone the wrong defaults may have great cost. Consider the case of organ donation (Johnson and Goldstein, 1993). Governments consider organ donation welfare maximizing, and polls in the United States show that most people approve of organ donation. However, only a minority of Americans have joined organ donor pools, and only a minority agree to be donors in forced-choice situations such as at motor vehicle registration agencies. Should stated preferences (polls) or revealed preferences (forced-choice questions about joining donor pools) be used to determine what is welfare maximizing? A useful tool in such cases is to see what people who are forced to make a choice without a default will choose.

Policy makers and marketers also must look beyond the number of people affected by various defaults (as we have done here) to the broader consequences. The families of willing organ donors may care little if their kin are defaulted into not being donors, while the families of unwilling donors may care a great amount if their loved ones are harvested for organs. Even if one argues that having more donors despite a few outrages is better for societal welfare (including organ recipients), one must admit that the negative press arising from the incidents could cause voters to put an end to the opt-out system, thus decreasing societal welfare.

In their approach to benign defaults, Sunstein and Thaler (2003) focus primarily on public policymaker use of defaults to identify welfare enhancing interventions. They do, however, also acknowledge the relevance of these interventions to the private sector (but do not consider private sector exploitation of defaults that reduce consumer welfare). Four interventions are identified: 1) “Minimal paternalism,” where a default rule is constructed with

the goal of influencing behavior but it is costless or nearly costless to depart from the default plan (this intervention is most consistent with their idea of libertarian paternalism); 2) “Required active choices,” where the planner is unsure of what choice will promote welfare and so forces people to choose explicitly; 3) “Procedural constraints” typically require more effort and are designed to ensure that not following the default is voluntary and rational rather than a function of defective decision-making (due to, say, a lack of experience); 4) “Substantive constraints” allow people to reject the default but only on certain terms and potentially at considerable cost as well as effort. Planners also have the option of denying choice altogether on the basis that people will reject a default in error. This is more typical of public sector use of defaults though, in some respects, it is what companies do in requiring consumers to read terms and conditions before committing to purchase, arguably to enhance consumer welfare but more likely to reduce scope for subsequent complaints or litigation. It is also what a company does in determining a set of product attributes over which the consumer has no choice, though clearly consumers have choice in comparing different products of competing companies.

In determining the appropriate intervention, there are two approaches that appear to apply to marketers as well as in a public policy context (Sunstein and Thaler 2003). First would be a cost-benefit analysis that evaluates the gains and losses associated with the program options. If feasible, this would be an objective assessment of which option maximizes consumer welfare and thus how to set defaults. The organ donation example illustrates the challenges this poses and a standard critique of consequentialist ethics is the difficulty of forecasting all potential good and bad consequences for all affected parties. Second, to adopt rules-of-thumb: the approach that the majority would choose if explicit choices were required and revealed (but what of the minority?); or a forced-choice approach (but some would not choose, others would not make “good” choices, and this abandons the efficiency of defaults); or an approach that minimizes the

number of opt-outs (but this might result from cognitive biases). Ultimately, however, the approach of using these various benign default solutions is suboptimal in our view relative to what we call “smart defaults” or “adaptive defaults” that intentionally set out to exploit marketer expertise in mitigating default effects in marketing contexts.

### **Smart Defaults**

Marketers are in the business of understanding consumer needs and predicting their behavior. Defaults can be set in a way that takes advantage of that knowledge. Consider the air bag example used earlier to illustrate heterogeneity in consumer needs. If the deployment of the airbag could react to the kind of occupant of the seat, consumer welfare would be increased. Thus many “Advanced Airbag Systems,” required on all new vehicles in the U.S. since 2006, are designed to sense the weight of the seat occupant to determine whether to activate the airbag. This is a smart default. In helping customers make better decisions about the purchase of retirement investments, a smart default might be based on a simple linear model incorporating the purchaser’s age, family status and intended age at retirement. Other factors, such as the investor’s risk preferences and loss aversion, also can be included. Such defaults would not suit all consumers perfectly, but are superior to the traditional default contribution of not providing a safety net or the more recent ‘one-size-fits-all’ default suggested by many firms.

The challenge for smart defaults is to gather enough information sufficiently quickly to produce a better-customized default than the one-size-fits-all approach. There will always be a tradeoff between the amount of information gathered and the accuracy of the default calculation, but existing market research technology should allow firms to address this problem. From both a consequentialist and a *caveat venditor* (seller beware) perspective, smart defaults are a dominant option.<sup>2</sup> We believe they may also be an advantage to the firm as well, assuming they do two things: The first is that they meet the challenge of creating the right smart default. The second,

which is perhaps much more difficult, is to be able to communicate the effect of defaults upon choice and to convince consumers that their choices using smart defaults are better. In this case, firms may profit from the long-term loyalty generated by increased consumer satisfaction.

Smart defaults require the presence of consumer-specific data, some of which may already be known to the marketer (e.g., age, gender, referring URL) and some of which might be collected explicitly to generate the default. The beauty of smart defaults is that they return us to the original idea of marketing as understanding and meeting consumer needs including the differences across consumers evident in market segmentation. What is novel is that smart defaults assume that the firm must understand consumers better than consumers themselves at the beginning of the decision process. Much like a firm uses market research to produce products that meet consumer needs, smart defaults suggest that firms must produce *decisions* that meet the consumers' needs as well. This was not the case when our auto manufacturer, who had picked the least expensive default for every choice, failed to meet the needs of most consumers. The smart default design, selecting the right engine, body style, and accessories for both the high performance connoisseur and the parent of a large family, would be a smart default better meeting those needs.

### **Adaptive Defaults**

Another option, particularly relevant to the world of online commerce, is the idea of an *adaptive* default, one that uses each choice in a series to set other defaults. Instead of making the auto manufacturer's unfortunate choice of selecting the least expensive options as defaults, a more appropriate, benign, welfare-enhancing default might be to make the default the option that a customer would select in the absence of a default.

As we have discussed, smart defaults would improve consumer welfare based on rudimentary knowledge about the consumer. Adaptive defaults would require the manufacturer

to present the options with defaults that represent the best guess of what might be chosen *conditional* on what has been chosen to date. For example, someone who chooses a powerful engine may be more likely to choose certain colors (red), and other consistent options, such as sporty wheels, a sports handling package, and performance tires. Note that unlike the widespread use of packages of options to limit choice, the idea of an adaptive default preserves considerable consumer autonomy (within marketer determined boundaries) and strikes a balance between providing more choice and providing the right choices. It also addresses concerns with choice overload (Iyengar and Lepper 2000) by limiting the options that must be shown to the consumer. Because the number of decisions that must be made is also reduced, ego depletion effects in choice might be minimized by adaptive defaults (Baumeister, Muraven and Tice 2000).

While smart and adaptive defaults have many merits, there may be some problems associated with their implementation. These clever defaults appear to be choices or judgments that the firm is making for the customer. Who is to blame when a smart or adaptive default does not fit the consumer, such as when the airbag is inappropriate: the manufacturer for having a poor algorithm, or the consumer for passively accepting the default?

### **Other Remedies**

In some circumstances, it might be appropriate to require procedural constraints (Sunstein and Thaler 2003) to reduce the prospect of consumers rejecting a welfare enhancing default. These constraints typically raise the cost of moving away from the default by requiring greater effort (e.g., where software companies provide recommended settings when installing software). In other circumstances, particularly where the default is not welfare enhancing for at least some consumers, warnings and disclosures may be warranted. Hidden defaults, that is, not informing all customers that they have a choice of certain options, may be inappropriate or at least require disclosure if there are potentially major negative consequences for consumer welfare. Equally, it

may be appropriate to warn consumers of default effects, not unlike how curved rear-view mirrors come with warnings about how they alter perceived distance. However, warnings would be of less practical value as a remedy under the assumption that cognitive biases are at work. If default selection reflects implied endorsement, it might be appropriate to require warnings to the effect that the default option is not endorsed by the company where this is not the consumer welfare maximizing option (e.g., “default settings do not constitute a recommendation and may not be the preference of a majority of consumers”). Clearly, however, in this context and others (e.g., in regard to paternalistic remedies), more research is required to better understand the relative contribution of the different theories of default effects to default outcomes.

More draconian, but arguably warranted in some contexts, would be regulations preventing the use of defaults or restricting marketers from using the consumer-welfare minimizing default or from unfairly loading the costs of not following the default. In view of the demonstrated powerful effects of defaults, consumer protection agencies should closely monitor their use. We believe that much could be achieved through consumer education so that consumers are better informed of how consciously or otherwise they might respond to defaults.

## **CONCLUSION**

We have borrowed a page from an old book on the manipulation of consumers. Though its message has been brushed aside, perhaps rightfully so where it concerns indirect manipulation (as through subliminal advertising), recent consumer research documents robust, reliable and more direct effects, the consumer-welfare implications of which merit attention. Taking the strength and scope of default effects as a case in point, we argue that they present considerable potential to impact, both positively and negatively, the outcomes consumers face. Where previous discussions of defaults have focused solely on outcomes, we argue that even when consequences are benign, default manipulations can violate consumer autonomy.

The implications of defaults cannot be judged without a theory of why default effects exist. We consider the ethical implications of defaults with respect to three dominant lines of explanation as to why default effects exist: implied endorsement, cognitive limitations, and effort. Arguing that ignoring defaults is never justified, we examine the options that are available to firms who wish to maximize consumer welfare given the effects of defaults. Moving beyond benign defaults, we propose two alternatives more in line with marketing principles of understanding and segmenting customers--smart defaults and adaptive defaults--showing that both can enhance consumer welfare and how adaptive defaults also may preserve consumer autonomy. These alternatives highlight marketer responsibility for the process of consumer decision-making. Buying mistakes as a result of marketer default settings cannot simply be blamed on the consumer. Accordingly, implementing an ethical market orientation (Kohli and Jaworski 1990) requires marketer attention to the consumer decision-making process, including but not limited to the role of defaults.

As we close, we note that while the effects of defaults are notably powerful and pervasive, similar issues arise with any marketing influence that operates without consumer awareness, whether they are failures of willpower encouraged by priming, the use of containers that encourage consumption, or the use of anchors to inflate prices. All these occur without substantial awareness, and in some cases, as in anchoring, simply warning consumers of their existence does not prevent their influence. Like defaults, they can enhance or detract from consumer welfare. Caveat emptor and consumer sovereignty are not adequately operative concepts in these cases. A more desirable view, in our opinion, is the realization that consumers' decisions are tightly linked to the manner in which information is presented to them, and represent additional obligations by which ethical marketers must abide.

## REFERENCES

- Baumeister, Roy F., Mark Muraven and Dianne M. Tice (2000). Ego depletion: A resource model of volition, self-regulation, and controlled processing. *Social Cognition*, 18, 130-150.
- Beshears, John, James J. Choi, David Laibson, and Bigitte C. Madrian (2006), "The Importance of Default Options for Retirement Saving Outcomes: Evidence from the United States." <http://www.people.fas.harvard.edu/~beshears/papers.html>
- Brown, Christina L. and Aradhna Krishna (2004), "The Skeptical Shopper: A Metacognitive Account for the Effects of Default Options on Choice," *Journal of Consumer Research*, 31 (3), 529-539.
- Camerer, Colin, Samuel Issacharoff, George Loewenstein, Ted O'Donoghue, and Matthew Rabin (2003), "Regulation for Conservatives: Behavioral Economics and the Case for "Asymmetric Paternalism," *University of Pennsylvania Law Review*, 151, 1211-1254.
- Cronqvist, Henrik and Richard H. Thaler (2004), "Design Choices in Privatized Social Security Systems: Learning from the Swedish Experience," *American Economic Review*, 94 (2), 424-428.
- Dunfee, Thomas W., N. Craig Smith and William T. Ross, Jr. (1999), "Social Contracts and Marketing Ethics," *Journal of Marketing*, 63 (July), 14-32.
- Dworkin, Gerald (1972), "Paternalism," *Monist*, 56 (January).
- \_\_\_\_\_ (1988), *The Theory and Practice of Autonomy*, Cambridge: Cambridge University Press.
- Farmer, Richard N. (1967), "Would You Want Your Daughter to Marry a Marketing Man?" *Journal of Marketing*, 31 (January), 1-3.

- Fitzsimons, Gavan J., J. Wesley Hutchinson, Patti Williams, Joseph W. Alba, Tanya L. Chartrand, Joel Huber, Frank R. Kardes, Geeta Menon, Priya Raghuram, J. Edward Russo, Baba Shiv, Nader T. Tavassoli (2002), "Non-Conscious Influences on Consumer Choice," *Marketing Letters*, 13 (3), 269-279.
- Gigerenzer, Gerd (1996), "On Narrow Norms and Vague Heuristics: A Reply to Kahneman and Tversky," *Psychological Review*, 103 (3), 592-596.
- Henrich, Joseph, Wulf Albers, Robert Boyd, Gerd Gigerenzer, Kevin McCabe, Axel Ockenfels, and H. Peyton Young (2001), "What is the Role of Culture in Bounded Rationality?" in *Bounded Rationality: The Adaptive Toolbox*, ed. G. Gigerenzer and R. Selten, MIT Press.
- Iyengar, Sheena S. and Mark R. Lepper (2000), "When choice is demotivating: Can one desire too much of a good thing?," *Journal of Personality and Social Psychology*, 79 (6), 995-1006.
- Johnson, Eric J., Steven Bellman, and Gerald L. Lohse (2002), "Defaults, Framing, and Privacy: Why Opting In Is Not Equal To Opting Out," *Marketing Letters*, 13 (1), 5-15.
- Johnson, Eric J. and Daniel G. Goldstein (2003), "Do Defaults Save Lives?" *Science*, 302, 1338-1339.
- \_\_\_\_\_ (2006), "The daily defaults that change lives," *Financial Times*, Aug. 29.
- Johnson, Eric J., John Hershey, Jacqueline Meszaros, and Howard Kunreuther (1993), "Framing, Probability Distortions, and Insurance Decisions," *Journal of Risk and Uncertainty*, 7, 35-53.
- Kahneman, Daniel and Amos Tversky (1984), "Choices, Values, and Frames," *American Psychologist*, 39 (April), 341-350.
- \_\_\_\_\_ (1996), "On the Reality of Cognitive Illusions: A reply to Gigerenzer's Critique," *Psychological Review*, 103, 582-591.
- Kesan, Jay P., and Rajiv C. Shah (2006), "Setting Software Defaults: Perspectives from Law, Computer Science and Behavioral Economics" *Notre Dame Law Review*, 82 (2), 583-634.

- Kohli, Ajay K. and Bernard J. Jaworski (1990), "Market Orientation: The Construct, Research Propositions, and Managerial Implications," *Journal of Marketing*, 54 (April), 1-18.
- Laczniak, Gene R. and Patrick E. Murphy (1993), *Ethical Marketing Decisions: The Higher Road*. Needham Heights, MA: Allyn and Bacon.
- Lampman, Robert J. and Robin A. Douthitt (1997), "The Consumer Bill of Rights Thirty-Five Years Later," *Advancing the Consumer Interest*, 9 (2), 4-6.
- Madrian, Brigitte C. and Dennis F. Shea, D. F. (2001), "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior," *Quarterly Journal of Economics*, 116 (4), 1149-1187.
- Mackay, Wendy E. (1991), "Triggers and barriers to customizing software," in Scott P. Robertson, Gary M. Olson, and Judith S. Olson (ed.), *Proceedings of the ACM CHI 91 Human Factors in Computing Systems Conference*, April 28 - June 5, 1991, New Orleans, LA, 153-160.
- McKenzie, Craig R.M., Michael J. Liersch and Stacey R. Finkelstein (2006), "Recommendations Implicit in Policy Defaults," *Psychological Science*, 17(5), 414-420.
- Packard, Vance (1960), *The Hidden Persuaders*, London: Penguin. First published 1957.
- Park, C. Whan, Sung Youl Jun and Deborah J. MacInnis (2000), "Choosing What I Want Versus Rejecting What I Do Not Want: An Application of Decision Framing to Product Option Choice Decisions," *Journal of Marketing Research*, 37 (2), 187-202.
- Payne, John W., James R. Bettman and Eric J. Johnson (1993), *The Adaptive Decision Maker*, Cambridge: Cambridge University Press.
- Ritov, Ilana and Jonathan Baron (1990), "Reluctance to Vaccinate: Omission Bias and Ambiguity," *Journal of Behavioral Decision Making*, 3, 263-277.
- \_\_\_\_\_ (1992), "Status Quo and Omission Bias," *Journal of Risk and Uncertainty*, 5, 49-61.

Samuelson, William and Richard Zeckhauser (1988), "Status Quo Bias in Decision Making,"

*Journal of Risk and Uncertainty*, 1 (1), 7-59.

Shafir, Eldar, Itamar Simonson and Amos Tversky (1993), "Reason-Based Choice," *Cognition*,

49 (1-2), 11-36.

Smith, N. Craig (1995), "Marketing Strategies for the Ethics Era," *Sloan Management Review*,

36 (Summer), 85-97.

Sunstein, Cass R. and Richard H. Thaler (2003), "Libertarian Paternalism Is Not an Oxymoron,"

*The University of Chicago Law Review*, 70 (4), 1159-1202.

Thaler, Richard H. and Cass R. Sunstein (2003), "Libertarian Paternalism," *American Economic*

*Review*, 93 (2), 175-179.

Thaler, Richard, Daniel Kahneman and Jack L. Knetsch (1992), "The Endowment Effect, Loss

Aversion and Status Quo Bias," in Richard Thaler, *The Winner's Curse*, Princeton: Princeton University Press, 63-78.

Wansink, Brian and Koert Van Ittersum (2003), *Journal of Consumer Research*, 30 (3), 455-463.

Wright, Peter (2002), "Marketplace Metacognition and Social Intelligence," *Journal of*

*Consumer Research*, 28 (March), 677-82.

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## Footnotes

<sup>1</sup> See American Marketing Association Statement of Ethics, adopted 2004, at <http://www.marketingpower.com/AboutAMA/Pages/Statement%20of%20Ethics.aspx?sq=statement+of+ethics#>. Accessed December 17<sup>th</sup>, 2008.

<sup>2</sup> Smith (1995) placed caveat venditor at the opposite end from caveat emptor on a “marketing ethics continuum”. This position is where consumer interests would be most favored relative to producer interests, but it raises concerns about paternalism of the type discussed earlier here in regard to defaults.

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