

Internality Regulation Through Public Choice

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Much health and safety regulation can be understood as the product of political coalitions between two groups. The first, consisting of persons with self-control issues, enlists the government as an intermediary. The second either expects to benefit from the success of the first, or anticipates gains from a tax imposed on the first group's behavior. A political entrepreneur might plausibly turn these groups' preferences into law. This public choice perspective on regulation provides a positive explanation of why it is more likely that a legal system will engage in some health and safety programs than in others. The important break from the conventional view of regulation, as something that either controls externalities or is imposed paternalistically, is in advancing the idea that the government is an intermediary deployed by those who want help. Internalities, associated with collective action problems or with time inconsistent preferences, deserve equal billing. The discussion considers smoking regulation and other health and safety regulation, and then contrasts these with anti-obesity efforts where private contracting is a more feasible means of controlling internalities, and where political coalitions are less likely.

INTRODUCTION

Some health and safety regulation can be justified on the basis of internalities — the impact of one's current decisions on one's future self. For example, smokers might wish they had been discouraged from smoking in the past, even before they know whether there will be dire personal consequences.¹

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1 Even if many smokers are rational addicts, see Gary S. Becker & Kevin M. Murphy, *A Theory of Rational Addiction*, 96 J. POL. ECON. 675 (1988), and have

It might follow, or it might independently be the case, that many potential smokers favor legal intervention in order to restrain their current and future selves. The intervention might be in the form of a smoking ban or a tax on cigarettes. A wide range of government interventions can be understood from this pre-commitment, or self-control, perspective, though not all of them derive from “time-inconsistent” preferences.

A very different interest group that might favor the same government interventions consists of those who stand to gain from regulation not because they want to influence their own future behavior, but because they seek to avert the costs expected from the uncontrolled behavior of others. To continue the example, some nonsmokers might support cigarette taxes because they fear that the health costs associated with smoking will eventually prove costly to nonsmokers. Alternatively, though perhaps less interesting, aspiring nonsmokers might need to purchase support from other groups by earmarking the new cigarette tax for something with special appeal to their anticipated allies.

The central claim of this Article is that a substantial and perhaps surprising fraction of health and safety regulation can be understood as the product of political coalitions between these distinct groups.² The first group, often a small subset of those with self-control issues, enlists the government as an intermediary in solving their problem; the second group benefits from the success of the first, perhaps because it expects to bear some of the costs generated by the latter’s self-control failures. In many cases these groups are not well-organized, and it is most plausible that a political entrepreneur turns their preferences into law. Over time, the group in favor of internality control might grow and push for stronger regulation. The important break from the conventional view of regulation, as something that either controls externalities or is imposed paternalistically, is in advancing the idea that the government is often best understood as an intermediary deployed by those who want help, albeit sometimes at the expense of others. Internalities, associated

at most an *ex post* kind of regret, others might fear and regret their future selves as well. The discussion below exploits this idea of different subsets of smokers. Somewhat similarly, one solution to self-control problems might be to put one’s faith in government, in which case paternalism is easily justified, rather than to imagine that the group understands its own time-inconsistent preferences and is best situated to design a solution. But I resist any convergence between paternalism and the public choice version of self-control developed here.

- 2 In other work I extend the argument to other areas, and especially to savings, which do not involve health and safety. That essay emphasizes information revelation problems. See Saul Levmore, *From Helmets to Savings and Inheritance Taxes: Regulatory Intensity, Information Revelation, and Internalities*, 81 U. CHI. L. REV. 229 (2014).

with collective action problems or with time-inconsistent preferences, deserve equal billing. The intuition or theory developed here requires only that some people wish to control their future selves.

There is, to be sure, a newer view of taxes and other regulation as addressing time-inconsistent preferences exactly of the kind emphasized here.³ Smokers and others regret decisions made by their former (and especially youthful) selves, and government intervention is justified on behalf of the underrepresented future selves. The first additional step taken here is to link this basis for intervention with interest group calculations. As a starting point, instead of thinking of the government as somewhat paternalistically intervening on behalf of future selves, the notion is that current selves, at strong moments, sometimes see the need to control their internality problem.⁴ The next step is to see that the more their strategy benefits other groups, the more likely it is to become law. And the more other groups, including regretful and rational addicts, are burdened, the more opposition there will be to the internality-directed intervention. The end result depends on the costs of political organization, or the returns to political entrepreneurs, and does not necessarily maximize social welfare.

Part I develops the claim about coalitions in the context of smoking regulation, but also includes some discussion of helmet laws, texting while driving, workplace safety, building codes, and other health and safety regulation. Part II turns to the health problem of obesity where the internality approach suggests private contracting rather than political coalitions. The conclusion revisits the line between internalities and externalities.

3 For a quick introduction, see Jonathan Gruber, *Government Policy Towards Smoking: A View from Economics*, 3 *YALE J. HEALTH POL'Y L. & ETHICS* 119 (2002-2003); Jonathan Gruber & Botond Köszegi, *Is Addiction "Rational"?* *Theory and Evidence*, 116 *Q.J. ECON.* 1261 (2001); and Kip Viscusi, *Cigarette Taxation and the Social Consequences of Smoking*, 9 *TAX POL'Y & ECON.* 51 (1995). For some ideas about fashioning the tax system around a population that is heterogeneous with respect to self-control, see Lee Fennell, *Willpower Taxes*, 99 *GEO. L.J.* 1371 (2011).

4 An emphasis on paternalism misses the point that regulation must navigate interest group opposition. Moreover, the approach adopted here makes room for the likelihood that those who need help are sometimes in the best position to self-assess the intensity of the regulation needed.

I. COALITIONS TO REGULATE SMOKING AND OTHER INTERNALITY PROBLEMS

A. Internality Control

The conventional view of smoking regulation is that governments heeded growing evidence regarding the dangers of smoking to health.⁵ Even governments that had once subsidized tobacco moved to require warnings, to levy higher excise taxes, to bar advertising in some media, and to tighten minimum age requirements for purchasers, all in order to discourage smoking, at least by the young and impressionable. More recently, as suspicions developed about negative health effects from secondhand smoke, law moved yet more aggressively with these tools and then went further by expanding no-smoking zones and enabling or even initiating tort suits against cigarette manufacturers.⁶ The first part of this story reflects moderate paternalism with an eye on the advantages of taxing inelastically demanded goods. The latter, more aggressive, phase in the regulatory history is easily described as legal intervention in response to a negative externality. The threat of secondhand smoke provided a justification for bans, lawsuits, and other regulation. Regulation in the face of this sort of externality is especially appealing, or likely, because conventional lawsuits are unwieldy. It is difficult to establish causation or even standing when one claims injury as a result of the cumulative and negative effects of a behavior engaged in by many others over a long period of time. Note that while regulation might be appealing, its proper intensity is hard to ascertain because of heterogeneous reactions to secondhand smoke as well as disparate burdens generated by taxes and bans.⁷

The externality-inspired story of regulation is not weakened by the fact that bans and taxes might extend the lives of smokers themselves. Many of the great health and safety advances of the last century have come out of the tradition of using liability rules and taxes to force parties to internalize the costs they impose on external parties.⁸ For example, driving an automobile

5 See Jonathan Gruber, *Tobacco at the Crossroads: The Past and Future of Smoking Regulation in the United States*, J. ECON. PERSP., Spring 2001, at 193 (describing the conventional literature on externalities of smoking).

6 Bans and other restrictions are found in a wide variety of countries (ranging from New Zealand to the European Union and to Bhutan), but this is not the place to separate those regulations derived from domestic political and health considerations from those passed in imitation of other countries' laws.

7 See Levmore, *supra* note 2.

8 I will assume that the externalities and internalities under discussion are "relevant" to behavior. An irrelevant externality or internality is one that does not alter

at an unsafe speed or while intoxicated may endanger the driver, but we normally regulate and impose liability or fines based on speed because of the damage done (or threatened) to others. Speed limits are set with others in mind, as in the case of school zones. These limits interfere with personal freedom, but they are accepted because they greatly simplify the operation of the tort system and likely reduce externalized costs. There is an ostensible bonus in the saved lives of the aspiring speedsters themselves, though of course they may rationally value speeding over longer lives, and insist that we misconstrue the apparent bonus.⁹ In any event, legal systems regularly control externalities with a combination of *ex ante* and *ex post* incentives.

There remains, however, the fact of regulation with respect to some internalities and not others. Put differently, we might understand or simply set aside the regulation of externalities, and observe that a substantial subset of health and safety regulation involves not externalities but things people do to themselves. To be sure, every internality problem has at least a small externality component, much as externalities usually come with small internalities. Smoking is likely rational for some persons and an internality problem for others, but to the extent that it generates harmful secondhand smoke and, perhaps, widely shared health costs, there is an externality problem stubbornly attached to both. Even a failure to wear a helmet, a decision to play a violent sport, or a personal choice to drop out of school can be seen as imposing costs on others. For purposes of exposition, however, it is useful to think of such joint problems as internalities alone, at least when the externality component is irrelevant, in the technical sense, for most of the population.¹⁰

behavior. See James M. Buchanan & William Craig Stubblebine, *Externality*, 29 *ECONOMICA* 371 (1962). I set aside the question of how to count and compare the external costs imposed by smoking, and then obesity, with the taxes already levied on cigarettes and other products. See Katherine Pratt, *A Constructive Critique of Public Health Arguments for Anti-Obesity Soda Taxes and Food Taxes*, 87 *TUL. L. REV.* 73 (2012); Jeff Strnad, *Conceptualizing the "Fat Tax": The Role of Food Taxes in Developed Economies*, 78 *S. CAL. L. REV.* 1221 (2005). Both authors note the possibility of taxes as self-control devices, and thus anticipate the fuller treatment here.

9 See Robert Cooter & Ariel Porat, *Does Risk to Oneself Increase the Care Owed to Others? Law and Economics in Conflict*, 29 *J. LEGAL STUD.* 19 (2000).

10 Thus, if a very large fraction of the population finishes high school, avoids overdoses of prescription drugs, or takes precautions not to fall into deep pits, we can approximate and say that those who behave differently either present internality problems or value the activity in question differently. It is possible that a modest intervention reflecting the (alleged) externality imposed on others would tip the balance, but I will assume not.

B. Government as Intermediary

How might a concerned, aspiring nonsmoker — that is, a person in search of self-control assistance regarding the future self as smoker — proceed? It is useful to concentrate on the easy cases, where at an early time period the individual knows that self-control might be weak in the future. Moreover, the individual is somehow confident that it is the present rather than the future self that knows best, or at least knows better.¹¹ Much as someone joins a fitness club with upfront costs as part of a New Year's resolution regarding the later self, the aspiring nonsmoker might try to commit to healthy ways and to fool or motivate oneself with sunk costs. The example is meant to elicit empathy for the aspirant. We are confident that the individual does not want to smoke and does wish to be trim and fit, but we are also aware that fitness clubs take advantage of the insecure, uncontrollable self, who designs and invests in a pre-commitment strategy.

One can toss away cigarettes at a strong moment, but it is more difficult to guard against the future weak self by investing in anti-cigarettes. One suggested strategy is to give money to a friend and ask that it be returned if the donor refrains from smoking, but given to a hated enemy if there is evidence that the donor smoked.¹² Ian Ayres and Michael Abramowicz have extended this strategy to commitment bonds, which are sold to outsiders who pay for the right to receive payment if the initiator fails to reach a stated goal.¹³ Where

11 More precisely, there is a thoughtful decision-maker at time T_1 that seeks to control behavior at T_2 , with some confidence that at T_3 the decision to constrain T_2 behavior will be appreciated. This is not terribly different from conventional thinking about pollution and other externality controls. I do not mean to pass over the difficult question of how the individual knows that the T_1 decision is thoughtful and correct. There will be cases where we can extract information from a prior self. In some cases, parents or other concerned persons might form the interest group that encourages intervention in the interest of "self"-control. Parents might like cigarette taxes, much as they might like high school principals to enforce dress codes.

12 See STICKK, www.stickk.com (last visited Feb. 4, 2014) (a website that enables monetary commitment strategies with self-reporting or third-party verification).

13 Ian Ayres & Michael Abramowicz, *Commitment Bonds*, 100 GEO. L.J. 605 (2012). It is not obvious that the commitment bond strategy is superior to the conventional one, because the marginal payoffs are not improved. It is interesting and perhaps revealing that Ayres and Abramowicz conclude with a news report about a New Zealander who auctioned off his promise to pay one thousand dollars for each cigarette he smoked after a specified date. A serious problem is that the buyer (and the promisor) must know that the promisor can sneak cigarettes without anyone knowing about it. A thousand-dollar tax on each cigarette would

there is a verification difficulty, as there is with smoking, and especially so if the subject reduces but does not entirely eliminate consumption, the self-help strategy focuses on inputs rather than results; a tax on cigarettes is easier to administer than is a tax or reward that requires knowing how much an individual smokes. Smoking is particularly amenable to this switch, inasmuch as there is one input, or product consumed, and it is not something nonsmokers will resist burdening. Another self-control strategy might be to live in a building that bans smoking. It is noteworthy that such bans are of recent vintage, and put in effect by local statutes as well as individual landlords.¹⁴ Strategies of this kind work for some people, but merely cause others to engage in deception or to suffer health problems, lose money, or suffer from the transaction costs of deception.

It is plain that the troubled, aspiring nonsmoker might turn to the government for help, or await a political entrepreneur. A high tax on cigarettes is one option. This internality control might be favored by those who fear they will start to smoke as well as by those who wish to quit smoking. It will be attractive to those who think they are influenced by financial incentives, though surely opposed by the much larger group that does not expect to quit. In order to magnify the antismoking incentive of such taxes, supporters might favor a law that promised to use the tax revenues to fund rewards, or refunds of sorts, for those who quit smoking after some period of time or for those above a specified age (because they are more difficult to influence and because the benefits of quitting are smaller).

A strategy that rewards or penalizes based on results faces difficulties. Smokers will claim to have quit, and those who want help with self-control might not also want the serious intrusions of privacy and bodily integrity that would be necessary to maintain the system's reliability. In addition, nonsmokers might claim to have smoked, or might even take up smoking on a temporary basis in order to qualify for the distribution of revenues.¹⁵ It is

be much more effective, though obviously that is a tax that continuing smokers would strongly oppose.

- 14 As explained presently, these developments can be understood as enacted on behalf of aspiring nonsmokers. If one subscribes to the notion that rational addiction explains a good deal of smoking, and responses to higher taxes and the like, then it must also follow that it is rational for aspiring nonsmokers to bring about smoking bans (at least) where they are not required by law.
- 15 This hazard stands in the way of several tempting plans. Aspiring nonsmokers could suggest a very high tax accompanied by a lump sum payment to all smokers, funded by the projected tax. On the margin there would be an incentive to quit, but continuing smokers would have little reason to fight the tax. The problem is verification (identifying true smokers) and the concern that people, or perhaps

likely that these and other problems doom the double incentive idea and, of course, explain why smokers cannot simply solve the problem on their own. Aspiring nonsmokers will need to be satisfied with a tax that benefits the general populace (including themselves), although we might expect some of the money to be used to finance education or counseling initiatives if these seem useful in the quest for assisted self-control. Structured in this manner, it is easy to see that nonsmokers will join in supporting the tax because it falls on smokers and benefits many. In turn, it is easy to see how these groups can overwhelm the presumed objections of tobacco companies and allied commercial interests, as well as smokers who do not expect or want to quit. Finally, once taxes and bans are in place, they discourage smoking even on the part of those who must attempt to quit more than once; in contrast, private commitments must be renewed as the need arises. If the number of smokers falls, it is then easier to raise taxes and extend bans. It is not surprising that taxes on cigarettes are common and increasing.

The modest theory sketched thus far is at odds with the conventional view of taxes on cigarettes, alcohol, and other addictive as well as unhealthy and unsafe products. It is, of course, allied with current work on time-inconsistent preferences. The conventional view is that a tax on cigarettes is among the more attractive excise taxes because an inelastic good can be taxed without much loss in sales, and thus without much loss in consumer surplus.¹⁶ There is a wealth transfer from buyers to the government, but not much inefficiency.¹⁷

just people who have reason to think they can easily quit, would be drawn to smoking in order to qualify for the lump sum payment. Somewhat similarly, if a financial incentive is aimed at young smokers, older citizens might claim to be smokers in order to qualify for refunds. And a tax limited to young buyers is too easily avoided by arbitrage from the old to the young.

16 See Gruber, *supra* note 5, at 207 (“This is in addition, of course, to the standard optimal commodity tax arguments for taxing cigarettes heavily because they are a fairly inelastically demanded good.”). The argument must be about the short run because high prices surely discourage some new smokers. Indeed, the rational addiction literature emphasizes that the long-run elasticity of cigarette demand is greater than the short-run elasticity.

17 The argument is static and second best. Optimal taxes should take distribution into account. Thus, we intuit that a tax on waking up in the morning is “efficient” in the sense that there will be no deadweight loss because behavior will continue as before, but it will have serious distributional effects. A well-known result (though not one that takes into account the cost of administering various taxes) is that we can get just as efficient a tax by taxing income without the distributional effect. See Louis Kaplow, *On the Undesirability of Commodity Taxation Even When Income Taxation Is Not Optimal*, 90 J. PUB. ECON. 1235 (2006) (discussing

The new view advanced here is quite different. It is that the tax can be understood as consistent with the wishes of many aspiring nonsmokers.¹⁸ They can count on support from other groups, as described previously, and when allied they might overcome tobacco producers and other vested interests. Roughly speaking, the theory depicts the government as an intermediary helping present selves to build protection against the future selves they fear. The government is a sum of interest groups, in a sense, and here it is likely that the troubled present selves require an alliance with another group in order to energize law.

It seems likely, however, that there are too many smokers who do not anticipate quitting, and these smokers will have a strong interest in joining commercial interests to oppose taxes and other self-control mechanisms. Note that under the new view, tobacco companies and dedicated smokers are opposed to the tax, much as they are in the conventional view. Optimistically, we have imagined some smokers to be aspiring nonsmokers, and this subgroup joins with vulnerable pre-smokers, but it goes beyond optimism to insist that a very large fraction of smokers expects to quit. Some might experience the health effects of smoking and generously wish for others to abstain, but the theory is a stronger one if it assumes self-interest and does not resort to altruism on the part of some groups.¹⁹ It is misleading to compare the number of aspiring nonsmokers with that of continuing smokers. Interest group power

implications of the Atkinson-Stiglitz Theorem and showing that differential commodity taxes are inefficient even with suboptimal income taxes).

- 18 Aloys L. Prinz, *The Political Economy of Smoking Regulation and Taxation*, 141 *PUB. CHOICE* 291, 292 (2009) (“[F]ar reaching policy measures are now being justified . . . in addition to negative externalities [by] internalities [such that] smokers should be happy that they are taxed heavily and that their smoking habit is counteracted by a benevolent government.”).
- 19 Theories can be mixed. If we lean more on externalities, we can include in the coalition nonsmokers who are indifferent to healthcare costs but who dislike secondhand smoke. Another group might like taxes for a particular expenditure. Similarly, smoking may be a function of peer pressure, so that the internality problem is solved by a ban (or tax) because the problem is really a collective action problem. Individual A smokes because B through T smoke, and then U smokes because A through U do so, and so forth. A and U would like a law against smoking. As discussed presently in the text, a similar and powerful argument can be made about laws requiring helmets. Strictly speaking, we might think of this too as an argument about externalities, and so I do not dwell on it here. Again, the goal here is to suggest that a fair amount of health and safety regulation is better understood with a new view of internality control. The idea is to see how far we can get with the new view, not to overclaim on its behalf.

is sometimes greater with a smaller group, because the group is easier to organize, more sensitive about threats to its wellbeing, and less burdened by a collective action problem. Here, however, the comparison seems easy because the continuing smokers are probably better organized than those who want to improve their health with the government's help. The continuing smokers are more easily identified and they have the tobacco companies on their side. It is the aspiring nonsmokers who have the serious collective action problem. If they are relatively disorganized and perhaps even outnumbered, then they will fail to gain the government's help unless they can form an alliance with a better-organized or perhaps larger group. The simple theory of government-as-intermediary thus requires enrichment.

There are examples of safety regulations that can be understood as internality controls, in the service of the affected group, that do not require any alliances. We might understand motorcycle and ski helmet laws (or contractual requirements to wear such safety equipment) or even seatbelt laws as clever internality solutions. An individual might hesitate to don a helmet because of some apprehension of looking uncool or cowardly. A law requiring helmets can solve this collective action problem — which can be understood as one of self-help without time-inconsistent preferences, and in the absence of an opposing interest group.²⁰ Workplace safety regulation belongs in the same category. The emergence of these laws is easily understood as responsive to workers, who might not want to compete by accepting more risk, or even to employers, who might want a level playing field. On a larger scale, environmental and other laws, at the international or national level, can be understood as internality controls in the sense of easing race-to-the-bottom pressure at a more local level. The regulation of intoxicated or texting drivers might be another example of internality control, but of the time-inconsistent preference sort rather than a collective action problem. It is plausible that the overwhelming majority of drunk and texting drivers would, *ex ante* and *ex post*, wish to be discouraged from the danger their behaviors pose to themselves. The problem is controlling the future self; there is no collective

20 It is not surprising that helmet laws vary across states inasmuch as we are without a theory about the precise formation of interest groups. Transaction costs might be overcome in some places and not others. Moreover, the repeal of helmet laws in some states fits comfortably in the internality perspective advanced here. Helmet law forced people to try helmets, and if after a period (when there is no longer a collective action problem) they reject helmet wearing, then it is almost surely welfare-maximizing to relax the laws.

action problem of the kind faced by fashion-conscious helmet-wearers, and there issue of “rational addiction.”²¹

These simple examples, or reinterpretations of existing laws, suggest that long-term contracts can also be understood as internality controls. In a strong moment one might contract to live in a building that bans smoking and to purchase a car that is better known for its strong and crumple-zoned frame than for its ability to take corners at high speed. Marriage contracts and religious affiliations, especially where religious edicts extend to addictive behavior, are also paths to self-control for some parties. Indeed, legal accommodations for these institutions can be understood as outsourcing or as two-tier internality controls.²²

C. Coalitions for Internality Control

Even if we continue to set aside the secondhand smoke issue, it is easy to see why some dedicated nonsmokers would be willing to support the aspiring nonsmokers, or even initiate cigarette taxes on their own. Smokers will have health problems, and nonsmokers might believe that it is in their financial interest to reduce the number of smokers. There is, to be sure, some dispute about the accuracy of this perception. Smokers generate health costs that they do not themselves cover, even if they are segregated in some insurance pools, but they also reduce claims on social security and other government programs that spend more on older constituents and thus are more costly the more long-lived the population.²³ The calculations are complicated because the calculus should include sick days, reduction in work effort (and income taxes), and more. A good deal depends on how much we expect public money to be used for end-of-life care in the future. This is not the place to revisit the issue, because it seems safe to say that most citizens do perceive that smoking increases healthcare costs far beyond what the individual smoker bears. Moreover, many nonsmokers are likely to place an existence value on fellow citizens; they value the longer lives that aspiring nonsmokers will enjoy if they can be kept out of, or removed from, the ranks of smokers.

21 The criminalization of some drugs can also be understood in internality terms, inasmuch as the externalities are modest compared to enforcement costs. People who do not want to be tempted into habit-forming drugs might like rules that keep drugs underground and away from social settings they frequent.

22 See Kelly Musick & Larry Bumpass, *Reexamining the Case for Marriage: Union Formation and Changes in Well-Being*, 74 J. MARRIAGE & FAM. 1 (2012).

23 See WILLARD G. MANNING ET AL., *THE COSTS OF POOR HEALTH HABITS* (1991); Viscusi, *supra* note 3, at 71.

The new view that emerges from this intuition about nonsmokers, or more generally about groups that see themselves as burdened by the failure of others to exercise self-control, does not qualify as a predictive theory. In the smoking case, it depends on the strength of opposing interests, on the relative power of continuing versus optimistic smokers, and even on the extent to which nonsmokers perceive that smoking is costly to them. But when we observe such things as higher taxes, it seems reasonable to look for coalitions of the kind just described, even if the aspiring nonsmokers come mostly from the ranks of nonsmokers who fear their future selves. Moreover, it is not as if the conventional externality-driven view generates successful predictions about where to expect regulation and where not.

Returning to the core idea of a coalition between aspiring nonsmokers and cost-conscious nonsmokers (with no self-control issues), it must be conceded that the second group is anticipating a negative externality, so that the theory is hardly operating with internalities alone. One might insist that the nonsmokers join the coalition not because of fears about externalized costs but because they appreciate the efficiency of a tax on an inelastic good. But this defies common sense, and in any event would doom the new view to a very few applications. It would not even explain the recent penchant for expanded no-smoking zones. Under the conventional view, bans impose substantial deadweight losses, whether or not these are offset by gains on the part of those who dislike smoke, but under the new view they are attractive as a means of self-control. Indeed, if we wish to understand the mix of bans and taxes, we can think of the coalition partners as searching together for that combination that best discourages smoking. Some aspiring nonsmokers might be responsive to prices, while others feel shamed or inconvenienced by smoking bans. For the present, it is sufficient to theorize that the primary group looks for intervention with respect to its members' actual or perceived internality problems, while a secondary group consists of nonsmokers who think they will gain if the primary group is successful.

Apart from transaction costs, what limits the formation of these coalitions? If we add internalities to the list of things that justify intervention, the size and reach of a responsive government would be truly remarkable. On the other hand, persons with internality problems might hesitate to enlist the government because each intervention serves as precedent for other interventions, and these will impose restrictions on liberty. Thus, internality controls on cigarettes might lead to similar controls on alcohol, but many occasional drinkers suffer from no internality problem and can easily be made worse off by higher taxes and direct restrictions. The same fear applies to the secondary, allied group with an interest in controlling the costs imposed by smokers. If they succeed, the pattern will be set for interventions that they find unwelcome.

These groups may simply count on the number and intense preferences of occasional drinkers (and manufacturers and bar owners) to prevent the internality solution developed for smoking from spreading to the consumption of alcohol. However, in each case, those who favor intervention will likely search for some means of distinguishing the case from others in order to reduce opposition from people (including themselves) who fear the precedential value of intervention.

D. Limits on Intervention

The theory advanced here benefits from some plausible limit to government interventions with respect to externalities. In the case of smoking, it seems that the emergence of a secondhand smoke issue provided just such a means of distinguishing smoking from other internality problems. Once the internality problem of smoking could be associated with, or even camouflaged by, the externality presented by secondhand smoke, bans and other regulation could be described in terms that would not invite significant and intrusive regulation. Other areas involve financial or redistributive, rather than “real,” externalities. For example, people may have trouble saving for retirement, and some may want the government’s help with this internality problem. But they — and certainly their allies who worry about redistributive claims on behalf of the elderly poor with insufficient savings — must be anxious about the idea that the government will deny people the right to consume, and will force more savings than currently required by social security taxes. The claim here is that those who hold this view, and therefore oppose intervention with respect to savings behavior, will nevertheless feel free to sign on to smoking bans and taxes. The threat of secondhand smoke insulates one topic from others, as it appears to be a case of externality control.²⁴

24 An alternative view is that smoking bans were accepted as a compromise because smokers feared an outright ban on the product. The more generalizable view is that a coalition in favor of regulation is easier to form when there is something distinctive about the area. But this is a modest source of friction where the primary group in favor of regulation faces low transaction costs. Consider, for example, health and safety regulations requiring buildings to upgrade smoke alarms, elevators, fire doors, and other expensive precautions. The problem is one of internality only in the limited sense that every collective action problem has an internality component. Tenants and condominium owners are likely to have heterogeneous preferences. We normally imagine that the median voter will prevail, that a market will develop with some high-precaution and some low-precaution properties, and that insurers will provide information and essentially require some precautions. But what is the role of law? It is plausible

Another limit to intervention derives from a barrier to interest group formation. I will continue to suggest that individuals are capable of recognizing and constraining their future selves. We can think of this as occurring at “strong moments.” The interest group formation problem is thus formidable because it seems to require many individuals to be like-minded or have their strong moments simultaneously. For example, it is inconsistent to think of many voters casting ballots in favor of cigarette taxes in order to control their future selves because that would require long-range planning and many strong moments on an election day. It is easier to think of the government or a political entrepreneur setting up a plan and then awaiting signatures or other forms of acquiescence at strong moments over a long period of time, especially if approval is not easily withdrawn. Put differently, those who suffer from internalities are often dispersed, disorganized, and heterogeneous, so that only occasionally does a political entrepreneur serve their purpose. On rare occasion, a large-scale event or a celebrity’s favorite cause might focus attention on the need for self-control. More often, libertarians probably do not need to fear precedents and unbridled intervention because it will be much easier for commercial interests to form groups opposing health and safety regulation than will it be for those who suffer from internalities to form groups in favor of regulation.

On the other hand, there are situations in which the costs of internality control fall on dispersed taxpayers, so that there may be too much intervention.

that some losers, with above-median preferences for precautions, will encourage the municipality to require greater precautions. This is especially the case for precautions that are shared. The high-end owners might be willing to pay those who prefer lower precautions to agree to more expensive precautions, but it is difficult to solve the collective action problem among members of this group in order to raise money to pay others. Indeed, strategic players might feign a preference for lower precautions in order to free-ride or even gain payment. Again, we might expect some of the groups to enlist the government’s help. A stringent building code will force the owners to install the precautions desired by one group. Put differently, it will sometimes be cheaper to lobby the government (or at least not to oppose ideas put forward by commercial interests) than to convince or pay off dissenters within the voting group. One point of this example is to emphasize that the theory advanced here does not offer much in the way of predictions or testable hypotheses. We are, for example, unable to say whether the typical building codes will be more or less stringent and costly than what the median voter prefers, or what the talented technocrat determines to be the efficient level. But this is generally true of a theory that admits interest group dynamics; the median voter is not dispositive and all that can usually be said is that organized groups overachieve.

The criminalization of various substances may provide an example. Potential addicts, or their families or employers, may seek help from the government in the form of criminal law, but the cost of enforcing such law falls in part on taxpayers at large, and its design need only satisfy the assembled coalition. It is plain that the political coalitions that bring about internality control do not necessarily produce efficient regulations.

II. OBESITY AS AN INTERNALITY PROBLEM

A. Multiple Inputs and Coalition Formation

The internality-driven view of smoking, developed in Part I, cannot simply be carried over to obesity, though that personal and social concern is at least as likely to reflect problems of self-control. One difference is that aspiring nonsmokers find it easy to attract allies among those who dislike or fear secondhand smoke, while obesity is less apt to impose negative externalities on interests that could organize or otherwise support anti-obesity measures. A second difference concerns the means of regulation. Smoking is more easily tackled through its inputs; bans and taxes can focus on one or two items, such as tobacco. A more direct tax on persons who smoke — or smoke excessively — is more difficult because cigarettes can be traded among people and there are no easy tests to determine exactly how much an individual has smoked. In contrast, an anti-obesity tax or ban on inputs would need to apply to hundreds of food products or ingredients and might need to be combined with incentives to encourage exercise. These taxes (or other incentives) affecting many inputs are much more difficult to engineer, and each one arouses an opposing and often powerful interest group.

On the other hand, obesity is easier to tax directly. Obese persons can be charged higher rates for health insurance and can, at least in theory, be weighed or measured and then taxed, or rewarded for improvement, so as to encourage healthy behavior. But when viewed as an internality problem, it is apparent why high taxes on cigarettes are far more common than taxes on weight, or overweight. If aspiring nonsmokers want help with their internality problem, they can gain the government's assistance as described earlier. The opposition of continuing smokers can apparently be overcome by an alliance with those who fear secondhand smoke or those who expect to benefit from the taxes imposed by the government. In contrast, those who wish to lose weight, or to be encouraged not to gain weight in the first place, do not need government assistance. Inasmuch as third parties can verify the weight of a subject, that individual can, in a strong moment, simply enter into a contract promising to pay if a goal is unmet or, equivalently, to be paid if an aim is

achieved. The aspiring smoke-reducer has more need for the government because smoking behavior is more difficult to verify. If new technology makes smoking behavior as easy to verify as weight, then aspiring nonsmokers will have another tool to work with, and they will be able to mix constraints on inputs with incentives based on outcomes.

It is possible that some aspiring weight-reducers would fare better with taxes on inputs than with taxes on excessive weight. The former applies earlier in time and the latter might suffer from the very same problems of self-control that brought about the obese condition in the first place. These aspirants will, however, find it much more difficult to enlist the help of the government than will aspiring nonsmokers, because the inputs they wish to constrain are consumed by healthy people, as well as by the continuing obese. Put simply, a tax on tobacco imposes no costs on nonsmokers, but taxes on the inputs that contribute to obesity impose costs on citizens who are fit and trim. In theory, the tax will fall disproportionately on those who consume more of the inputs, but in reality there will be enough exceptions to fuel considerable opposition.²⁵ Most will oppose a tax or ban on these inputs, as they expect to lose more from the intervention than they will gain indirectly from reduced obesity in the population. In short, aspiring (weight) reducers cannot find ready coalition partners. Any proposed tax on sugar, caloric drinks, or restaurant entrees with high calorie content, for example, will induce opposition not only from commercial interests but also from those who do not need to lose weight as well as those who do not expect to reduce their consumption of these inputs.²⁶ Similarly, nonsmokers who fear that their future selves will smoke can support a tax or ban on tobacco, but healthy eaters who fear their future selves cannot agree to taxes on inputs without burdening themselves. Obesity's inputs, or causes, are simply too versatile and widely consumed. And where one input is easily avoided by, or even of little interest to, healthy eaters, as might be the case for large sugary drinks, a regulation is unlikely to be more than symbolic. Eager consumers can simply purchase and combine two smaller items. To be sure, a tax on junk food will fall more heavily on unhealthy eaters, and it is plausible that a coalition can be formed in favor of such a tax, even if it is not quite as

25 There will be some groups, such as athletes, with high consumption of inputs but low obesity rates. The problem is that obesity is often generated by an unhealthy differential between energy output and input, and we have no reliable way of measuring output.

26 Gun control offers an example where there might be a single input, but it is one that opposing interests value. One group of supporters may worry about the large number of suicides with firearms and seek help with its externality problem, but the obvious input is not one that other groups can ignore.

neat as a tax on cigarettes. There are, however, administrative problems (and then avoidance inefficiencies), as the government must define junk food or assess taxes based on a ratio of calories to nutrients, without creating too many perverse results and arousing interest group opposition.

Note that from an internality and public choice perspective there is no need to claim that smokers have a higher discount rate, or simply less self-control, than obese persons. The argument is simply that subsets of aspiring smokers as well as aspiring weight-reducers might think that their problems are best solved through third-party input control. The aspiring nonsmokers then seek allies to impose taxes and bans on cigarettes in order to control their future selves. Aspiring weight-reducers have much more difficulty following this strategy because there will be much stronger opposition to controls on the many inputs that are involved. Aspiring weight-reducers might therefore need to turn to incentives that are based on actual body weight, or another readily measured outcome. Neither set of aspirants really needs much help from the government if it chooses a strategy based on verifiable outcomes, because third parties can be enlisted to form contracts that will reward or penalize as the aspirant chooses.

Finally, it is plain that when aspiring nonsmokers try to build a coalition to control inputs, the opposition of continuing smokers to taxes and bans must be overcome. In contrast, aspiring weight-reducers (or nonsmokers) who try to influence their future selves through incentives based on outcomes have little to fear from peers who do not wish to join them. A continuing obese person does not lose when an aspiring reducer makes a “bet” or contract regarding future weight. Those who do not enter such contracts have no reason to object to their formation or enforcement.

B. Public Choice and Contracts for Self-Control

The private market for self-control contracts appears to be growing. In a strong moment, accompanying a New Year’s resolution perhaps, the aspiring weight-reducer might transfer away a thousand dollars not to a fitness club but to an entity that will give it back in one year if the individual loses thirty pounds. This entity would supervise the weighing of the voluntary client at the beginning and end of the period. Several American states have experimented with intrusive weighings in classrooms in order to motivate weight loss among adolescents, and nothing stops an aspiring reducer from adding a similar shame (or mutual celebration) element to the reduction plan.²⁷ Thousands of users

27 For information regarding the Arkansas BMI reporting project (the first state to implement such a program), see Allison J. Nihiser et al., *Body Mass Index*

have apparently lost weight with the help of a website, StickK, that helps the user self-assess and serves as an intermediary for “commitment contracts.”²⁸ The participant chooses a goal, such as losing twenty pounds over twenty weeks, and then selects an amount to forfeit (to a friendly or hated cause) in the event of failure. The site reports a higher success rate for persons who risk money and a yet higher success rate for those who choose a “referee” to verify their claims. StickK collects a commission when a goal is not met.²⁹

Measurement in Schools, 77 J. SCH. HEALTH 651 (2007); and *Obesity Initiative — Overview*, ARKANSAS CTR. FOR HEALTH IMPROVEMENT, <http://www.achi.net/childob.asp> (last visited Dec. 18, 2013).

28 STICKK, *supra* note 12.

29 Ayres & Abramowicz, *supra* note 13, develop a more elaborate self-assessment and opt-in scheme in the form of commitment bond contracts. Each participant self-assesses an amount that might cause him to lose a specified amount of weight. The bond, or wager, is a means of selling the right to the stated amount in the event of failure, in order to make the wager more attractive to the promisor in expected value terms. For example, imagine that O can invest \$5000 and believes that a \$10,000 marginal incentive will make it likely he loses thirty pounds. Ayres and Abramowicz advance the idea of O’s selling a bond that requires a \$10,000 repayment if the goal is met, but that pays the holder \$10,000 if it is not. Now imagine that P and O each think that O is fifty percent likely to meet the goal with that incentive. P will pay \$5000 for this commitment bond. If O fails, P gets \$10,000, and if O succeeds with the weight loss, the \$10,000 is returned to O. It is thus clear why P will pay \$5000 for this gamble. The genius of this plan is that it might induce O to agree to the financial risk and thus the incentive plan to lose weight because the buyer makes it cheaper to do so, without diminishing the marginal incentive to lose weight, once the initial investment is made. O receives \$5000 from P, so that O’s net investment is \$5000, but there is then a \$10,000 benefit to losing weight. I prefer a group plan, in which O invests \$5000 alongside other similar aspirants. The successful reducers will share the pot. If half the group succeeds, each successful participant (like O) will receive the same \$10,000. However, the incentive might be greater because O will know that there is some chance of a higher (or lower) return depending how many succeed. There is also the group competition effect. The group plan seems like an easier program for a government subsidy. The government could announce that the income is tax-free (though it could do that for the bonds as well), but it could also add money to the pot. It could, for example, promise \$10,000 as the minimum payoff, promising to pay the difference if more than half the group succeeds. Finally, it seems easier to gather a group of aspiring reducers than it does to find buyers like P, who must assess O’s likelihood of weight loss. The Ayres & Abramowicz plan can also accommodate teams, though the buyer of a bond will have even more trouble assessing the probability of success. The Ayres & Abramowicz plan does not risk discouraging participants who do not

The commitment contract approach might be improved by organizing participants into groups and by combining sticks and carrots. The group idea seems to work for many commercial and employer-based wellness programs. It fosters a kind of competition, alongside the education and mutual support it can facilitate. The developing evidence suggests that it would be even better to compete with teammates, so that one has solidarity as well as competition.³⁰ Finally, the uncertain reward may add a sense of excitement for many participants.

The goal of this Article is not to design the perfect anti-obesity campaign but to emphasize that these contracts do not impose losses on unwilling parties, and do not therefore require political coalitions and government intervention. To be sure, aspiring reducers might look for government subsidies to make the rewards for success yet greater, much as interest groups form around particular diseases and lobby for cross-subsidies in the healthcare system, for research, and for other benefits. A large number of aspiring reducers as well as nonsmokers might simply sense that their problem is one of long-term self-control, or even a lifetime struggle. It is possible that no incentive system is up to the task. This Article's aim has, however, not been to insist that these health problems can be solved, but rather to explain the programs we find from the perspective of internalities as much as externalities. The internality perspective may well help in understanding and designing programs to encourage retirement savings or other matters of public interest, but such applications are beyond the scope of this Article.

Taxes and bans on cigarettes have proceeded without unanimous support from smokers, and we can imagine that a successful anti-obesity plan could also be imposed on disinclined but unhealthy persons. It is plausible that participants who are coerced into groups, or more likely induced there by heavily subsidized programs, will be less successful than those who have

want to join a group with others who are perceived to have a greater chance of success. On the other hand, it is not clear why participants would think they could evaluate chances of success, any more than the Ayres & Abramowicz plan's buyers could evaluate the bond issuer's chance of success.

- 30 Leslie K. John et al., *Financial Incentives for Extended Weight Loss: A Randomized, Controlled Trial*, 26 J. GEN. INTERNAL MED. 621 (2011); Tricia M. Leahey et al., *Teammates and Social Influence Affect Weight Loss Outcomes in a Team-Based Weight Loss Competition*, 20 OBESITY 1413 (2012). It should be noted, however, that the outcomes of a number of experiments, in both the United States and United Kingdom, show most of the weight loss attributed to financial incentives to be short-term. See, e.g., Clare Relton et al., *The 'Pounds for Pounds' Weight Loss Financial Incentive Scheme: An Evaluation of a Pilot in NHS Eastern and Coastal Kent*, 33 J. PUB. HEALTH 536 (2011).

more sincerely self-assessed and volunteered. But of course such inclusion is unnecessary. In the case of smoking, the interest group in search of help with its internality problem requires coercion because taxes and bans cannot be made voluntary if they are to be effective against the weak-willed self. In the obesity case, however, there is no comparable need to include the unwilling in order to make the plan effective for eager participants. Moreover, cigarette taxes and bans can be imposed without any unseemly intrusions; the anti-obesity plan requires more intrusive weighing.

C. Prices as Signals

It is noteworthy that antismoking strategies, whether internality-centered or not, mix bans and taxes, but do not normally include the sort of end-of-period rewards proposed for anti-obesity efforts. The lumpy rewards may be too distant, and thus unsuited for people with long-term self-control issues, but I have also suggested that there are more serious verification problems with respect to (non)smoking than dieting. In the case of smoking it is easier to link incentives to inputs, as by taxing cigarettes, but in the case of obesity it is easier to link incentives to outcomes.

Nevertheless, aspiring reducers may focus on selected inputs because they assess that the problem of long-term planning can best be tackled with short-term incentives. For such aspirants, taxes on unhealthy inputs may be most attractive. Producers of these inputs will be opposed, as will consumers who are burdened by the same taxes even though they have no need to reduce their consumption. I have already suggested that a public choice perspective suggests the emergence of few such taxes, even though the revenue can be earmarked in order to attract allies to a coalition. In short, the choice between inputs and outcomes is complicated. Outcomes require long-term execution but offer palpably greater rewards, which may be psychologically important. Inputs are easier to verify in the case of smoking, but the opposite is true for obesity.

The choice between focusing on inputs and outcomes carries over to insurance markets. To the extent that the internality problem reflects a failure to appreciate long-term effects, insurance premiums might serve to remind aspirants of the costs of self-gratification. Smoking might cause health problems decades down the road, but higher annual insurance premiums for smokers (for health, disability, or life insurance) serves the function of an annual carrot or stick. Again, verification is an issue and it is one that suggests that health insurance tied to body mass index or another verifiable measure of obesity might more successfully turn a lifelong horizon into useful annual or monthly signals. Insurance can also be bundled into input prices, as has

been suggested for automobile liability insurance which could be “paid at the pump.”³¹ Thus, an order of chips or ice cream could be priced to include the expected healthcare costs associated with the extra calories. The price differential between ice cream and broccoli would thus reflect not only the costs of production and distribution, but also the anticipated healthcare costs.

From a health and behavioral perspective, the question is whether immediate but smaller signals and incentives are more or less effective than larger and more noticeable incentives applied sporadically. But from a public choice perspective, the bundling of health insurance into input prices generates opposition. The opposition can be reduced by rewarding those who are (verifiably) fit at the end of a period, such as the term of a health insurance policy. It is, however, impossible to track the health insurance premiums (folded into food prices) paid by this group during the year in order to refund it at the end (if only because unfit consumers could transfer their receipts to the fit). As such, even if healthy insured persons were rewarded at intervals, there would be an inefficiently high level of substitution from ice cream to broccoli. It is the coalition-building rather than potential inefficiency that is of special interest here, and it goes without saying that fit consumers of ice cream will join with the producers of such products to oppose the bundling of insurance into input prices.³²

An alternative is that one regulation will lead to another, and that interest groups and libertarians are correct to fight hard against a minor ban, like New York City’s recent assault on large sugary drinks, because pro-regulation forces will divide and conquer their opponents and eventually ban many inputs.³³ Such a pattern is not at odds with the internalty-driven theory offered here, because aspiring reducers may find that the way to defeat commercial interests, like fast-food enterprises and manufacturers of prepared foods, is to attack them separately in the hope of avoiding a defensive coalition.

31 Such a scheme would reduce the problem of uninsured motorists.

32 Similarly, those who drive long distances in rural areas (where auto insurance rates are low) will oppose pay at the pump insurance, though the latter might be favored by urbanites who find many uninsured motorists in their midst.

33 See Saul Levmore, *Interest Groups and the Problem with Incrementalism*, 158 U. PA. L. REV. 815 (2010). For a brief overview of the proposed New York City soda ban, see Michael Howard Saul, *Judge Cans Soda Ban: Ruling on Sugary Drinks Marks Rare Defeat on Health Policy for Bloomberg*, WALL ST. J., Mar. 11, 2013, <http://online.wsj.com/news/articles/SB10001424127887323826704578354543929974394>.

CONCLUSION

I have suggested that regulations like helmet laws and cigarette taxes, normally seen either as paternalistic health and safety interventions or as controls on negative externalities, can instead be understood as aimed at internality problems, imposed on behalf of persons who seek to help their future selves. In some cases the self-help group is insufficiently powerful and must form an alliance with a secondary group that benefits from the first group's success. In the case of smoking, where verification is difficult and the lone input easily taxed, private commitment plans are relatively ineffective and government assistance particularly valuable and possible because useful political coalitions can be formed. In contrast, a plan to burden obesity's numerous inputs generates interest group opposition. In this setting, private commitment devices are comparatively advantaged because weight is verifiable. Coalitions might still be useful in order to increase the marginal incentive for self-control. More generally, the internality perspective leads directly to the design of self-help plans, but it suggests a modest reliance on governmental intermediation.

This Article has developed the idea that legal interventions are best understood as motivated not only by externalities but also by internalities. There are settings where internalities, arising out of time-inconsistent preferences or collective action problems, are distinct from externalities. But the more those who are regulated by a law overlap with those who seem to benefit from it, the more externalities, internalities, and collective action problems merge. Consider, for example, littering. We know that statutes attach modest fines to littering. This legal intervention does not have obvious interest group origins, but the law seems to reflect voters' or groups' preferences. Most readers will begin by thinking of externalities; X's littering behavior imposes much greater costs on others than on X, because the single piece of trash she tosses might be viewed by hundreds of people before the day is done. These beneficiaries will want a law to force X to internalize the costs imposed on them, and a private lawsuit is unwieldy. At the same time, the fine for littering does not decrease when there is already much litter about and yet, if thousands of people have littered on a beach, the extra damage done by X is small. From this perspective, littering is a collective action problem, as all are much better off if all refrain, but there is little incentive to behave well when others do not. Finally, there is the inevitable internality; most people have littered in weak moments, perhaps looking around to see if anyone can observe their behavior. There is some *ex post* regret, and it must be rare to find someone who wishes she had littered more in the past. A majority might well prefer a legal rule, and even cameras or another enforcement mechanism, in order to bring the present self up to the standard of the future (and past) self.

Most of the examples in this Article have contrasted externality- and internality-driven interventions, but the preceding example is meant to show that the perspectives converge. The more we have national healthcare, so that one person's care costs, arising from obesity for instance, affect others, the more obvious the convergence in matters relating to health. On the other hand, with some effort, nearly all of regulatory law can be understood as internality-driven. Taxing or banning certain pollutants is a mainstay of the externality approach to law, but even excessive polluters do not wish to be the victims of self-inflicted toxic pollution. An *ex ante* observation point can serve the same function as substantial overlap between beneficiaries and targets of regulation; it blurs the line between externalities and internalities.³⁴ This blurring suggests that while the internality perspective is useful or even hegemonic, it is hardly based on a stable, well-defined category.

34 Indeed, a traditional approach to tort law, which asks whether the actions imposed were reciprocal, seems to have the matter backwards. The more activities are reciprocal — but also inefficient — the more the participants would agree to laws that helped restrain them. If we understand law as the product of political coalitions, then reciprocal wrongs will be remedied more readily than nonreciprocal ones.

