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Internality Regulation Through Public Choice
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Abstract

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; in particular, smoking is easier to regulate than is obesity. 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, helmet laws, and other health and safety regulation, and then contrasts these with anti-obesity programs where coalitions are more difficult to form. The analysis sketches a plausible anti-obesity program while developing several differences between smoking and obesity control.

I. 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 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 precommitment, or self-control, perspective, though not all of them derive from “time-inconsistent” preferences.

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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. Political Econ. 675-700 (1988), and have 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.

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, is the possibility that 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 paper 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 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. This public choice perspective on regulation, with a focus on internalities, 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; in particular, as we will see, smoking is easier to regulate than is obesity. 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 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 under-represented 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

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*.

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 (2002-03); Jonathan Gruber & Botond Köszegi, *Is Addiction "Rational"?* *Theory and Evidence*, 116 Quarterly Journal of Economics 1261 (2001); Kip Viscusi, *Cigarette Taxation and the Social Consequences of Smoking*, 9 Tax Policy and the Economy 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 Georgetown L. J. 1371 (2011).

current selves, at strong moments, sometimes see the need to control their internality problem.⁴ In some cases, a collective action problem, rather than time-inconsistent preferences, is at the root of a group's need for intermediation. 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. Moreover, there are internality-directed interventions that can be understood in this manner that do not concern time-inconsistent preferences.

Part II 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 III uses the health problem of obesity to explore the difficulty of forming coalitions in some settings, and the weak regulation that follows. It sketches a different kind of anti-obesity program—motivated by internalities but adaptable to varying levels of regulatory encouragement—while developing the several differences between smoking and obesity control. Part IV revisits the line between internalities and externalities.

II. 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 second-hand 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 second-hand 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

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.

⁵ See Jonathan Gruber, *Tobacco at the Crossroads: The Past and Future of Smoking Regulation in the United States*, 15 J. Econ. Persp. 193 (Spring, 2001) (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.

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 second-hand 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 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.

If we observed bans, fines, and taxes to encourage motorcycle helmets, but not to control factory pollutants or speeding cars, we might theorize that law left most externality problems to private lawsuits. But various collective action and proof problems cause private litigation to deter some externalities inadequately. In any event, there is no shortage of explanations (in efficiency as well as in political terms) for the growth of seemingly duplicative regulation of externalities. 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 second hand 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.⁹

⁷ See *Regulatory Intensity*, 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 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 *Tulane Law Review* 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 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

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.¹⁰ 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 precommitment strategy. One can toss away cigarettes but it is more difficult to invest 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.¹¹ Ayres and 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.¹² The strategy is examined in Part III if only because it seems much better for obesity control than for smoking, inasmuch as smoking behavior is not easily verified. Where there is verification difficulty (as in smoking), 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.¹³ Strategies of this kind work for some people but merely cause others to

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.

¹⁰ More precisely, there is a thoughtful decisionmaker 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.

¹¹ See www.stickk.com.

¹² Ian Ayres & Michael Abramowicz, *Commitment Bonds*, 100 Georgetown 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-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 \$1,000 tax on each cigarette would be much more effective, though obviously that is a tax that continuing smokers would strongly oppose.

¹³ 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 responds to higher taxes

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 anti-smoking 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). On or both of these strategies is difficult. 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.¹⁴ It is 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 fall, 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 if elementary economics learning 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.¹⁵ There is a

and the like, then it must also follow that it is rational, aspiring nonsmokers who bring about smoking bans (at least) where they are not required by law.

¹⁴ 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 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.

¹⁵ 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

wealth transfer from buyers to the government, but not much inefficiency.¹⁶ 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.¹⁷ 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.¹⁸ It is misleading to compare the number of aspiring nonsmokers with that of continuing smokers. Interest group power is sometimes greater with a smaller group, because the group is easier to organize, more sensitive about threats to its well-being, 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

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.

¹⁶ 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. of Pub. Econ. 1235 (2006) (discussing implications of the Atkinson-Stiglitz Theorem and showing that differential commodity taxes are inefficient even with suboptimal income taxes).

¹⁷ Aloys L. Prinz, *The Political Economy of Smoking Regulation and Taxation*, 141 Public Choice 291, 292 (2009) ("far 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 . . .").

¹⁸ Theories can be mixed. If we lean more on externalities, we can include in the coalition nonsmokers who are indifferent to health care costs but who dislike second-hand smoke. Another group might like taxes for a particular expenditure. Similarly, smoking may be a function of peer pressure, so that the externality 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 internal control. The idea is to see how far we can get with the new view, not to overclaim on its behalf.

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.¹⁹ 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-inconsistence preference sort rather than 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. It is noteworthy that these time inconsistency problems are present in the absence of addiction.²⁰

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.²¹

C. Coalitions for Internality Control

Even if we continue to set aside the second-hand 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

¹⁹ 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.

²⁰ 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.

²¹ See Kelly Musick & Larry Bumpass, *Reexamining the Case for Marriage: Union Formation and Changes in Well-Being*, 74 J. Marriage & Fam. 1, 1-18 (2012) (comparing married and cohabiting couples). See also *id.* at note 20 (discussing building codes as well as private markets for safer buildings).

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.²² 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 health care 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.

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's members look for intervention with respect to their actual or perceived internality problem, 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

²² See Willard G. Manning, et al., *The Costs of Poor Health Habits* (1991); W. Kip Viscusi, *Cigarette Taxation and the Social Consequences of Smoking*, 9 *Tax Policy and the Economy* 51, 71 (1995).

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 internalities. In the case of smoking, it seems that the emergence of a second-hand 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 second-hand 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 second-hand smoke insulates one topic from others, as it appears to be a case of externality control.²³

²³ 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 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

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 where the costs of internality control fall on dispersed taxpayers, so that there may be too much intervention. The criminalization of various substances may provide an example. Potential addicts, or their families or employers, may seek help from the government, but the great costs of enforcement may fall elsewhere. It is plain that the need for political coalitions to control most internalities implies that intervention need not be efficient.

III. Obesity as an Internality Problem

A. Multiple Inputs and Coalition Formation

Obesity is a more difficult problem than smoking. Each might be eliminated or reduced by an authority with substantial capacity to monitor behavior as well as power to intervene with rewards and penalties. In most settings there is no such authority and, in any event, there would be little inclination to relinquish liberty and privacy to it. An important difference between obesity and smoking is that the former is the product of multiple inputs. A ban or tax on one or two easily tracked items will not accomplish much. Moreover, while a tax on tobacco imposes no costs on nonsmokers, taxes on the inputs that contribute to obesity would 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.²⁴ 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

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.

²⁴ 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.

partners. Any proposed tax on sugar, caloric drinks, or restaurant entrees with high calorie content 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.²⁵ The inputs 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 neat as a tax on cigarettes. There are, however, administrative problem (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.

It is possible that education, enhanced by popular politicians or other celebrities, could change eating and exercise habits, and even that the publicity from a trivial ban (such as one on large soft drinks) will carry the educational message as no direct campaign could. If so, more attention will be paid to the process of enacting such symbolic bans, and perhaps they will be understood as reflecting internality-oriented coalitions of the kind discussed in Part II.

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.²⁶ Such a pattern is not at odds with the internality-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.

For present purposes I will assume that the rising obesity problem in the United States and other societies cannot be solved with a little education or other low-key intervention strategy. After all, nothing of the kind has worked thus far. Early anti-smoking regulation can be associated with a decrease in smoking, but there is little sign of success where government campaigns against obesity are concerned. The problem is spreading.

B. Anti-Obesity Strategies from the Internality Perspective

If multiple inputs make anti-obesity regulation on behalf of those who want help difficult, then perhaps a self-help strategy must simply avoid imposing burdens on other interest groups. One idea builds on the familiar strategy of precommitment to a penalty, reward, or both. It is likely

²⁵ 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 internality problem, but the obvious input is not one that other groups can ignore.

Note that if the aspirants in the obesity context are trim citizens who simply fear their future selves, they are unlikely to favor taxes on inputs that they presently consume. They might, however, favor much higher health insurance premiums on obese people.

²⁶ See Saul Levmore, *Interest Groups and the Problem with Incrementalism*, 158 U. Pa. L. Rev. 815-58 (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 Street Journal (March 11, 2013), <http://online.wsj.com/article/SB10001424127887323826704578354543929974394.html>.

weaker than a tax because it requires the target group to opt in. The coalition in favor of anti-smoking interventions was able to impose taxes and bans on unwilling smokers, who might prove susceptible to financial incentives. In contrast, the self-help strategy sketched here requires volunteers. These aspiring reducers will hope that financial incentives work where the prospect of long-term health benefits and fairly immediate interpersonal rewards do not. A participant might transfer a substantial sum to an entity that will give back the money only if some specified and verified goal is achieved. In a strong moment, accompanying a New Year's resolution perhaps, the aspiring reducer might transfer away \$1,000 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 have apparently lost weight with the help of a website offering a plan, StickK, that helps the user self-assess and serves as an intermediary for "commitment contracts." 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.

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.²⁸ Finally, the uncertain reward may add a sense of excitement for many participants.

The goal of this Essay is not to design the perfect anti-obesity campaign, but some suggestive details are useful. An illustrative qualifying plan (an expression used here because government subsidies are introduced shortly) might include twenty participants all certified as needing to lose more than thirty pounds. These individuals could each deposit \$1,000, with successful reducers sharing the pot at the end. If half the group succeeds, then each participant's incentive is a \$2,000 gain at the margin, with \$1,000 of it taxable, inasmuch as the participant has an investment, or basis, of \$1,000. Alternatively, or additionally, participants could be required to join as teams of four, and

²⁷ For information regarding the Arkansas BMI reporting project (the first state to implement such a program), see Arkansas Center for Health Improvement, Reports available online at <http://www.achi.net/childob.asp>; Allison J. Nihiser, et al., *Body Mass Index Measurement in Schools*, 77 J Sch Health 651 (2007).

²⁸ Leslie John, et al., *Financial Incentives for Extended Weight Loss: A Randomized, Controlled Trial*, 26 J. Gen. Internal Med. 621 (2011). 26; 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 U.S. 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. Public Health 536 (2011).

one imagines co-workers or family members forming such a group.²⁹ Employers that have sponsored such plans have coordinated the financial incentives with subsidized fitness centers, wellness programs, and scheduled sessions with trainers and dieticians, so that dangerous crash diets are, for example, discouraged.³⁰ It is easy to imagine the plans or groups as self-sustaining. What is needed is some coordination and reliable distribution of funds, and there is no reason why a private firm could not do this without any government intervention. Again, there are website businesses that do something of this kind, and it is hardly unusual for people to encourage family members and themselves to lose weight (or reach other goals) with monetary and nonmonetary carrots and sticks.

The internality perspective advanced here suggests that this anti-obesity scheme will be successful the more aspiring reducers believe it works, and the more they can be recruited at moments when the present self wants to constrain the future, weaker self. Many participants will likely regret their involvement and will wish they could withdraw and recover the initial payment. We do not allow recruits to the armed forces to withdraw even if they volunteered when vulnerable, but in many jurisdictions buyers of cars and houses, to take the two most common examples, do enjoy (at some cost, no doubt) a legally imposed cooling-off period during which their earlier, tempestuous decisions can be undone.

It is easy to see how government involvement might allow the plan to proceed on a large scale and, more importantly, might encourage more participants. A private entrepreneur who organizes this plan cannot pay out more than the participants have contributed, and some funds need to be withheld for managing the plan and for nonmonetary inducements, such as wellness programs that will attract aspirants and also contribute to the program's success. The government, however, can do as the majority likes, and aspirants will be quick to suggest that carrots as well as sticks will stimulate participation and weight loss. We might anticipate that the primary group of aspiring reducers will be joined by voters who believe that a healthier population will be more productive and less costly to maintain. A government-subsidized plan might be more successful because it will have the resources to induce participation, to fund wellness and counseling services, and to enlarge the difference to each participant between failure and success. On the other hand, private enterprises might stand firmer against excusing failures. As before, the scheme depends on responsiveness to financial incentives. Participants must agree to periodic weigh-ins and to risk some money of their own. The plan is simple, as it consists of a financial incentive that has been recognized and tried by many people over many years. It does not require a political coalition and can be understood as the

²⁹ In the simple version sketched in the text, each participant risks \$1,000. Failure forfeits this investment, while success generates between \$1,000 and \$20,000, depending on how many other participants also succeeded. If organized on the basis of teams, then the winning teams would be those in which all members met the goal; in the event that no team completely succeeded, the winner(s) might be the team with the most successful reducers. Minimal governmental participation is needed only to ensure that the contracts will be upheld and that no violation of securities or anti-gambling laws will be successfully asserted.

³⁰ Many employers have moved to quasi-sticks rather than carrots either because this is less expensive or because of a claim that sticks are more effective. A common tool is to charge a penalty, or deny a positive incentive, to employees with substantial waists or other easily measured characteristics. See Leslie Kwoh, *Shape Up or Pay Up: Firms Put in New Health Penalties*, Wall St. J., Apr 6, 2013, at A1.

simplest self-help plan that deploys intermediation. On the other hand, and continuing the approach of Part II, we should expect aspiring reducers to look for coalition partners in order to induce the government to subsidize these group plans, and to create greater incentives for successful weight reduction. Much as interest groups form around particular diseases, and lobby for cross-subsidies in the health care system, for research, and for other benefits, an interest group can form around an anti-obesity plan. In both cases, coalition partners might consist of employers, pharmaceutical companies, various not-for-profit organizations, and others who are sympathetic or financially interested.

One objection to this plan is that it assumes that fairly long-term economic incentives will work on participants whose problem is, in most cases, one of a failure of long-range planning and execution. People who have trouble making daily decisions when confronted with immediate gratification at the cost of long-term health problems seem unlikely to be good at denying themselves the same gratification in return for financial rewards at the end of a year. To be sure, the rewards can be based on weekly results, but then the reward is likely to seem small to most participants.³¹ But one year may be a more manageable time horizon than the many years that will pass between enjoying an unhealthy lifestyle and suffering from poor health. Moreover, rewards are cumulative; the reducer can expect a healthier and more attractive life as well as the financial reward provided by the plan. The first has not proved sufficient, but the package may do the job. Finally, as described presently, the individual can assess his or her own self-control problem, as well as responsiveness to incentives, and increase the financial stakes and marginal reward.

Another objection is that weight control, like smoking, is not a problem solved once, but rather a multiyear or even lifetime struggle. Many reducers gain back what they have lost, much as many smokers quit several times before they succeed or are forever discouraged. The self-control approach suggests that incentives be repeated, or layered. For example, if a participant is heading toward the successful completion of a one-year, thirty-pound plan, the organizer can offer a second year, in which the goal is weight maintenance. Other participants may require a second year and a further thirty-pound reduction. Again, the idea is to induce participation and investment when the present self is most optimistic, most eager to control the future self, and perhaps most inclined to join a team.

The plan sketched thus far envisages the same financial incentives for all participants. Skeptical readers will object that the thousand dollar investment in the proffered illustration is beyond the reach of some aspiring reducers, and then of insufficient significance to affluent ones (even with the potential for a greater return). A slightly more complicated group plan, however, can expand on the self-help theme and permit each participant to self-assess and invest accordingly. It is also possible to imagine the government, or a coalition partner, subsidizing some aspirants more than others. In the simple case, if X thinks that he will be motivated by a \$4,000 investment, and Y thinks a \$2,000 stake will suffice for her, then they can buy four and two units respectively. The group to which X and Y are assigned can either accept twenty participants or be closed once \$20,000 is

³¹ This seems like a weakness of the StickK plan, noted above. It offers weekly inducements (typically ten or twenty dollars to reach a goal for the week) in order to avoid the risk of unhealthy crash diets at the end of a longer period. In turn, however, the participant never faces a large financial incentive.

invested. Heterogeneity can, of course, also be accommodated within the team approach. If X and Y are both successful, the former will receive twice the reward the latter receives, excluding the costs of counseling and wellness programs. To be sure, some participants might hesitate to join a group where others have invested more, because they might take this as a signal that these bigger investors have reason to be confident about reaching their goals. On the other hand, a larger investment might mean that the aspiring reducer is sufficiently doubtful about reaching the goal that the investor feels compelled to risk more in order to create a greater incentive. In any event, this pooling is just one of many self-help strategies. It borrows from commercial weight-loss operations, makes plain how a local entrepreneur might be involved, and is an easy base on which government subsidies can be added. Interest groups are part of the plan. The more it is structured in a way that the government can outsource to, or simply include, pre-existing commercial weight-loss enterprises, the less likely it is that these groups will lobby or otherwise work to block the plan. Established diet-oriented businesses have nothing to fear; indeed, participants with a financial stake in reaching their goals might flock to these enterprises' services and products if they are perceived as increasing a participant's chance of success. In turn, these businesses might offer to be co-investors in their clients' participation interests.

Ayres and Abramowicz develop commitment bond contracts, through which an aspiring reducer also 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. There is obviously room to try commitment bonds as well as the pools sketched here. The group, or pooling, approach advanced here emphasizes the marginal payoff for success. It also encourages aspiring reducers to recruit others to the pool, and to engage in some teamwork, but I prefer to emphasize the leveraging of government subsidies as well as the increased marginal payoff to encourage success.³²

³² Imagine that O can invest \$5,000 and believes that a \$10,000 marginal incentive will make it likely he loses 30 pounds. Ayres and Abramowicz (A-A) 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 thinks that O is 50% likely to meet the goal with that incentive. P will pay \$5,000 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 \$5,000 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 \$5,000 from P, so that O's net investment is \$5,000 but there is then a \$10,000 benefit to losing weight. Under the group plan, O invests \$5,000 alongside other persons like O. The successful reducers share the pot. Half the group will succeed, if they are indeed like O, and so 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 weight loss. The A-A plan can also accommodate teams, though the buyer of a bond will have even more trouble assessing the probability of success. The A-A plan does not risk discouraging participants who do not 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

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 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 weighings.

C. Prices as Signals

It is noteworthy that anti-smoking 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.”³³ Thus, an order of chips or ice cream could be priced to include the expected health care costs associated with the extra calories. The price differential between ice cream and broccoli would thus reflect not only the costs of

participants would think they could evaluate chances of success, any more than the A-A plan’s buyers could evaluate the bond issuer’s chance of success.

³³ Such a scheme would reduce the problem of uninsured motorists.

production and distribution, but also the anticipated health care 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 the year. 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.³⁴

IV. 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. In any event, the public choice perspective makes clear why obesity is a more difficult problem than smoking. More generally, the internality perspective leads directly to the design of self-help plans, and also illuminates political coalitions.

This Essay 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,

³⁴ 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.

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 Essay have contrasted externality and internality-driven interventions, but the preceding example is meant to show that the perspectives converge. The more we have national health care, 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.³⁵ This blurring suggests that while the internality perspective is useful or even hegemonic, it is hardly based on a stable, well-defined category.

³⁵ 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.