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Introduction

Mr. Chairman and Members of the Committee, we thank you for inviting us to appear today. For the past several years, we have been researching and writing on the question of how best to regulate the market for cigarettes. We have a pair of forthcoming publications in which many of our comments today are, or will be, much more fully developed.

In an article that will appear in the March issue of the *Yale Law Journal*, we make three general arguments regarding the cigarette market.[1] First, we argue that the market for cigarettes is characterized by severe market failures and hence is in need of extensive government regulation. Given that the current debate in Washington assumes the need for some type of government action in the cigarette area, we will not restate those market failures here. Instead, we will say only this: In light of evidence that smokers typically begin habits at a very early age, they tend to underestimate the long-term health risks to themselves of smoking, they often underestimate the addictiveness of cigarettes, and they do not bear many costs associated with their own smoking, we agree that the market for cigarettes should not be left unregulated.

The second general point that we make in the Yale article is that, from a deterrence (or public health) perspective, the most promising type of regulation in the cigarette context is some form of "ex post incentive-based regulation"—regulation that imposes the costs of smoking on cigarette manufacturers as those costs arise, *giving manufacturers incentives to make safer cigarettes and forcing cigarette prices to reflect the full social costs of smoking.*

Finally, in that article we describe how the Proposed Tobacco Resolution takes just the wrong approach, completely rejecting ex post incentive-based regulation and instead expanding the use of other regulatory approaches (mainly command-and-control provisions) that have proven to be—and are widely regarded by regulatory experts as being—inferior to incentive-based regulatory approaches.

In a second forthcoming article, to be published in the *Southern Illinois University Law Journal*, we elaborate on one type of ex post incentive-based regulation that was briefly outlined in the Yale article.[2] It is a regime that we call *smokers' compensation*. The principal goals of the regime would be: (a) to force cigarette manufacturers, and hence cigarette consumers through the price of cigarettes, to take into account something closer to the full social costs of cigarettes than is currently the case; (b) to create incentives for cigarette companies to make safer cigarettes, indeed to compete with respect to cigarette safety just as they have always competed with respect to taste; (c) to establish a separate insurance pool for smoking-related harms that is financed by smokers through the price of cigarettes, thereby removing those costs from existing public and private health-insurance pools (which means, of course, lower premiums or taxes for nonsmokers); and (d) to do all three of those things without producing administrative costs that outweigh the benefits of the regime.

In our testimony, we will provide a sample of the types of arguments contained in those two articles.

I. The Case for Ex Post Incentive Based Cigarette Regulation

A. *Three Categories of Regulation*

When comparing and contrasting various regulatory regimes, scholars often divide the world of regulation into three general categories: *command-and-control* regulation; *performance-based* regulation; and *incentive-based* regulation. The distinctions among these three categories are not perfect. Thus, some examples of

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[1] Jon D. Hanson & Kyle D. Logue, *The Costs of Cigarettes: The Economic Case for Ex Post Incentive-Based Regulation*, 108 YALE L.J. 1163 (forthcoming March 1998).

[2] Jon D. Hanson, Kyle D. Logue & Michael Zamore, *Smokers Compensation: Toward a Blueprint for Federal Regulation of Cigarette Manufacturers*, 22 S.ILL U. L.J. ___ (forthcoming Spring 1998).

command-and-control regulation begin to shade into performance-based regulation. And some examples of performance-based regulation begin to look like incentive-based regulation. In fact, it is probably most accurate to understand the three categories as three points along a continuum, with command-and-control regulation at one end, incentive-based regulation at the other end, and performance-based regulation somewhere in the middle. Nevertheless, it is useful to maintain the conceptual distinctions among the three types of regulation to enable us to identify the costs and benefits of moving in one direction or the other along the continuum.

Under *command-and-control* regulation, sometimes called "input regulation," the regulator imposes specific requirements on the firm. The regulator in effect tells the regulated firm how specifically to run some aspect of its business. In regulating pollution, for example, the command-and-control regulator might prescribe specific steps that manufacturers must take, or specific technologies that they must use, to reduce the level of pollution that is emitted by their manufacturing processes.[3]

Under *performance-based* regulation, by contrast, the regulator presents manufacturers with a target of some sort, which the manufacturers are given incentives to meet. That target is sometimes called a "performance standard." The manufacturers are then left to decide how best to achieve the target. One performance standard, for example, might be a maximum quantity of pollution that a firm is allowed to emit over a given period of time, such as that allowed by tradable pollution permits. Failure to achieve the relevant target, however, would result in a fine or additional regulation.[4] Performance-based regulation, when compared to command-and-control regulation, reflects a greater degree of humility and skepticism with regard to how much the regulator can be expected to know about the cutting-edge technology in a given industry

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[3] There are many examples of command-and-control regulation in the Proposed Resolution. For example, the warning requirements and the advertising restrictions that the Proposed Resolution would impose on manufacturers are best characterized as command-and-control regulations. Similarly, if the FDA exercised its limited authority under the Proposed Resolution to mandate particular "technically feasible," "less hazardous tobacco products," it would do so in the form of command-and-control regulations.

[4] The Proposed Resolution contains a couple of performance-based standards. The best known example is the so-called "look-back" provision, which would set target levels of underage smoking that the industry would pay a fine for failing to meet.

and a greater degree of reliance on the industry (or the market) to have and act on that information. Nevertheless, both types of regulation make substantial informational demands on the regulator.

Although there is something to be said for performance-based regulation over command-and-control regulation,[5] both impose roughly the same informational demands on the regulator. To see why this is so, consider the following question: How is the performance-based regulator to choose the appropriate target level of performance or the appropriate fine for failing to meet that target? For example, how does Congress or EPA determine the aggregate level of air or water pollution to permit? To answer such questions the regulator must have information about not only the level of harm caused by different levels of pollution but also the total social costs and benefits of the activities that give rise to the pollution.

Incentive-based regulation is superior to command-and-control and performance-based approaches because it requires less information of the regulator, and because it relies more on the market to generate the desired regulatory outcomes, than the other two approaches do. Under incentive-based regulation, the regulator simply forces the manufacturers to pay the total costs of their manufacturing activities. The manufacturers are then left to decide what to do about those costs, if anything. Thus, incentive-based regulation does not, in any way, tell manufacturers how to run their business (as command-and-control regulation does). Nor does it require the regulator to choose the ideal regulatory target (as performance-based regulation does). It simply makes the industry pay its costs, and lets the market sort things out. The general superiority of incentive-based regulation over command-and-control regulation in most settings is fairly widely accepted among efficiency-oriented scholars and is increasingly recognized by policy makers. Indeed, most of the important recent debates in environmental regulation

[5] If there is a performance standard or target that is *assumed* to be desirable, performance-based regulation can be superior to command-and-control regulation as a means of achieving that standard, for the reason already described — manufacturers have better information. In addition, if we know what the target standard is, then enforcement of such a standard is relatively easy (because of the ease of monitoring compliance) compared to enforcement of command-and-control regulation, where the regulator must constantly defer to the informational advantage of the manufacturer.

seem to be about, not whether to use market forces, but how best to use market forces as a means of reducing pollution.

B. *Ex Post vs. Ex Ante Incentive-Based Regulation*

Consider one additional definitional distinction: the distinction between "ex ante" and "ex post" incentive-based regulation. Under ex post incentive-based regulation, as we define the term, the regulator waits until after the harm occurs and then imposes the costs of that harm on the particular manufacturer responsible for it. Thus the manufacturer, in making its initial production decisions, will anticipate the possibility of such ex post liability and will take into account the expected value of those liability costs in deciding how much to invest in improving the safety of its cigarettes and in deciding how much to charge consumers for its brand of cigarettes. Under current law, we have a form of ex post incentive-based regulation: tort law or products liability law.

Ex ante incentive-based regulation, on the other hand, tries to impose those same expected accident costs on manufacturers before the harms actually occur. The typical example of this type of regulation would be an excise tax imposed on cigarettes. What is interesting is that the excise tax seems to be the preferred form of regulation among most economists. Indeed, among the economists writing about cigarettes, it seems to be the only regulatory tool that is given serious consideration. Why do economists have this preference for excise taxes? It is because a tax supposedly requires less information on the part of the regulator than command-and-control or performance-based regulation does: Again, the idea is that the regulator can just measure harm and impose it on the manufacturer.

There are two general reasons why ex ante incentive-based regulation is inferior to the ex post version, especially in the cigarette context. First, choosing the appropriate rate of tax requires the regulator (as in the case of command-and-control and performance-based regulation) to have an enormous amount of information up front (at the time the tax rate is set) about the costs and benefits of cigarettes, including the costs and benefits of alternative cigarette designs. In contrast, under an ex post regime, costs would be imposed on cigarette manufacturers only as the external harms caused by cigarettes actually became manifest. Thus, although the regulator would be responsible for sorting out after the fact what harms had been caused by cigarettes and should be charged to manufacturers, it would be the cigarette manufacturers who would decide up front how to make and market cigarettes to minimize those costs.

Second, an excise tax, in contrast with an ex post approach, does not create incentives for cigarette manufacturers to compete over safety. This is a very basic point, but it is central to the argument for an ex post regime and to our critique of the proposed national tobacco settlement. At best, an excise tax of the sort now being considered would impose on each manufacturer the average per pack external costs for the whole industry. Such a tax, however, provides no incentive for manufacturers to make investments in developing and manufacturing safer cigarette designs (such as nicotine-free cigarettes or low-carcinogen cigarettes) or in identifying relatively low-risk smokers (people who are least likely to suffer harmful effects from smoking). Any such innovations would cost a manufacturer money — the research and development costs among others — but would provide essentially zero benefit to that manufacturer given that the taxes are fixed (or, if variable, are assessed on a market share basis).[6] This phenomenon is a special case of what policy scholars call the "common pool" or "free rider" problem. We sometimes refer to it as the "unraveling problem," because, under such a scenario, the market for safety improvements may unravel, as each manufacturer realizes that making investments in safety enhancements is not in their financial best interest. Indeed, assuming that relatively safe cigarettes are more costly to produce or market, each manufacturer's incentive will be to make its cigarettes less safe.

We should emphasize that our position is *not* that command-and-control, performance-based regulation, and excise taxes should never be used. In some non-cigarette situations (for example, in dealing with the problems of air pollution created by automobile emissions), command-and-control or performance-based regulation, or perhaps an excise tax, may be the only available options. This would be true if ex post incentive-based regulation were considered impractical, perhaps, for example, because the harms associated with the injury-causing substance are too widely dispersed to give

[6] If the taxes are fixed, then, of course, nothing that a manufacturer does can lower them. Even if the taxes vary to reflect the changes in the average costs imposed by cigarettes, however, manufacturers will not invest to lower those costs, because the benefit of such investments would be shared with the whole industry in the form of a reduced industry-wide excise tax. Again, each manufacturer would have a strong incentive to make no such safety-enhancing investments.

rise to ex post damage claims brought by individual victims. It should be emphasized, however, that the cigarette market presents a setting in which ex post incentive-based regulation *is* available as a regulatory option. Therefore, those types of regulation in the cigarette context are not viable ***substitutes*** for ex post incentive-based regulation, for the reasons already discussed. Still, even in the cigarette context, command-and-control and performance-based regulation might be useful complements to an ex post incentive-based regime, for example, as additional means of reducing underage smoking.

C. *The Problem with the Proposed Resolution*

Given the arguments in favor of incentive-based (and against command-and-control) regulation, one would hope that any proposal to regulate cigarettes would rely most heavily on incentive-based approaches, with little emphasis on command-and-control and performance-based regulation. In fact, the Proposed Resolution takes just the opposite approach. It is dominated by a renewed and strengthened emphasis on command-and-control regulation, including everything from new warning requirements to new FDA control over the level of nicotine and other ingredients in tobacco products.

In addition, the settlement contains the occasional performance-based approach — such as the "look back" provision designed to achieve specific targets of underage smoking by various points in time — but those provisions, by virtually all accounts, entail penalties that are too weak. Moreover, as we argued above, the way in which the penalties would be apportioned among tobacco companies (essentially on a market-share basis) would undermine each company's incentives to reduce underage smoking.[7]

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[7] To get a clearer picture of the limits of the command-and-control and performance-based regulations outlined in the proposed resolution, consider the following questions. What gives us any confidence that the proposed cigarette warnings and advertising restrictions would be any more effective than they have been in the past in this country or in other countries? Why would cigarette manufacturers, in response to requirements that they must turn over to the FDA all research regarding potential alternative, potentially safer, cigarette designs, stop conducting such research? What if the FDA did identify a cigarette design that appeared likely to be safer than conventional designs? Should the FDA mandate it? What if smokers increased their overall consumption of cigarettes because of the new design? What if the safer cigarette were unpopular because of, say, unpleasant taste attributes? Should the FDA require that all cigarettes adopt the new design? If not, would the FDA require that cigarette manufacturers market cigarettes with the safer design as aggressively as they market their conventional brands? Why is the target reduction level of the look-back provision set at 60%? What if the look-back provision were successful in encouraging the industry to reduce underage smoking to target levels, can we be

Finally, the Proposed Resolution is especially remarkable for its rejection of ex post incentive-based regulatory approaches. In fact, by sharply curtailing products liability law as a means of regulating manufacturer behavior, the Proposed Resolution would eliminate the only existing incentive-based system with any potential for internalizing the external costs of smoking. The Proposed Resolution arguably includes an incentive-based component, insofar as the costs imposed on manufacturers are required to be passed through to consumers in the form of a price hike. That mandated price hike would, like an excise tax, force manufacturers to bear at least some of the costs of their products. Viewing the Proposed Regulation in that light, some scholars have complained that the price hike is too small.[8] And some senators and the Clinton administration have recently suggested the possibility of increasing the price hike to some amount closer to $1.50 per pack.[9] In fact, there appears to be an emerging consensus among commentators and policy makers that the regulatory effect of the de facto excise tax needs to be enhanced and will have a greater regulatory effect than that of other aspects of the Proposed Resolution.

But again, because of the common-pool problem, even an excise tax of $1.50 per pack would not create incentives for manufacturers to make safer cigarettes.

III. An Introduction to Smokers' Compensation

A. *Introduction*

As we have already mentioned, one type of ex post incentive-based regulation of cigarettes is currently in effect—that is, products liability law. And compared with the Proposed Resolution, we would prefer the status quo, which may be imperfect but at least has the potential for producing the sorts of deterrence incentives and pricing effects that we see as important. In this Part, however, we explore one alternative to products

sure that many of the children who would otherwise have started smoking as children would not just pick up the habit at age 18?

[8] According to Jeffrey Harris, for instance, the proposed agreement would, if adopted, have the effect of a $0.62 per pack excise tax on cigarettes.

[9] *See* Jeffrey Taylor, *More Senators Seem to Back Increasing Cigarette Prices Beyond Level in Accord,* WALL ST. J. A4, Sept. 17, 1997.

liability law, an administrative system of compensation and cost-internalization that we call *smokers' compensation.*

The following issues distinguish a smokers' compensation regime from other conceivable ex post incentive-based approaches, including a products liability regime: (a) who the decision-maker would be, (b) who would be entitled to bring claims, (c) what costs would be recoverable by the claimant, (d) what evidentiary showing the claimant would have to make to receive compensation, and (e) how the claimant's damages would be allocated among cigarette companies. As we describe in greater detail below, one plausible version of a smokers' compensation regime would (a) be decided by some type of administrative tribunal, (b) be open only to smokers themselves or to those who bring claims on behalf of smokers (e.g., the smoker's estate or a subrogated insurer), (c) allow recovery only for those costs that tend to be covered under standard insurance and existing administrative compensation regimes, (d) require some showing of a causal connection between the claimant's harm and her smoking, and (e) would allocate damages among cigarette companies, as much as is feasible, according to each company's causal contribution to each claimant's harms. Under such a regime, the administrative fact-finders would bring expertise to the adjudication of smoking-injury claims.[10] Perhaps supported by a standing science panel,[11] the fact-finder would bring to bear the most current evidence, epidemiological and otherwise, regarding the effects of cigarette smoking. Research could be not only borrowed from private researchers, but also funded or conducted by the tribunal itself.

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10 Administrative alternatives are frequently proposed in situations that involve complex scientific or medical determinations, long latency periods, and large numbers of potential plaintiffs. *See, e.g.*, Robert L. Rabin, *Some Thoughts on the Efficacy of a Mass Toxics Administrative Compensation Scheme*, 52 MD. L. REV. 951, 952 (1993). This description is usually applied to mass toxic exposures, but fits tobacco equally well.

11 One model for a "Tobacco Disease Panel" is Ontario's Industrial Disease Standards Panel, which assists the provincial Workers' Compensation Board. Its mandate is to investigate potential diseases, to make findings about causal connections, to specify criteria for evaluation of claims, and to advise the Board concerning appropriate eligibility rules. The Board refers specific questions to the panel, but the panel may also investigate issues on its own accord. The panel may appoint specialist scientific subpanels on particular subjects. The full panel integrates the scientific findings with policy considerations to make recommendations to the Board. *See* 2 AMERICAN LAW INST. ENTERPRISE RESPONSIBILITY FOR PERSONAL INJURY 227 (1991), at 335-37.

Causation-based administrative alternatives to tort law are not strangers to the legal landscape. Workers' compensation is the exclusive remedy for employees injured on the job in every state.[12] And alternative compensation systems have been used at the federal level on several occasions, including the Black Lung Benefit Program for miners suffering from lung disease,[13] the National Vaccine Injury Compensation Program for victims of illnesses contracted from immunizations,[14] and the Price-Anderson Act governing liability in the event of a nuclear accident.[15] Indeed, the notion of an alternative compensation system specifically for smoking-related injuries is itself not new. Over twenty years ago, Donald Garner proposed a system in which welfare agencies could exercise no-fault claims against cigarette manufacturers to recover direct medical costs and related transfer payments, such as social security disability payments.[16]

Garner's proposed system would involve a special tribunal with expert fact-finders to manage any complicated scientific questions of causation. Claimants could invoke a rebuttable presumption of causation based on how long the victim smoked, and liability would be apportioned according to the approximate number of each manufacturer's cigarettes that were smoked by the victim. A presumption that all cigarettes are equally dangerous would be rebuttable by a manufacturer's showing that its brand is safer than others'.

Since Garner's article, legal scholars have continued to discuss the notion of an alternative compensation scheme for tobacco. Richard Ausness, for example, recently proposed creating an administrative board with rulemaking and adjudicative authority to process tobacco-injury claims.[17] As under Garner's system, Ausness's board would set presumptions of causation, perhaps even irrebuttable for certain diseases, and damages would be limited to economic losses. Most recently, Paul LeBel advocated an

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[12] *See* U.S. CHAMBER OF COMMERCE, 1994 ANALYSIS OF WORKERS' COMPENSATION LAWS at vii (1994).

[13] *See* 30 U.S.C. §§ 901-945 (1994); *see also* PETER S. BARTH, THE TRAGEDY OF BLACK LUNG: FEDERAL COMPENSATION FOR OCCUPATIONAL DISEASE (1987).

[14] *See* 42 U.S.C. §§ 300aa-10 to 300aa-34 (1994).

[15] *See* 42 U.S.C. § 2210.

[16] *See* Donald W. Garner, *Cigarettes and Welfare Reform*, 26 Emory L.J. 269 (1977).

administrative system involving broad, categorical determinations of causation and damages to minimize costs.[18] The program would be available only to individuals with particular diseases and smoking patterns, and those claimants would be allowed to collect only out-of-pocket medical expenses. LeBel would also allow a modest benefit to families of smokers who die from smoking-related diseases, primarily for the symbolic value. Both Ausness and LeBel would finance the payment of damages through an excise tax.

Those earlier proposals were not designed to address all of the deterrence and cost-internalization goals that, in our view, should be central. The Ausness-LeBel excise tax, for instance, would impose costs on all manufacturers, irrespective of their causal connection. As we emphasized above, however, the goal of optimal deterrence requires that *each manufacturer bear that portion of the overall cigarette-caused harm that is attributable to that manufacturer's brand.* Only then will market forces lead manufacturers to design, produce, and market safer cigarettes. And only then will each brand of cigarette fully reflect its expected costs.

None of the actual or proposed causation-based compensation systems provides a perfect model for a smokers' compensation system. They do, however, highlight some of the major considerations and tradeoffs in designing an ideal smokers' compensation system. In the Southern Illinois article, we provide a more fully formed, but still incomplete, model of the smokers' compensation idea. In this testimony, we suggest only a few of the major substantive issues that must be confronted in crafting such a system.

In an ideal smokers' compensation world, three conditions would hold. First, all smoking-related injuries would be "signature diseases." They would, in other words, be caused exclusively, or nearly so, by smoking. Second, smokers would be steadfastly brand loyal, sticking to their preferred cigarette as long as they smoke. Third, all smoking-caused damages would be tangible and easily measured. In this cheap-deterrence world, the analysis would be greatly simplified. If a claimant had one of the

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[17] *See* Richard C. Ausness, *Compensation for Smoking-Related Injuries: An Alternative to Strict Liability in Tort*, 36 WAYNE L. REV. 1085 (1990).

[18] *See* Paul A. LeBel, *Beginning the Endgame: The Search for an Injury Compensation System Alternative to Tort Liability for Tobacco-Related Harms*, 24 N. KY. L. REV. 457, 474 (1997).

signature diseases, the system could easily place liability on the manufacturer that caused the harm for an appropriate amount, and the costs of smoking would be appropriately internalized.

The good news is that the ideal world is not as far from the real world as most readers might assume. Certain diseases, most notably lung cancer and chronic lung disease, are significantly more common among smokers than they are among non-smokers and smoking is very likely to be the central cause of those diseases among smokers.[19] There is also evidence that smokers are extremely brand loyal.[20] Moreover, a substantial portion of smoking costs is economic and may be easily and accurately measured.

Nevertheless, the cheap-deterrence-world conditions are not always met, at least not entirely. For instance, although smoking is known to increase the risk of heart disease, there are a number of other potential causes of heart disease as well. Similarly, some smokers do occasionally switch brands. Insofar as the real world diverges from the cheap-deterrence world, it becomes necessary to weigh the value of increased accuracy in attaching injury costs to manufacturers against the administrative costs of achieving that accuracy. A similar trade-off exists with respect to calculating real-world damages.

In what follows, we suggest some of the ways in which a smokers' compensation system could be implemented in the real world. For the purposes of this discussion, we assume that the smokers' compensation claims will be brought by either smokers themselves, their families, or by their subrogated insurers (private or public). Therefore, the two remaining issues, to which we now turn, are these: What causal showing must

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[19] For example, *66%* of all cases of esophagus cancer are due to smoking (even though only approximately 30% of the population are smokers). To put the point differently, a smoker is *7.6 times* more likely to die of esophagus cancer than a non-smoker. For chronic lung diseases, such as emphysema, the numbers are 72% and 9.6 times. For laryngeal cancer, the numbers are, 74% and 10.5 times. For lung cancer (for which there are 123,000 annual deaths), the numbers are 87% and 22.4 times. And for mouth cancer, the numbers are 89% and 27.5 times. See Patrick Remington, Assessing the Health Effects of the Proposed Tobacco Settlement (Working Paper: Proceedings of the Conference on the So-Called Global Tobacco Settlement: Its Implications for Public Health and Public Policy) at 8, tbl.1.

[20] *See* Joe B. Tye et al., *Tobacco Advertising and Consumption: Evidence of a Causal Relationship*, 8 J. PUB. HEALTH POL'Y 492, 493 (1987) ("Cigarettes enjoy one of the most tenacious brand loyalties of any consumer product."); *see also* Philip H. Dougherty, *A.M.A.'s*

the smokers' compensation claimant make in order to recover? And, assuming causation is demonstrated, what damages would the claimant be entitled to recover?

B. *Causation*

1. *General Causation*

The first inquiry of a smokers' compensation board would be to determine whether cigarette smoking could have caused the injury claimed. To lower administrative costs, the system could be open only to certain claims. A threshold definition of a compensable injury under smokers' compensation might turn, for example, on the quantity of cigarettes smoked (and/or the length of time during which the victim was a smoker) and the type of disease for which a claim is being made. Claims for certain diseases with known, constant latency periods might be barred until a given period of time has passed. Finally, a determination that smoking *could* have caused any compensable injury would not necessarily imply that, in the given case, smoking *did* cause the injury.

One option for addressing difficult questions of causation, often proposed for mass toxic torts, would be probabilistic recovery.[21] In such a system, damage awards would be discounted by the likelihood that smoking did not cause the smokers' injury. If, say, smoking has a 90% probability factor of causing lung cancer in smokers,[22] one out of every ten smokers with lung cancer would have developed lung cancer even without smoking. In theory, those individuals should not be compensated, since smoking did not cause their injuries. The nature of epidemiological evidence, however, makes it extremely difficult, if not impossible, to identify which ten claims should be denied. Probabilistic recovery would address this problem by allowing *all* claimants with lung cancer to collect damages—at 90% of their total. The industry would thus pay the full costs of the injuries caused by its product, albeit not to the exact victims.

Assault on Tobacco, N.Y. TIMES, Dec. 12, 1985, at D29 ("Unlike most products you could name, cigarettes engender considerable brand loyalty.").

[21] For an extended early discussion of an ex post incentive-based regime along the lines described here, see David Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 HARV. L. REV. 851 (1984).

[22] Our hypothetical estimate may be reasonably accurate, as 87% of all lung cancer deaths in 1985 were caused by smoking. Presumably, the percentage of *smokers* whose lung cancer

A smokers' compensation system could adopt another commonly recommended tool for simplifying the causal determinations as well: evidentiary presumptions.[23] Garner, Ausness, and LeBel all propose presumptions of causation for certain diseases depending on the claimant's smoking history. Moreover, presumptions of causation figure prominently in many of the administrative schemes set up by the current federal law, including the Black Lung Benefits Program and the National Vaccine Injury Compensation Program. The use of presumptions would reduce the costly obstacles facing claimants. It would also expedite the claims process by avoiding redundant litigation of scientific evidence. Although these administrative-cost savings would come at the expense of additional deterrence, such a tradeoff may be desirable.

2. *Specific Causation*

If a claimant smoked only one brand of cigarette, establishing general causation would be sufficient. When the smoking-related injuries must be divided among multiple brands, however, a smokers' compensation system would need to allocate liability. Ausness and LeBel do not address this question; under each of their proposals, damages would be financed by excise taxes. Liability, therefore, would effectively be determined by market share. The Black Lung Benefits Program and the National Vaccine Injury Compensation Program are similarly funded by taxes, with liability allocated according to market share rather than causal share. In this subsection, we identify five possible methods of allocating liability among cigarette manufacturers other than market-share liability. We begin with the least accurate and (probably) least expensive and move toward the most accurate and most expensive. In presenting these methods, we remain agnostic as to the proper tradeoff between accuracy and administrative costs; our goal is simply to highlight a few of the possible options.

First, responsibility could be divided *equally* among the manufacturers that produced cigarettes smoked by the claimant. This method would be the easiest to administer, as it would require only the knowledge of which brands were smoked and

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deaths were due to smoking would be well over 90% given that the rate of lung cancer among smokers is approximately 20 times that of nonsmokers.

[23] Depending on the system, such presumptions could be rebuttable or irrebuttable. Failure to satisfy the conditions of the presumption could bar compensable claims from being brought, or it could simply shift the burden of proving causation to the claimant.

some basic arithmetic. Moreover, it is at least one step better than an allocation based solely on market share in that only those companies that manufactured the particular smoker's cigarettes would pay for that smokers' harms. If consumers are reasonably brand loyal or if those who are not brand loyal switch brands somewhat randomly,[24] then manufacturers of relatively safe cigarettes should thrive and competition for safety should emerge. Nevertheless, the nexus between causation and payment of damages would be somewhat attenuated, reducing the beneficial incentive effects of the system.

Second, rather than dividing liability equally, a smokers' compensation system could prorate liability according to the length of time a smoker consumed each manufacturer's brand of cigarette. This method would require the fact-finder to make additional findings of fact, and would thus add to the administrative costs of the process. Pro rata liability, however, could represent an improvement over the equal allocation method inasmuch as it would allocate damages in a way that more closely approximated the harm done by the respective manufacturers. This approach, too, may have problems. For example, insofar as smokers systematically smoke disproportionately dangerous cigarettes for disproportionately short durations, this equal-allocation-by-time method would not create optimal ideal deterrence. To help address any such problem, this allocation system could be combined with a rebuttable presumption that all cigarettes are equally dangerous. Manufacturers of demonstrably safer cigarettes would be permitted to rebut that presumption, thereby reducing their shares of liability.[25]

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[24] If brand switching were independent of the risks posed by the different brands and if smokers typically did not smoke all brands of cigarettes, then makers of more dangerous cigarettes would bear more of the liability costs. To be sure, in some cases, a manufacturer might be charged, say, only half of the damages, when its product caused more than half. However, that manufacturer will more often be charged half than will manufacturers of the other brands charged in that case because, by hypothesis, that manufacturer's cigarettes are more dangerous.

[25] Although the administrative board may lack information to judge adequately the relative riskiness of cigarettes, manufacturers probably do not. By placing the burden on manufacturers, therefore, the presumption forces the well-informed manufacturer to inform the poorly informed regulator. Furthermore, it does so in a way that pits manufacturers against manufacturers in contrast to the current regime in which manufacturers have common incentives to maintain one simple story—that there is no proof that any brand of cigarettes causes cancer and that smoking cigarettes is not addictive. A code of silence in response to a presumption that all cigarettes are equally dangerous, however, is certainly not unimaginable given the industry's history, and would partially undermine the primary motivational impact of ex post incentive-based regulation by sharply reducing care level considerations from manufacturing decisions. While this behavior would not be in individual companies' best interests, oligopolistic decision-

A third allocation system would involve estimating the number of cigarettes smoked of each brand. Doing so would further refine the allocation process, but at much greater cost. It may be that a smoker smokes a half-pack of Brand *X* every day for ten years. If that person moves on to Brand *Y* for another ten years, while also increasing consumption to a pack per day, she has smoked twice as many Brand *Y* cigarettes, though the time frame for each brand was the same. Recognizing this problem, Garner suggests the per number means of allocating liability, coupled with a rebuttable presumption that cigarettes are equally dangerous.

Fourth, it may be desirable to allocate the damages in some way other than purely on a pro rata basis. The allocation could, for example, be structured on a "winner-take-all" basis. Such a system could assume any number of forms. For instance, the manufacturer who produced the most cigarettes smoked by the claimant could bear all liability. Such a method would reduce the administrative costs associated with inter-manufacturer disputes. Or the company producing the first brand smoked could bear a disproportionate share of the liability. This "first-brand penalty" might be justified on the grounds that first brands create the addiction and that their toxins linger in a smoker's body for the greatest number of years.

C. *Damages*

Assuming a claimant can prove the causal link between her illness and her smoking habit, how much should that person receive under a smokers' compensation program? There are two general sorts of losses that might be compensated, economic losses and noneconomic (or intangible) losses. Taking deterrence as our only goal, an ideal smokers' compensation scheme would, at least in an abstract world resembling an economist's model, award full compensation for both economic and noneconomic harms caused by cigarettes. In the real world, however, the picture is clouded by a number of complicating political and administrative considerations. In the Southern Illinois article, we will lay out some of those factors and their implications for the types of injuries that should be compensable. We argue in that article that, in light of the various practical and

making might prompt such action, particularly if the industry felt that the smokers' compensation system could be dismantled if it failed to produce results. Even were it the case that manufacturers could not manage to cooperate in that way, however, administrative regulators political constraints, a smokers' compensation system should, like most of the extant no-fault programs and public and private insurance arrangements, be limited to economic loss only. More specifically, the smokers' compensation should provide complete medical benefits, partial but substantial disability benefits, and death benefits. Compensation for noneconomic losses, if any, should be scheduled and modest.

IV. Possible Objections

There are two possible objections to an ex post incentive-based system, such as a smokers' compensation system, as compared to an ex ante incentive-based system of regulation, such as an excise tax.

A. *Strategic Avoidance of Regulatory Incentives*

First, an excise tax might be presumed superior because it would be charged as the cigarette is sold rather than when the injury occurs. Because, under a smokers' compensation system, manufacturers would be liable for the harms of cigarettes sold many years earlier, a smokers' compensation system would arguably create opportunities for cigarette manufacturers to evade the regulator's incentive-creating sanctions. For example, after profiting for twenty years or so, a new entrant to the cigarette market might simply distribute its assets to its shareholders, rendering itself largely immune to the threat of smokers' compensation claims. To be sure, the manufacturer would then be bankrupted by the smokers' compensation claims, but only after many years of profiting substantially and distributing those profits to shareholders. Legal scholars sometimes describe this as a Judgment-proofing or "hit and run" strategy.

There are several reasons why such judgment-proofing strategies are unlikely to be adopted by manufacturers. For example, sophisticated long-term creditors would – and, in other industries, do – include covenants prohibiting (or, more generally, increasing the costliness of) such strategies. Also, opportunities for strategic avoidance of regulatory incentives exist for virtually *all* forms of regulation. For instance, manufacturers could avoid the effect of an excise tax by directly or indirectly selling their brands on black markets, as may be common in other countries that have substantial

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might not be sufficiently competent to sort out any informational disputes and competing claims among manufacturers.

cigarette tariffs. That evasion strategy would be less effective under a smokers' compensation system because manufacturers would have to pay for the harms caused by all of their cigarettes, even those purchased on black markets. Indeed, for that reason, manufacturers would have a strong incentive to discourage the emergence of black markets in their own cigarettes.

Finally, there are regulatory policies that could be adopted that would prevent manufacturers from evading the threat of future liability. For instance, as is provided for under the proposed resolution, manufacturers might be required to put up a substantial bond, to ensure that some assets are available in the future. Similarly, as is the case for virtually all European corporations, manufacturers might be required to meet minimum capitalization requirements, which would serve the same purpose as a bond. In addition, as is true of automobile drivers in most of the states in this country, cigarette manufacturers could be required to purchase a minimum amount of liability insurance which would cover the costs of future potential liability.

B. *The Personal Responsibility Question*

Others might object to a smokers' compensation system (or to any other type of victim-initiated ex post incentive-based system) on the ground that it compensates smokers for the harms caused by cigarettes and thus removes from them any responsibility for their own decisions. If the goal is to make all parties "own up" to their decisions, however, several arguments can be made that the appropriate policy response would be to adopt some form of ex post incentive-based regulatory system.

First, the argument cuts two ways. A strong argument can be made that, without products liability or some other type of ex post incentive-based regulation of cigarettes, tobacco *manufacturers* would be allowed to avoid responsibility for *their* actions. Indeed, some analysts have calculated that the proposed settlement would, if enacted, increase the industry's net profits.[26]

Second, even if we are worried primarily about individual rather than corporate responsibility, the only way to be sure that smokers take full responsibility for their

[26] *See* John M. Broder, *Industry Windfall Seen in Tobacco Deal*, GREENSBORO NEWS & REC. (N.C.), Sept. 23, 1997, at A1 (describing an FTC study finding that "the tobacco companies could reap as much as $123 billion in additional profits in the next 25 years if the settlement plan is adopted as drafted").

actions would be through the implementation of an ex post incentive-based regime of regulation and its effects on the price of cigarettes. Otherwise, smokers would continue to externalize substantial costs in the form of higher insurance premiums and tax rates.

Under a smokers' compensation program, there is no doubt that smokers would be responsible for their decisions. For starters, they would have to pay when purchasing each pack of cigarettes, in the form of higher product prices, for their right to make a claim when they come down with a smoking-caused illness. The arrangement is virtually identical to the arrangement that exists between individuals and their first-party health insurance companies. Thus, just as one is not getting medical care from one's insurer for nothing, smokers under a smokers' compensation program would not be getting something for nothing—and thus would not be evading responsibility.

Moreover, even to the extent smokers or their families receive compensation for their harms, it is difficult to say that the dead or seriously ill smoker would ever fully evade the ultimate responsibility for her smoking decisions. And that is especially true compensation is limited under the system to economic losses and public and private insurers enjoy subrogation and indemnity rights.

IV. Is it Really Now or Never; This or Nothing?

Those who are interested in the cigarette problem might ask questions such as: "Doesn't the proposed resolution represent a step in the right direction?"; and "In light of the fact that the apparent momentum in Washington to enact a comprehensive federal regulatory response to the cigarette problem might die, shouldn't we embrace the proposed resolution or something substantially similar to it while we have the chance, rather than be returned to the status quo?"

In our view, the answer to both questions is "no." Taking public health as the overriding goal, we would, if forced to choose, pick the status quo. To understand why, it is necessary first to understand that critics and supporters of the proposed settlement share two flawed premises, which nevertheless seem to be dictating the terms of the policy debate. First, both sides assume that the primary purpose of products liability law in this context is not to serve public health goals, but simply to compensate those injured by smoking. Second, both sides seem to agree that civil liability laws have, to date, failed to serve that or any other worthwhile goal. Consequently, most participants in the debate have indicated in one way or another that the elimination of products liability law would be no big loss, even for smoking plaintiffs. The proponents of the proposed settlement, for instance, point out that, even if $368.5 billion does not cover all the harms caused by cigarettes, it is a lot more than nothing, which is what manufacturers are often said to have paid in tort damages to individual plaintiffs to date. Critics are typically less explicit. They make their views known either by not mentioning the effect of the settlement on tort law or by indicating that they would not challenge that effect if only the settlement could be adjusted to serve public health goals better.

Arguably, however, the principal goal of products liability law is, broadly speaking, *public health*, not compensation. In the cigarette context in particular, the question then becomes whether the public health goal is better achieved through products liability law or through the types of regulation envisaged in the proposed settlement. Those who would sacrifice products liability law to accept the settlement implicitly assume that the public health benefits of the latter would outpace the public health benefits of the former. But, perhaps because of the general anti-tort sentiment in this country, that presumption has been largely unexamined and is, for several reasons that we have already noted, highly questionable.

Products liability law comes far closer, at least in theory, to providing an ex post incentive-based type of regulation than any alternative form of regulation now being considered (other than the smokers' compensation regime we are proposing). Moreover, products liability law could have more than just a theoretical impact. It is true that no substantial tort judgments have been won against the tobacco industry. Nevertheless, products liability law is currently in a state of flux or disequilibrium. In our view, the growing inevitability of many large civil judgments against the industry helped push the manufacturers to the negotiating table and thus made the $368.5 billion settlement offer possible. In other words, to say that the settlement agreement would produce $368.5 billion while tort law has produced nothing is to misunderstand what motivated the agreement in the first place.

It would be more accurate to claim that command-and-control regulation, not products liability law, has failed those who have been harmed by cigarette smoking. The

FDA has long declined to exercise its authority in this area, presumably because of the political power of the cigarette industry and because of the FDA's lack of expertise regarding how best to regulate. Furthermore, it has been administrative regulation that has effectively derailed otherwise viable tort claims against cigarette manufacturers. For example, the FTC-promulgated warning labels have given rise to the preemption defense and greatly strengthened the assumption-of-risk defense in tort law. Those defenses have until very recently proved an insurmountable barrier to tort recovery. Thus, in light of this past experience with administrative regulation, it is not clear that we should have much confidence in the expanded role for administrative regulation contemplated in the settlement proposal.

Conclusion

That brings us to our final observation. The history of tobacco regulation makes clear one very disturbing fact. The cigarette industry has, using a variety of strategies, successfully managed to protect itself throughout this century against any form of meaningful regulation. By far, its most successful strategy has been to meet the threat of tough regulations with weak command-and-control regulations that are preemptive of individual tort claims. A case in point is the experience with FTC warning-label requirements. And there are many other such examples. Within the last several years, that practice has been especially evident at the local level, where the industry has supported some state tobacco control legislation in an effort to preempt the authority of city, town, and county governments to control the sale and use of tobacco. With that historical backdrop in place, it is illuminating to look briefly again at the promises and the likely effects of the proposed resolution. As will become clear, the proposed resolution appears to be just one more example – this time on a grander scale – of a very successful long-term tobacco-industry strategy.

The proposed resolution states that "[a] key element in achieving the Act's goals will be forcing a fundamental change in the way the tobacco industry does business." With that assessment we completely agree. The proposed resolution also claims that it would "provide for means to ensure that the industry will not only comply with the letter of the law but will also have powerful incentives to prevent underage usage of tobacco products and to strive to develop and market less hazardous tobacco products." As our analysis has indicated, however, that claim is unfounded.

Indeed, as already emphasized, the mix of regulatory regimes chosen by the proposed resolution—mostly command-and-control; some qualified performance-based; and virtually zero ex post incentive-based regulation—is precisely the reverse of what most policy-oriented scholarship would recommend. Moreover, it is, from the tobacco industry's perspective, ideal. In light of the industry's track record, therefore, the choice of that mix of regulatory regimes was probably no accident.

As we have already noted, command-and-control is the least effective form of regulation in this type of setting. It requires the regulator to have an enormous amount of information about the product, information that the regulator often must rely on the industry to provide. Insofar as the industry is the source of the regulator's information, it becomes relatively easy for the industry to manipulate the process and avoid really having to bear the costs of its actions. Furthermore, the regulations themselves are severely limited by the inability of the regulator to anticipate every counter-move that the industry might make in its attempt to thwart the regulator—or, more accurately, to save the money that would otherwise have to be spent in complying with the spirit of the regulation.

As we have argued, those criticisms certainly apply to the settlement's numerous command-and-control regulations. To be sure, the agreement also contains some elements of performance-based regulations, which, in theory, might pose somewhat of a regulatory threat to the cigarette industry. As other critics have noted and our research shows, however, the performance-based aspects of the settlement are rendered quite anemic by the substantial ex ante and ex post loopholes and the relatively minor surcharges for failing to meet performance targets.

Considering the big picture, therefore, we have no trouble rejecting the suggestion that the proposed settlement would somehow substantially alter the culture or incentives of the tobacco industry. To the contrary, the basic incentives of manufacturers would remain. They would still seek to find and to create loopholes in the regulations. They would still seek to misrepresent the risks to consumers and regulators.

Our very strong sense at the end of the day is that the proposed resolution would accomplish precisely what previous efforts to regulate the cigarette industry have accomplished. Specifically, the proposal would create the illusion of regulation (at least initially) while simultaneously protecting the industry and smokers from having to bear the costs of cigarettes. In the words of C. Everett Koop: "The tobacco industry has always been able to get around or hurdle over measures we set up to try to stop them . . . to make victories of steps we thought would set them back. . . . We don't want that to happen again here."