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RAY RUSHTON DISTINGUISHED LECTURER SERIES

A POSTMORTEM ON THE CIGARETTE SETTLEMENT

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I. INTRODUCTION

The settlement of the Attorney Generals' suits against the cigarette industry for \$206 billion was a landmark outcome. By any standard, the financial stakes were enormous, dwarfing even the largest tort liability judgments and punitive damages awards. Moreover, what was especially noteworthy was that the party paying for the costs was the cigarette industry, which to date had been almost unscathed after decades of litigation involving the hazards of smoking.

This litigation has also taken place within a context in which there has been a rising societal interest in the social costs of smoking. In recent years there has been a flurry of anti-smoking ordinances and other restrictions. Moreover, the interest in the financial stakes has been prominent, beginning with the 1994 Clinton health care proposal, which included a federal tax of \$2 per pack on cigarettes. Subsequently, there was a proposed \$368.5 billion settlement fund that would have resolved the state suits, class action suits, and given the cigarette industry protection against punitive damages.¹ Although this proposed settlement was never adopted by Congress, the actual resolution of the Attorney Generals' suits involved considerable costs and had a somewhat more modest scope than the pro-

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¹ See the "Proposed Resolution" released on June 20, 1997.

posed federal resolution. Both, however, were similar in that they included a substantial regulatory component as well as a cost allocation.

Even more surprising than the enormous amount of the settlement is that any portion is being paid at all to the states. Past research at the national level indicates that cigarettes are self-financing. If cigarettes in effect pay their own way and there are no net costs, why is it that the states have a valid claim? Is it possible that the effect of cigarettes on costs borne by the states may be different than the costs to the country as a whole due to the different structure of insurance and benefit programs for the states than the federal government? In this article, I will examine the nature of the lawsuits and assess the costs the states incur. This assessment indicates that by any reasonable reference point, the states on balance benefit financially from cigarettes. Moreover, the method by which the states calculated costs substantially overstates any legitimate measure of any cost component, leading to windfall gains to the states as a result of the cigarette settlement.

These results pertain to the overall net economic implications. This comprehensive tally may not, however, be what the courts would have done had the suits been litigated, with the controversies resolved after appropriate appeals. Cigarettes do in fact increase expected health care costs. Whether cigarettes are on balance self-financing consequently depends on which other cost effects are recognized in determining the economic loss to the states.

II. THE IMPETUS FOR THE STATE LAWSUITS

A. *The Economic Rationale for the Litigation*

For market outcomes to be efficient, all costs associated with the use of the product must be borne by the consumer. If, for example, consumers impose costs on others that are not reflected in the price, they will consume too much of the good. Similarly, for output by firms to be efficient, production costs imposed on society must in fact be borne by the producer. Problems arise in situations in which production and consumption activity impose costs on others, whether it be air pollution emitted as part of the production process or fatalities resulting from drunk driving. These adverse consequences affecting others, which economists label externalities or external costs, must be reflected in the costs imposed on the party responsible for these harms in order to align the incentives with the full social

cost of the actions.

A conventional solution to this difficulty is to impose an appropriate tax. If, for example, a product imposes 25 cents per unit cost on others, then a tax of 25 cents per unit, known as a Pigouvian tax (after the British economist Pigou), will create efficient incentives for the correct amount of product use. Distributional issues may still arise. The tax may lead the consumers to generate an efficient amount of harm, but there is also the task of getting the 25 cent penalty to the party who is harmed. Such compensation for any loss in welfare is needed to ensure that the outcome is equitable, but even without such targeting of the payments, the penalty level itself will be sufficient to lead to efficient levels of care. For example, a properly set penalty on heavily polluting vehicles will lead consumers to recognize the costs of their pollution, which must be offset by some other valuable car attribute if the product is to remain attractive for purchase.

The economic underpinnings for the lawsuits filed by the state attorneys general have a similar impetus. The fundamental concern is with the financial cost to the states imposed by smoking behavior. The chief economic cost is that cigarettes have an adverse effect on individual health, boosting health care costs and the associated financial burden on the states.

An obvious economic solution to such costs is that the state could impose an externality tax following the economic textbook prescription. Unlike externality taxes in general, there is no problem in directing the payment to the injured party because it is the state government itself that has suffered the financial harm. Thus, the state could tax the product at the time of sale, rather than suing the cigarette industry after the fact for these costs.

Taxes have a two-fold advantage over litigation costs. First, they create incentives at the time of sale for efficient use of the product. Taxes at the time of use will discourage consumption, but unanticipated liability costs will not affect product prices. If, for example, the purpose of these suits is to recoup for net costs over the previous decades of cigarette consumption, then the prices consumers paid in the past for cigarettes did not reflect these costs, and people smoked too much given the costs of smoking. Appropriate taxes will lead to correct consumption choices. A second advantage of taxes is that they avoid the considerable litigation costs and attorneys' fees associated with the state suits. It is noteworthy that both the Proposed Resolution and the attorneys general case settlement each ultimately had a tax-like structure for collecting the settlement amount, as will be

discussed below.

One question raised by this tax-like structure, as well as by these general concerns about the desirability of taxes, is whether the sales taxes already imposed by the states do not compensate the states for any financial costs of cigarettes. As part of the calculation of the costs associated with cigarettes, I will compare the level of state excise taxes of cigarettes with the financial costs imposed by cigarettes to see whether from that vantage point cigarettes are self financing.

B. Profile of the Cigarette Tax

Cigarettes are the most heavily taxed consumer commodity. Cigarettes have a higher tax rate than alcohol, three times the tax rate of gasoline, and over ten times the tax rate of utilities and automobiles.² For the fiscal year 1998, the total federal, state, and municipal excise taxes on cigarettes was over \$13 billion.³ Of this amount, 24 cents per pack was for the federal excise tax, yielding a total revenue amount of \$5.5 billion.

Cigarette taxes are highly regressive in character. The usual economic concern with regressivity is whether people in lower income groups pay a higher proportion of their income for the tax. Because cigarette consumption decreases as one's income group rises, the extent of the regressivity is even more extreme. Indeed, cigarette smokers not only pay a higher tax amount as a percentage of their income, but also the absolute amount of the tax paid by the poor is greater than for those in the upper income groups. For example, people with income less than \$10,000 pay five percent of their income in cigarette taxes, while people who make \$50,000 or more pay roughly 0.4 percent of their income in cigarette taxes.⁴ The cigarette tax is strikingly regressive, though there are no apparent racial differences in terms of the incidence of the cigarette tax.

III. THE NATURE OF THE STATE ATTORNEY GENERAL LAWSUITS

A. The Wrongful Behavior Claims

The trigger for the state lawsuits was that the cigarette industry engaged in wrongful behavior that led to the financial costs to the states. These claims were similar for the various

² See Don Fullerton & D.L. Rodgers, *Who Bears the Lifetime Burden?* 74 (1993).

³ See 33 *The Tobacco Institute, The Tax Burden on Tobacco*, at VII (1998).

⁴ These data are drawn from Table 1 of W. Kip Viscusi, *Cigarette Taxation and the Social Consequences of Smoking*, in 9 *TAX POLICY AND THE ECONOMY* (James Poterba ed., 1995).

states, as well as in the lawsuits filed by the union pension funds, in their efforts to recoup costs from the cigarette industry.

The wrongful behavior claims fall into three general categories. Although the character of the lawsuits differed by state, there were several common themes. First, the states claimed that the cigarette industry misled, deceived, and confused the public. In particular, it suppressed its internal research on the risks and addictive properties of cigarettes, fostering increased consumption of cigarettes. Second, the states claimed that the cigarette industry engaged in racketeering activity and was guilty of public fraud through the Council for Tobacco Research, the Tobacco Institute, and other efforts. Third, the states claimed that the industry was guilty of antitrust violations, in particular, conspiracy to suppress safer cigarettes.

Rather than assess the validity of each of these claims, it is useful to examine the broader issue of whether there have been any adverse consequences of this wrongful behavior, assuming that in fact it took place. Thus, the reference point for the litigation is the following: what would the costs to the states have been but for the wrongful behavior of the cigarette industry? This issue can be broken down into two separate questions. First, are there any net costs of smoking? If there are no net costs to the states, then there is no financial basis for the claim and no need to be concerned about the wrongful behavior. Second, even if there was wrongful behavior, is there any evidence that this wrongful behavior had any effect on consumers and hence on the costs of smoking? In particular, do consumers underestimate the risks associated with smoking because of these alleged wrongful acts?

The role of wrongful behavior in affecting costs is critical. In particular, the cigarette industry is only liable for the particular share of costs due to its wrongful behavior. Claims by the states typically fail to make this distinction, as they seek to recoup all the costs associated with cigarettes, not break out the segment due to alleged wrongful conduct. The damages that can be claimed by the states are limited by time. If the wrongful conduct started in the early 1950s, it is only the cigarette consumption beginning after that time that can be the basis for the claim. In addition, the wrongful conduct is limited in amount to the cost due to the effect of the wrongful behavior on the assessment of risk. After the wrongful conduct began, it is only the additional costs attributable to the wrongful behavior that can be recouped. Thus, in terms of Figure 1, suppose that 1950 is the critical date. All the cigarette consumption indicated after that point would potentially contribute to part of the costs

claimed by the states. The practical task is trying to assess the share of costs due to wrongful behavior. One might, however, seek to establish an upper bound on these costs. Suppose that whatever wrongful conduct took place was in terms of information disclosure. By the current time, all these documents have now all been released and are public information. Moreover, there have been decades of research and Surgeon General reports on cigarettes to reduce smoking since the mid-1960s. Presumably, the rate of smoking in a world without wrongful conduct would be no lower than it was in Figure 1 for 1998. Thus, only that portion of the costs could potentially be claimed by the states if this approximation to bounding the level of costs is used.

As part of these suits, the states must show that the wrongful behavior led to underassessment of risks and that this underassessment led to smoking behavior. If people overassess the risks, then there is no need to consider this wrongful conduct further. The next section will document that risk awareness is quite prevalent for smoking, as one would expect for these highly publicized risks.

IV. RISK AWARENESS AND PREFERENCES

A. *Evidence on Risk Awareness*

The principal concern of the state suits is the effect of the wrongful conduct on underassessment of the risks of smoking. By almost any standard, cigarette smoking is one of the most hazardous consumption activities that people undertake on a large scale. The main empirical issue is the extent to which people are aware of the magnitude of the risks. If people overassess the risks of smoking, then there already is an excessive market response to smoking hazards.

To explore whether there is overassessment or underassessment of smoking risks, I will utilize data derived from a series of surveys. The surveys included both national as well as regional surveys. All these surveys were telephone surveys, which affects the types of questions that can be asked. The 1985 national survey was administered by Audits and Surveys, Inc. That survey focused on public perceptions of lung cancer risks. In 1991, I generalized the focus of the study using a regional North Carolina sample for which I analyzed perceptions of the effects of smoking on lung cancer mortality, total mortality, and life expectancy loss. This survey framework in turn provided the basis for a 1997 survey, which was also run nationally by Audit and

Surveys, Inc. Finally, to assess whether the Medicaid population was aware of smoking risks, a 1998 survey in Massachusetts administered by Roper and Starch Worldwide considered that class of issues for a sample that included disproportionate representation of the Medicaid population. With the exception of my 1991 North Carolina survey, all these surveys were funded by law firms representing the cigarette industry, but none of the respondents were aware of the source of the funding.⁵

Before considering the results of the surveys, it is useful to establish a reference point for what the true risk levels are for these various outcomes. I will use risk estimates based on studies by the U.S. Surgeon General, which I will take at face value. One can question some of the underlying assumptions in the statistical studies reported by the Surgeon General, such as whether adequate controls were included for other risky behaviors. However, these estimates are useful as a plausible upper bound on the risks and, more importantly, they are the most widely recognized estimates in this area. If people's risk perceptions are at least as high as would be suggested by the Surgeon General's studies, then we can be confident that there is no problem of risk underassessment. Smoking decisions could, of course, be flawed for other reasons, but lack of awareness of the hazards can be ruled out as a factor.

The specific estimates that I use are based on the Surgeon General's estimates of the total number of adverse health outcomes, such as smoking-related fatalities. I have coupled this information with estimates of the size of the smoking population to determine a risk level measured in terms of a probability of an adverse health consequence.⁶ In 1985, the overall additional lung cancer mortality risk due to smoking was .05-.10. By 1991, studies indicated that this risk was somewhat higher, around .06-.13. The total incremental mortality risk to the smoker in 1991 and thereafter is from .18-.36. Finally, the estimated life expectancy loss, which represents the combined influence of the probability of premature death coupled with the length of life lost in the event of a death, is from 3.6-7.2 years.

Table 1 reports the estimates of the smoking risk perceptions for a variety of different health outcomes. The lung cancer question was framed in terms of the number out of how many smokers who would either get lung cancer because they smoke or die from lung cancer because they smoke. For both

⁵ The texts of the 1985 and 1991 surveys appear in W. KIP VISCUSI, *SMOKING: MAKING THE RISKY DECISION* (1992).

⁶ For these estimates and the procedures for calculating them, *see id.* at 69-78.

the full sample as well as for the current smoking population, the estimates of the lung cancer risk are several times greater than the actual estimated risk of lung cancer associated with smoking. For the smoking population, the estimated lung cancer risk perception levels ranged from 0.31 to 0.42. There appears to be some modest upward drift over time in the level of lung cancer risk perceptions. The wording of the question in terms of lung cancer incidence or lung cancer mortality risks does not appear to be of major consequence. It should be noted that the sample composition varies across the surveys, and these differences alone may contribute to the minor variations in the lung cancer responses.

Because lung cancer has been the most highly publicized hazard of smoking, beginning with the landmark 1964 report by the Surgeon General, one might hypothesize that the public's overestimation of risk was restricted to this particular health outcome. Analysis of the total mortality risk perception estimate indicates, however, that although the risk overestimation is greatest for lung cancer, the perceived risk is greater than the upper bound scientific estimate of the risk level for both smokers as well as for the general population. In particular, for all three surveys smokers believe that there is at least a 42% chance that they will die from lung cancer, heart disease, throat cancer, or some other illness because they smoke. As in the case of the lung cancer questions, the framing of the question is in terms of the risk to a group of 100 people, which is a denominator that respondents find easy to conceptualize.

The final set of estimates in Table 1 pertains to the perceived life expectancy loss. This question was posed in two different ways. First, the North Carolina survey told respondents their remaining life expectancy at age 21 and asked what the remaining life expectancy would be for an average smoker. The 1997 national survey told people the actual life expectancy at age 21 and asked respondents what the perceived actual life expectancy would be for smokers. In each case, respondents assess a substantial life expectancy loss, where the average for the male and female smokers exceeds the upper bound estimate for the actual life expectancy loss associated with smoking.

The evidence for the Massachusetts survey on lung cancer mortality, total mortality, and life expectancy loss, yielded similar results, but for more focused populations. These results are of particular pertinence to the litigation because that sample focused on the Medicaid population, which was the subject of the state attorney general suits. This sample exhibited a similar pattern of overestimation of the risk. Moreover, the sample of un-

ion workers in the Massachusetts respondent group had responses similar to those of the nonunion workers, which is a result pertinent to the lawsuits filed by union pension funds. For these suits risk awareness among union members has been a key issue.

Even if one accepted the result that smokers believe that there is a risk of smoking to others, one might hypothesize that they do not really believe that there is a risk to themselves. One might hypothesize that perhaps they suffer from optimism bias and do not internalize the risk. Even if this is true, it is unclear whether the cigarette industry should be held responsible for this form of individual rationality. Awareness of the risk is the usual province of hazard warnings cases rather than cognitive failings of the individual.

More fundamentally, optimism bias may be an illusion based on survey framing. Surveys that ask people whether they are above average or below average in riskiness invariably find that people believe that they are better than average.⁷ Most of us, for example, like to think that we are above average drivers. However, these same surveys that indicate that people are above average in safety also show that their risk decisions in that domain are excessively cautious. Whereas parents believe that their households are above average in terms of child safety risks, when confronted with opportunities to buy safer products for their children, they often give excessive risk values rather than the inadequate amounts that would be hypothesized if optimism biases were influential.⁸

To judge whether smoking risk beliefs reflect an actual recognition of the hazards, the most meaningful test is to determine whether people in fact respond to these beliefs when making their smoking decisions. The empirical evidence suggests that higher risk perceptions do in fact reduce smoking rates. One way to get an assessment of the extent of these influences is to ask what smoking rates would be if people were unaware of the risk.⁹ If, for example, lung cancer risk perceptions were zero, smoking rates would rise by 7.5 percent—or roughly a one-quarter increase in the size of the entire smoking population.

If smokers underestimated the risk, then one could deter smoking behavior by imposing an excise tax on cigarettes. Thus, one can view excise taxes as in effect endowing smokers

⁷ See W. Kip Viscusi & Wesley A. Magat, *Learning About Risk: Consumer and Worker Responses to Hazard Information* (1987).

⁸ See *id.*

⁹ These estimates are drawn from VISCUSI, *supra* note 5, at 99-109.

with the equivalent of an awareness of smoking risks, even in situations in which there is no such risk belief. Calculations for each of the 50 states indicates that excise taxes discourage smoking to the same extent as with lung cancer risk perceptions ranging from 0.17-0.38, where this effect depends on how responsive cigarette demand would be to changes in the price or tax level.¹⁰

Another useful index of risk awareness is the extent to which cigarette smoking behavior is reflective of the kinds of decisions smokers make in other contexts. If smoking behavior is due to a difference in individual preferences, then one would expect smokers also to be willing to engage in other risky behaviors if they have a greater willingness to incur health hazards. A difference in the taste for tobacco could, of course, be an additional factor that leads some people to find smoking more attractive.

The empirical evidence indicates that smokers are in fact quite different from nonsmokers in a variety of respects.¹¹ In particular, smokers are more willing to work in hazardous jobs. They choose jobs in higher risk industries, and they require less money in compensation for these higher risks than do nonsmokers. Moreover, controlling for the riskiness for the type of job, smokers are more likely to be injured. Smokers are also more likely to be injured in home accidents than are nonsmokers. Similar behaviors are reflected in other risk preventive measures, as smokers are less likely to check their blood pressure regularly, and they floss their teeth less often. All available evidence suggests that smokers differ from nonsmokers not only in their smoking behavior, but also in their risk taking behavior across a wide variety of decision contexts.

V. INSURANCE EXTERNALITIES OF SMOKING

Because cigarettes increase the health costs of smokers, there is a popular view that cigarette smokers must be more costly to society than nonsmokers. This health cost linkage is the foundation of the state lawsuits. In particular, to what extent are people other than smokers footing the bill for smoking related costs? The portion of these costs borne by the states is the specific focus of the state suits. To assess the level of smok-

¹⁰ See *id.*

¹¹ These results are drawn from Joni Hersch and W. Kip Viscusi, *Cigarette Smoking, Seatbelt Use, and Differences in Wage-Risk Tradeoffs*, 25 J. HUM. RESOURCES 202 (1990); Joni Hersch and W. Kip Viscusi, *Smoking and Other Risky Behaviors*, 28 J. DRUG ISSUES 645 (1998); and W. Kip Viscusi and Joni Hersch, *Cigarette Smokers as Job Risk Takers*, Harvard Law School Working Paper (1999).

ing related costs, one must ask what would the costs have been but for the smoking behavior. In effect, one must look at the trajectory of costs over time, taking into account both the difference in the costs in each year, as well as possible differences in life expectancy that affect how long these costs are generated. Because these costs occur over time, it is the present value of these costs that is the appropriate damages measure, as is routine for damages calculations. Thus, when undertaking the cost analysis, one must examine these costs on a lifetime basis, not simply look at relative cost differences for a particular year of medical costs. To determine net costs, one must take into account all insurance consequences, not simply select those which are associated with increases in costs due to smoking.

The economics literature includes a variety of previous assessments of the costs associated with smoking.¹² My analysis is in the spirit of these estimates in which I have adjusted for changes in medical care utilization and prices that have taken place over time. These estimates have also been prepared both adjusting for tar levels in cigarettes and not including such adjustments. The tar level, which is the most commonly used composite measure of chemical residues linked to cancer, has declined. If there is a linear dose-response relationship between the tar level and the cigarette risk, then the health costs would also presumably be proportionate to the tar level. As it turns out, making an adjustment for the tar level of cigarettes actually increases the net social costs of smoking because the cost savings associated with premature mortality are reduced.¹³ The estimates presented here will be for a nonsmoking smoker, which is to say a representative person in the nonsmoking population who has the demographic characteristics of a smoker.¹⁴ Thus, to the extent that people are more likely to be incurring high health expenses because they are less well-educated or live in particularly high health cost regions, such influences would be taken into account and not attributed to smoking behavior.

Table 2 summarizes the social costs of smoking on a national basis, including costs to the federal government, state

¹² See W.G. MANNING ET AL., *THE COSTS OF POOR HEALTH HABITS* (1991); J.B. SHOVEN ET AL., *The Social Security Costs of Smoking*, in *THE ECONOMICS OF AGING* (D.A. Wise ed., 1987); Jane Gravelle and Dennis Zimmerman, *Cigarette Taxes to Fund Health Care Reform: An Economic Analysis*, Congressional Research Report (1994); Viscusi, *supra* note 4.

¹³ Adjustment for the level of tar in cigarettes is also controversial to the extent that smokers of lower tar cigarettes inhale more deeply than they would in smoking conventional cigarettes.

¹⁴ In particular, the baseline for these estimates was developed using the nonsmoking smoker analysis of MANNING, *supra* note 12.

governments, and private insurers. Because these costs are on a lifetime basis, they must be brought back to present value. The estimates shown on this table use a rate of interest of three percent when converting future costs into their present value cost equivalents. Because the estimates are fairly similar both without a tar adjustment and after adjusting for tar content, let us focus primarily on the estimates in which there is no adjustment for the tar content of cigarettes. Overall, cigarette smokers impose additional medical care costs of 58 cents per pack. This is a net cost increase that fully recognizes the fact that because of their premature mortality, smokers will not be generating additional medical costs after their death.

Focusing on medical costs alone does not, however, tell the whole story. There are other cost components that rise as well. Smokers incur additional sick leave costs of a penny a pack, additional life insurance costs of 14 cents per pack, additional property damage costs due to smoking-related fires of two cents per pack, and additional costs because they do not pay payroll taxes on earnings after their death of 42 cents per pack. There are also two major categories of cost savings. Because of smokers' premature mortality they generate lower nursing home care costs, leading to a cost savings of 24 cents per pack, and by failing to live to the full life expectancy, there is a retirement and pension cost savings of \$1.26 per pack. On balance, the net cost savings is 32 cents per pack without a tar adjustment and 29 cents per pack after making a tar adjustment. This cost savings of 32 cents per pack is in addition to the 56 cents per pack savings in excise taxes at the time of these calculations.

Are these cost savings components a legitimate concern or some kind of bizarre death credit? These calculations in no way ensure that premature death of smokers is a desirable outcome. Any concern regarding wrongful deaths of smokers should be the province of individual tort suits, not the state suits which were only concerned with financial losses to the state, not health effects on individuals. The estimates in Table 2 are directed solely at the financial losses imposed on society and address the fundamental issue of what the economic effects would be but for the smoking behavior. If there had been any net losses, the next question to resolve would be what is the share of these losses attributable to the wrongful behavior?

The cost savings for the country as a whole do not necessarily carry over to the particular states. The major area of national cost savings is for social security benefits, and to the extent that pension-related benefits for state employees do not loom as large in the state budgets as do the federal social security pro-

gram payments, there will be fewer cost offsets included in the calculations. After generating the state-specific numbers, one finds however that the states profit from cigarettes from an insurance standpoint as well.

Table 3 summarizes the results for five states and the national average. These states include Alabama, two states that were prominent in the cigarette litigation (Florida and Mississippi), and the two largest states (California and New York). The results are fairly similar across states, so let us focus on the results from Alabama, a state that resisted launching a suit against the tobacco industry. The medical care costs of concern include the state's share of costs of the Medicaid program, as well as the state's portion of all other medical costs, such as hospital expenses, that are affected by smoking behavior. Overall, medical care costs to the state are two cents per pack in Alabama. However, if we also take into account the nursing home cost savings, which involves a reduced cost of four cents per pack, we find that looking at the medical care and nursing home care component combined that there is a net savings of cost due to smoking and the shortened associated life spans. Similarly, the pension cost savings of six cents per pack is roughly triple the medical cost increase. The total insurance externalities due to smoking involve a six cents per pack savings in Alabama. These total cost estimates include the components shown in Table 3, as well as other small entries such as sick leave and life insurance. Moreover, this cost savings does not even include the additional payments made to the state through excise taxes of 16 ½ cents per pack in Alabama. Similar results pertain to the other states in Table 3. Thus, the only way in which cigarettes can be viewed as increasing the costs to the states is by framing the cost issue in terms of the medical care component alone.

VI. HOW THE STATES CALCULATE COSTS

Not surprisingly, the state lawsuits were quite focused in that they concentrated only on the medical care consequences. Thus, the effort was not to assess the total net external cost to the states, but rather to isolate the main cost component that increased as a result of smoking behavior. Much of the battle in the various jurisdictions involved whether other cost consequences, such as nursing home and pension savings, could be included. Another salient issue was whether excise taxes could be viewed as an offset for the medical care cost increase.

My calculation of the national cost of cigarettes shown in

Table 2 represents a straightforward accounting of the cost consequences of cigarettes, which leads to results that are consistent with all published economic studies of these effects. Nevertheless, in the memorandum filed by the state of Mississippi on the tobacco litigation, the state of Mississippi described my analysis, which at the time was included in a National Bureau of Economic Research working paper, as “ghoulish,” “cold-blooded,” “depraved,” “base,” “evil,” “corrupt,” “repugnant,” “offensive to human decency,” and “robbing the graves of smokers.” However, the analysis itself was in no way normative in character. It was not undertaken to show that these smoking-related deaths were a good outcome. Rather, the intent was simply to calculate what the financial cost implications of smoking are if one does this exercise in a comprehensive manner.

One might well suggest that these calculations ignore what many believe are the central concerns. On the negative side, what about the loss to smokers and their families from their ill health and premature death? On the positive side, presumably there is some benefit smokers derive from smoking since they continue to purchase this costly product even in the wake of decades of health warnings and public information campaigns. Recognition of these private valuations and private health costs would be part of a broader societal analysis of the benefits of smoking and whether particular kinds of smoking restrictions might be appropriate. However, these broader and more fundamental questions were not the focus of the state lawsuits. These lawsuits had nothing whatsoever to do with individual health, but were focused exclusively on the higher Medicaid cost to the states. Thus, the task was little more than a comprehensive accounting exercise rather than a more broadly based societal assessment of the direction cigarette policy should take.

In many respects, these state suits are not even the appropriate mechanism for addressing such harms. If there are losses to the individual smoker, then they can file private tort suits in attempt to recoup their damages. Although most of these suits have been unsuccessful, in 1999 there were two successful plaintiff verdicts in San Francisco and Oregon, and each led to a substantial award amount.

Even though the focus was solely on the increased medical costs, the nature of the calculations nevertheless involved substantial controversy in terms of the approaches used by plaintiffs and defendants. Medicaid costs are shared by the state and federal governments, where this share depends on the income level in the state. Even though in states such as Mississippi the federal share accounts for over two-thirds of the Medicaid costs, the

state's claims sought compensation for the federal costs as well as the state share of Medicaid. Thus, in effect, the state would get paid twice for this component. Given that the states attempted to recoup both the federal and state shares, attempts by U.S. budget officials to assert a claim to part of the settlement on behalf of the federal government were not entirely misplaced.

A second way in which the states attempted to boost their take was by claiming reimbursement of costs that would have been incurred by smokers had they lived and not died prematurely due to smoking. Thus, the states labeled attempts to recognize the shorter life expectancy of smokers as a "death credit," whereas in fact such recognition is simply proper accounting for the actual costs that will be generated by smokers given their shortened life expectancy caused by their smoking behavior. By failing to recognize differences in life expectancy, the state cost calculations in effect charged cigarette companies for costs after smokers are dead, based on their relative costs while alive. However, smokers have these relative costs because they are sicker and die sooner, incurring all of the costs associated with death. The states consequently sought to recoup costs that smokers never generated, as well as costs that were already paid for through the federal government's Medicaid share. The state calculations also sought to collect for all smoking-attributable costs without isolating the portion due to wrongful behavior. By any measure, these suits represented a potential profit center for the states.

What restrictions are there, in terms of counting cost components, to prevent plaintiffs from gaining the system even further once net costs are not a matter of concern? Suppose that Medicaid has two parts—Part A and Part B. If smoking increases Part A costs and decreases Part B costs, can the states focus only on the Part A costs and ignore the cost savings? More generally, can the states go disease by disease and only claim the cost components that are higher and ignore those that are lower? This concern is not merely hypothetical because getting lung cancer in one's 60s will decrease the chance that one gets Alzheimer's disease in one's 80s. The underlying fallacy of all such manipulations is that they fail to address the basic issue of what the economic harm to the states has been, which by its very nature is a net cost increase concept.

VII. THE RESOLUTION OF THE STATE ATTORNEYS GENERAL SUITS

Because of the substantial litigation costs and legal uncer-

tainties associated with litigating these suits in a variety of state jurisdictions, the cigarette industry sought a negotiated settlement of this litigation in 1997. The proposed resolution of the tobacco litigation would have provided for \$368.5 billion in payments over 25 years, substantial regulatory changes, and shielding of the companies from litigation by the states, class actions, and punitive damages claims. To take effect, this resolution needed to be passed by Congress, which it failed to do. Much of the difficulty arose as the original proposal, which was tantamount to a 62 cent per pack tax, spun out of control as antimoking congressmen such as Senator Ted Kennedy proposed taxes of \$1.50 per pack, leading the industry to drop its support for the agreement.

At the end of 1998, the industry did reach a separate settlement agreement with the group of 46 attorneys general who had not yet settled. It had already settled with four states in separate agreements, as Mississippi received \$3.5 billion, Florida received \$11.3 billion, Texas received \$15.3 billion, and Minnesota received \$6.6 billion. Thus, these \$36.5 billion in settlements are not included in the overall price tag of \$206 billion, which was the most highly publicized figure from the master settlement agreement.

The master state settlement included substantial reforms. Whereas ideally one might want these reforms to emerge from a national policy discussion and federal legislation, these reforms are the results of the decentralized bargains by the state attorneys general. The regulations included a prohibition of targeting youths in cigarette marketing, a ban on the use of cartoons (e.g., Joe Camel, who had already been retired by R.J. Reynolds), limitations on corporate sponsorships of events, elimination of outdoor advertising and advertisements, no payments for product placements, a ban on tobacco brand name merchandise, ban on youth access to free samples, and lobbying limits. In particular, the industry had to dissolve the Tobacco Institute and the Council for Tobacco Research—U.S.A. as well as the Center for Indoor Air Research, but it had the freedom to form new trade associations so that the net effect of this lobbying limit is unclear.¹⁵

The effect of the advertising limit on broader social objectives is unclear. If the primary effect of advertising is to affect

¹⁵ It should also be noted that the Tobacco Institute served a general educational role as well by, for example, issuing its annual volume on the Tax Burden on Tobacco, which consists of over 200 pages of detailed data on cigarette sales, taxes, and prices. This report has served as a resource for numerous economic studies of the tobacco industry, including the cost estimates presented above.

brand choice, then banning advertising or restricting it in important domains has the effect of locking in the current market shares to the extent that firms cannot advertise new brands. Firms with a high market share at the present time, notably Phillip Morris, will presumably tend to benefit more than firms with a more modest market share. New market introductions by these firms will be more difficult so that it will be harder to get smokers to switch brands or to switch to different types of cigarettes by making consumers aware of the properties of these new products. This disadvantage is potentially troublesome, both from the standpoint of fostering competitive markets in terms of pricing, but also from the standpoint of enabling firms to have an avenue to provide information to consumers about safer cigarettes that are developed in the future.

The original participating manufacturers in the settlement included the four major producers: Phillip Morris Incorporated, R.J. Reynolds Tobacco Company, Brown and Williams Tobacco Company, and Lorillard Tobacco Company. As a result of the settlement, these firms were released of all claims relating to the state suits. In particular, they were released of all claims for past conduct targeted in the state suits, where these claims were based on sale, research, and statements regarding tobacco products. Similarly, the firms were released of state suit claims for future conduct, and monetary claims relating to tobacco product exposure.

The functioning of the payments to be made under the agreement is very much akin to that of a tax per pack. Costs are to be based on the firm's market share, based on the total number of individuals sold. If, for example, the tax level were \$8 billion annually, there would be a 33 cent per pack tax-equivalent charge associated with the agreement. The actual increase in the price per pack will be more due to the costs generated by attorney's fees, the cost of the agreements with the four states with separate settlements, wholesaler markup, and related expenses.

The focal point of the public discussion has been on the publicized figure of \$206 billion for the master settlement agreement, rather than on the per pack equivalent. The actual cost levels are much more complex than a simple flat payment level, however. The scope of the settlement with the states was quite complex and involved more than cash transfers. The financial outlays also were targeted for specific purposes related to anti-smoking efforts.

First, the cigarette industry would be funding a foundation to reduce youth smoking. The base payments would be \$25 million in 1999 and in the subsequent nine years for a ten year total

of \$250 million.

Second, the cigarette industry would also fund a national public education fund that would be more broadly based. The amount of funds going to this effort would be \$250 million in 1999, and \$300 million beginning in the year 2000 and continuing for every year through 2003, for a total amount of \$1.45 billion. Whereas there would be no inflation adjustments for the youth smoking payments, the national public education fund payments would be subject both to an inflation adjustment and to a volume adjustment based on the level of cigarette sales by the particular firm.

The third component of financial payments is for enforcement efforts related to the settlement agreement. In particular, the firms must contribute \$150,000 annually to fund an executive committee to supervise the agreement, or \$1.5 million over 10 years. Moreover, the firms must pay \$50 million in 1999 for enforcement of the agreement. These payments are subject to both inflation adjustments as well as volume adjustments.

Table 4 summarizes the payments the firms must make for the settlement agreement, which go above and beyond their payments for the various educational efforts mentioned earlier. The first column of payments lists the initial payment amounts for the years 1999-2003. These initial payments range from \$2.4 billion to \$2.7 billion. The next column of payments pertains to annual payments, and these begin at \$4.5 billion in the year 2000 and rise to \$9 billion in the years 2018 into perpetuity. Note that whereas the press has focused on payments over the initial 25 years, these annual payments do not stop in 2023 but continue forever. The final set of payments, which are designated additional payments, are for \$0.861 billion from the years 2008 through 2017. These payments are distinguished in different categories in part because different kinds of volume and inflation adjustments pertain to them. The final column in Table 4 lists the total payment amounts, which begin at \$2.4 billion in 1999 and rise to a total of \$9 billion by 2008 and remain at that level in perpetuity.

Table 4 also lists the 25 year payment totals for each column of costs. These amounts are \$12.7 billion for the initial payments, \$190 billion for the annual payments, and \$9 billion for the additional payments, for a total amount of \$211.7 billion.

In terms of the total costs over the 25 year period, one must also add in the base payments to the foundation of \$0.25 billion and the additional payments of \$1.45 billion. There are also the executive committee payments of \$0.004 billion and enforce-

ment payments of \$0.05 billion. The net result is that the total payment over 25 years come to \$213 billion, as is summarized in Table 5.

Payments made in the future have a smaller economic value than payments made today. Even though most cost components are indexed for inflation, current payments can be invested and are consequently more valuable than future payments. Using a 3 percent real (i.e., net of inflation) rate of interest, the present value of the losses over 25 years is \$150 billion.

The agreement also specified the share of the settlement fund that would be received by each state. These state allocations were a political outcome that resulted from the negotiations among the attorneys general. Table 6 lists the state allocation percentages for several of the states participating in the agreement. It is noteworthy that the two largest states, California and New York, each received 12.76 percent. Such equality is not coincidental, but is in fact a reflection of the political nature of the agreement to allocate the settlement fund.

An interesting question to ask is whether the state did better than its proportional share of the total medical costs. The first component of this assessment is to determine the level of medical costs in each state. This can be done by multiplying the medical cost estimate for the state, which is in terms of a cost per pack, by the total number of packs of cigarettes sold in the state. After determining this amount for each state, one can ascertain the total medical costs to the states throughout the country. Using this value for total costs and the counterpart value for each state's specific costs, one can readily calculate the proportionate share of the medical costs. By dividing the proportionate share of the medical costs by the share of the settlement agreement received by the state, one can determine whether a state beat the average or performed worse than the average. Thus, if the ratio of the percentage share of the agreement to the percentage share of the medical costs is 1.0, then the state exactly breaks even with respect to how it should have done in terms of the settlement outcome. For the state of Alabama, the allocation percentage was 1.6 percent and the medical cost share was 1.5 percent. By dividing the allocation amount by the medical cost share, one finds that Alabama was paid \$1.08 by this agreement for every dollar that it incurred in terms of its share of the medical costs. Thus, the state of Alabama beat the average performance of other states in terms of reaping its portion of the settlement payments. This outcome is especially noteworthy because Alabama was a holdout in terms

of taking initiative against the cigarette industry. Alabama Attorney General William Pryor consequently was able to reap a disproportionate share of the settlement amount as part of the agreement among the attorneys general without having to incur the litigation costs associated with filing a claim against the tobacco industry.

The state of Mississippi is shown in Table 6 as receiving zero percentage. Other states that settled separately with the tobacco industry also received no share of this settlement so that this entry is simply a reminder of the limited scope of the settlement agreement that pertains to the 46 states that did not reach separate agreements.

In a typical court award to a plaintiff in a personal injury case, a portion of the award amount is used to pay the attorneys' fees. However, in this case the attorneys' fees will be borne by the companies rather than by the states so that the settlement amount reflects the net take by the states including the attorney fee costs. From a bargaining standpoint one would of course expect that the amount of the settlement given to the states would be less if the cigarette industry would also have to be paying the attorneys' fees of the states. Thus, by putting the attorneys' fees under a separate heading, it simply establishes a separate category of costs which the firms must ultimately bear. Whether these costs are included as part of the package or treated as a separate component will be equivalent from the standpoint of the firm. Nevertheless, making attorneys' fees not a part of the settlement is likely to make the settlement more politically acceptable to the constituents in these states. The process of determining these fees has been relatively hidden as well. The general public might be upset to see lawyers receiving billions of dollars in compensation so that the political salability of the agreement can be enhanced by making attorneys' fees appear to be a distinct and less visible component.

The agreement provides for the companies to pay for the fees of attorneys and paralegals and to compensate them "for time reasonably expended" for the government entities. Similarly, they must pay private outside counsel "reasonable attorney's fees." These amounts have a quarterly payment cap of \$125 million, or \$500 million annually, but this amount is into perpetuity.

The attorneys' fee outcome was the result of a decision by an arbitration panel. That group awarded lawyers for the cases in Florida, Mississippi, and Texas attorneys' fees of \$8.1 billion. Media experts pegged the estimated total attorneys' fees to be awarded for all states to be in the \$20 billion range for under

500 lawyers. How high the actual payments will be and whether the payments will in fact be greater than this amount remains uncertain.

VIII. FUTURE PROSPECTS

The implications of the state suits for the federal government were not lost on President Clinton. In his 1999 State of the Union address, he announced plans to pursue a 55 cents per pack cigarette tax. Moreover, in a late addition to that address (after the text had been released to the press), he also indicated that he planned a federal suit against the industry that would parallel those by the states. Although the legal underpinnings for the suit have not yet been made clear, if the suit does have standing, the costs potentially would be very high. The bulk of the funding of Medicaid is from the federal government rather than from the states, which were able to collect hundreds of billions of dollars for their losses. The stakes for the federal suit have yet to be specified, as they potentially could include Medicare as well as the major share of Medicaid. Moreover, it is not yet clear whether the cigarette industry would challenge such a suit in court rather than choosing to settle the case.

One outgrowth of the states' suits is that federal budget officials initially suggested that a certain percentage of the state settlement be earmarked for the federal government because of its contributions to Medicaid. This proposal was in fact consistent with the way in which the states calculated losses for their lawsuits, as they included the federal share. However, the states successfully resisted this attempt to divert funds from the states to the federal government.

The settlement of the state suits for more than \$200 billion established a new reference point and potential anchor for runaway juries. As part of the settlement there was a broad release of the documents used in the litigation, which were placed on the web and received substantial publicity. The flurry of anti-smoking efforts funded in part by the settlement and the expectation of multi-billion dollar awards have not only spurred the federal government into action, but have also led to suits being filed by union pension funds, as well as more private lawsuits. Shortly after the settlement, for example, there was a successful San Francisco lawsuit in which an individual plaintiff suffering from diseases that were claimed to be smoking-related received a \$50 million award, which was triple the punitive damages award that was requested by the plaintiff's attorney. Indeed,

one juror interviewed after the verdict indicated that she favored a \$1 billion sanction. One potential ramification of the settlement is that now juries are beginning to think in terms of billions rather than millions as a realistic dollar figure for a tort liability outcome. If awards of \$50 million per person who suffered premature mortality from cigarettes are multiplied by the more than 400,000 annual smoking related deaths estimated by the Surgeon General, then the stakes could become quite high indeed.

In terms of the future prognosis for the tobacco industry, it is clear that the industry did not buy peace with this settlement, but in fact may have stimulated further litigation. Moreover, no legal issues were ultimately involved so that the precedent for other industries is unclear. Which suits have standing? Is the tobacco industry experience in any way unique, or can it be readily transferred to other industries? The subsequent suits filed against the gun industry by several municipalities suggest that this phenomenon may be more widespread than being simply a tobacco related issue. Alcoholic beverages, cars, and lead paint similarly could emerge as targets for litigation.

Because these issues were not resolved through the judicial process, there is also no resolution on how costs should be counted for such lawsuits. Is the concern with net costs or gross costs of a particular cost component? For example, is it appropriate to net out the nursing home cost savings and pension cost savings, or should one simply look at the increase in medical costs? Similarly, do excise taxes matter as a concern? Given that the settlement agreement is tantamount to imposing a higher tax rate on cigarettes, the question arises as to whether other excise taxes paid by smokers as a result of state tax levies also should be counted.

Most fundamentally, why is it that these matters are the province of the courts rather than the legislative process? The hazards of cigarettes are known. It is possible to tax and regulate cigarettes now rather than relying on retrospective lawsuits to address the issue. Moreover, this regulation can emerge from a consensus process in which legislators formulate regulatory objectives and policies that represent the national interest. In contrast, the state lawsuits led to a resolution that reflected the interests of the state attorneys general. Though they are public officials, their major concern was with the dollar amount reaped by the states as part of the settlement, which is their principal area of responsibility, rather than formulating broadly based regulatory initiatives.

The competency of the judicial process also may be called

into question. What is at issue in these suits is a very complex judgment regarding the economic ramifications of a product for an entire market. The question is not whether a manufacturer produced a defective product that harmed a particular individual. Rather, the state suits are being used to make an overall judgement regarding market outcomes and, ultimately, to formulate a market-wide regulatory policy. The technical nature of these judgments alone suggest, that they might be better addressed by regulatory staffs with expertise in these matters. Moreover, there also appears to be a mismatch between the locus of jury expertise and the scope of the problems being addressed in these cases.

By settling this litigation out of court rather than awaiting the ultimate judicial disposition of these cases, the cigarette industry sacrificed the opportunity to provide a knowledgeable baseline for ascertaining how future efforts such as this may fare. The substantial litigation costs, legal uncertainties, and the prospect of potential punitive damages may have motivated a more cautious approach, as may the fact that the stock prices of the cigarette industry firms repeatedly increased once different settlement efforts were announced. The likely result is that there will be a flurry of similar suits until there are definitive judgments regarding the underlying rationale for this litigation.

Table 1
 Summary of Smoking Risk Perception Results

| Risk Question (Sample) | Risk Estimate | |
|--|---------------|-----------------|
| | Full Sample | Current Smokers |
| Lung Cancer: | | |
| Among 100 smokers, how many of them do you think will get lung cancer because they smoke? (U.S., 1985) | 0.43 | 0.37 |
| Among 100 smokers, how many of them do you think will die from lung cancer because they smoke? (N.C., 1991) | 0.38 | 0.31 |
| Among 100 smokers, how many of them do you think will develop lung cancer because they smoke? (U.S., 1997) | 0.47 | 0.40 |
| Out of every 100 smokers, how many of them do you think will die from lung cancer <i>because</i> they smoke? (M.A., 1998) | 0.48 | 0.42 |
| Total Mortality: | | |
| Among 100 smokers, how many of them do you think will die from lung cancer, heart disease, throat cancer, and all other illnesses because they smoke? (N.C., 1991) | 0.54 | 0.47 |

Table 1 continued

| | | |
|---|-------------------|-------------------|
| Among 100 cigarette smokers, how many of them do you think will die from lung cancer, heart disease, throat cancer, or any illness because they smoke? (U.S., 1997) | 0.50 | 0.42 |
| And out of every 100 cigarette smokers, how many of them do you think will die from lung cancer, heart disease, throat cancer, or any other illness <i>because</i> they smoke? (M.A., 1998) | 0.54 | 0.46 |
| | Risk Estimate | |
| Risk Question (Sample) | Full Sample | Current Smokers |
| Life Expectancy Loss: | | |
| The average life expectancy for a 21-year old male (female) is the he (she) would live another 53 (59) years. What do you believe the life expectancy is for the average male (female) smoker? (N.C., 1991) | 8.5 (males) | 6.9 (males) |
| As you many know, an average 21-year old male (female) would be expected to live to the age of 73 (80). What do you think the life expectancy is for the average male (female) smoker? (U.S., 1997) | 13.2 (females) | 10.9 (females) |
| | 10.1 (males) | 7.9 (males) |
| | 14.8 (females) | 12.3 (females) |

Table 1 continued

| | | |
|--|-------------------|-------------------|
| As you may know, an average 21-year old male (female) would be expected to live to the age of 73 (80). What do you think the life expectancy is for the average male (female) smoker? (M.A., 1998) | 10.1 (males) | 8.6 (males) |
| | 15.9 (females) | 13.2 (females) |

Table 2
Social Costs of Smoking in 1995

| | No Tar Adjustment | Tar Adjusted Estimates |
|----------------------|-------------------|------------------------|
| Total Medical Care | 0.5804 | 0.4806 |
| Sick Leave | 0.0134 | 0.0119 |
| Group Life Insurance | 0.1439 | 0.1206 |
| Nursing Home Care | -0.2390 | -0.2074 |
| Retirement Pension | -1.2589 | -1.0553 |
| Fires | 0.0167 | 0.0167 |
| Taxes on Earnings | 0.4247 | 0.3438 |
| Total Net Costs | -0.3186 | -0.2891 |

Note: All estimates update the 1993 cost estimates in W. Kip Viscusi, *Cigarette Taxation and the Social Consequences of Smoking*, in 9 *TAX POL'Y AND THE ECON.* (James Poterba ed., 1995) to 1995 data whenever possible, using a 3 percent interest rate.

Table 3

Estimates of State Externalities Due to Smoking (\$ per pack)* -

| | Excise Tax | Medical Care | Nursing Homes | Pensions | Taxes on Earnings | Total ^a |
|--------------|------------|-----------------|------------------|----------|----------------------|--------------------|
| Alabama | .165 | .019 | -.038 | -.063 | .015 | -.061 |
| California | .370 | .028 | -.097 | -.111 | .017 | -.157 |
| Florida | .339 | .026 | -.075 | -.052 | .016 | -.080 |
| Mississippi | .180 | .017 | -.025 | -.043 | .014 | -.032 |
| New York | .560 | .068 | -.058 | -.076 | .027 | -.034 |
| U.S. Average | .315 | .029 | -.072 | -.063 | .017 | -.084 |

* All estimates use 1995 data converted to present value using a 3 percent rate of interest.

^a Excluding excise taxes

Table 4
 Summary of Agreement Payments by Year

| Year | Initial Payments (\$ in Billions) | Annual Payments (\$ in Billions) | Additional Payments (\$ in Billions) | Total (\$ in Billions) |
|---------------|---|--|--|---------------------------|
| 1999 | 2.400 | 0 | 0 | 2.400 |
| 2000 | 2.472 | 4.500 | 0 | 6.972 |
| 2001 | 2.546 | 5.000 | 0 | 7.546 |
| 2002 | 2.623 | 6.500 | 0 | 9.123 |
| 2003 | 2.701 | 6.500 | 0 | 9.201 |
| 2004 | | 8.000 | 0 | 8.000 |
| 2005 | | 8.000 | 0 | 8.000 |
| 2006 | | 8.000 | 0 | 8.000 |
| 2007 | | 8.000 | 0 | 8.000 |
| 2008 | | 8.139 | 0.861 | 9.000 |
| 2009 | | 8.139 | 0.861 | 9.000 |
| 2010 | | 8.139 | 0.861 | 9.000 |
| 2011 | | 8.139 | 0.861 | 9.000 |
| 2012 | | 8.139 | 0.861 | 9.000 |
| 2013 | | 8.139 | 0.861 | 9.000 |
| 2014 | | 8.139 | 0.861 | 9.000 |
| 2015 | | 8.139 | 0.861 | 9.000 |
| 2016 | | 8.139 | 0.861 | 9.000 |
| 2017 | | 8.139 | 0.861 | 9.000 |
| 2018 | | 9.000 | 0 | 9.000 |
| 2019 | | 9.000 | 0 | 9.000 |
| 2020 | | 9.000 | 0 | 9.000 |
| 2021 | | 9.000 | 0 | 9.000 |
| 2022 | | 9.000 | 0 | 9.000 |
| 2023 | | 9.000 | 0 | 9.000 |
| 25 year total | 12.742 | 189.890 | 8.610 | 211.242 |
| 2024 | 0 | 9.000 | 0 | 9.000 |
| | | | 0 | |
| | | | 0 | |
| | | | 0 | |
| In Perpetuity | | | | |

Table 5
Master Settlement Loss Summary Over 25 Years

| | Cost (\$ billions) | |
|-------------------------------------|--------------------|----------------|
| | Undiscounted | Present Value* |
| Foundation and Education | | |
| Base Payments | 0.250 | 0.220 |
| Additional Payments | 1.450 | 1.365 |
| Agreement Payments | | |
| Executive Committee | 0.004 | 0.001318 |
| Enforcement | 0.050 | 0.050 |
| Initial Payments | 12.742 | 12.0 |
| Annual Payments | 189.890 | 130.671 |
| Additional Payments | 8.610 | 5.798 |
| Total Payments Over 25 Years | 212.996 | 150.104 |

*Present value is based on use of 3 percent rate of interest.

Table 6
State Allocation Percentages

| | Percentage |
|----------------|------------|
| Alabama | 1.62 |
| California | 12.76 |
| Massachusetts | 4.04 |
| Mississippi | 0.00 |
| New York | 12.76 |
| North Carolina | 2.33 |
| Virginia | 2.04 |

