



1 (especially) the McCain Bill.<sup>2</sup> While some of these changes such as the reduction in  
2 payments, were probably because the MSA was less comprehensive than the original  
3 proposals, some of the changes were probably necessitated by concerns about  
4 constitutional or antitrust law. For example, a set of draconian escrow requirements  
5 meant to make it impossible for a non-participating manufacturer (NPM) to sell cigarettes  
6 was modified, thus opening the door to some limited competition. These modifications do  
7 not appear to have been made to further the interests of any of the negotiating parties, but  
8 for their concern about the effects of such provisions on the legality of the MSA.

9         The MSA effectively implemented a set of *national* (as opposed to state) taxes in  
10 return for the settlement of lawsuits against cigarette manufacturers, as well as a promise  
11 by the states not to bring similar suits in the future. It also created barriers to entry against  
12 firms that might subsequently enter the cigarette market. As we will see, the MSA has a  
13 Byzantine structure, aimed at creating this national tax without calling it that. It thus  
14 creates a number of distortions relative to a national excise tax.

15         Why did the parties choose to go down this strange route instead of simply  
16 agreeing to everything else in the deal and lobbying jointly for an increase in the federal  
17 excise tax on cigarettes?

18         For the attorneys general, one difference is that the money went directly to the  
19 states rather than to the federal government. An alternative of having the companies agree  
20 to support equivalent state excise tax increases would also have been less appealing to

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<sup>2</sup> One example of a provision in McCain that was dropped in the MSA was one requiring that cigarettes contain no more than 12 mg of tar, a rule that exists in Europe. For a detailed look at the Tobacco Resolution and the McCain Bill, as well as a brief description of the MSA, see Jeremy Bulow and Paul Klemperer, “The Tobacco Deal”, *Brookings Papers on Economic Activity: Microeconomics 1998*, pp. 323-94.

1 many of the state attorneys general at the center of the negotiations. For one thing, as we  
2 will see, some states receive much more revenue (and some much less) than they would  
3 get if each state imposed a roughly equivalent state excise tax.

4 Furthermore, some states might not have accepted the MSA terms *cum* state  
5 excise tax, while the MSA structure economically coerced states into participating. So a  
6 state like Oklahoma, which might not have imposed a \$4.00 per carton state excise tax,  
7 was nevertheless compelled to approve a deal that imposed the same burden on its  
8 taxpayers but gave the state half as much money. Additionally, it was surely politically  
9 more advantageous for the state attorneys general to claim that they had negotiated large  
10 damages from the tobacco companies rather than a tax increase.<sup>3</sup> Some may have also  
11 believed, or at least thought they could sell, the rhetoric that lawyers' fees were paid on  
12 top of any settlement payments and thus did not come out of the money that would go to  
13 the states, though this is economically implausible.

14 The contingency fee trial lawyers for the states were able to receive billions of  
15 dollars from the MSA and the four earlier state settlements. Indeed, they will continue to  
16 receive another \$500 million every year for as far as the eye can see. Were the deal  
17 constructed more transparently, voters and consumers would likely have rebelled against  
18 a settlement that paid private citizens a percentage based on their having contributed to  
19 passing a tax increase. So it was imperative for the lawyers that the MSA payments be  
20 labeled as damages.

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<sup>3</sup> For spendthrift states there was the further advantage that by classifying MSA revenue as a windfall settlement rather than a tax increase the future revenues could be capitalized and spent quickly, skirting state balanced budget laws which would not allow future years' tax revenue to be counted as part of current income.

1           For the OPMs, having a national deal was probably of paramount importance.  
2   Such a deal would be a major step forward in enabling the companies to separate their  
3   domestic tobacco assets and thus limit the cost of future settlements. A national  
4   settlement would also have the appeal of eliminating a major class of legal problems once  
5   and for all, and might also be cheaper than 50 separate state settlements. The companies  
6   may also have come to believe that if they wanted a durable settlement it was more  
7   important that they agreed to something that satisfied the political and financial  
8   objectives of their deal partners rather than something that made more sense in terms of  
9   competition law or the MSA's purported health objectives.<sup>4</sup> While the OPMs would  
10   surely have preferred a settlement that included a straightforward national excise tax ---  
11   though not an *ad valorem* tax --- they agreed to a structure that gave them the support of  
12   their politically powerful partners.<sup>5</sup>

13           The structure of this paper is as follows: Section II discusses the financial terms of  
14   the settlements with the states. This section shows why the MSA and its complementary  
15   legislation must be considered a set of national taxes rather than state taxes. It also  
16   illustrates how the MSA deviates from a pure excise tax, because not all of a company's  
17   payments increase in strict proportion to its sales volume, and in part because, as a  
18   putative legal settlement, the deal would not automatically include the small existing  
19   manufacturers or any future entrants.

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<sup>4</sup> See Bulow and Klemperer, *op. cit.*, for a discussion of the myriad ways in which the proposed tobacco legislation was economically inconsistent with its stated goals.

<sup>5</sup> The OPMs would not have preferred an *ad valorem* tax, equal to say 60 percent of the wholesale price of cigarettes (before federal excise taxes), because premium cigarettes sold for double the price of deep discount cigarettes at wholesale.

1           Section III discusses the three-pronged approach of the MSA to dealing with  
2 competition issues, potential litigation from the small manufacturers, and the need to  
3 force states that lost money on the deal to nevertheless sign on and enforce it. Essentially,  
4 the MSA required a variety of measures aimed at increasing the costs and reducing the  
5 market access of NPMs. The SPMs were bought off by tax exemptions allowing them to  
6 keep all the MSA tax money their sales would have generated, up to an average of 150  
7 percent of their pre-MSA market shares. Finally, if a state did not join the MSA its  
8 consumers would still have been forced to pay national taxes to the remaining states, but  
9 the state would not have received any of the money.

10           Section IV discusses more recent developments in the evolution of the MSA.  
11 These include “allocable share amendment” (ASA) statutes, aimed at making the NPM  
12 business model unprofitable, and new taxes that apply either only to SPMs and NPMs or  
13 only to NPMs. A consequence of this legislation is that two leading NPMs have agreed to  
14 pay large amounts of money to become SPMs, though they will not receive any tax  
15 exemptions. Because the MSA entry fee that these NPMs are paying is being spread out  
16 over time, some SPMs have protested and have taken advantage of a dispute resolution  
17 provision in the agreement that has enabled them to pay little or nothing into the MSA.  
18 When these disputes are resolved there seems little doubt that the firms most aggressively  
19 exploiting this provision will default on their obligations.

20           Section V provides a brief competitive analysis of the cigarette market in light of  
21 the MSA. Section VI then discusses some potentially relevant antitrust issues. Among  
22 them is the contention of the Attorneys General that the ASA are for the purpose of  
23 “leveling the playing field” in the cigarette market. While these amendments are not

1 aimed at creating a level playing field, and fail miserably in doing so, this motivation is  
2 more consistent with the outdated approach to antitrust policy of protecting competitors  
3 rather than competition. The public health justification for the deal is questioned, as  
4 legislators had at their disposal means to achieve the same results without violating the  
5 antitrust laws. Finally, the national structure of the MSA means that even if some of its  
6 provisions would be immune from antitrust challenge if enacted by Congress, the deal  
7 seems beyond the scope of the states' authority.

8

## 9 II. The MSA and Related Settlements

### 10 A. The Previously Settled States

11 The Tobacco Resolution, the initial deal between the state attorneys general, the  
12 tobacco companies, and the trial lawyers, was signed on June 20, 1997. It was then  
13 brought to Congress where it evolved into the McCain Bill and ultimately collapsed. In  
14 the year between the signing of the Resolution and the demise of the McCain Bill the  
15 lawsuits of four states were resolved. Mississippi (July 1997), Florida (August 1997),  
16 Texas (January 1998) and Minnesota (May 1998) all settled their suits on terms modeled  
17 after the Resolution. The Minnesota litigation also involved the settlement of a lawsuit  
18 by Minnesota Blue Cross Blue Shield against the tobacco companies. These four states  
19 became known as the Previously Settled States (PSS).

20 Each agreement prominently included a federal excise tax for the benefit of the  
21 individual state. For example, in 2004 Texas received about 29 cents for each carton of  
22 cigarettes manufactured and sold anywhere in the United States by the four largest  
23 companies, none of whom were based in Texas. Viewed in isolation it is difficult to

1 imagine the rationale for even thinking that such an agreement would be legal. It hardly  
2 seems possible that Texas could impose taxes on consumers in other states. This  
3 agreement differs from state corporation taxes, which may be based on national or global  
4 profits, but are in proportion to the company's presence in the state and are also not paid  
5 by firms that do not operate in the state. Here, Texas's revenue depends entirely on  
6 national sales, and is unrelated to state sales.

7         One could argue that the agreement was only with four firms and so was not a tax  
8 imposed on the whole market. But these firms had a combined market share of 97-98  
9 percent, so an agreement that would raise the costs of each of them by 29 cents, and  
10 would tend to have a similar effect on prices, would seem to be illegal on competition  
11 grounds, if it is not considered a tax.

12         These settlements can be distinguished from an agreement between a patent  
13 holder and a group of licensees to charge them all the same royalty. The patent holder  
14 owns a government-granted monopoly, granted as an incentive for innovation, that  
15 exempts it from competition. Furthermore, these deals differ from a state monopolizing  
16 the sale of alcoholic beverages within its borders and fixing prices. The problem here is  
17 that the cigarette companies and the state attorneys general, without a legal monopoly,  
18 participated in a collusive *national* agreement that allowed all the firms in the market to  
19 raise price. Whether that money was split between the companies and the state, or  
20 whether the companies sold their share of the collusive gains to the state in consideration  
21 for the state relinquishing its claims against the companies is beside the point. The deal is  
22 essentially a revenue sharing agreement, with each firm contributing money from every  
23 carton of cigarettes sold, to trusts that then pay their revenues to the states and the trial

1 lawyers, in return for extinguishing a liability that would otherwise have to be settled in a  
2 manner that was not anti-competitive.

3           One response is to say that the state deals should not be looked at individually;  
4 that the Texas deal might have been illegal on a stand-alone basis but perhaps it would  
5 not be problematic in the context of a set of agreements that were, looked at in their  
6 entirety, no different from 50 independent deals imposing restrictions on competition in  
7 every state. While a group of companies could not justify a collusive price increase on the  
8 grounds that it would have the same economic effect as if each of them raised their prices  
9 unilaterally, a group of states could coordinate their tax policies, say. Perhaps on this  
10 basis one might then argue that the deals could be justified by the principle of “state  
11 action”, covering both the constraints imposed by the states and the coordination among  
12 them.

13           But as we shall see the four PSS deals and the MSA are very different  
14 economically from a series of 50 independent state deals, or even a coordinated national  
15 deal developed by the states, with each state having the freedom to refuse to participate.

#### 16           B. The Master Settlement Agreement

17           Payments negotiated under the MSA may be grouped into four categories: (1)  
18 payments that are not contingent on future sales, (2) payments that are directly  
19 proportional to an individual firm’s future sales, like an excise tax; (3) payments that are  
20 fixed in total but then allocated among the OPMs on the basis of their market shares; and  
21 (4) an excess profits tax that was applied in 1999 and 2000 but has not generated any  
22 revenues since. Payments are subsequently reduced by the “NPM Adjustment” which

1 was created to give the participating states large financial incentives to impose barriers to  
2 entry on the NPMs. The NPM adjustment will be discussed in Section III.

3 1. Payments not contingent on future sales

4 The MSA included an initial payment of \$2.4 billion. This amount was allocated  
5 according to an estimate of the firms' relative stock market values: Philip Morris paid 68  
6 percent, Brown & Williamson (owned by British-American Tobacco) paid 17.9 percent,  
7 Lorillard (owned by the Loews Corporation) 7.3 percent, and R.J. Reynolds 6.8 percent.  
8 This part of the settlement mirrored any damages settlement against multiple defendants  
9 in which payments were allocated based on deepness of pockets rather than damage  
10 caused.<sup>6</sup> As such, it does not create any antitrust problem. Furthermore, there were  
11 several payments allocated in proportion to pre-1999 market share that were not  
12 negotiated until late 1998. The most important of these payments were \$2.76 billion paid  
13 to the PSS.<sup>7</sup>

14 The allocation of the payments based on 1998 sales gave Philip Morris an *ex post*  
15 marginal cost of approximately \$.74 per carton; if Philip Morris had sold one carton more  
16 that year, holding constant the sales of all other firms, its MSA costs would have been 74  
17 cents higher. For the other three OPMs the *ex post* marginal costs ranged from \$1.13 to  
18 \$1.35. OPM prices did rise by an average of roughly \$0.60 a carton in 1998 *before* the  
19 passage of the MSA, which may or may not have been in anticipation of the MSA

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<sup>6</sup> RJR was the largest company in the industry when most current smokers became addicted, and in fact faced more lawsuits than Philip Morris at the time of the MSA.

<sup>7</sup> Other payments included most of the \$567 million or more paid over three years to the lawyers who prosecuted the Minnesota case, \$160 million to Minnesota Blue Cross Blue Shield, whose case against the OPMs was joined with the state's, and \$50 million to an Attorney General MSA Enforcement Fund.

1 payments. **Table 1** includes payments made either independently of market share, or on  
2 the basis of 1998 market share.

### 3 2. Per Carton Payments

4 Most current MSA payments are simply per carton amounts. For example, for  
5 payments based on 2000 sales the MSA specified a per carton payment to the settling  
6 states and territories equal to the MSA base amount for the year (\$5 billion) times .98,  
7 times an “inflation adjustment”<sup>8</sup>, times .8755 as a “Previously Settled States Reduction”,  
8 divided by the number of cartons sold by the OPMs in the 1997 base year (approximately  
9 2.38 billion), or about \$1.80 per carton.<sup>9</sup> The four PSS received a national MSA excise  
10 tax amount based on the same formula except with multipliers that added up to .17  
11 instead of .8755, or 35 cents per carton.<sup>10</sup> Several other payments, including 98 percent of  
12 a series of initial payments made to the PSS, of payments made to foundations  
13 established by the MSA, and of payments made to tobacco growers, were also effectively  
14 excise taxes, raising the average and marginal costs of all OPMs by the same amount.

### 15 3. Payments Fixed in Total But Allocated Based on Market Share

16 A further set of payments were fixed in total, either in nominal terms or adjusted  
17 for inflation, but allocated among the firms based on market share. The most prominent  
18 of those payments were four further “initial payments” made to the MSA states, equaling  
19 \$2.472 billion payable based on 1999 sales and increasing three percent per year for three

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<sup>8</sup> This adjustment equals the maximum of 3 percent and the actual December to December increase in the Consumer Price Index each year. For 2000 the inflation multiplier was approximately 1.0649.

<sup>9</sup> For years beginning with 2003 the Previously Settled States Reduction is 12.45 percent of \$8 billion, even though the base payments ultimately rise to \$9 billion.)

<sup>10</sup> So Texas, for example, received the amount of the 46 MSA states, except with .0725 replacing .8755 in the formula calculating per carton amounts.

1 additional years, and \$500 million or more per year for the trial lawyers. Also, amounts  
2 equaling 2 percent of the base amounts discussed above were not adjusted for volume.<sup>11</sup>

3         These payments affect the average costs of every OPM by the same amount, but  
4 affect the marginal costs of each firm by a different amount. For example, say that these  
5 payments averaged \$1.75 per carton in 2000. Also, assume that Lorillard had a market  
6 share of roughly 10 percent while Philip Morris had a market share of 53 percent. Then if  
7 Lorillard increased its sales by one carton it would pay an additional  $\$1.75(1-.10) =$   
8  $\$1.57$ . The reason is that while the “new” carton would create a payment of \$1.75 it  
9 would also reduce the payments required on all “old” OPM cartons by \$1.75. Ten percent  
10 of that reduction would go to Lorillard, or about 18 cents, so its net incremental cost  
11 would be \$1.57. For Philip Morris the marginal cost would be  $\$1.75(1-.53) = \$.82$ ; for a  
12 monopolist the marginal cost would of course be zero.

13         As **Table 2** shows, including both the per carton payments and the payments fixed  
14 in total but allocated by market share, all the OPMs had average MSA costs of \$4.95 in  
15 2000, but marginal costs were \$4.09 for B&W, \$4.13 for Lorillard, \$3.37 for Philip  
16 Morris, and \$3.88 for RJR.

17         One might question the odd incentives created by this form of payments. In  
18 particular, Philip Morris would pay \$.94 less if it sold an extra carton, holding the sales of  
19 all competitors equal, than if it sold an extra carton by taking business from another  
20 OPM. Under traditional taxation there would be no advantage to gaining one kind of  
21 business or the other. Therefore, the MSA created a financial incentive for firms to prefer

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<sup>11</sup> So, for example, in 2000 the 46 MSA states received 2 percent of \$5 billion (\$100 million) times the inflation adjustment times the PSS adjustment, this payment allocated among the OPMs based on market share but the total payment unaffected by total OPM sales.

1 to gain business by expanding the market rather than by taking business from another  
2 competitor. This seems inconsistent with the putative public health objectives of the  
3 agreement.

4 One might argue, as the tobacco companies have, that competition amongst them  
5 is almost exclusively about stealing market share, and that they do nothing that affects the  
6 size of the overall market. However, there are two problems with the argument. First, if  
7 the state attorneys general believe that competition among the tobacco companies only  
8 affects a consumer's brand of cigarettes, and not whether and how much someone  
9 smokes, it is that much harder to see the intellectual case for their lawsuits, particularly  
10 the Medicaid lawsuits.<sup>12</sup> Second, it does not address why the OPMs are given a greater  
11 incentive to take business from the SPMs and NPMs than from other OPMs.

12 With the end of the initial payments, the lawyer fees now represent the largest  
13 part of the fixed payment taxes. Therefore, as of 2003, the differential in marginal costs  
14 had narrowed, but Philip Morris's marginal costs were still 20 cents lower than  
15 Lorillard's.

16

#### 17 4. Excess Profits Payments

18 The MSA also contains an "excess profits" clause, so that if the combined profits  
19 of the OPMs exceed their 1996 level, adjusted each year by the maximum of 3 percent  
20 and inflation, 25 percent of the increase is taxed. As tobacco company profits had peaked

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<sup>12</sup> I believe that it is profitable for the tobacco companies to *not* be able to compete for new smokers, which is why they were willing to give up icons like "Joe Camel" in the first *hour* of their negotiations with the states. However, the ancillary effect of competition for market share may be to at least somewhat expand the overall market. See Bulow and Klemperer, *op. cit.*

1 in 1991-92 and volume continued to decline by roughly 2 percent per year, even absent  
2 any decline in sales or in OPM market share that would be due to the MSA, and as actual  
3 inflation fell to less than 3 percent, it might have seemed likely that this clause would be  
4 irrelevant. Nevertheless, it did lead to higher payments for Lorillard and Philip Morris in  
5 1999 and 2000; see **Table 3**. The payments were limited to Lorillard and Philip Morris  
6 because while the amount owed is based on increases in “real” *aggregate* OPM profits,  
7 only those firms whose *individual* “real” profits have increased actually pay, in  
8 proportion to those individual increases.

9         The combined profits of Lorillard, Philip Morris, and RJ Reynolds (as calculated  
10 using the methodology of the MSA) was \$8.2 billion in 1992; by 1996 their combined  
11 profits were down 25% before adjusting for inflation, to less than \$6.2 billion. Average  
12 OPM profits in 1999-2002 were 15 percent higher than in 1996; if we again exclude  
13 Brown & Williamson the increase was over 18 percent, even though unit sales were an  
14 average of 18 percent *lower*. Thus margins per carton rose from \$2.95 per carton in 1996  
15 to an average of \$4.10 in the first four years of the MSA. However, profits fell by  
16 roughly 20 percent in 2003 and rose only slightly in 2004; therefore it seems unlikely that  
17 the excess profits tax will kick in again soon. However, changes in the MSA aimed at  
18 reducing competition will raise OPM profits.

19

### 20         III. Coercing MSA Participation and Enforcement

21         Because the MSA would inevitably lead to large price increases by the OPMs,  
22 these firms demanded provisions that would deter competition from other firms. The  
23 MSA achieved this objective through a three-part strategy. First, escrow statutes and

1 other provisions were enacted to raise the costs of NPMs and limit their access to the  
2 market. These provisions also made not participating less attractive to the largest of the  
3 small manufacturers. Still, those firms might have challenged the deal. Therefore, they  
4 were bought off with generous “grandfather share” exemptions, which reduce MSA  
5 revenues by roughly \$300 million per year. Third, it was necessary to force states to enact  
6 and enforce these escrow laws. This was done through the MSA’s national structure, and  
7 further enforced through the “NPM Adjustment”, which essentially forced states to enact,  
8 word for word, the model escrow statute written into the Agreement.

9 A. Reducing Competition: The NPM Escrow Statutes

10 The MSA designers required the states to pass laws making life more difficult and  
11 expensive for any firm that did not agree to join the cartel. This served the twin purposes  
12 of providing a stick to persuade current small manufacturers to join as SPMs and a barrier  
13 to entry against new firms.

14 The Tobacco Resolution and the McCain Bill both required NPMs to place large  
15 sums in escrow for each pack of cigarettes sold. The original proposal was to require  
16 firms to place into escrow 150 percent of the amount they would have to pay into the  
17 MSA if they joined, the money remaining in escrow for 35 years with interest  
18 accumulating but not paid out. The money could be used to settle subsequent litigation  
19 between the company and the states. Furthermore, “the resolution provides that the  
20 exemption from civil liability applicable to distributors and retailers of the products of  
21 participating manufacturers will not apply to distributors and retailers who handle  
22 tobacco products of non-participating manufacturers.”<sup>13</sup>

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<sup>13</sup> *The Tobacco Resolution*, June 20, 1997.

1           For the MSA the escrow accounts were modified in several ways, probably to  
2 make them more antitrust-compatible in light of the lack of any authorizing national  
3 legislation. Payments were reduced to slightly less than the amount that a hypothetical  
4 SPM with no grandfather share would pay to the MSA.<sup>14</sup> However, because of rebates  
5 that have been awarded the SPMs through the NPM adjustment, an NPM has actually had  
6 to deposit more than an SPM without an exemption would have had to pay. The length of  
7 the escrow was reduced to 25 years, the time period over which MSA press releases  
8 valued the settlement (though the MSA has no expiration date). Companies were allowed  
9 to withdraw interest annually. Most importantly, the MSA escrow statutes included an  
10 “allocable share cap”.

11           Say that the MSA tax on a hypothetical non-grandfathered SPM was \$4.00 per  
12 carton.<sup>15</sup> However, an individual state’s share was ten percent. Then the state would  
13 actually receive MSA payments of  $\$4 \times .10 = 40$  cents a carton from the firm, based on

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<sup>14</sup> In 2003 for example the NPM amount was 3.900 per carton while the SPM amount was \$3.943, the amount rising with inflation and the MSA’s base and “strategic” payments. The SPM amount consisted of \$3.836 that is computed in the same way as the NPM amount and an additional \$0.107 that is tied to the same factors but also rises in inverse proportion to OPM sales.

<sup>15</sup> The advantage is hypothetical in the following sense: General Tobacco and Farmer’s Tobacco, two firms that built their businesses as NPMs under the original escrow rules but have now agreed to make large payments to be admitted into the MSA, represented almost 90 percent of non-grandfathered SPM sales in 2004. Of the remaining non-grandfathered SPMs the second, third, and fourth largest actually paid the MSA less than 10 cents a carton. Outside of the former NPMs, the non-grandfathered SPMs represented about \$10 million out of over \$7 billion paid into the MSA for 2004. Non-grandfathered SPMs may be able to survive in the future if NPMs are eliminated from the market and OPMs continue to charge prices that are well above the pre-MSA level, adjusted for MSA payments.

1 its national sales --- regardless of how much of the sales were in the state.<sup>16</sup> An SPM  
2 with an exemption equal to 50 percent of its sales would pay the state 20 cents per carton.

3 The original escrow statute required NPMs to contribute roughly the same 40  
4 cents a carton that a non-grandfathered SPM would pay into an escrow account. This  
5 would assure the state that if the NPM were ever convicted of a tort against the state it  
6 would have the funds to pay the state as much as the state would have received were the  
7 company a non-grandfathered SPM, and much more than it would have received from a  
8 grandfathered SPM.<sup>17</sup> But NPMs did have one important advantage: while SPMs would  
9 pay all 46 states that signed the MSA, it was hard to justify requiring NPMs to establish  
10 escrow accounts in states where they never did any business. The inability of the MSA to  
11 require NPMs to make escrow payments in the states where they do not operate is what  
12 the advocates for the ASA now call an “unforeseen loophole” that somehow slipped in to  
13 the document.<sup>18</sup>

14 So, for example, if the company sold 3,000 cartons nationally its net MSA  
15 payments to a state with a ten percent MSA share would be \$.40 x 3,000, or \$1,200. If the

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<sup>16</sup> An OPM would pay 35 cents because of the PSS reduction, but because it would have to pay the Previously Settled States, the lawyers, and some significant additional payments in the first years of the MSA its national costs would be the highest.

<sup>17</sup> Specifically, “It would be contrary to the policy of the State if tobacco product manufacturers who determine not to enter into such a settlement could use a resulting cost advantage to derive large, short-term profits in the years before liability may arise without ensuring that the State will have an eventual source of recovery from them if they are proven to have acted culpably. It is thus in the interest of the State to require that such manufacturers establish a reserve fund to guarantee a source of compensation and to prevent such manufacturers from deriving large, short-term profits and then becoming judgment-proof before liability may arise.” MSA Exhibit T, paragraph (f).

<sup>18</sup> The MSA was a collaborative product of 46 state attorneys general, the four largest tobacco companies, and several hundred of the richest trial lawyers in the world. It does not seem credible that a “loophole” was accidentally inserted into the model statute which was so crucial to the OPMs’ participation in the MSA.

1 company sold 1,000 cartons in the state it would be required to deposit \$4.00 per carton,  
2 or \$4,000 in escrow, but it would be due a rebate of \$2,800 shortly thereafter. However,  
3 if it had less than 10 percent of its national sales in the state it would be not required to  
4 add to its initial \$4.00 per carton deposit. Thus if it sold only 100 cartons in the state it  
5 would only be required to escrow \$400 rather than \$1,200.

6 As a practical matter, it would not pay for an NPM to enter a state unless by doing  
7 so it could increase its sales by considerably more than the state's MSA percentage. For  
8 example, assume that there were 10 states each with a 10 percent MSA share. The firm  
9 currently operated in three of the states, and had total sales of 3000, divided evenly  
10 between the states. Its total escrow obligation (net of refunds) would be \$1,200 in each of  
11 three states, or a total of \$3,600.<sup>19</sup> Relative to a hypothetical non-grandfathered SPM it  
12 would save \$8,400 by not having to open escrow accounts in the seven states where it did  
13 not operate.

14 Now, assume that the firm considered entering a fourth state, and projected that if  
15 it did so its sales the next year would again be 3,000 in the original three states but would  
16 equal 300 in the new state. Escrow payments in the new state would be capped at \$4.00  
17 per carton, or \$1,200, but the 10 percent increase in sales would also increase the  
18 payments in the first three states by 10 percent, or \$360. Thus, the total increase in  
19 escrow payments attributable to the new sales would be  $\$1,200 + \$360 = \$1,560$  or \$5.20  
20 per carton. Since this sum would be well in excess of the SPM and OPM amounts, the  
21 expansion would clearly not be profitable. (Similarly, one would not expect to see an

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<sup>19</sup> The escrow obligations to the states would be equal even if the sales in each state differed, so long as the sales in each state represented more than the state's 10 percent share of the MSA.

1 NPM that was already in several states entering a new one during the later part of the  
2 year, since payments are based on calendar year sales.)

3           A best case would probably be that the expansion into a fourth state would  
4 increase national sales by 1/3, as the company is unlikely to do relatively as well in a new  
5 fourth state as in the three states where it was already established and which it chose to  
6 enter first. But in this best case the incremental escrow costs from entering the fourth  
7 state would be \$2.80 per carton. That is, by selling 4,000 cartons nationally, split amongst  
8 four states, the firm would have to deposit  $.40 \times 4,000 = \$1,600$  to each of four escrow  
9 accounts, or \$6,400 in total. That would represent an increase of \$2,800 from the three-  
10 state total, or \$2.80 for each extra carton sold.

11           All this may seem somewhat confusing for a non-economist who might have  
12 taken one or two economics courses and thinks of a firm as having “a” marginal cost. Of  
13 course the whole concept of marginal analysis is to compare the incremental costs and  
14 benefits of an action, and the incremental costs will vary depending on the action. In our  
15 example, if a firm is selling more than a state’s MSA allocation in three of the ten states  
16 and less in the others, then its marginal costs are \$1.20 in the three states and \$5.20 in the  
17 remaining seven. Of course, entering the remaining seven and selling less than the MSA  
18 amount will be unprofitable, but the firm may attempt to sell a large amount in a fourth  
19 state, incurring the additional costs of \$2.80 per additional carton sold. As an analogy, an  
20 airline might find it profitable to add an extra flight to its schedule only if it can expect to  
21 earn \$280 per seat. However, once the flight is scheduled, the airline may find it  
22 profitable in some cases to offer tickets for \$120 (implying that it considers its marginal

1 cost of selling the seat no more than that amount), and in other cases to demand \$520.

2 The appropriate definition of marginal cost depends on the action being considered.

3 If there is free entry into the NPM market (that is, anyone who wants to become  
4 an NPM can do so, with the same restricted market access as other NPMs), so that prices  
5 are pushed to minimum average cost, including escrow costs, then obviously NPMs will  
6 only be able to operate profitably by concentrating their sales in a small number of states.

7 Of course there are circumstances in which a state might require a firm or an  
8 individual to bond against the possibility of future damages. Auto insurance comes to  
9 mind. However, given the nature of the settlements it seems that some of these risks are  
10 distant. While Medicaid claims are cited as one of the types of lawsuits settled by the  
11 MSA, the states have argued forcefully in other settings that the settlements are much  
12 broader than that, also involving antitrust and consumer protection claims, and that some  
13 states either had not brought any Medicaid claims or already had those claims  
14 dismissed.<sup>20</sup> Obviously, given their size, the NPMs pose no serious threat to the antitrust  
15 laws. Under current law cigarette marketing is highly restricted, and because they  
16 basically compete on price the NPMs would probably not do much marketing even if

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<sup>20</sup> See Letter from State Attorneys General to the President of the United States, November 7, 1997: “The State Actions assert a variety of legal theories. Many seek recovery of Medicaid payments made by the states for tobacco-related illnesses, as well as damages and penalties for violation of state antitrust and consumer protection laws. Indeed, in some states, the latter claims are the core elements of the lawsuit against the industry, as Medicaid-related claims have been dismissed by the courts or were not brought at all.” Also Letter from the National Association of Attorneys General to Senators Lott and Daschle and Representatives Gingrich and Gephardt, September 17, 1998: “A frequent misconception is that the state lawsuits are based entirely on recovering money through the Medicaid program. In reality, state lawsuits are based upon a variety of theories and measures of recovery. For example, many states are pursuing civil penalties under consumer protection statutes, treble damages under antitrust laws, or forfeiture of profits from sales of cigarettes to underage buyers. Some states have made no Medicaid-related claims at all.”

1 they could afford it anyway. The NPMs’ limited distribution also means that their  
2 opportunities for marketing are less than for SPMs. NPMs are subject to the same  
3 packaging and warning laws as all other companies, and so consumer protection claims  
4 seem unlikely as well.

5         However, it is quite clear that the protection of the state’s revenues in case of  
6 future claims against the NPMs is not the economic intent of the escrow statutes,  
7 regardless of the OPM-approved legislative intent language in the model statute.  
8 Furthermore, even a leading anti-tobacco activist and attorney did not regard the escrow  
9 statutes as serving a significant tobacco control purpose:

10         “Would adopting a “Qualifying Statute” be good or bad for tobacco control? The  
11 short answer is that it probably would not matter much for tobacco control purposes. To  
12 the extent that a “Qualifying Statute” would discourage cigarette price competition, it  
13 might produce some slight reductions in smoking. The effect on teenage smoking would  
14 likely be particularly small, since teenagers generally do not smoke the unbranded  
15 cigarettes that would likely be the major part of the non-participating manufacturers’  
16 business. On the other hand, to the extent that such a statute would help guarantee that the  
17 OPMs suffer little adverse financial consequences from the MSA, it would tend to  
18 undermine the deterrent and punitive effect of the laws under which the AG’s cases were  
19 brought.”<sup>21</sup>

20         What is the economic evidence that the statutes were not written to assure there  
21 would be funds to pay a judgment against an NPM?  
22

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<sup>21</sup> Richard Daynard, “The Non-Participating Manufacturer Adjustment, Qualifying Statutes, and the Model Statute in Exhibit T of the Master Settlement Agreement”, Chapter 4 in *The Multistate Master Settlement Agreement and the Future of State and Local Tobacco Control*, Graham Kelder and Patricia Davidson eds. Commissioned by the American Cancer Society. At the time Prof. Daynard was the president of the Tobacco Control Resource Center, chairman of the Tobacco Products Liability Project, editor-in-chief of the Tobacco Products Litigation Reporter, and principle investigator of the National Cancer Institute’s “Legal Interventions to Reduce Tobacco Use”.

1 First, using the insurance analogy, if the purpose is protection of state revenue  
2 against future damage claims, why not allow the companies to purchase insurance  
3 policies for a like amount rather than require the money to be held in escrow?<sup>22</sup>

4 Second, why require a company that knows, from its tax stamp purchases, that it  
5 is going to have to leave \$200,000 in escrow with a state (based on national sales) to  
6 deposit \$1 million and wait for an \$800,000 rebate.<sup>23</sup> If the company unknowingly fails to  
7 deposit the full amount it is subject to a penalty of 5 percent per day up to 100 percent  
8 total. If the violation is knowing, the penalty can be 15 percent per day up to 300 percent  
9 total.<sup>24</sup> As we will see, this stands in stark contrast to the rules applied to SPMs. A more  
10 reasonable system would require the NPMs to deposit into a national account the  
11 maximum they might have to pay, conditional on their sales being spread among the  
12 states in which they are legally allowed to sell, with the money then divvied up among  
13 the state escrow accounts and any remaining rebate given to the company after the annual  
14 resolution of the company's obligation to those states.<sup>25</sup>

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<sup>22</sup> Even if an insurance company were *certain* that it was eventually going to have to pay the full amount of the escrow it would be willing to offer insurance at a considerable discount from face value, because of the time value of money. Restricting the companies to keeping the funds in expensive escrow accounts and requiring investment in very low yielding short-term securities adds to the companies' costs while doing little to increase the state's security.

<sup>23</sup> State sales are estimated using reports from wholesalers, which may be sloppy. So, for example, the seven states in which Xcaliber operates claimed an aggregate sales volume equal to 150 percent of its national total. This did not affect its net escrow payments under the original statutes, but did sharply increase the amount of money it had to borrow from the time it was required to meet its gross escrow obligations until the time it would receive the rebate of its excess payments, a period which could range from a few days to many months.

<sup>24</sup> MSA, "Model T" Statute.

<sup>25</sup> This would imply that if the company were registered to sell in states with an aggregate MSA share of 20 percent and the per carton MSA amount was \$4.00, the company would

1 Third, if the purpose of the escrow statutes were to protect state revenues in the  
2 event of future Medicaid claims against the NPMs, what would be the rationale for  
3 requiring OPM approval of these statutes, and for making OPM and SPM payments to  
4 the state contingent on the passage of the statute? And why would *all* the MSA states  
5 feel compelled to pass escrow statutes while *none* of the PSS states did so?

6 As described by the National Conference of State Legislatures,

7 “The model act ... must be enacted by states exactly as it is drafted in the MSA  
8 (Exhibit T) and as a stand-alone piece of legislation or the state must alternatively enact a  
9 "qualifying statute," as determined by a firm jointly retained by the settling states and the  
10 original participating manufacturers. The ruling of the firm is final. A "qualifying statute"  
11 is defined in the MSA as a settling state’s statute, regulation, law and/or rule (applicable  
12 everywhere the state has authority to legislate) that effectively and fully neutralizes the  
13 cost disadvantages that the participating manufacturers experience (as opposed to the  
14 non-participating manufacturers) as a result of the MSA.”<sup>26</sup>

15  
16 Of course the value of an escrow account will typically, though not always be  
17 greater than zero.<sup>27</sup> Thus being required to contribute \$5 million to an escrow account  
18 will not be as costly as having to pay \$5 million to the MSA. But as the Federal Trade  
19 Commission said, in describing the accounts as envisioned in the McCain Bill, “Due to  
20 the difficulty of predicting the amount of future liability payments and the long delay  
21 before any money could be reclaimed, these payments are likely to be viewed as non-  
22 refundable costs of doing business.”<sup>28</sup> In the one transaction I have heard about a

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have to deposit 80 cents per national sale. It would receive a partial rebate if its sale in one or more individual states was less than the state’s MSA share.

<sup>26</sup> National Conference of State Legislatures, “Summary of the Attorneys General Master Tobacco Settlement Agreement”, March 1999, prepared by Joy Johnson.

<sup>27</sup> Because NPMs are typically restricted by the states to have their escrow funds invested in short-term instruments companies with smaller accounts have sometimes requested that they be allowed to forfeit all the funds in their account to the state rather than have to maintain it. This type of request has met with mixed success.

<sup>28</sup> Federal Trade Commission, “Competition and the Financial Impact of the Proposed Tobacco Industry Settlement”.

1 company with a \$5 million escrow account only received 5 cents on the dollar when it  
2 sold the account. While it may seem difficult to understand why the price would be so  
3 low, given that the MSA escrow accounts are still more favorable than the McCain Bill  
4 accounts, a price in the five or perhaps 10 percent range is consistent with the views of  
5 the NPM executives with whom I have spoken, who express a deep skepticism that the  
6 states will ever let them recover their escrow funds.<sup>29</sup>

7           The impact of the escrow accounts on the costs of the NPMs can thus be  
8 measured by discounting the amount that has to be deposited by the salvage value of the  
9 account. So, for example, if we assume that the escrow accounts have a residual value of  
10 10 percent a \$1000 escrow deposit would have a net cost to the firm of \$900. However,  
11 this assumes that the NPMs are able to deduct their escrow payments from their taxable  
12 income as the participating manufacturers may deduct their MSA expenses. The tax  
13 question is beyond the scope of this paper.

#### 14           B. Reducing Competition: Additional Costs Imposed on NPMs

15           While under the MSA an NPM does have a cost advantage over a hypothetical  
16 non-grandfathered SPM, due to the “loophole” of not having to make escrow payments to  
17 states where it does not do business, this advantage must be balanced against the  
18 offsetting disadvantages that the NPMs face. Any wholesaler or retailer who only dealt  
19 with MSA companies could never be sued for Medicaid reimbursement. To this day,

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<sup>29</sup> The concern is not that their companies will break the law but that, consistent with the Allocable Share Repeal bills we are now seeing, that the states will find a way to expropriate these funds by changing the rules. For example, say the states retroactively required the companies to apply the Allocable Share Repeal rules to past sales or forfeit the funds in their existing accounts. Companies would have no choice but to forfeit their money. Other changes to the escrow rules to make them more like those in the Tobacco Resolution would also greatly reduce or eliminate the value of the escrow accounts, even if there remained some hope of getting the money back in the distant future.

1 nearly all major chains of convenience stores, drugstores, discounters, and groceries  
2 refuse to handle NPM cigarettes.<sup>30</sup> Thus, even if the escrow payments were effectively  
3 less costly than MSA payments, they also provide less comprehensive legal protections  
4 and less access to the market.

5 A Salomon Smith Barney study indicated even in mid-2002 that while the NPMs  
6 had a substantial MSA-related cost advantage compared to an OPM, they were  
7 “beginning to come under pressure from both the state attorneys general and from the  
8 retailers who refuse to carry their brands...69% of the retailers currently do not sell any  
9 nonparticipating brands, and of those, approximately 25% used to carry them.”<sup>31</sup>

10 According to one senior Philip Morris executive, when a cigarette is not widely available  
11 it is much more difficult for the firm to build any consumer loyalty or brand equity.<sup>32</sup>

12 Another executive pointed out that 60 percent of customers will simply buy a different  
13 brand rather than go to another store if their favorite premium brand is not in stock<sup>33</sup> ---  
14 the lost business from not being available would obviously be higher for a deep discount  
15 cigarette. Even putting aside the legal risks of buying from an NPM instead of an SPM, a  
16 large business with repeated interactions with the state government might be responsive

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<sup>30</sup> Roger Parloff, “Is the \$200 Billion Tobacco Deal Going Up in Smoke? The states are addicted to the money it provides. But the comically convoluted settlement is riddled with problems, and judges’ patience for it is wearing thin.” *Fortune Magazine*, March 7, 2005.

<sup>31</sup> Bonnie Herzog, “U.S. Tobacco Industry”, Salomon Smith Barney, July 18, 2002, p.8.

<sup>32</sup> “Smokers want to know that they can find their brand when they go into a store to purchase cigarettes. If they have trouble finding stores that carry their brand, if the brand is hard for them to find when they go into the store, or if the stores they visit are routinely out of stock of their brand --- those things can erode the equity of the brand in the smoker’s mind.” Written direct testimony of David R. Beran, *United States v. Philip Morris*, 99-CV-2496 (GK), pp. 41-42. Mr. Beran testified as Philip Morris’s Executive Vice President of Strategy, Communications, and Consumer Contact.

<sup>33</sup> Interview with Ross Webster, vice president of trade marketing and distribution at Philip Morris, “Philip Morris: An Industry Overview”, *tobonline.com*, Nov./Dec. 2004.

1 to pressure from the state attorneys general to give preference to SPMs. As described by  
2 Ronald Tully, an executive at NPM National Tobacco, the disadvantages that the NPMs  
3 face have been compounded over time:

4 “The situation is markedly different for an NPM today than it was for one in 1999. NPMs  
5 must now face:

- 6
- 7 1) State by state escrow certifications for each of their operating companies (my  
8 company has up to three escrow accounts in each state for each of our different  
9 trading divisions). Our interest gains on these accounts barely covers our costs of  
10 operating the escrow accounts for the states' benefit.
- 11 2) The certification requirements are onerous on a NPM compared to a signatory  
12 company. We must recertify annually, and provide assurances on our compliance  
13 in other states that may deemed to be 'untrue' by a particular state AG because of  
14 a technical non-compliance event that occurs in another state after our  
15 certification has already been filed.
- 16 3) We face AGs, who under the state statutes are given the power to assess guilt and  
17 penalties without due process or administrative review. Signatories to the MSA  
18 face no such punitive actions even when they do default.
- 19 4) If we choose to contract manufacture, we can face delisting in a state if the  
20 manufacturer of our brands fails to meet his escrow obligations in a given year.  
21 Such delistings can be indefinite and subject to a 300% penalty. My company is  
22 faced with a situation in one state where our contract manufacturer has been  
23 delisted because he legitimately refuses to pay escrow on cigarettes he never sold  
24 in the state. The state has told us, even if we manufacture the brand ourselves and  
25 apply to be relisted we must pay the back escrow on the assessed brands of the  
26 previous manufacturer, plus the penalties on all brands that manufacturer is  
27 assessed as having sold in the state. This is an impossible problem for any NPM  
28 that has used contract manufacture, and is unique to NPMs as under the MSA an  
29 SPM is defined as the manufacturer for the purpose of making MSA payments.  
30 The advantage an SPM faces is clear, as their brands always remain in compliance  
31 and they can shop manufacturers to get the lowest production costs possible.  
32 NPMs who contract have to stay with the same manufacturer for the life of the  
33 brand and hope that NPM manufacturer never defaults on escrow or compliance  
34 certification on any of its brands. The reality now is an NPM can only make its  
35 own brands itself or contract with another NPM that is fully compliant, while an  
36 SPM or OPM can have its products made by anyone, including an NPM that is  
37 noncompliant. Where is the fairness in that, and consider the market concentration  
38 effects in favor of signatories.
- 39 5) NPMs cannot get OPMs or SPMs with market distribution reach to either  
40 manufacture for them or offer distribution deals through existing trade networks.  
41 SPMs and OPMs are forbidden from engaging in any activity with NPMs. Our  
42 company approached a number of small specialty distributors of cigarettes in CO  
43 and CA to carry a new premium brand cigarette. While the brand appealed they

1 refused to carry our product because we were not a party to the MSA. We have  
2 faced similar problems with large c-store distributors who are fearful of state  
3 action because we are not MSA signatories.”<sup>34</sup>

4  
5 Nevertheless, prior to the recent spate of ASA statutes, the NPMs were able to  
6 compete in the market because their *average* MSA costs were below the *marginal*  
7 (though not necessarily average) cost of an SPM that was selling comfortably more than  
8 its exemption amount.

9

#### 10 C. Buying off Existing Manufacturers: The SPM Grandfather Shares

11 While the escrow statutes combined with other actions reduced competition from  
12 new entrants, it was also essential to buy off the largest of the remaining cigarette  
13 makers, notably Liggett and Commonwealth, so that they would not challenge the deal.

14 These firms were accommodated by the inclusion of a “grandfather share”  
15 exemption for tobacco companies that became SPMs within 45 days of the original  
16 signing of the MSA. They would get to keep any and all MSA tax revenue generated by  
17 their sales of cigarettes, up to the maximum of either 125 percent of their 1997 market  
18 share or 100 percent of their 1998 market share. Liggett reported sales of 32.2 million  
19 cartons in 1997 and 29.1 million in 1998. Thus, its exemption was determined by 125  
20 percent of its 1997 sales, or 40.3 million cartons, to be adjusted downward as the overall  
21 market shrunk. Commonwealth reported a 1997 volume for MSA purposes of 16.4  
22 million cartons, claiming that while it only paid taxes on 8.9 million cartons it had sold  
23 almost 7.5 million cartons that year on which B&W paid the tax. Its sales dropped to 11.9

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<sup>34</sup> Email from Ronald Tully of National Tobacco to Jeremy Bulow, April 14, 2005.

1 million cartons in 1998, so Commonwealth's exemption was also calculated based on  
2 1997 sales, grossed up to  $16.4 \times 1.25 = 20.5$  million cartons in 1997.

3 As SPMs Commonwealth and Liggett would not have to participate in paying the  
4 initial up front fee, or the subsequent initial payments to either the MSA states or the  
5 PSS, or the foundation payments, or the lawyers' fees, and until federal legislation was  
6 passed in October 2004, the growers' fund fees of \$500 million per year that only the  
7 OPMs paid. Furthermore, while the SPMs did not receive the PSS reduction of 12.45  
8 percent in their payments, they also do not pay an additional 17 percent to the PSS, so on  
9 net, even ignoring all the initial payments borne by the OPMs and the exemptions they  
10 were offered, the SPMs would pay slightly less than the OPMs --- about \$4.07 in 2004  
11 versus \$4.56.<sup>35</sup>

12 However, Liggett was not satisfied with this arrangement and bargained harder.  
13 Liggett was the least efficient of the five major U.S. cigarette manufacturers. Once  
14 substantially larger than Philip Morris<sup>36</sup>, Liggett's market share had plummeted to about  
15 1.3 percent at the time of the MSA. It was the high cost, low quality producer among the  
16 major companies. Its CEO paid himself a larger salary than the CEO of Philip Morris  
17 was making, and was well known for running the company for his own benefit.<sup>37</sup> The  
18 market value of the parent company's entire stock fell to as low as \$37 million.

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<sup>35</sup> That is, the SPM payment per pack is the OPM amount, ignoring initial payments, lawyer fees, and foundation payments, times  $1/(.8755+.17)$ . New tax legislation in PSS states, discussed later, is reducing the SPMs' advantage.

<sup>36</sup> For example, in 1947, when today's 75 year olds were just becoming legal smokers, Liggett held 21.3 percent of the market and Philip Morris 7 percent. Liggett was still slightly larger in 1962. Reynolds was larger than Philip Morris until 1982. See the 1997 FTC Report, *op.cit.* p.18

<sup>37</sup> See "Ready Credit: Head of Brooke Group [the name of Liggett's parent at the time] Draws on its Coffers to Tune of Millions --- LBO Artist Bennett LeBow, 60% Owner,

1           But Liggett made a deal with 41 state attorneys general in March 1996, effectively  
2 turning state's evidence and agreeing to give the states about 27.5 percent of any future  
3 company profits in return for settling the states' claims against Liggett. Therefore, Liggett  
4 argued that based on its earlier deal it would only have to give the states their percentage  
5 of its future profits and could produce all the cigarettes it wanted without having to pay  
6 into the MSA or facing the barriers imposed on NPMs. Paying 27.5 percent of profits  
7 instead of participating in the MSA would have given Liggett a phenomenal market  
8 advantage. For perspective, the OPMs earned about \$3 per carton in the base profit year  
9 1996. The wholesale price of OPM cigarettes that year was less than \$7 (excluding  
10 Federal Excise Tax). A cost advantage of \$4 or more per carton would enable even a  
11 highly inefficient firm to ramp up production and gain market share.

12           To entice Liggett to join the MSA, a deal was struck whereby Liggett sold three  
13 dying brands to Philip Morris, with total annual sales of less than \$40 million, for \$300  
14 million or 7.5 times sales --- Microsoft currently sells at 7 times sales; Intel at less than 5  
15 times; Altria (Philip Morris) at about 2 times.<sup>38</sup> Here were the terms of the deal: Liggett  
16 agreed to sign the MSA. Philip Morris paid Liggett \$150 million, which Liggett got to  
17 keep even if the Federal Trade Commission did not allow the sale of the brands. If the  
18 FTC denied the sale of the brands then Philip Morris was required to resubmit the deal to  
19 the FTC up to three more times over the next ten years, the timing decided by Liggett.<sup>39</sup>

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Gets Loans And Sells Assets to Firm --- Public Company Under Stress” by Laurie P. Cohen, Wall Street Journal July 30, 1993 p. A1.

<sup>38</sup> Data for Microsoft and Intel are based on June 29, 2005 closing stock prices. Actually, this understates the story, as the Liggett brand sales were calculated based on list price, before deducting cash rebates and discounts given to distributors.

<sup>39</sup> The relevant information can be found in Brooke Group's 8-k report to the SEC, November 25, 1998.

1 In addition, Liggett became an SPM with a grandfathered market share of 1.644%,  
2 reflecting 125 percent of its sales the year before the MSA, including the brands that had  
3 been sold.

4 This deal has enabled a cigarette manufacturer that had been sliding to oblivion to  
5 approximately double its market share since the passage of the MSA. But consumers  
6 have not benefited; indeed, they are the ones who paid to keep a mismanaged company  
7 going.

8 Commonwealth represented the discount brands that Brown & Williamson had  
9 acquired in its 1995 acquisition of the American Tobacco Company. The Federal Trade  
10 Commission had required a divestiture on grounds that the merger would reduce  
11 competition in the discount segment of the cigarette business, and refused to allow B&W  
12 to sell to Lorillard. The brands were then divested to Commonwealth in mid-1996, and  
13 presumably but for the divestiture would have been treated like any other OPM  
14 cigarettes.

15 While Commonwealth and Liggett benefited from being allowed exemptions that  
16 were disproportionate to their current market shares, the other firms with the largest  
17 exemptions acquired them by dramatically expanding their 1998 sales for MSA purposes.

18 Premier, the SPM that has the third largest exemption, increased its market share  
19 by 104 percent in 1998, though it was apparently up only 18 percent in the first half of  
20 the year.<sup>40</sup> The second half sales spurt increased its exemption by 63 percent over what it  
21 would have had if it matched its first half market share growth. Because of its large  
22 grandfather share based on its 1998 sales, Premier did not have to pay anything into the

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<sup>40</sup> See document 2085607199 which estimates market shares for full year 1997 and 1998 through July 11<sup>th</sup>.

1 MSA in 2004. Santa Fe, a growing specialty company subsequently bought by RJR, had  
2 a 39 percent market share growth in the first half of 1998 and a 116 percent growth for  
3 the year, reportedly emptying its warehouses at the end of 1998. It then reported a 23  
4 percent sales decline the following year. Medallion increased its market share by 308  
5 percent in 1998, with the growth rate for the year again apparently much faster than for  
6 the first half. Medallion ended with the fourth largest exemption, based on 1998 sales of  
7 6.46 million cartons. As discussed later, the value of this exemption represented 97  
8 percent of the entire value of the company when it was sold to Liggett a few years later.

9         These large giveaways can thus be divided into two categories. In the case of  
10 Liggett and Commonwealth, the companies represented brands that had been sold by  
11 major tobacco companies throughout the period of the alleged torts. Because the  
12 companies were now in a position to disrupt the MSA cartel, though, they were paid off  
13 with over 65 percent of the exemptions, an amount equal to virtually the entire size of the  
14 non-OPM market in 1997. These companies are thus much better off under the MSA  
15 than, for example, companies that were founded after 1998 and which thus did not sell  
16 any cigarettes during the period in which the alleged torts occurred.

17         The second, smaller, giveaways were to very small companies who, upon seeing  
18 how the MSA would work, sharply increased their sales in 1998 --- over 80 percent of the  
19 remaining exemptions were awarded to firms that reported sales increases that year of  
20 over 80 percent. For these firms, it would have been profitable to simply give away  
21 cigarettes at the end of 1998 --- the excise tax on a carton of cigarettes at that time was  
22 \$2.40, so if a firm had marginal costs of manufacturing of \$2.00 it could, for \$4.40,  
23 receive an exemption on one carton a year (adjusted for market declines in volume) in all

1 future years. Better yet would be if the firm could simply pay the federal excise tax and  
2 report a sale to the MSA without going to the trouble of manufacturing the cigarettes.

3 The grandfathered SPMs thus acquired a tremendous advantage against new  
4 entrants into the discount cigarette market, for whom there would be no exemptions and  
5 for whom becoming an NPM was left as the only potentially profitable course.

6 One piece of evidence of the importance of the SPM exemptions comes from the  
7 2003 10k of Vector Group, the current name of Liggett's parent company, discussing its  
8 purchase of Medallion tobacco. Liggett paid \$110 million for the company, which it  
9 broke down into a purchase price for the ongoing business of \$3 million and a purchase  
10 price for Medallion's SPM exemption for .28 of one percent of the market (about 5.5  
11 million cartons in 2003) of \$107.511 million.<sup>41</sup> Put another way, the MSA gave a  
12 company worth \$3 million a payoff of \$107 million to become an SPM participant.

#### 13 D. Coercing the States: Tax and Payment Structure of the MSA

14 How did the MSA designers, namely the representatives of the four large  
15 companies, a subset of the state attorneys general, and a group of trial lawyers, manage to  
16 write an agreement that received approval by every state? The answer is coercion.

17 For some states the MSA is a decidedly bad economic deal relative to an excise  
18 tax on cigarettes of an equivalent amount per carton. For example, Virginia's share of  
19 MSA revenues is 2.0447451 percent which, when adjusted for the PSS becomes 1.71

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<sup>41</sup> See Vector Group 10-k for 2003, filed with the SEC March 2004, p. F-16. The Vector CEO described the transaction this way: "Medallion brings to Vector approximately 1.2 billion units annually with no payment obligation under the MSA, which should add significantly to Vector's earnings in coming periods." Business Wire, "Vector Group to Acquire Medallion for \$110 million", November 15, 2001.

1 percent.<sup>42</sup> By contrast, in 2003 roughly 3.6 percent of national cigarette sales took place  
2 in Virginia. So if the MSA *cum* PSS consisted of a \$4.00 excise tax in every state,  
3 Virginia would have received \$4.00 per carton sold within its borders. However, given  
4 the national structure, it received 6.85 cents on each carton sold nationally, or an average  
5 of  $\$.0685/.036 = \$1.91$  per carton sold within the state. Multiplying by 68.6 million  
6 cartons, the state lost about \$143 million relative to an excise tax in 2003 alone.<sup>43</sup> These  
7 moneys went to subsidize other states; for example New York received over \$12.00 per  
8 carton sold within the state. The calculation would be even worse if one considered the  
9 lawyers' fees and the SPM exemptions that consumers pay and that do not provide the  
10 state with any money. **Table 4** shows the degree to which the MSA re-allocates revenues  
11 compared to a series of state escrow taxes.

12 In some cases the states have attempted to justify these skewed MSA payments by  
13 claiming they were linked to state Medicaid costs. But as **Table 5** shows, the link is weak  
14 at best. New York and California have the same MSA shares even though New York's  
15 calculated Medicaid costs were 85 percent higher. Alabama and Arkansas had the same  
16 Medicaid costs but Alabama gets twice as high an MSA share. However, what is really  
17 relevant is that the MSA reallocates revenues compared to state taxes, not whether or not  
18 the reallocation is tied to higher doctors' salaries in New York.<sup>44</sup> The MSA is a set of  
19 *national* taxes imposed by private parties and a set of *state* attorneys general.

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<sup>42</sup> The calculation is 2.0447451 percent times .8755 divided by (.8755 + .17).

<sup>43</sup> Using the calculations in the example in the text, the state lost \$2.09 per carton times 68.6 million cartons. The calculation ignores Virginia consumers' share of the lawyers' fees and SPM exemptions, which would be another \$29 million.

<sup>44</sup> Anyway, the CDC data is questionable in a number of ways. There are a number of statistical issues, some highlighted by the authors of the relied upon study. (For example, their methodology is more appropriate to a snapshot of medical costs than long-term state

1           Why didn't Virginia refuse to join the MSA, and instead implement an excise tax  
2 of either \$4.00 per carton (if it wanted to have a similar effect on the price of cigarettes  
3 but wanted to recapture the lost \$143 million) or \$1.91 per carton (if it wanted to raise the  
4 same amount per carton as it received from the MSA, but not tax its consumers as  
5 heavily)?<sup>45</sup> Because refusing to join the MSA would still have left Virginia's consumers  
6 paying the national MSA tax to the rest of the states.

7           If Virginia did not sign the MSA its consumers would still have had to pay prices  
8 reflecting the \$4.00 national tax for the benefit of other states, reduced only by about 7  
9 cents a carton to reflect Virginia's decision not to join. So its real options were to (1) not  
10 sign, have consumers pay \$3.93 per carton, and have the state receive nothing, or (2)  
11 sign, have the consumers pay \$4.00, and have the state receive \$1.91 per carton.

#### 12           E. Coercing the States: The NPM Adjustment

13           In addition to having to sign the deal, the "NPM Adjustment" gave the states a  
14 strong incentive to pass the model statutes as written.

15           If Virginia had passed the model statute and the statute had subsequently been  
16 declared illegal under state law, then the state still would have been liable to lose up to 65  
17 percent of its share of MSA revenues, potentially reducing its \$1.91 to 67 cents. If,  
18 however, it modified the language of any part of the statute (including the "legislative

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costs, and does not account for many factors that may be correlated with tobacco use. So smoking and other risky behaviors may be correlated, leading to a potential overestimate of smoking-attributable costs. The data itself seems suspect. For example, the authors attribute a higher percentage of California Medicaid costs to smoking than Kentucky costs, even though Kentuckians smoke three times as much. Alabamans smoked 60 percent more than New Yorkers, but the smoking-attributable Medicaid costs were 9 percent in Alabama and 16 percent in New York.

<sup>45</sup> Or doing something in between, or simply not raising cigarette taxes at all if that were the will of the legislature.

1 intent” section<sup>46</sup>) then if the statute was declared illegal the state would be liable to lose  
2 up to 100 percent of its share of MSA revenues.<sup>47</sup> Thus it was the responsibility of the  
3 state to appoint judges who would rubber stamp the legality of the agreement. Note that  
4 this is very different from a judge being asked to evaluate the legality of a state tax. In  
5 that case, revenues lost by the state are returned to its own citizens and the net  
6 consequence is a redistribution within the state. Here, the consequence would be a loss of  
7 revenue to the state without an equivalent reduction in the national tax that the state’s  
8 consumers would still pay.

9         The mechanism for reducing the payments to any state that did not pass and then  
10 diligently enforce the escrow statute was the “NPM Adjustment”, a complicated formula,  
11 which the MSA also claims is “[t]o protect the public health gains achieved by this  
12 Agreement”. The base MSA payments (now, everything but the lawyers’ fees and the  
13 small remaining foundation payments), are reduced by three times any gain in the market  
14 share of the NPMs above 2 percent, from their base 1997 share.<sup>48</sup> For example, the base  
15 year NPM share as calculated by the MSA is about 0.4 percent (though the state  
16 attorneys general have argued that in fact the true NPM share at that time was higher). If  
17 the NPM share in a given year were 5 percent then payments could be reduced by  $3 \times (5$   
18  $- 2.4) = 7.8$  percent. However, the 7.8 percent would not be spread evenly; the burden

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<sup>46</sup> “A State may elect to delete the “findings and purposes” section in its entirety. Other changes or substitutions with respect to the “findings and purposes” section (except for particularized state procedural or technical requirements) will mean that the statute will no longer conform to this model.” Footnote at the start of the Findings and Purposes Section of Exhibit T, MSA.

<sup>47</sup> See Daynard, *op.cit.*, citing MSA sections IX(d)(2)(F) and IX(d)(2)(H).

<sup>48</sup> The formula is modified for NPM market share gains in excess of 18 2/3 percent (implying a 50 percent reduction in the payment formula, to insure that if the NPMs grew enough the OPM payments would still be positive rather than negative.

1 would only be distributed among those states that had not enacted or diligently enforced a  
2 model escrow statute or an equivalent approved by the PMs. As a simple example, if  
3 Virginia was the only state to not pass the MSA then if the NPMs' market share rose to 5  
4 percent (or even 3.1 percent) Virginia would lose its entire share of MSA revenues.  
5 Virginia's options are summarized in **Table 6**.

6 These incentives were described to the Washington Legislature in the following  
7 way:

8 "This [escrow] legislation is necessary for the state to receive the full amount of  
9 the tobacco settlement due Washington....Essentially the bill requires a tax on the non-  
10 participating tobacco manufacturers, but it is not like a simple raise in the cigarette tax for  
11 Washington state because it is compensating and "leveling the playing field" between  
12 participating and non-participating manufacturers. If every state passes this legislation,  
13 then any reduction in payments is allocated the same across the states according to the  
14 same distribution methods that allocate the dollars. If there is any state that has not passed  
15 this legislation, then that state is first assessed by a reduction in dollars up to 65% of what  
16 it is owed. The MSA sets up an incentive for every state to pass the legislation because  
17 states that do not will be left "holding the bag" because those are the states from which  
18 the non-participating adjustment will come first."<sup>49</sup>

19  
20 While the main purpose of the NPM adjustment was to force states to pass and  
21 enforce the escrow statutes, it has also created what might be politely described as a set  
22 of unusual incentives. For example, **Table 7** shows how the NPM adjustment would have  
23 worked for 2001 were there a finding that some states had not diligently enforced the  
24 escrow statutes. (Actually, there was a settlement instead.) The table shows that if Brown  
25 & Williamson lost a marginal sale to RJ Reynolds it would have received an additional  
26 \$3.08 in NPM adjustment payments (\$.89 because it lost a sale and \$2.19 because RJR  
27 gained one.) For comparison, B&W earned \$2.94 per carton that year. Losing a sale to an

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<sup>49</sup> State of Washington House Bill Report ESB 5485, April 25, 1999. Testified: Elaine Rose and John Hough, Attorney General's Office, (expert witness) Jonathan Gruber, MIT Department of Economics.

1 NPM would increase B&W's NPM Adjustment payments by \$6.18, or more than twice  
2 the amount it earned when it actually sold cigarettes. The NPM Adjustment that year, if  
3 fully implemented, would have substantially raised the marginal costs of B&W and RJR,  
4 who would have split the NPM Adjustment money, without affecting the marginal costs  
5 of the more successful Philip Morris and Lorillard. Therefore, the NPM adjustment  
6 would have reduced the incentive of B&W and RJR, who are the big discount producers  
7 among the OPMs, from trying to gain market share. For 2003 (**Table 8**), Philip Morris  
8 would receive an extra \$2.08 if it lost a marginal sale to RJ Reynolds, but lose \$1.02 if it  
9 lost a sale to Lorillard.

10 Finally, because states were not allowed to alter the language in the "legislative  
11 intent" section of the Model Statute, it is fair to say that because of the economic  
12 coercion involved one cannot infer anything about the true legislative intent from the  
13 passage of these escrow statutes in the OPM-approved format, other than that bodies like  
14 the Virginia Legislature did not wish to lose even more money than the MSA currently  
15 costs them.

#### 16 IV. More Recent Developments

17 Recently, states have moved to raise the costs of the NPMs and, in the PSS, the  
18 costs of the SPMs as well. These changes include the ASA, passed in a large majority of  
19 the states, using OPM-blessed language, and new taxes on both NPMs and SPMs (in  
20 Minnesota and likely in other PSS), and new taxes exclusively on NPMs.

##### 21 A. The Allocable Share Amendment

22 NPMs have escrow costs that are lower than what a hypothetical non-  
23 grandfathered SPM would pay, because they do not have to set up accounts in the states

1 where they do not do business. The ASA “remedies” this, by requiring that firms pay in  
2 the full national amount (e.g. \$4.00 per carton) to an escrow account in the state,  
3 regardless of the volume of sales. So while Virginia will only receive 7 cents a carton  
4 from the sales of a hypothetical non-grandfathered SPM, its ASA requires NPMs to  
5 deposit \$4.00 per carton in escrow, supposedly to protect the state against similar losses.

6 Recall the earlier example of a country with 10 states, in which the company sells  
7 1,000 cartons in each state. Under the original statute, if the firm expanded to a fourth  
8 state its marginal costs would start at \$5.20 per carton, as each carton would generate a  
9 \$4.00 escrow payment to that state and increase payments to other states by \$1.20.  
10 However, once it sold more than 10 percent of its total volume within the new state the  
11 incremental cost of an additional sale would fall to \$1.60 (40 cents per carton times four  
12 states), and if sales ultimately matched the level of other states the marginal cost of  
13 producing in the new state would be \$2.80 per carton.

14 With the ASA the marginal cost of \$5.20 would apply at all sales levels, until the  
15 higher marginal cost raised the national average cost to \$4.00 per carton. Given the other  
16 disadvantages of being an NPM, it is hard to see how an NPM would be viable against a  
17 hypothetical non-grandfathered SPM.

18 If no participating manufacturer hid sales from the MSA and if all NPMs obeyed  
19 the MSA’s model T statute, there would be no case for an NPM adjustment. States are  
20 exempt if they diligently enforce the escrow statutes and there could be no better proof  
21 than for all NPM sales to be accounted for as following these rules. Since one would  
22 expect that the degree of evasion of the model statute would increase with a more  
23 draconian escrow statute the NPM adjustment would actually discourage states from

1 passing the ASA. The Tobacco Merchants Association (TMA) estimates that the volume  
2 of non-compliant NPM sales roughly equaled the volume of compliant NPM sales in  
3 2003.<sup>50</sup>

4 However, even under the original escrow statutes the states have apparently had a  
5 great deal of trouble with small manufacturers who have neither joined the MSA nor  
6 made any escrow payments. Many of these cigarettes may have legitimate federal and  
7 state tax stamps, so it would not be obvious to a customer that the cigarettes did not  
8 follow cartel rules.<sup>51</sup>

9 Since the NPM adjustment specifies that payments be made on estimated NPM  
10 volume rather than on the estimated volume of NPM cigarettes for which no escrow is  
11 paid, the states have chosen to not only attempt to reduce the volume of non-compliant  
12 cigarettes but to eliminate the compliant NPMs as well.

13 Were the ASAs truly focused on having NPMs pay \$4.00 per carton, rather than  
14 simply driving them out of the market, they would require \$4.00 tax stamps at the  
15 wholesale level, the way all other state taxes work. Instead, the NPM is made responsible  
16 for any errors made by the wholesaler in selling to a state where the NPM is not

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<sup>50</sup> See “TMA Update on the Master Settlement Agreement”, slide presentation, May 2004. Compliant NPM sales were estimated at 33.3 billion; non-compliant at 32.9 billion.

<sup>51</sup> Furthermore, the states do not appear to have very good data on the fraction of NPM volume that is accounted for through the escrow statutes. Indeed, there is apparently not very good data kept on total NPM sales, which appear to be largely measured as the residual of total sales less participating manufacturer sales. As an example, Attachment 7 of the Independent Auditor’s Report for payments due April 15, 2002 shows a negative estimate of NPM sales for the US in 2001 based on taxing authority data, and a negative estimate for Puerto Rico for all years shown (1997, 1998, 2001), again based on taxing authority data.) Data at the state level is apparently worse; while states know how many tax stamps they sell they do not effectively monitor the sales by company, so they do not have tax data on NPM sales. (Traditionally, wholesalers, who may sell in more than one state, have applied state tax stamps. Thus, Philip Morris does not have an exact count of Marlboro sales by state.)

1 registered. In our earlier example, an NPM may have escrow costs of \$1.20 per carton in  
2 the states where it sells, but if a carton is mistakenly sold in an ASA state it will have to  
3 pay \$5.20. Since its price will not reflect such a high cost, the company will take a loss. If  
4 the wholesaler had to apply the stamp it would have a strong incentive to not make the  
5 mistake.

6 Furthermore, the system of measuring sales is very poor. Xcaliber, for instance,  
7 reported that the seven states in which it operated claimed total sales of 150 percent of the  
8 company's national sales. Under the original escrow statutes this requires the firm to  
9 increase its short term borrowings to meet its gross escrow obligations, but net amounts  
10 paid are determined by national tax stamp data.<sup>52</sup> But if all of these states passed the ASA  
11 then the company would be required to make escrow payments of \$6.00 for every carton  
12 sold, and then engage in a lengthy dispute resolution process to get the excess payments  
13 back. For perspective, Xcaliber's earnings were about 45 cents per carton in its best year.  
14 Compare this to the participating manufacturers, who are permitted to withhold disputed  
15 payments.

16 The NPM escrow system makes perfect sense if the goal is to create losses for the  
17 NPMs and raise their costs by enough to drive them out of the market; it makes no sense  
18 if the goal is to replace the original escrow statute with a \$4.00 per carton escrow  
19 payment made to the state in question.

20 B. Response of Major NPMs to the Allocable Share Amendments

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<sup>52</sup> There is still the possibility of a state incorrectly claiming that a small amount of sales were made within its borders, but so long as the fraction of the company's sales within the state are greater than the state's MSA share there is no net effect on escrow payments from an overstatement of state sales.

1           One type of evidence that NPMs cannot compete with non-grandfathered SPMs is  
2 the decision of two of the largest NPMs to pay significant sums to join the MSA.  
3 Farmer’s Tobacco announced in mid-2003 that it would apply to the MSA, and it joined  
4 at the end of the year. Farmer’s was well over twice the size of any previous non-  
5 grandfathered SPM. In describing its decision the company issued the following  
6 statement:

7           “Farmer’s Tobacco Company of Cynthiana, Inc., manufacturer of Kentucky’s Best  
8 cigarettes, announced today it has elected to apply for membership in the Master  
9 Settlement Agreement (MSA). If approved, the move will make Kentucky’s Best  
10 one of only a few so-called “4th tier” brands to formally join the settlement between  
11 U.S. tobacco companies and the states.

12           Once its membership in the MSA is final, Kentucky’s Best will be able to market its  
13 outstanding products nationwide instead of in only a handful of states, responding to  
14 requests received every day from wholesalers, retail chain buyers and consumers.

15           While many smaller tobacco companies initially chose to stay out of the MSA as  
16 “non-participating manufacturers,” legislative changes across the country mean by  
17 next year that status will no longer be financially feasible. However, few companies  
18 are expected to make a successful transition to MSA membership, and many  
19 observers predict a shake-out of the 4th tier.”<sup>53</sup>

20           In August 2004 General Tobacco joined. General Tobacco, which had about 2  
21 percent of the U.S. cigarette market (by units, probably less than one percent by  
22 revenues net of excise taxes), was about 18 times as large as any non-grandfathered  
23 SPM other than Farmers. These two firms thus accounted for 89 percent of all the  
24 moneys paid by the non-grandfathered SPMs related to 2004 sales, even though  
25 General Tobacco’s payments only covered the second half of the year.

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<sup>53</sup> Press release of Farmer’s Tobacco, July 14, 2003, available June 29, 2005 from [www.farmerstobacco.com](http://www.farmerstobacco.com).

1           The MSA requires that any NPM that joins must retroactively pay in to the  
2 MSA (with interest) the entire amount it would have owed since the MSA's inception,  
3 had the company been a non-grandfathered SPM. In the General Tobacco deal, about  
4 \$78 million came from the forfeiture of the company's escrow accounts to the states,  
5 while an additional \$240 million is being paid over 12 years, at five percent interest.<sup>54</sup>  
6 **Table 9** indicates the effect of these payments on General Tobacco's average costs over  
7 the next 12 years, assuming that it is able to maintain the level of sales it had in the  
8 final six months of 2004.

9           While General Tobacco clearly did not regard remaining as an NPM to be a  
10 viable alternative, given the ASA statutes, one might ask how they can hope to earn  
11 enough money as a non-grandfathered SPM to pay their enormous debt. There are three  
12 possibilities.

13           First, most of the states where it was selling implemented ASAs by the end of  
14 2004. This meant that General Tobacco's escrow payments for 2004, which would have  
15 been based on the full year's sales, were probably much greater than what its deal  
16 required it to pay to the MSA on April 15, 2005. General Tobacco may simply not have  
17 been able to meet the payments necessary to remain an NPM.<sup>55</sup> Therefore, even if the

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<sup>54</sup> The General Tobacco agreement to join the MSA cites a long-term debt of \$155 million, based on sales through 2003. The debt was calculated based on what required payments would have been, net of the escrow forfeiture, adjusted downwards for an NPM adjustment and upwards for interest. The MSA payments that would have been due on sales from the first half of 2004 were about \$85 million.

<sup>55</sup> If it did have the money to make the payment, it might have felt it was better off keeping the money and paying it out to shareholders, then declaring bankruptcy and defaulting on its MSA obligations when it was no longer subject to fraudulent conveyance.

1 firm thought it was likely to have to declare bankruptcy within a few years under its  
2 new deal, the alternative might have been immediate bankruptcy. Second, General  
3 Tobacco may share the view that the MSA will blow up in the next few years, and it  
4 will not have to make good on the debts it incurred. Third, it may believe it can remain  
5 in business even with average costs that are higher than those of a non-grandfathered  
6 SPM.

7         The last possibility is in some ways the most informative. Why would General  
8 Tobacco think it could earn enough money to cover its back obligation to the MSA?  
9 Ultimately, the answer would have to be that it expected to be able to sell its cigarettes  
10 at higher prices. The reason it might be able to do this is an expected dearth of  
11 competition in the deep discount market. The NPMs will be out of business. The  
12 owners of the NPMs will not be allowed to start SPMs without making back payments  
13 to the MSA, which would be an insurmountable barrier to entry for most. Therefore, the  
14 most obvious candidates to start non-grandfathered SPMs after the elimination of the  
15 NPMs would be prohibited from doing so. The existing non-grandfathered SPMs are  
16 minuscule, with the slight exception of Farmer's, which has a market share of under  
17 0.3% and which shares General Tobacco's back payment burden.

18         If the OPMs continue to take advantage of the demise of the NPMs to raise  
19 prices, as they have thus far<sup>56</sup>, perhaps General Tobacco can hope that being a large

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<sup>56</sup> "Fourth-tier cigarettes, on the up and up for quite some time in category growth, are finally feeling some pain, as legislation for allocable share may well put many of them off the map. That has given some confidence to the leading mainstream brands to regain some of the pricing power they once had, and retailers must brace themselves for these changes. In addition to price increases taken by Philip Morris and Reynolds American

1 SPM will become sufficiently profitable that it can pay what appears to be an  
2 unpayable debt. If there are decently run non-grandfathered SPMs that enter the market  
3 when the NPMs leave, then competition should make it very difficult for General  
4 Tobacco to earn enough to pay its obligation.

5 The FTC, in its report to Congress on the McCain Bill, discussed the importance  
6 of allowing firms to join that agreement without having to make back payments:

7 “The settlement does not discuss the terms under which non-participants may  
8 later join the agreement. If such membership is not limited, and if it entails no lump-  
9 sum up-front payments, then concerns about anticompetitive effects on non-  
10 participating manufacturers would be mitigated because they would have the option of  
11 joining the agreement on non-discriminatory terms.”<sup>57</sup>

12 Of course the FTC was discussing what its concerns would be within the  
13 context of a national tax structure passed by Congress, and not discussing the issue of a  
14 national tax structure imposed without Congress, but even so it appears to question the  
15 MSA approach, particularly in light of an MSA that is substantially changing its rules.

16 C. The new approach of the non-grandfathered SPMs

17 After the General Tobacco deal was announced, the small SPMs discovered a way to  
18 avoid keeping current on their MSA payments. Their argument is that their “most

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late in the fourth quarter of last year (see sidebar), promotional spending is down for three major brands—Marlboro, Camel, and Newport, manufactured by Philip Morris, Reynolds American, and Lorillard, respectively. In fact, the promotional levels by each company are actually the lowest they have been since the beginning of 2003, according to a fourth quarter (2004) report put out by Smith Barney, *The Smoke Scene*.” Renee M. Covino, “The Buzz Around Leading Brands --- March/April 2005”, tobonline.com.

<sup>57</sup> FTC Report, op. cit., p.24.

1 favored nation” contract provisions should allow them to build up a debt of \$240  
2 million to the MSA as they build a business, and after they have incurred such an  
3 obligation they should then have to pay it off over 12 years.

4 Unlike the NPMs, who face penalties of 5 to 15 percent per day for late  
5 payments, the SPMs can simply not pay any disputed amount. If they lose the dispute,  
6 which can apparently take several years if the NPM Adjustments are any indication,  
7 they will then owe the original amount plus interest calculated at the prime rate plus  
8 three percent. This means that a non-grandfathered SPM may be able to operate for  
9 several years without paying in to the MSA, and then simply default when it is  
10 obligated to make the payments.

11 The second, third, and fourth largest SPMs besides Farmers’ and General are  
12 employing this strategy. One of these firms (Beckenton) paid the MSA 10 cents a  
13 carton for its 2004 sales; the other two paid nothing. It is evident from its pricing that  
14 Beckenton, much the biggest of the three, is playing the strategy of eventual default.  
15 Iowa, for example, reports the wholesale price of Beckenton’s cigarettes to be \$7.20 per  
16 carton.<sup>58</sup> To put the price in perspective, it includes \$3.90 in Federal Excise Tax, over  
17 \$.50 in a federal grower’s tax, and supposedly about \$4.20 this year as an MSA fee. It  
18 is difficult to see how a firm planning to pay all these taxes could cover its marginal

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<sup>58</sup> “Iowa Department of Revenue Minimum Legal Prices on Cigarettes as of June 1, 2005”, available at [www.state.ia.us/tax/forms/curmin.xls](http://www.state.ia.us/tax/forms/curmin.xls) . The state requires wholesalers and retailers to charge minimum prices based on these reported wholesale prices. For other manufacturers the prices were: General Tobacco, \$9.75 to \$11.20, Farmers’ \$12.45, Liggett \$13.75 to \$17.09. Montana reports a minimum price for Beckenton of \$9.25, higher than Iowa but still well below cost. See “State of Montana Minimum Price List --- 2005” 5/23/2005, available July 21, 2005 at [http://www.mt.gov/revenue/formsandresources/forms/cigminpricelist\\_05\\_23\\_2005.pdf](http://www.mt.gov/revenue/formsandresources/forms/cigminpricelist_05_23_2005.pdf)

1 production costs at a price under \$10.00 per carton. Beckenton has built the capacity to  
2 triple its 2004 sales, to 100,000 cases (500,000 cartons) per month.

3 Assuming that the MSA itself is legal, a state has a legitimate interest in  
4 requiring a firm like Beckenton to hold in escrow its share of the disputed payments, so  
5 that the state would not be left trying to collect the disputed MSA payments from a  
6 judgment-proof shell. In comparison, the NPMs deposit as much into escrow as the  
7 state would receive from the company were it a fully paying non-grandfathered SPM.  
8 Nevertheless, the states have used a concern about non-payment of future verdicts as a  
9 rationale for changing the escrow requirements on the NPMs and not on the SPMs.

#### 10 D. New Taxes in PSS

11 The PSS received particularly large amounts of tobacco money during the five  
12 year start-up phase of their agreements with the OPMs. However, they had not received  
13 any money from the SPMs or NPMs. The states had no interest in passing escrow statutes  
14 that would have raised SPM and NPM prices with no immediate effect on state revenue,  
15 consistent with the argument that the MSA states all passed escrow statutes because they  
16 were coerced.

17 With no escrow accounts in these four states NPMs such as Star Scientific could  
18 sell in the PSS at low prices. These low prices added competition to the market. The  
19 implication is that for any target average retail price the state could impose a higher state  
20 excise tax. Furthermore, if the state were concerned particularly about youth smoking,  
21 there would be an advantage in allowing the NPM cigarettes, which basically only appeal  
22 to adults who are on a tight budget, to be sold at a lower price than the premium

1 cigarettes which are generally associated with youth smoking.<sup>59</sup> That is, if the states  
2 would prefer to have higher prices for young smokers than for older smokers, allowing  
3 the NPMs to sell at lower prices would help achieve that goal, while the state would still  
4 have full flexibility in its choice of *average* price through its setting of other state taxes.

5         However, in 2004 Minnesota passed a \$3.50 per carton tax on all non-OPM sales  
6 in the state. Effectively, this raised the marginal costs of a non-grandfathered SPM to  
7 approximately \$7.50 per carton in Minnesota, including the SPM payments based on  
8 national sales. The effect of paying a full state tax and then a tax to other states based on  
9 the same sales is essentially the same as the effect of the escrow statutes on NPMs in  
10 states where either their sales are very low or where an ASA applies, described above.

11         The SPMs have a most favored nation clause in the MSA, which they claim  
12 should apply to their payments in Minnesota. The offer that the National Association of  
13 Attorneys General (NAAG) have made is that the SPMs would receive a 100 percent  
14 credit for payments actually made to the PSS if the company agreed to “reduce its  
15 grandfather share by that portion of the grandfather share attributable to the PSS and to  
16 increase its MSA payments by 4.55 percent.”<sup>60</sup> It is not absolutely clear what this means.  
17 (Is the proportion of the grandfather share attributable to the PSS based on actual sales or

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<sup>59</sup> While there is a lot in the rhetoric of the MSA about youth smoking, the financial terms pay no attention to the subject. As one example, Kentucky, the state with the highest rate of youth smoking, receives the lowest amount of “damage” payments from the MSA per carton of cigarettes sold. For youth smoking data, see for example CDC Morbidity and Mortality Weekly Report, Nov. 2, 2001 reporting that Kentucky and West Virginia were tied for the highest rate of high school smoking. The May 21, 2004 report puts Kentucky alone at the top.

<sup>60</sup> Letter from Tom Miller, co-chair of NAAG Tobacco Committee, to John Long, General Counsel of Liggett, December 29, 2004. This is consistent with the General Tobacco agreement to join the MSA, except that General Tobacco has no exemptions to forfeit.

1 is it based on the PSS reduction of 12.45 percent? I will assume it is based on actual  
2 sales.) The SPMs must choose between taking the deal as applied to all four PSS or none.

3 As Minnesota represents less than 2 percent of the national market it would make  
4 more sense to pay an extra \$3.50 per carton in Minnesota than to pay an extra 18 cents  
5 nationally and give up a portion of the SPM's exemptions. But this would mean that  
6 Commonwealth, say, would be facing a marginal cost in Minnesota of \$7.50 including  
7 both the MSA and state payments. This puts it at a \$3.00 cost disadvantage relative to the  
8 OPMs, which would seem to make its business unviable.

9 What if the other PSS also enacted similar taxes? Consider a firm with national  
10 sales of 100 and an exemption of 50. Payments are \$4 per carton so the company  
11 originally owes  $\$4 \times (100-50) = \$200$ . Assume that the SPM's sales in those states were  
12 14 percent of the total, equivalent to the states' share of actual 2003 sales. Then by  
13 demanding the credit the firm would have to sacrifice 7 of its exemptions and pay a total  
14 of  $\$4 \times 1.0455 \times 57 = \$238.37$ .

15 If the firm simply did *not* sell in these states, and so its sales declined from 100 to  
16 86, its MSA cost would only be  $(86-50) \times \$4.00 = \$144.00$ , so the net MSA cost of  
17 selling in the PSS would have been  $\$238.37 - \$144.00 = \$94.37$ , or \$6.74 per carton.  
18 Even for a hypothetical non-grandfathered SPM the cost in the PSS would be a  
19 prohibitive \$5.30.<sup>61</sup> While less than the \$7.50 cost if the NAAG deal were accepted,

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<sup>61</sup> If the firm sold in the PSS its costs would be  $1.0455 \times \$4 \times 100 = \$418.20$ . If it did not sell in the PSS it would pay  $\$4 \times 86 = \$344.00$ . So the incremental cost of selling in the PSS would be \$74.20. Dividing by sales of 14 yields a per carton cost of \$5.30.

1 obviously the SPMs would be financially better off withdrawing from those states than  
2 trying to make money at such a cost disadvantage.<sup>62</sup>

3 With the SPMs knocked out of the PSS, an NPM would have at least some chance  
4 of surviving with a strategy of only selling in those states.<sup>63</sup> The marginal cost of \$3.50  
5 would be about a dollar a carton below that of the OPMs, and depending on whether the  
6 NPMs were made to face other barriers to competing they might be able to profitably  
7 maintain a small deep discount market.<sup>64</sup>

8

#### 9 E. Taxes on NPMs in MSA States

10 Alaska, Michigan and Utah have implemented \$3.50 per carton “equity  
11 assessment” fees on NPMs to supplement the allocable share amendment escrow statutes  
12 they have already passed. A similar bill, at \$5.00 per carton, sponsored by Reynolds  
13 American, was proposed in Tennessee but vetoed by the Governor. Philip Morris and  
14 NAAG, the most ardent supporters of the MSA, opposed this bill. According to a NAAG  
15 memo,

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<sup>62</sup> As with the NPMs, it would not be profitable for the SPMs to sell in these states at low volumes. At low volumes the company would be better off paying the \$3.50 Minnesota tax rather than raising its national rate and sacrificing some exemptions. As with the NPMs, the SPMs would be forced by the MSA to work to prevent wholesalers from selling in these territories. *There is one important difference, though. An NPM can be forced to pay escrow on unauthorized sales in a state, even if it does not believe that the sales occurred.* If Minnesota implements its tax in the manner of state tax stamps, paid for by the wholesaler, the SPMs will simply be priced out of the state but will not be at risk for disastrous below-cost sales.

<sup>63</sup> As already discussed, selling in an allocable share amendment state would not be practical, and if the firm operated in several non-allocable share amendment states its marginal cost from an extra sale would rise because of the incremental escrow costs due to those states even when sales were made in the PSS.

<sup>64</sup> There is no particular reason why the PSS should create all the other market barriers that the MSA states have, but it would still be unlikely that an NPM would be able to sell to a major chain, because it would still lack the MSA’s legal protections.

1 “States that enact the Equity Fee Legislation may find themselves facing serious  
2 constitutional and antitrust challenges and having to devote considerable resources to  
3 defending them. Moreover, challenges such as these may well make the States’ defense  
4 of the MSA, the escrow statutes and the complementary legislation less persuasive, and  
5 thus weaken rather than strengthen the entire structure of the Agreement.”  
6

7 That last sentence is about the only good thing one can say about this legislation.  
8 Given their allocable share amendments, the NPMs will not be able to compete in those  
9 states anyway, so the equity fee assessments are simply gilding the lily.

#### 10 F. Other State Proposals to Tax NPMs

11 Mississippi, for one, has proposed state taxes on cigarette companies, with credits  
12 given for the state’s share of the company’s MSA payments. Again presumably the idea  
13 is to “level the playing field”, and these taxes may have the advantage of clawing back  
14 SPM exemptions. There are, however, two flaws.

15 First, the “level playing field” concept does not appear to extend to  
16 simultaneously repealing the state escrow statutes and other provisions that provide  
17 disparate treatment for NPMs and participating manufacturers. Second, the concept  
18 works better in a state like Mississippi, which receives more money per carton from the  
19 MSA than its citizens pay, than in a state like Tennessee, which gets too little. Mississippi  
20 could impose a tax equal to the non-grandfathered SPM amount per carton, with credits  
21 for MSA payments and equal treatment of NPMs and SPMs without its consumers  
22 bearing the brunt of the cost.<sup>65</sup> However, the same tax applied within Tennessee would  
23 impose per carton costs of much more than the MSA payments to the state. On the  
24 margin, an SPM or OPM would thus see its marginal costs rise by the full amount of the

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<sup>65</sup> However, if there are brands that do disproportionately well in Mississippi those brands could generate a credit equal to their full payments to the state under its PSS deal, and for those companies the marginal cost of selling as much in the state as before would rise to reflect the new tax.

1 tax (unless its market share in Tennessee were well below its national average share), as  
2 the credit for MSA payments would have no marginal value. The state's consumers  
3 would pay the same prices and the state would receive the same revenue as if it had  
4 simply passed an increase in the state excise tax but at the same time not signed the MSA  
5 --- clearly an unattractive option for the state.

#### 6 G. Marketing Practices of OPMs

7 Since the MSA the OPMs have developed a practice of raising the list price by  
8 several dollars per carton and then rebating the money to wholesalers and retailers who  
9 meet certain conditions. For example, as of the end of 2004 Philip Morris provided  
10 rebates of \$5.50 per carton on the four brands that represented 96 percent of its sales.  
11 These rebates were roughly four times the size of the rebates that existed prior to the  
12 MSA. Obviously, a distributor who did not qualify for the discount would not be able to  
13 compete for business with those who did, so distributors were essentially forced to do  
14 whatever was required to receive the discount. At the wholesale level this might mean not  
15 distributing any NPM cigarettes.

16 One retailer in Oklahoma testified that he was required to give Philip Morris 55  
17 percent of his shelf space to receive a \$2.00 per carton "buy-down", the buy-down  
18 representing two thirds of his gross profit.<sup>66</sup> Furthermore, the shelf space demanded

19 "[i]s not just anywhere. It's the premium space up at the top...When you sign  
20 their contract, it will tell you that you can only have so many feet of the other company's  
21 signage up and that you can't display any cigarettes or signage on the counter – on your  
22 counter space."<sup>67</sup>  
23

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<sup>66</sup> Deposition of George D. Carter, Jr., 04-CV-922-EA (C) p.12.

<sup>67</sup> Ibid. p. 13.

1           Additionally, RJ Reynolds required 45 percent of the retailer’s shelf space as a  
2 requirement to receive a buy-down of \$7 to \$8.00.<sup>68</sup> As a wholesaler said of these  
3 contracts,

4           “Well, their contracts are so restrictive that a lot of times the only place to put a  
5 fourth-tier product is underneath the counter because if a retailer puts it out on the shelf,  
6 they’re in violation of their contract and then they lose buy-downs and stuff from the  
7 major manufacturers.”<sup>69</sup>

8           RJ Reynolds also required that the retailer not charge less for any other  
9 company’s cigarettes than the lowest price he charged on an RJR brand.<sup>70</sup>

10           The contracts with wholesalers also contain market share requirements. For  
11 example, RJR withheld 50 cents a carton in discounts from a wholesaler in the second  
12 and third quarter of 2003 because he “sold too many low end cigarettes.”<sup>71</sup> For  
13 perspective, the wholesaler’s margin was only about 50 cents “[a]nd when they took that  
14 discount away, as you can see, I was actually losing money.”<sup>72</sup> Perhaps these tactics have  
15 gone unquestioned because of the MSA and a possible misperception among state  
16 attorneys general that it is in their interest to promote OPM cigarette sales over other  
17 brands.

18

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<sup>68</sup> Ibid p.14. “They get --- they want 45 percent of your shelf space and basically the same signage type of set-up, but they have this huge, huge buy-down price on their cigarettes which is 7 to \$8 a carton.”...Q. “Now, you’ve testified that 55 percent of the shelf space goes to Philip Morris and 45 goes to Reynolds. Does that leave any other shelf space for anybody else or where are their products displayed?” A. “No. No. You pretty much have to get them down low, you know, where it’s not a big visible deal.” (p. 15).

<sup>69</sup> Deposition of Justin Boyes, 04-CV-922-EA (C) p.15.

<sup>70</sup> Carter, op.cit., p. 17. “RJ Reynolds has a contract called an EDLP, every day low price, and they have a brand that if you sign that contract, they will pay you so much a carton extra money ... whatever the lowest priced cigarette in your store is, you must have price parody [sic] with their lower brand cigarette.”

<sup>71</sup> Deposition of Maurice Campbell, 04-CV-922-EA(C). p.23.

<sup>72</sup> Ibid, p. 24.

1 V. Competitive Analysis

2 This section examines the effect of the original MSA and the allocable share  
3 amendment on competition.

4 A. Geographic Market

5 Historically the wholesale market for cigarettes has been national. The large  
6 companies (the OPMs plus Liggett, plus American Tobacco before it merged into Brown  
7 & Williamson) would set national wholesale prices for 1,700 wholesalers. Wholesalers  
8 would apply the appropriate state tax stamps as orders came in from 285,000 retailers.<sup>73</sup>  
9 Stamping at wholesale was efficient if some wholesalers sold in more than one state,  
10 because separate inventories would not have to be kept for each state. However, some  
11 localized competition would nevertheless be possible, through retailer rebates and other  
12 marketing expenditures concentrated in a particular area.

13 Under the MSA, NPMs have entered the market on a largely regional basis. Some  
14 states have been tougher for NPMs to enter than others, and it makes more sense to enter  
15 a state like Virginia than a state like New York, because of the large disparity between  
16 the MSA shares that determine escrow payments and the states' share of the national  
17 cigarette markets. Furthermore, one would expect NPMs to be more likely to do well in  
18 states with relatively low excise taxes and distribution costs, because they will be able to  
19 offer the largest *percentage* discounts to OPMs in those areas.

20 Because some of the enormous post-MSA increase in rebates has taken place at  
21 the retail level, the MSA has made the market somewhat more geographically  
22 fragmented. Still, there remain coordination advantages to the OPMs in setting national

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<sup>73</sup> Source: Brown & Williamson Montreal presentation, *op.cit.*

1 prices, and list prices at least are still set that way. As state taxes continue to rise,  
2 companies may find it profitable to affix the state tax stamps themselves, if they wish to  
3 price discriminate at the state level, despite the inefficiency this would create at the  
4 wholesale level.<sup>74</sup>

#### 5 B. Premium and Discount Cigarettes

6 The deep discount market in which NPMs compete is called the “fourth tier” of  
7 the cigarette market. The proximate competitors of an NPM are other NPMs and the  
8 SPMs. Given that most smokers tend to prefer a regular brand, and NPMs do not have  
9 access to most of the country’s retailers, they can only compete in the market if they can  
10 offer the lowest prices.

11 At the level of the small individual firm, then, an NPM or small SPM is  
12 competing in a market for deep discount cigarettes. From the perspective of an OPM  
13 there is the recognition that consumers substitute deep discount cigarettes for premium  
14 cigarettes. Were this not the case, the OPMs would not have insisted on the MSA’s  
15 escrow statutes. What one could not predict was whether the existence of a robust deep  
16 discount market would cause OPMs to lower their margins after the MSA to retain  
17 market share, or to simply give up on the most price-elastic consumers and raise prices to  
18 the rest. For example, when a medicine goes off patent and begins to face competition  
19 from generics, the pioneer manufacturer sometimes actually raises prices, realizing that

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<sup>74</sup> It is not really possible now to discriminate by charging a higher wholesale price in a high-tax state than in a very low tax state, because even if a tax stamp were added at the company level in North Carolina a wholesaler might find it profitable to buy cigarettes with those stamps and then sell cigarettes in a higher tax state with a second stamp added.

1 the price-elastic consumers will be lost to the generics and the customers who remain are  
2 the least price-sensitive.

3 The OPMs are of course oligopolists, not monopolists, and their incentives have  
4 been complicated by the political environment: were they charging lower prices that led  
5 to much lower NPM sales the states might not be passing the allocable share amendment  
6 statutes. We do know that empirically the OPMs chose to raise prices by more than the  
7 MSA amount, and this may or may not have been an indirect consequence of the MSA.  
8 Similarly, it is theoretically possible that the OPMs will actually charge less if the NPMs  
9 are eliminated from the market, as they see the opportunity to take back most of their lost  
10 share --- though for now it appears they are taking advantage of the ASA statutes to raise  
11 prices.<sup>75</sup> But the theoretical possibility of lower prices for premium brands, which applies  
12 equally to other markets in which generics compete with oligopolistic branded products,  
13 does not mean that eliminating the NPMs or the generics is pro-competitive.

#### 14 C. The Effect of the MSA on the OPMs

15 The MSA caused the OPMs to raise prices dramatically, and lose some market  
16 share. While one might have expected profits net of MSA payments to decline somewhat  
17 from what they would otherwise have been, profits have held up surprisingly well,  
18 because more than 100 percent of the MSA cost increase was passed through to  
19 customers.

##### 20 1. Price Increases

21 The most obvious and straightforward implication of the MSA was that it would  
22 force a large increase in cigarette prices; see **Figure 1** and **Figure 2**. In 1996, the base

1 year that the MSA uses for profit calculations, the OPMs earned \$2.95 per carton, while  
2 the average price (net of excise taxes and cash discounts) was about \$7.00. Say that the  
3 MSA imposed a \$4.00 increase in the marginal costs of the four firms representing 97  
4 percent of the market. It was impossible that prices would not rise as a consequence.  
5 What was more difficult to predict was that prices would rise by perhaps \$2.50 more than  
6 the increase in the costs attributable to the MSA, and profits per carton would also rise,  
7 ranging between \$3.70 and \$4.30 in 1999-2003; see **Table 10**. This is a period where  
8 nominal production costs were basically flat and real (inflation-adjusted) production costs  
9 were declining; see **Figure 3**. Furthermore, the MSA reduced marketing expenses other  
10 than price discounts.<sup>76</sup>

11 Economists can not make a theoretical prediction about whether, in an  
12 oligopolistic market, an increase in an excise tax will lead to price increases that are  
13 greater than or less than the amount of the tax. What is clear is that an excise tax is  
14 relatively favorable to higher priced brands, because if each firm raised its price by the  
15 amount of the tax the relative price of the more expensive product would decline. For  
16 example, if Marlboro sold for \$8.00 a carton at wholesale while a deep discount brand  
17 sold at \$4.00, a \$4.00 per carton excise tax would change the price ratio of the products  
18 from 2/1 to 3/2. This focus on the ratio of product prices is also consistent with Philip

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<sup>76</sup> Indeed, the puzzle may be why, given the large price increases profits rose as little as they did. One reason may be an increase in costs related to the resolution of private lawsuits. For example, the same Brown & Williamson document (slide 15) estimated OPM operating profits for 2001 at \$8.8 billion while the amount recorded for MSA purposes was less than \$8.2 billion. Because of the lower MSA figure, no excess profits tax was due that year. The puzzle cannot be explained by restructuring costs, which are excluded from MSA profit accounting.

1 Morris’s reported approach to pricing; see **Figure 4** illustrating the price of Marlboro.<sup>77</sup>  
2 Thus the maker of a premium brand could increase its profit margin when an excise tax  
3 increased and not lose market share.<sup>78</sup> Indeed the evidence from past cigarette excise tax  
4 increases includes both studies that find the price rises by about the same amount as the  
5 tax increase and by more than the tax increase.<sup>79</sup> But because the MSA was not a pure  
6 excise tax as applied to non-OPMs, it was unclear how much of the MSA cost would be  
7 reflected in SPM pricing and whether NPMs would enter the market.

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<sup>77</sup> See Berans, op. cit., p. 134, describing how Philip Morris has found that by keeping the Marlboro price within 40 percent of the discount brands (as opposed to, say, within so many dollars per carton) it is able to grow market share. The emphasis on percentage difference to the discount price is repeated several times in the testimony.

<sup>78</sup> On a more technical level, the analysis works like this: In equilibrium, firms choose prices to maximize the product of sales and margin. The more price sensitive the sales of a product, the lower the margin. Premium cigarettes sell at much larger margins than discount cigarettes, implying that their demand is less price sensitive. So an excise tax that is passed through by all firms will disproportionately hurt the demand for the discount cigarettes.

<sup>79</sup> In a study for the Congressional Research Service, “The Proposed Tobacco Settlement: Effects” Number 97-995 E, Jane E. Gravelle summarized the empirical evidence this way: “See Theodore Keeler, The-wei Hu, Paul G. Barnett, Willard G. Manning, and Hai-Yen Sung. 'Do Cigarette Producers Price Discriminate by State? An Empirical Analysis of Local Cigarette Pricing and Taxation.' *Journal of Health Economics* 15 (August 1996), pp. 499-512. This study found that a one-cent state tax increase results in a price increase of 1.11 cents. This finding is similar to Barnett, Keeler and Hu, 'Oligopoly structure and the Incidence of Cigarette Excise Taxes,' *Journal of Public Economics*, Vol. 57, July 1995, pp. 457-470, who found about a dollar for dollar pass-through for the federal tax and a 90% pass-through for State taxes. Sung, Hu, and Keeler, 'Cigarette Taxation and Demand: An Empirical Model,' *Contemporary Economic Policy*, Vol. 12, July 1994, pp. 91-100, found a 127% pass-through for state taxes. Jeffrey Harris in, 'The 1983 Increase in the Cigarette Excise Tax,' in *Tax Policy and the Economy*, National Bureau of Economic Research, Vol. 1, Cambridge, MA: MIT Press, 1987, suggested that the 1983 tax increase was an opportunity to coordinate a general price increase in the industry, so that the price rose by more than the tax.” The 1997 FTC Report, “Competition and the Financial Impact of the Proposed Tobacco Settlement” provides a similar description of the evidence. So the general evidence is that a five cent cigarette tax would increase price by about five cents, and possibly more.

1           **Table 11** shows the average price of OPM cigarettes over time. The prices are  
2 compared to the export prices of Philip Morris International, which presumably would be  
3 affected by any production cost changes but not by the MSA.

#### 4           2. Changes in Profits

5           Two other certainties were that gross profits, before payment of MSA costs,  
6 would rise tremendously, and that the OPMs did not need for the MSA to increase their  
7 gross profits by more than their MSA costs for the deal to be profitable for them. The  
8 demand for cigarettes is relatively inelastic: demand may currently be about 3.5 percent  
9 below what it would have been but for the MSA.<sup>80</sup> Whether a \$4.00 per carton MSA tax  
10 raised prices by \$3.00 or \$5.00, the total amount of money to split between the  
11 companies, the trial lawyers, and the state governments would increase tremendously,  
12 even if some sales were lost to new entrants and SPMs. The SPMs would of course see  
13 their profits soar because of their exemptions. For example, Liggett's operating profits,  
14 which averaged less than \$12 million in 1995-97 have averaged over \$100 million the  
15 last five years.<sup>81</sup>

16           The large increase in gross profits is what made possible a deal that could pay the  
17 states large amounts at relatively little cost to OPM shareholders. For example, say that  
18 the OPMs were earning \$7 billion per year before taxes prior to the MSA, but the  
19 expected cost of the state litigation, as reflected in the companies' stock prices, was \$3

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<sup>80</sup> Philip Morris estimates that the demand elasticity for cigarettes is -.28. See Berans *op. cit.* p. 139. Brown & Williamson *op. cit.* estimated an elasticity between -.25 and -.30. If the average retail price of cigarettes in 2004 was \$4.07 and MSA costs were 49 cents this would imply that the MSA had reduced smoking by about 3.4 percent. If the elasticity of demand were -.4 then the MSA would be responsible for about a 5 percent decline in current consumption.

<sup>81</sup> Source: Vector Group 10-k reports. The "last five years" refers to 2000-2004.

1 billion per year<sup>82</sup>, leaving the shareholders with \$4 billion per year. If the MSA raised  
2 gross profits to \$14 billion (before MSA payments) but required payments of \$8 billion  
3 then the plaintiffs would gain \$5 billion per year compared to a more conventional, non-  
4 collusive settlement and the shareholders would gain \$2 billion, being left with  $14 - 8 = 6$   
5 instead of  $7 - 3 = 4$ . This payoff to shareholders could come in various ways, including the  
6 ability of the companies to separate their domestic tobacco businesses from their other  
7 businesses and so limit any liability spillover.<sup>83</sup>

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<sup>82</sup> Actually, prior to the MSA the stock price of RJR apparently reflected a zero valuation for a domestic tobacco business earning over \$1 billion per year, because of the threat that litigation would ultimately cost the parent company even more than that. See Jeremy Bulow and Paul Klemperer, "The Tobacco Deal", Brookings Papers on Economic Activity: Microeconomics" 1998. For example, footnote 32 quotes RJR's CEO at the time, Steven Goldstone, as explaining RJR's eagerness for a settlement by saying "I do not have to tell you that the continuing controversy surrounding our domestic business has caused investors to give that business no value --- and I mean zero value if you add up all the components of RJR Nabisco stock. When you realize that today that business earns \$1.4 billion operating earnings a year and it has no value from the stock market, there clearly is some upside." Remarks at an October 27, 1997 conference sponsored by the Investor Responsibility Research Center. The zero value would have reflected the company's total litigation liability rather than only the state lawsuits.

One major reason for the pessimistic assessment of shareholders was that the companies faced legislation such as Florida's Medicaid Third-Party Liability Act of 1994, which allowed the state to sue the manufacturer of an allegedly harmful product for the medical expenses of a group, relying on statistical evidence instead of proving causation. This legislation, said to be conceived by the Inner Circle, an exclusive group of 100 personal injury lawyers, barred the assumption of risk argument, imposed joint and several liability, allowed the courts to award damages on the basis of market share regardless of the brands used by Medicaid patients, and was made retroactive. See Junda Woo, "Tobacco Firms Face Greater Health Liability", Wall Street Journal, May 3, 1994. p.A3. While one might question whether such laws would be upheld upon judicial review, they clearly posed a grave financial threat to the tobacco companies.

<sup>83</sup> Indeed, among the OPMs the Reynolds and B&W domestic tobacco operations now operate as one standalone business, Loews has partly spun off Lorillard, and Philip Morris (now Altria) has talked of separating its domestic tobacco business, perhaps after the Justice Department and Illinois "light cigarette" lawsuits are resolved.

1           In fact, we know that net profits rose in the years immediately after the MSA, and  
2 while carton sales have fallen profits per carton have been up considerably since the  
3 MSA. Furthermore, the stocks of the big tobacco companies have greatly increased in  
4 price, especially since the merger of RJR and B&W.

### 5           3. Changes in Market Share

6           The MSA estimates that SPMs and NPMs have taken about 15 percent of the  
7 cigarette market in terms of units, with the SPMs taking the majority of this amount. As  
8 already discussed, the SPM volume was almost entirely produced by exempt SPMs until  
9 the conversion of Farmers' and General Tobacco to non-grandfathered SPM status.

10          Of course, economists traditionally measure market share by dollar volume rather  
11 than by unit volume --- if BMW and Hyundai sold the same number of cars at very  
12 different prices, we would not say that the firms were equally large. A calculation of  
13 dollar volume net of excise taxes (and MSA payments) would probably reduce the  
14 NPMs' market share to about three percent. The reduction for SPMs would be large but  
15 less dramatic. In terms of profits, the SPMs do have nine-figure aggregate earnings,  
16 because of their exemptions. Some large NPMs were unprofitable even before the ASAs,  
17 but presumably they would have earned normal returns on capital in the long run if the  
18 ASAs had not been implemented. Now they are likely to lose their investments.

19          Which measure is most relevant in thinking about size? The unit measure  
20 probably better reflects the degree to which the small firms have constrained the profits  
21 of the OPMs, and might even underestimate that effect if the firms have both taken  
22 market share an constrained prices. If one were interested in shareholder wealth or  
23 profits, the NPMs' unit sales, and even revenues, vastly overstate their share.

1           The NPMs and SPMs have gained their market share because of the OPM price  
2 increases that were largely an inevitable consequence of the MSA. However, the growth  
3 in the market share of small firms should not be taken as a sign that the MSA is pro-  
4 competitive. If Coke and Pepsi get together to raise cola prices, the market share of RC  
5 Cola will rise, reducing industry concentration, but the price increase harms consumers  
6 and competition.

### 7           C. Role of the SPMs and NPMs in the Market

8           The SPMs have a clear cost advantage up to the point where they use their full  
9 exemptions. If they sell more than their exemption amount their MSA payments are high  
10 enough that they exceed the minimum average cost of an NPM, under the original escrow  
11 statutes. This means there are essentially three equilibrium regions.

#### 12           1. SPMs sell less than their exemption amounts

13           Say the SPMs had an exemption for 75 million cartons. If demand for their  
14 cigarettes at pre-MSA margins was less than that amount, then if the SPMs were  
15 competitive they would charge the same prices as before the MSA. There would be no  
16 room for NPMs in the market.

#### 17           2. SPMs sell approximately their grandfathered amounts

18           A second possibility would be that the demand for SPM cigarettes would be such  
19 that while demand would exceed 75 million cartons at the pre-MSA price, demand would  
20 be less than 75 million at the MSA price plus \$4.00. In this case we would expect the  
21 SPMs to sell an amount roughly equal to their MSA exemptions. As demand increased  
22 the price would rise to reflect more and more of the \$4.00, but quantity would remain at  
23 the exemption amount. An economist would describe both the profits that the SPMs

1 would earn from their last exemption and their marginal MSA cost as the part of the  
2 \$4.00 reflected in SPM prices.

3 Demand for SPMs could be in this region either because of OPM competition or  
4 NPM competition. Say the NPMs were able to sell at a price that reflected the exempt  
5 SPM amount plus \$1.50. Then obviously the NPMs will not be in the market at all if the  
6 SPM price does not rise by more than \$1.50. However, beyond that point the barriers to  
7 entry imposed upon the NPMs become relevant.

8 For example, were the NPMs allowed free entry at the \$1.50 cost, then the SPMs  
9 would be unable to charge a price higher than the NPMs. Any extra demand for deep  
10 discount cigarettes would be met by the NPMs, reflecting their \$1.50 cost. An extra  
11 exemption would be worth \$1.50 to an SPM, and it would produce as a firm that had a  
12 marginal cost of that amount.

13 However, as the states began to impose heavier and heavier barriers against the  
14 NPMs, the SPMs could charge prices that exceeded the NPM level and still sell their full  
15 exemption quotas. If the price at which the SPMs can sell their full quota exceeded the  
16 NPM price by less than \$2.50 (\$4.00 less the \$1.50 NPM cost) it would still not pay for  
17 the SPMs to sell more than their quotas.

18 Of course things are a bit more complicated in the real world --- some SPMs  
19 might be more efficient than others, and if the SPMs can reflect most but not all of the  
20 \$4.00 amount in their prices firms might choose to err on the side of selling too much  
21 rather than too little, so as to keep their distribution channels filled and make sure they  
22 could sell their exemption amounts in the future.

1           Recently, several SPMs appear to have been following such a strategy, selling  
2 more than their exemption amount but less than they sold in the late 1990s. In total, more  
3 than 80 percent of grandfathered SPM sales by firms other than Commonwealth were by  
4 firms that did not exceed their exemption by more than 20 percent. By far the largest  
5 exception to this rule was RJR-owned Santa Fe, which is a specialty produced not in the  
6 discount market.

7           3. Grandfathered SPMs sell significantly more than their exemption amounts

8           In the New York and Oklahoma allocable share cases the states (generally advised  
9 by the National Association of Attorney Generals, NAAG), argued that the SPMs were  
10 generally selling more than their exemption amounts and therefore the relevant marginal  
11 cost for the SPMs is the \$4.00 MSA amount. Their apparent calculation was to estimate  
12 the incremental payments that would have to be made by the SPMs if each one of them  
13 increased its sales by one percent, divided by the total increase in sales.

14           This calculation depends heavily on Commonwealth, which alone accounted for  
15 about 76 percent of the amount actually paid by grandfathered SPMs based on 2004  
16 sales<sup>84</sup>, and the fact that many of the other larger grandfathered SPMs, Liggett in

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<sup>84</sup> Commonwealth accounted for 70 percent of such sales but the other grandfathered SPMs, such as Liggett chose to not pay 20 percent of their computed MSA obligations. That is, while Commonwealth is also disputing the MSA calculations it is paying its disputed calculated obligations into escrowed dispute accounts while Liggett and others have at least partially exercised their rights to not pay these amounts into escrow pending the resolution of the disputes.

Commonwealth is now owned by Houchens Industries, which specializes in discount grocery stores and tobacco shops. Because of this vertical integration and Commonwealth's high sales relative to its MSA exemption it is probable that Commonwealth will continue to sell beyond its exemption in the foreseeable future, and thus will treat its MSA exemption as the equivalent of a corporate welfare check from the state attorneys general each year, with no effect on its marginal costs.

1 particular, have sold a bit more rather than a bit less than the exemption amount in recent  
2 years.

3 Consider though the implications of the attorney generals' claim that the SPMs  
4 sell much more than the exemption amount.

5 The tighter marketing restrictions imposed on NPMs, including the barriers to  
6 expanding into new states and the lack of access to large parts of the distribution network,  
7 mean that SPM and NPM cigarettes are not perfect substitutes. SPM cigarettes can be  
8 sold at higher prices than NPM cigarettes, in part because of these restrictions, which  
9 make NPM brands less widely available and less able to build any brand equity.<sup>85</sup>  
10 If the SPMs can profitably expand their sales to well beyond their exemption amounts,  
11 factoring in (almost) the full \$4.00 non-grandfathered SPM payment into marginal  
12 costs,<sup>86</sup> as the attorneys general contend, then it is clear that the restrictions imposed  
13 upon the NPMs are having enormous bite.

14 That is, NPMs will enter the market so long as they can earn a normal return on  
15 capital, and economic theory tells us they will not earn more than that except to the extent  
16 that the states artificially restrict new firms from coming in. The competitive NPM price

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<sup>85</sup> For example, in 2004 Xcaliber, an Oklahoma-based NPM, sold at an average wholesale price of \$4.85 per carton, plus \$3.90 for Federal Excise Tax. Xcaliber is one of the plaintiffs in the lawsuit challenging Oklahoma's allocable share law, 04-CV-922-EA(C). I served as a paid expert witness in that case. Xcaliber paid an average of \$1.50 per carton into escrow accounts, included in the \$4.85 price. Star Tobacco, the one publicly traded NPM, reported an average price of approximately \$4.10 from 1999-2004. Star attempts to constrain its sales to the PSS states, which do not require escrow payments. Liggett's average price for 2004 was \$7.06, plus Federal Excise Tax. Source: 10-k reports of Liggett's parent, Vector Group.

<sup>86</sup> Actually, the grandfathered SPM marginal payment is less than the non-grandfathered SPM marginal payment because additional sales increase the market-share based exemption. For example, if Liggett were paying \$4.07 for each carton over its exemption, then an extra sale would actually increase its payments by \$3.99 because of the increase in its exemption amount.

1 is set by their costs. If the SPMs have as much or more of the market than the NPMs, and  
2 their prices are reflecting a \$4.00 MSA payment instead of a \$1.50 escrow cost, it must  
3 be that the restrictions on NPMs provide a sufficient advantage to let the SPMs sell at a  
4 \$2.50 higher price.

5 If the market supported both NPMs paying the escrow fees and SPMs paying the  
6 MSA amounts before, then the cost advantages of the NPMs relative to a non-  
7 grandfathered SPM and the marketing advantages of the SPMs must have been of a  
8 similar magnitude. When states implement the ASA, the NPM cost advantage is  
9 eliminated, and even reversed to the extent that selling in the ASA state raises the escrow  
10 costs in non-ASA states. At the same time, the marketing advantages of the SPMs are left  
11 in place. Therefore, as predicted by the Tobacco Marketing Association, the NPM form  
12 will not be able to survive.<sup>87</sup>

13

#### 14 VI. Antitrust Issues

15 While it is clear that the MSA significantly increased cigarette prices, and that the  
16 ASAs will effectively eliminate most if not all competition for the OPMs and  
17 grandfathered SPMs, the defenders of the deal have nevertheless argued that the  
18 Agreement and the amendments are lawful.

19 Regarding the MSA, the primary arguments are that the price increase has public  
20 health benefits that should override competition issues. It is further argued that because

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<sup>87</sup> In May 2004 the TMA *op. cit.* projected that NPM sales would fall by over 70 percent by 2008. Presumably the remaining volume would be largely in states where ASA did not pass.

1 firms set prices unilaterally in the context of the MSA, the MSA itself is not serving as an  
2 illegal device to coordinate prices.

3 For the ASAs, the arguments are (1) the amendments merely create a level  
4 playing field by equating the marginal MSA costs of non-grandfathered SPMs,  
5 grandfathered SPMs selling significantly more than their quotas, and NPMs; (2) the state  
6 has a legitimate concern in enacting these statutes in order to protect state revenues; and  
7 (3) in any event, the principle of state action exempts these rules from the competition  
8 statutes. These arguments are considered in turn.

9 A. The Public Health Rationale for the MSA

10 Jonathan Gruber, a premier health economist, has eloquently described the public  
11 health rationale for the MSA as follows:

12 “[I]t is unambiguously true that a [\$4.50] per [carton] tax on cigarettes would  
13 have been better social policy, avoiding disparate treatment of producers and huge lawyer  
14 fees. But the legal settlement must be considered relative to the counterfactual. In the  
15 current political environment, particularly given current federal budget surpluses, the  
16 likely alternative to such a settlement was not a [\$4.50] per [carton] federal tax, but rather  
17 no federal action to raise the price of cigarettes. In this sense, the payments to lawyers  
18 and excess profits to small producers, while inequitable, can be viewed as the political  
19 economy costs that must be paid to impose cigarette taxes.”<sup>88</sup>

20  
21 Put aside the logic of defending a policy on the grounds that it was impossible to  
22 get through the legislature, and focus on the underlying assumption that it was not  
23 possible to increase cigarette prices outside of the MSA. This assumption has been  
24 proven wrong. Since the passage of the MSA state cigarette taxes have risen by about

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<sup>88</sup> Jonathan Gruber, “Tobacco at the Crossroads”, *Journal of Economic Perspectives*, Spring 2001, pp. 193-212.

1 \$3.00 a carton, to \$6.40 a carton.<sup>89</sup> Furthermore, federal taxes have risen by \$1.50 a  
2 carton, to \$3.90, and places like New York have added hefty local taxes as well. Tax  
3 increases of \$5.00 or more per carton are on the agenda in a third of the states in 2005;  
4 see **Table 12**. It is simply wrong to say that the only way to increase cigarette prices was  
5 through the MSA. Even if the assumption *might* have been true in late 1998 it is not true  
6 now, and there is no justification for continuing a collusive bargain.<sup>90</sup>

7         When I was at the FTC the antitrust attorneys emphasized that efficiencies were  
8 not a justification for a potentially anti-competitive transaction, even when the  
9 efficiencies might outweigh the antitrust concerns, if there was an alternative way of  
10 achieving the efficiencies without the anticompetitive behavior.<sup>91</sup> As Professor Gruber  
11 states, straight excise taxes would be a much better alternative to the MSA, and one that  
12 we know is feasible.

13         Second, even if it were true that the federal and state governments would not  
14 decide to raise cigarette taxes if the MSA were rejected, does that mean that we should  
15 try to find a legal loophole to justify the anti-competitive MSA? Where would we draw  
16 the line?

17         For example, former Secretaries of Defense William Perry and George Schulz  
18 have said that one of the important ways we should be fighting terrorism is by reducing  
19 the demand for Mideast oil. This would have to be done through conservation or through

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<sup>89</sup> See Parloff, *op. cit.* "Cigarette Tax Increases by State Per Year 2000-2005", available at [www.tobaccofreekids.org](http://www.tobaccofreekids.org), claims an average state tax of \$8.40, but may count all 50 states equally, not adjusting for size.

<sup>90</sup> Certainly the problem that it would not be possible to pass a cigarette tax increase because of the federal budget surplus has been completely "solved" by Congress and the White House!

<sup>91</sup> This argument held even if corporate politics made the alternative unlikely to actually occur.

1 the development of alternative sources, potential increases in domestic production being  
2 limited. One obvious way to achieve this goal is through higher oil and gasoline prices.  
3 Others have argued for higher prices to reduce greenhouse gas emissions.

4 Say the National Resources Defense Council<sup>92</sup> sued all the oil refineries in the  
5 United States for their role in greenhouse gas emissions. Say they settled the suit on the  
6 following terms: Each refiner agrees to pay \$42.00 per barrel (\$1.00 per gallon) in  
7 damages for all future gasoline production, but receives a grandfather exemption equal to  
8 30 percent of recent annual sales. As part of the deal import costs would have to be raised  
9 equally, so NRDC gives the states 90 percent of its take in return for implementing user  
10 fees on all imported gasoline. The states with ports and large refineries are particularly  
11 important to the deal, so they are given disproportionate shares of the revenue; the other  
12 states are given the “option” of not participating in the deal, but as refiners do not receive  
13 rebates for sales to non-participating states those states can effectively only choose to  
14 agree to take their reduced share of the revenue or reject the deal and get nothing. The  
15 refiners, their marginal costs raised by \$1.00, raise their prices by that amount, but their  
16 average costs only rise by about 70 cents so their profits increase despite a small  
17 reduction in demand.

18 Does this example differ in any significant way from the MSA? One difference is  
19 that with gasoline, state and national tax increases *are* politically difficult to enact, no  
20 matter how much support they have from the scientific community.

21 Allowing such a deal might help achieve an important public policy objective, but  
22 does our system allow people who are not part of the federal legislature to circumvent the

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<sup>92</sup> The attorneys whom I have met from NRDC are all outstanding people; I only use the organization in this example because of its leading role in fighting global warming.

1 system and raise national taxes on their own? We do not allow for private agreements  
2 that collusively raise the prices charged by firms who dominate a market. In fact, any  
3 transaction expected to increase local gasoline prices by as little as a penny a gallon will  
4 be blocked, according to FTC policy.

5        Though it is an argument rarely heard, sugar quotas may also serve a public health  
6 objective. The decline in sugar consumption is much larger than the estimated 3.5 percent  
7 decline in smoking due to the MSA, though there is probably also more substitution into  
8 other sweeteners than into other tobacco products.<sup>93</sup> But assume that there is a public  
9 health benefit from the higher prices; in fact I'm sure I would be better off in the long run  
10 if a \$10 a scoop tax were imposed on ice cream. The question is, who gets to make these  
11 decisions?

12        In the case of the sugar quotas, Congress does. States cannot impose tariffs on  
13 sugar imported from other countries or from other states. They cannot impose national  
14 taxes on the sale of sugar. They can only impose state taxes. Special state regulations  
15 may require approval from Congress, as with California's gasoline regulations.

16        Should we allow Coke and Pepsi to get together to raise the price of soda, or  
17 McDonald's, Burger King, Wendy's and Carl's Jr./Hardee's to get together on the price

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<sup>93</sup> Admittedly the high price of sugar has led to substitution to high fructose corn syrup, but the high price of cigarettes has led to a substitution into other forms of smoking. Partly offsetting the obvious health benefits of reduced cigarette smoking has been the switch to cigars and other tobacco products (more male high school seniors now report smoking cigars than cigarettes), an apparent reversal of the long-term trend to lower tar and nicotine cigarettes, and likely behavioral changes due to higher prices (the prediction that with a higher price people will smoke their cigarettes down closer to the filter). Nevertheless, I accept the common assumption that the higher price of cigarettes has had some net health benefit.

1 of fast food hamburgers? In both cases higher prices would reduce purchases, arguably  
2 creating a public health benefit, but negating the antitrust laws.

3 B. Does the MSA create coordination on pricing?

4 One argument that has been made in favor of the legality of the MSA is that the  
5 document does not specify that the OPMs *must* raise prices. True, their marginal costs  
6 would more than double, and their costs would rise by substantially more than their pre-  
7 MSA prices, but the agreement does not specifically require them to raise prices. The  
8 claim itself defies economic plausibility, but a lawyer or a judge could perhaps make  
9 such an argument (and some have) while keeping a straight face.<sup>94</sup> The argument is akin  
10 to claiming that an individual decides unilaterally and voluntarily to pay his property tax,  
11 because he always has the option of not paying and giving the state his house.

12 A variation on the theme is it is not an antitrust violation for all gasoline  
13 companies to raise their prices unilaterally, and by virtually identical amounts, if their  
14 costs all rise through an increase in the federal tax on gasoline. Similarly, the argument  
15 goes, the revenue sharing agreement between the companies and the states by which the  
16 states give up their legal claims against the companies, and agree to limit new  
17 competition, in return for a \$4.00 per carton share of cigarette revenues, has the same  
18 effect on the participating manufacturers as an equal tax increase.

19 The reason we do not become suspicious when all firms raise their price  
20 following a tax increase is that it is an obvious and fully predictable result forced upon  
21 the firms by the tax increase. But if MSA payments are taxes, then who had the authority  
22 to levy them?

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<sup>94</sup> It is true however that the states do not “supervise” the MSA members; indeed no state knows how many cigarettes any given MSA member has sold within its borders.

1           If the payments are not taxes, this argument obviously creates a slippery slope for  
2 antitrust law. Say Coke and Pepsi each had \$10 billion in debts. The companies form a  
3 trust, and each agrees to pay into the trust 10 cents per can of soda sold. The trust then  
4 uses the revenues to extinguish the debts. The companies would each have an incentive to  
5 raise the price of soda, and no further communication between the firms, after the  
6 establishment of the trust, would be necessary. If this sort of activity is ruled to be legal,  
7 we can expect to see a great deal more of it.

### 8           C. The Level Playing Field Argument

#### 9           1. Does ASA level the playing field?

10           The standard justification of the allocable share amendment is that it “levels the  
11 playing field” by raising the marginal costs of the NPMs to the level of the SPMs with  
12 whom they compete in the deep discount segment of the cigarette market.

13           The argument depends on the fact that the NPMs find it unprofitable to operate in  
14 more than a few states, because of both competition from other NPMs and the marketing  
15 restrictions they face. If, before the allocable share amendments, an NPM distributed its  
16 sales in the same proportion as a firm like Liggett, it would face marginal escrow costs of  
17 close to \$8.00 in many states.<sup>95</sup> On the other hand, if Liggett chose to operate in as many  
18 states as an NPM, and generally many more, would face no MSA costs whatsoever.  
19 However, based on actual production levels if Liggett sold one more carton of cigarettes  
20 anywhere in the country its marginal costs would be higher than if the NPM sold an extra

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<sup>95</sup> In some states its sales would be below the state’s MSA percentage. In those states it would pay \$4.00 in escrow to the state, and an additional \$4.00 to the remaining states, less the MSA percentage of the state in which the sale took place.

1 carton in one of the states where it already made more than its MSA share of its sales,  
2 and that is what the amendments purport to “remedy”.

3           Think of the following example. Firm X must pay marginal tax costs that are  
4 equal to \$2 times the number of units sold. The firm and its customers face a variety of  
5 legal and regulatory risks, so customers will only pay a low price and the firm cannot  
6 profitably sell more than 10 units, at which point its marginal tax cost is \$20. Firm L  
7 receives a 50 percent tax subsidy that reduces its marginal tax costs to \$1 times the  
8 number of units sold, and is much less heavily regulated. It can thus receive a higher  
9 price for its product, and it chooses to sell 40 units, at which point its marginal tax cost is  
10 \$40. The government wishes to level the playing field between the two firms. Will  
11 changing the tax on X to a flat \$40 marginal cost, thereby making X’s profit maximizing  
12 quantity zero, accomplish that goal?

13           There are three details that make the story of Xcaliber and Liggett different from  
14 the story of firm X and L. First, the subsidies that Liggett receives make its average cost  
15 less than Xcaliber’s; in the story L has a higher average cost than X. Second, Liggett’s  
16 tax breaks were not wholly arbitrary; they stem directly from its role as one of the largest  
17 tobacco companies during the period of the alleged torts and its agreement to turn state’s  
18 evidence. Normally, state governments do not settle cases against alleged lawbreakers  
19 who turn state’s evidence by agreeing to pay the lawbreaker \$100 million per year. Third,  
20 Liggett can withhold payments if it disputes its tax assessment; Xcaliber’s rights of  
21 dispute are much more limited.

22           Obviously, a real “level playing field” amendment would require eliminating the  
23 extra barriers that the NPMs face and making the grandfathered SPMs pay a tax or

1 escrow on all their sales up to the exemption amount, but no MSA state has moved in  
2 such a direction.

### 3 2. Marginal Cost Issues

4 If we look at the statutes as a whole we must recognize that any NPM that sells in a  
5 non-ASA state has costs that exceed even the non-grandfathered SPM amount. --- if you  
6 are selling in non-ASA states with an MSA share of 25 percent, say, your marginal cost  
7 in an MSA state is 125 percent of the base amount. So on this basis the “level playing  
8 field” test is not met.

9 Of course one could argue that the taxes imposed by other states should be irrelevant  
10 in calculating whether, say, Oklahoma’s taxes do not discriminate among companies, and  
11 so only the \$4.00 cost that the allocable share amendment imposes in Oklahoma, and not  
12 the \$1.00 it imposes elsewhere should be considered in evaluating whether the allocable  
13 share amendment discriminates between firms. However, if this is legally correct then the  
14 allocable share amendments are an immediate loser. Oklahoma only collects 4 cents per  
15 carton from a participating manufacturer for each carton of cigarettes sold in the state.  
16 Charging the NPMs \$4.00 would not be equitable under a standard that ignored the effect  
17 of other states’ rules.

18 Furthermore, with the application of the NPM adjustment --- which can be applied  
19 due to sales of non-compliant firms through Native American reservations and internet  
20 sales, the SPM payments will be reduced below the NPM amount. This has already  
21 happened in recent years, though the amounts involved in the settlements to date have  
22 been small relative to the amounts currently being contested.

1 In the early years of the MSA the marginal costs of the various OPMs varied widely.  
2 There are still differences both across and among the OPMs, the SPMs, and the NPMs.  
3 **Table 13** shows some of those differences. It should be clear that while raising marginal  
4 costs has been an important part of the MSA, making marginal costs equal for everyone  
5 has not been a major objective, even if raising the costs of NPMs has been.

6 Finally, it is easy to forget that while marginal costs affect incentives, firms will  
7 generally prefer lower average costs to lower marginal costs. Implementing the full NPM  
8 adjustment in 2003 would have given RJR a windfall, while increasing its marginal costs  
9 substantially. The company would not have protested the payment of the NPM  
10 adjustment because of the marginal cost factor. Rather, it would have been pleased to  
11 have the extra profits. If the SPMs believe they are being treated unfairly relative to the  
12 NPMs, the NPMs would be delighted to trade with them.

### 13 3. Excise Taxes and Level Playing Fields

14 Even if one believed that the allocable share amendment would lead to all firms  
15 paying the same marginal amount per carton, it would not contribute to a level playing  
16 field. The taxation of all goods at the same percentage rate would generally serve that  
17 purpose, because it maintains relative prices. A tax of \$5,000 on all cars would distort the  
18 relative prices of a Hyundai and a Mercedes in favor of the Mercedes. In cigarettes,  
19 taxing Xcaliber cigarettes that sell for \$3.50 a carton net of MSA and excise taxes by the  
20 same amount as Marlboros that go for \$10.00 makes the *relative* price of Marlboro  
21 cheaper and helps its competitive position. Excise taxes on cigarettes, have a role; they  
22 may be appropriate for addressing an externality that is proportional to the quantity rather  
23 than the value consumed. However, equating the escrow payments per carton of the

1 NPMs with the payments made by higher priced cigarettes sold by MSA cartel members  
2 *does not* create a more level competitive playing field.

3 D. Competition Policy and the Level Playing Field Argument

4 It is not the job of competition policy to level the playing field. Xcaliber does not  
5 contend that any market advantages that Philip Morris has attained through legitimate  
6 business practices should be taken away from it so that Xcaliber could earn the same  
7 profits as Philip Morris.<sup>96</sup> Similarly, there is no role for competition policy in evening out  
8 any cost disadvantages that a company may have acquired, ranging from an older and  
9 larger company's higher cost and benefit structure to the obligations it has incurred to  
10 settle alleged torts.

11 E. Protection of state revenues

12 As Professor Gruber argued, a straightforward increase in cigarette taxes could  
13 have achieved all the benefits of the MSA without the ancillary costs. This really makes  
14 the MSA form indefensible. But taking the MSA statutes as given, the allocable share  
15 amendments also cannot be justified on the theory that they protect state revenues.

16 The argument that the state requires escrows to match the amounts paid by the  
17 participating manufacturers would be appropriate for the original escrow statutes, if we  
18 ignored the SPM exemptions, but not for the allocable share amendments. Also, because  
19 the NPMs cannot defer disputed payments and are often required to pay in quarterly  
20 rather than annually, there is much less risk of loss from a compliant NPM than from a  
21 small SPM.

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<sup>96</sup> As another example, the bans on television advertising, which were imposed by Congress and serve a legitimate public purpose, are not contested even though they have the clear ancillary effect of protecting the existing premium brand manufacturers from new competition.

1 But the real revenue protection argument is the notion that if a consumer buys an  
2 NPM cigarette the MSA will receive no money from the sale, other than what it might  
3 hope to ultimately extract from the company's escrow accounts. Therefore, the state  
4 would gain revenue if NPMs were eliminated from the market, and the ASA protects  
5 state revenues by eliminating the NPMs.

6 First, consider the argument at a state level. Assume that the price of NPM  
7 cigarettes reflects \$1.50 in escrow costs while the price of SPM cigarettes reflects \$4.00  
8 in MSA costs, as the attorneys general claim. Then in the "best case" for the states, if the  
9 NPMs were wiped out the buyers of NPM cigarettes would pay an extra \$2.50 and the  
10 state would receive \$4.00 times its MSA share, assuming that the consumer continued to  
11 smoke the same amount. For the average state, with a 2 percent MSA share, for every  
12 \$2.50 extra its consumers paid would thus generate 8 cents in revenues, ignoring the loss  
13 in state revenues that will occur if sales fall. Contrast that to a state excise tax increase,  
14 which generates about \$2.50 for every \$2.50 additional paid by consumers, ignoring the  
15 loss in state revenues from a sales decline.

16 Adding in the NPM adjustment does not change things. A state gains very little  
17 from an ASA, and probably loses revenues if we consider the loss in excise tax revenue  
18 from lower sales.<sup>97</sup>

19 What if we consider an "altruistic" state? For example, perhaps if Oklahoma  
20 implements the ASA its revenues only rise 8 cents while its consumers pay an additional  
21 \$2.50, but the state is happy that other states will receive an additional \$3.92? If  
22 protecting New York and California revenues is a legitimate rationale for an Oklahoma

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<sup>97</sup> As with the escrow statutes, if passing the ASA helps a state avoid paying its share of any NPM adjustment, there might be a financial incentive to do so.

1 state law, then things become ambiguous relative to an increase in excise taxes. There is a  
2 gain in the sense that the MSA escrow costs involve a deadweight loss --- the money  
3 must be invested in a way that provides little value to the NPMs and little value to the  
4 states, and when that cost is replaced with an MSA tax the consumer does not lose but the  
5 state wins. On the other hand, the profits of the remaining companies will rise with the  
6 reduction of competition, and this will cost consumers money.

7 This analysis, however, assumes that the only alternative to the original escrow  
8 statutes is the ASA. But what if, for example, the states required the NPMs to pay taxes  
9 in lieu of escrow payments, leaving the NPMs as well off as before the ASA, and then  
10 combined this with an increase in general cigarette taxes? This alternative would also  
11 eliminate the cost of having escrow funds inefficiently invested, but would not force  
12 consumers to pay for higher participating manufacturer profits. Perhaps the MSA  
13 braintrust believes that raising NPM costs through escrow payments rather than through  
14 taxes is a necessary fig leaf. But then we are back to justifying an increasingly Byzantine  
15 set of rules meant to support a highly inefficient structure.

#### 16 G. State Action

17 The final justification for the MSA and the ASA is that they require no  
18 justification --- that states can do whatever they wish under the banner of “state action”.  
19 But one might ask whether state action could plausibly apply in a case like the MSA.

20 The main issues here are (1) whether the MSA must be viewed as a set of state  
21 laws, given that no national legislature authorized it; and (2) to what extent the states can  
22 discriminate in their treatment of different firms.

1           *De facto* the MSA is clearly a set of national taxes, and the participation of many  
2 of the states cannot be deemed voluntary in any meaningful sense. It leads directly to  
3 large price increases. The courts must decide whether a subset of the states, in  
4 conjunction with a group of oligopolists, has the power to impose such an agreement on  
5 the entire country, or whether state action is limited to a state's ability to take actions  
6 within the borders of its elected officials.

7           Consider an example of a two state deal. New York and New Jersey may agree to  
8 each raise cigarette taxes by \$4.00 per carton. They may even agree that New Jersey will  
9 give part of its revenues to New York, even if it is hard to understand why it would do so.  
10 However, what New York cannot do is impose a \$4.00 per carton tax on all sales in both  
11 New York and New Jersey, and then tell New Jersey its options are to either sign the deal  
12 on terms that are much worse for New Jersey than if each state implemented its own  
13 excise tax, or else not sign and still have its consumers pay the tax, but with New York  
14 keeping all the revenue. That kind of action by New York *cannot* be covered by state  
15 action.

16           If the attorneys general argue that the MSA is really a collection of state laws, and  
17 that the escrow statutes are a collection of state laws then a different set of issues arise. If  
18 MSA members pay 7 cents to Virginia for each carton of cigarettes sold within the state,  
19 can the legislature require the NPMs to escrow \$4.00 per carton? If Virginia receives  
20 total revenues that work out to \$1.91 per carton sold within the state from the MSA, and  
21 less than a dollar from SPM sales, can it impose an escrow requirement of \$4.00 per  
22 carton on NPMs?

23           VII. Conclusion

1           The MSA designers had several goals in mind. The companies wished to obtain a  
2 national settlement of their litigation with the states. They wanted any payments to be  
3 based on future sales, in proportion to units sold. The state attorneys general in the  
4 biggest anti-smoking states wanted a deal that would give them a bigger share of the  
5 revenue than if every state imposed a state excise tax. The trial lawyers wanted to be  
6 paid.

7           None of the designers had taxing authority, and none were part of the federal  
8 legislature. An effort to have Congress ratify a similar, though somewhat broader, deal  
9 had failed. What was left was to create an agreement that was meant to achieve these  
10 objectives, under the guise of a tort settlement rather than a tax, at the same time hiding  
11 the fact that the agreement was really imposed nationally rather than by the independent  
12 decisions of officials in 50 states.

13           There were complications. Small firms had to be prevented from expanding too  
14 much and new entry also had to be restricted. The small firms were paid off through their  
15 grandfather exemptions and the new entrants were restricted in a variety of ways, most  
16 notably the escrow statutes.

17           But the escrow statutes had to be written as though they were state statutes, and  
18 originally the designers felt constrained to demanding that the non-participating  
19 manufacturers only escrow the amount they would owe the state as a participating  
20 manufacturer. It was also deemed impossible to require escrow payments in a state where  
21 a firm did not operate. Because the MSA was really a national tax, this meant that if a  
22 non-participating firm only operated in a small number of states it might be able to earn a  
23 profit, despite the various other barriers limiting its distribution.

1           By 2003 these small firms represented perhaps three percent of industry revenues  
2 (net of excise taxes) and a smaller share of profits. However, they represented seven  
3 percent of all cigarettes sold, and through the competitive pressure they placed on the  
4 deep discount cigarette market, and indirectly on the market as a whole their impact on  
5 the profits of the incumbent manufacturers may have been even greater.

6           States were persuaded to stretch even beyond the original MSA, modifying their  
7 escrow statutes through allocable share amendments that give non-participating  
8 manufacturers all of the costs but none of the benefits of being part of the cartel. The non-  
9 participating manufacturers are fighting a David vs. Goliath battle in trying to overturn  
10 these statutes, but they face enormous political and financial disadvantages.

11           And what of consumers? After all, they have an even stronger case against the  
12 MSA than the non-participating manufacturers, who at least had a chance to succeed  
13 before the allocable share amendments. One problem facing a class action consumer  
14 lawsuit is that such an enormous fraction of the richest class action attorneys have gotten  
15 that way through the MSA. They will not contest it, and other lawyers who did would  
16 create powerful political enemies. Sometimes there are too many lawyers, and sometimes  
17 it's very hard to find one.

Table 1

Lump Sum Payments and Payments  
Allocated by 1998 Market Share

Type of Payment	Amount
Related to Market Value	
Initial Payment	\$2,400,000,000
Related to OPM Market Share	
PSS Up Front Payments*	\$2,764,800,000
Minnesota Attorneys	\$378,000,000
Minnesota Blue Cross Blue Shield	\$160,000,000
Attorney General Enforcement Fund	\$50,000,000
Total Payments	\$5,752,800,000

Company	Payments	Avg. Per Carton	Marg. Per Carton
B&W	\$946,734,866	\$2.74	\$1.27
Lorillard	\$491,115,233	\$2.33	\$1.36
Philip Morris	\$3,324,341,223	\$2.94	\$0.74
RJ Reynolds	\$990,608,678	\$1.79	\$1.13

Minnesota's lawyers were reported to receive a minimum of \$567 million over three years. I have attributed two thirds of this amount to the start-up period. Marginal costs are the amount extra a firm would have to pay into the MSA if it sold an extra carton in 1998, the sales of all competitors held constant.

Table 2  
MSA, PSS, and other OPM Payments, 1999-2003

Type of Payment	1999	2000	2001	2002	2003
<b>Proportional to Volume</b>	<b>\$2.63</b>	<b>\$3.18</b>	<b>\$4.04</b>	<b>\$3.92</b>	<b>\$4.24</b>
Base Payment	\$1.85	\$2.29	\$3.07	\$3.16	\$4.00
PSS Initial	\$0.62	\$0.64	\$0.66	\$0.39	\$0.00
Growers	\$0.16	\$0.12	\$0.18	\$0.23	\$0.24
Addl. Foundation	\$0.00	\$0.13	\$0.14	\$0.14	\$0.00
<b>Proportional to Market Share</b>	<b>\$2.18</b>	<b>\$1.77</b>	<b>\$1.83</b>	<b>\$1.92</b>	<b>\$0.46</b>
Part of above payments not volume adjusted	\$0.06	\$0.08	\$0.10	\$0.11	\$0.12
MSA Initial Payments	\$1.20	\$1.27	\$1.36	\$1.49	\$0.00
Base Fdn. Payments	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
Addl. Foundation	\$0.12	\$0.00	\$0.00	\$0.00	\$0.00
Minnesota BCBS	\$0.04	\$0.03	\$0.03	\$0.03	\$0.03
Lawyers	\$0.75	\$0.37	\$0.32	\$0.28	\$0.29
<b>Total OPM Per Carton</b>	<b>\$4.81</b>	<b>\$4.95</b>	<b>\$5.87</b>	<b>\$5.84</b>	<b>\$4.71</b>
<b>SPMs Per Carton</b>	<b>\$0.28</b>	<b>\$0.61</b>	<b>\$1.16</b>	<b>\$1.54</b>	<b>\$1.96</b>
B&W Marginal	\$4.50	\$4.09	\$5.00	\$5.22	\$4.65
Lorillard Marginal	\$4.57	\$4.13	\$5.03	\$5.26	\$4.66
Philip Morris Marg.	\$3.69	\$3.37	\$4.22	\$4.44	\$4.45
RJ Reynolds Marg.	\$4.29	\$3.88	\$4.77	\$4.97	\$4.60
Non-exempt SPM	\$1.95	\$2.24	\$3.01	\$3.10	\$3.94

Notes: For 1999, 91.37 percent of the states (weighted by MSA shares) were credited with “state specific finality” in the Independent Auditor’s Report, affected that year’s reported payments. Payments in this table are similarly adjusted. Marginal costs for grandfathered SPMs are always at least slightly below the marginal costs for non-exempt SPMs. For example, if Liggett sold significantly more than its exemption amount it would face an MSA marginal cost of about 2 percent less than the non-exempt SPM amount.

Table 3  
Excess Profits Tax Calculations

(1)	Year	data	1999	2000	2001	2002	2003
(2)	BW 1996 profits	data	\$801,640,000	\$801,640,000	\$801,640,000	\$801,640,000	\$801,640,000
(3)	Lorillard 1996 profits	data	\$698,200,000	\$698,200,000	\$698,200,000	\$698,200,000	\$698,200,000
(4)	Philip Morris 1996 profits	data	\$4,293,000,000	\$4,293,000,000	\$4,293,000,000	\$4,293,000,000	\$4,293,000,000
(5)	RJR 1996 profits	data	\$1,268,000,000	\$1,268,000,000	\$1,268,000,000	\$1,268,000,000	\$1,268,000,000
(6)	OPM 1996 profits	(2)+(3)+(4)+(5)	\$7,060,840,000	\$7,060,840,000	\$7,060,840,000	\$7,060,840,000	\$7,060,840,000
(7)	Profit index to Year	data	1.09273	1.12974	1.16363	1.19854	1.23450
(8)	Indexed Base Profits	(6)*(7)	\$7,715,570,510.68	\$7,976,882,313.90	\$8,216,189,009.27	\$8,462,696,931.37	\$8,716,578,101.49
(9)	BW Year profits	data	\$651,474,000	\$442,000,000	\$662,000,000	\$742,000,000	\$533,000,000
(10)	Lorillard Year profits	data	\$1,025,200,000	\$1,003,900,000	\$1,021,000,000	\$1,081,500,000	\$912,000,000
(11)	Philip Morris Year profits	data	\$5,045,900,000	\$5,350,000,000	\$5,186,000,000	\$5,011,000,000	\$4,173,000,000
(12)	RJR Year profits	data	\$1,267,737,000	\$1,280,000,000	\$1,313,000,000	\$1,016,000,000	\$722,000,000
(13)	Total profits	(9)+(10)+(11)+(12)	\$7,990,311,000	\$8,075,900,000	\$8,182,000,000	\$7,850,500,000	\$6,340,000,000
(14)	BW excess profits	max(0, (9)-(2)*(7))	\$0	\$0	\$0	\$0	\$0
(15)	Lorillard excess profits	max(0, (10)-(3)*(7))	\$262,258,009	\$215,118,604	\$208,555,140	\$244,679,594	\$50,074,956
(16)	Philip Morris excess profits	max(0, (11)-(4)*(7))	\$354,822,989	\$500,045,069	\$190,546,284	\$0	\$0
(17)	RJR excess profits	max(0, (12)-(5)*(7))	\$0	\$0	\$0	\$0	\$0
(18)	Total excess profits	max(0, (13)-(6)*(7))	\$274,740,489	\$99,017,686	\$0	\$0	\$0
(19)	Settling states percentage	data	91.36648%	100.00000%	100.00000%	100.00000%	100.00000%
(20)	PSS reduction	data	87.55%	87.55%	87.55%	87.55%	87.55%
(21)	Total Excess Profit Tax	.25*(18)*(19)*(20)	\$54,942,158.83	\$21,672,496.04	\$0.00	\$0.00	\$0.00
(22)	BW excess profit tax	(21)*(14)/[(14)+(15)+(16)+(17)]	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(23)	Lorillard excess profit tax	(21)*(15)/[(14)+(15)+(16)+(17)]	\$23,350,291.48	\$6,519,007.15	\$0.00	\$0.00	\$0.00
(24)	Philip Morris excess profit tax	(21)*(16)/[(14)+(15)+(16)+(17)]	\$31,591,867.34	\$15,153,488.90	\$0.00	\$0.00	\$0.00
(25)	RJR excess profit tax	(21)*(17)/[(14)+(15)+(16)+(17)]	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

**Table 4**  
**MSA Taxes v. State Excise Taxes**

State	MSA Share (adjusted for PSS)	2003 Tobacco Sales (in millions of cartons) 1	MSA Taxes Paid @ \$4.00 Per Carton	MSA Revenue Per Carton	Dollars Gained (Lost) vs. State Excise Tax
Alabama	0.013533453	36.7	\$146.7	\$2.83	(43.0)
Alaska	0.002859035	4.0	\$16.2	\$5.42	5.7
Arizona	0.012342285	24.1	\$96.5	\$3.92	(2.0)
Arkansas	0.006934212	23.2	\$92.8	\$2.29	(39.6)
<b>California</b>	<b>0.106885155</b>	<b>119.6</b>	<b>\$478.4</b>	<b>\$6.85</b>	<b>340.5</b>
Colorado	0.011479571	28.2	\$112.7	\$3.12	(24.7)
Connecticut	0.015546613	19.1	\$76.4	\$6.23	42.7
<i>Delaware</i>	<i>0.003311655</i>	<i>13.1</i>	<i>\$52.3</i>	<i>\$1.94</i>	<i>(26.9)</i>
<b>District of Columbia</b>	<b>0.005083999</b>	<b>2.5</b>	<b>\$10.0</b>	<b>\$15.52</b>	<b>28.9</b>
Florida	0.052606408	125.8	\$503.3	\$3.20	(100.2)
Georgia	0.020553587	69.7	\$278.6	\$2.26	(121.1)
Hawaii	0.005040008	6.0	\$23.9	\$6.47	14.7
Idaho	0.003041960	7.7	\$30.9	\$3.02	(7.6)
Illinois	0.038974590	64.1	\$256.5	\$4.66	42.1
Indiana	0.017081280	61.8	\$247.2	\$2.12	(116.3)
Iowa	0.007282577	25.0	\$99.9	\$2.23	(44.1)
Kansas	0.006981149	16.1	\$64.3	\$3.33	(10.8)
Kentucky	0.014747913	71.5	\$285.8	\$1.58	(172.8)
Louisiana	0.018886290	37.0	\$148.1	\$3.91	(3.4)
Maine	0.006442529	9.6	\$38.4	\$5.14	11.0
Maryland	0.018929030	26.6	\$106.4	\$5.45	38.6
<b>Massachusetts</b>	<b>0.033822344</b>	<b>30.3</b>	<b>\$121.3</b>	<b>\$8.55</b>	<b>137.9</b>
Michigan	0.036443138	71.6	\$286.4	\$3.90	(7.2)
Minnesota	0.024390244	35.7	\$142.6	\$5.24	44.3
Mississippi	0.016260163	26.1	\$104.2	\$4.78	20.4
Missouri	0.019047473	59.9	\$239.6	\$2.44	(93.7)
Montana	0.003556926	5.7	\$22.7	\$4.81	4.6
Nebraska	0.004982380	11.5	\$45.9	\$3.33	(7.7)
Nevada	0.005107587	15.8	\$63.1	\$2.48	(23.9)
New Hampshire	0.005576520	18.4	\$73.7	\$2.32	(31.0)
New Jersey	0.032382164	36.6	\$146.4	\$6.78	101.7
New Mexico	0.004994158	7.9	\$31.5	\$4.86	6.8
<b>New York</b>	<b>0.106869040</b>	<b>67.1</b>	<b>\$268.3</b>	<b>\$12.21</b>	<b>550.6</b>
North Carolina	0.019530517	80.0	\$319.9	\$1.87	(170.2)
North Dakota	0.003064994	4.2	\$16.7	\$5.63	6.8
Ohio	0.042184025	102.6	\$410.4	\$3.15	(87.2)
Oklahoma	0.008676594	35.7	\$142.6	\$1.86	(76.1)
Oregon	0.009610471	21.2	\$84.6	\$3.48	(11.0)
Pennsylvania	0.048124102	83.8	\$335.3	\$4.40	33.5
<b>Rhode Island</b>	<b>0.006020102</b>	<b>6.6</b>	<b>\$26.2</b>	<b>\$7.04</b>	<b>19.9</b>
<i>South Carolina</i>	<i>0.009850752</i>	<i>38.9</i>	<i>\$155.4</i>	<i>\$1.94</i>	<i>(80.0)</i>
South Dakota	0.002922066	5.3	\$21.0	\$4.26	1.3
Tennessee	0.020440011	53.5	\$214.1	\$2.93	(57.5)
Texas	0.069344811	125.6	\$502.5	\$4.23	28.8
Utah	0.003725476	8.3	\$33.1	\$3.45	(4.6)

**Table 4**  
**MSA Taxes v. State Excise Taxes**

Vermont	0.003443257	4.4	\$17.7	\$5.96	8.7
Virginia	0.017122662	68.6	\$274.5	\$1.91	(143.3)
Washington	0.017193951	24.0	\$96.1	\$5.48	35.6
West Virginia	0.007423205	19.7	\$79.0	\$2.88	(22.1)
Wisconsin	0.017351221	38.8	\$155.0	\$3.43	(22.1)
Wyoming	0.002079636	4.9	\$19.5	\$3.27	(3.5)
Territories	0.009916709	11.9	\$47.6	\$6.39	28.4

<sup>1</sup> Cigarette pack sales from Orzechowski and Walker, *Tax Burden on Tobacco*, 2003 as reported in "State Cigarette Tax Rates and Rank, Date of Last Increase, Annual Pack Sales & Revenues, and Related Data" at [www.tobaccofreekids.org](http://www.tobaccofreekids.org). Territory sales estimated by assuming that the territories' share of 2003 sales equalled Puerto Rico's share of 1998 sales as estimated by taxing authorities.

Note: Table does not include effect of Lawyers' tax and SPM exemptions, or initial payments (skewed to PSS).

Table 5  
Smoking, Medicaid, and the MSA

State	Smoking	Population	Cigarette	Smoking	Cig Sales	MSA Share	Cig Sales	Medicaid	MSA	MSA
	Medicaid			Share of						
	Costs		Sales	Medicaid			Share	Share		
Alabama	186	4,351,999	45.38	9	10.43	1.367%	1.976%	0.769%	-30%	78%
Alaska	60	614,010	4.77	17	7.77	0.289%	0.208%	0.248%	39%	16%
Arizona	247	4,668,631	29.22	14	6.26	1.247%	1.273%	1.021%	-2%	22%
Arkansas	189	2,538,303	27.49	14	10.83	0.700%	1.197%	0.781%	-42%	-10%
California	2,310	32,666,550	166.84	16	5.11	10.796%	7.267%	9.551%	49%	13%
Colorado	249	3,970,971	31.05	17	7.82	1.159%	1.352%	1.029%	-14%	13%
Connecticut	336	3,274,069	24.72	13	7.55	1.570%	1.077%	1.389%	46%	13%
Delaware	62	743,603	9.63	16	12.95	0.334%	0.419%	0.256%	-20%	30%
District of Columbia	61	523,124	2.76	9	5.28	0.513%	0.120%	0.252%	327%	104%
Florida	976	14,915,980	132.07	16	8.85	5.313%	5.752%	4.035%	-8%	32%
Georgia	419	7,642,207	73.86	13	9.66	2.076%	3.217%	1.732%	-35%	20%
Hawaii	91	1,193,001	4.2	14	3.52	0.509%	0.183%	0.376%	178%	35%
Idaho	65	1,228,684	9.38	14	7.63	0.307%	0.409%	0.269%	-25%	14%
Illinois	1,226	12,045,326	95.16	18	7.90	3.936%	4.145%	5.069%	-5%	-22%
Indiana	380	5,899,195	79.4	15	13.46	1.725%	3.458%	1.571%	-50%	10%
Iowa	235	2,862,447	26.8	14	9.36	0.736%	1.167%	0.972%	-37%	-24%
Kansas	153	2,629,067	22.52	15	8.57	0.705%	0.981%	0.633%	-28%	11%
Kentucky	380	3,936,499	66.52	15	16.90	1.490%	2.897%	1.571%	-49%	-5%
Louisiana	518	4,368,967	44.91	17	10.28	1.908%	1.956%	2.142%	-2%	-11%
Maine	169	1,244,250	11.75	16	9.44	0.651%	0.512%	0.699%	27%	-7%
Maryland	372	5,134,808	36.5	15	7.11	1.912%	1.590%	1.538%	20%	24%
Massachusetts	817	6,147,132	38.72	14	6.30	3.416%	1.686%	3.378%	103%	1%
Michigan	881	9,817,242	70.72	16	7.20	3.681%	3.080%	3.642%	20%	1%
Minnesota	363	4,725,419	38.76	13	8.20	2.463%	1.688%	1.501%	46%	64%
Mississippi	206	2,752,092	29.07	14	10.56	1.642%	1.266%	0.852%	30%	93%
Missouri	415	5,438,559	64.34	14	11.83	1.924%	2.802%	1.716%	-31%	12%
Montana	52	880,453	7.83	13	8.89	0.359%	0.341%	0.215%	5%	67%
Nebraska	105	1,662,719	13.64	12	8.20	0.503%	0.594%	0.434%	-15%	16%
Nevada	96	1,746,898	16.42	19	9.40	0.516%	0.715%	0.397%	-28%	30%
New Hampshire	90	1,185,048	20.19	13	17.04	0.563%	0.879%	0.372%	-36%	51%
New Jersey	755	8,115,011	57.98	16	7.14	3.271%	2.525%	3.122%	30%	5%
New Mexico	144	1,736,931	10.72	15	6.17	0.504%	0.467%	0.595%	8%	-15%
New York	4,271	18,175,301	118.02	16	6.49	10.794%	5.140%	17.658%	110%	-39%

Table 5  
Smoking, Medicaid, and the MSA

North Carolina	600	7,546,493	92.25	13	12.22	1.973%	4.018%	2.481%	-51%	-20%
North Dakota	37	638,244	5.09	11	7.98	0.310%	0.222%	0.153%	40%	102%
Ohio	1,113	11,209,493	118.87	17	10.60	4.261%	5.177%	4.602%	-18%	-7%
Oklahoma	170	3,346,713	37.04	13	11.07	0.876%	1.613%	0.703%	-46%	25%
Oregon	224	3,281,974	26.99	13	8.22	0.971%	1.176%	0.926%	-17%	5%
Pennsylvania	1,335	12,001,451	111.08	16	9.26	4.861%	4.838%	5.519%	0%	-12%
Rhode Island	140	988,480	8.78	15	8.88	0.608%	0.382%	0.579%	59%	5%
South Carolina	307	3,835,962	46.95	14	12.24	0.995%	2.045%	1.269%	-51%	-22%
South Dakota	45	738,171	6.48	13	8.78	0.295%	0.282%	0.186%	5%	59%
Tennessee	531	5,430,621	83.68	15	15.41	2.064%	3.645%	2.195%	-43%	-6%
Texas	1,265	19,759,614	139.93	15	7.08	7.004%	6.095%	5.230%	15%	34%
Utah	81	2,099,758	8.47	12	4.03	0.376%	0.369%	0.335%	2%	12%
Vermont	56	590,883	5.71	14	9.66	0.348%	0.249%	0.232%	40%	50%
Virginia	313	6,791,345	70.46	14	10.37	1.729%	3.069%	1.294%	-44%	34%
Washington	508	5,689,263	31.22	16	5.49	1.737%	1.360%	2.100%	28%	-17%
West Virginia	179	1,811,156	20.92	14	11.55	0.750%	0.911%	0.740%	-18%	1%
Wisconsin	375	5,223,500	45.79	14	8.77	1.753%	1.994%	1.550%	-12%	13%
Wyoming	29	480,907	4.95	14	10.29	0.210%	0.216%	0.120%	-3%	75%
Total	24,187	270,298,524	2,296.00	15.2	8.49	100.00%	100.000%	100.000%	0%	0%

Data Sources: 1998 smoking-attributable Medicaid costs and smoking-attributable percentage is from Miller et.al. (same source as CDC)  
 Population by state from US Census. Cigarette sales from TMA.  
 MSA share from MSA, adjusted for PSS and exclusion of territories.  
 Medicaid costs in millions of dollars. Cigarette sales in cartons.

Table 6

Virginia's Options Under the MSA

- (1) Don't Sign MSA: Residents pay \$3.93 per carton (\$270 million), state gets \$0.00.
- (2) Sign MSA but don't pass escrow statute: Consumers pay \$3.93, state gets \$0.00.
- (3) Pass escrow statute with change in wording (even if only in legislative intent section), but in a way that is approved by OPMs; escrow statute declared illegal under state law: Residents pay \$3.93, state gets \$0.00.
- (4) Pass escrow statute without changing the wording; escrow statute declared illegal under state law: Residents pay \$3.96, state gets \$0.67 per carton. State loses \$226 million relative to comparable state excise tax.
- (5) Pass escrow statutes; statutes declared legal by state courts; state "diligently enforces" escrow statute: Residents pay \$4.00, state gets \$1.91 per carton. State loses \$143 million per year relative to \$4.00 per carton state excise tax.

**Table 7**  
**NPM Adjustment 2001**

Co. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H
(1) Company Name			B&W	Lorillard	Philip Morris	RJ Reynolds	OPM Total
(2) Base OPM Amount	data		\$6,500,000,000	\$6,500,000,000	\$6,500,000,000	\$6,500,000,000	\$6,500,000,000
(3) Inflation Adjustment	data		1.0968306	1.0968306	1.0968306	1.0968306	1.0968306
(4) 1997 OPM Sales	data		476,365,606,637	476,365,606,637	476,365,606,637	476,365,606,637	476,365,606,637
(5) 2003 OPM Sales	data		385,693,034,525	385,693,034,525	385,693,034,525	385,693,034,525	385,693,034,525
1997 Relative Market Share							
(6) Share	data		16.43477%	8.96335%	49.60923%	24.99266%	100%
(7) 2003 Company Sales	data		45,335,863,481	38,678,801,705	209,261,844,228	92,416,525,111	385,693,034,525
(8) 2003 SPM Sales	data		25,543,791,246	25,543,791,246	25,543,791,246	25,543,791,246	25,543,791,246
(9) 2003 NPM Sales	data		20,631,017,546	20,631,017,546	20,631,017,546	20,631,017,546	20,631,017,546
(10) 2003 Market Size	data		431,867,843,317	431,867,843,317	431,867,843,317	431,867,843,317	431,867,843,317
Payments Before NPM							
(11) Adjustment	calculation		\$596,826,007	\$509,188,819	\$2,754,836,927	\$1,216,621,487	\$5,064,125,943
Sales Lost via declining							
(12) RMS	max(0, (5)*(6)-(7))		18,051,883,710	0	0	3,978,404,686	22,030,288,396
Cigarette Price Index							
(13) 2001/2000	data		1.1519777	1.1519777	1.1519777	1.1519777	1.1519777
(14) Base Adjustment	.02*(13)*min(15 billion, (12))		\$345,593,310	\$0	\$0	\$91,660,670	\$437,253,980
NPM Adjustment							
(15) Percentage	3*max(0, ((9)/(10))-.0234518)		0.024319799	0.024319799	0.024319799	0.024319799	0.024319799
(16) NPM Adjustment Amount	(15)*(H11)		\$369,475,579	\$369,475,579	\$369,475,579	\$369,475,579	\$369,475,579
Available for Base							
(17) Adjustments	min((H14),(H16))		\$369,475,579	\$369,475,579	\$369,475,579	\$369,475,579	\$369,475,579
Available Beyond Base							
(18) Adjustments	(16)-(17)		\$0	\$0	\$0	\$0	\$0
Company Share of Base							
(19) Adjustment	(17)*(14)/(H14)		\$292,023,159	\$0	\$0	\$77,452,420	\$369,475,579
Company Share of non-							
(20) base Adjustment	see notes		\$0	\$0	\$0	\$0	\$0
Total Company							
(21) Adjustment	(19)+(20)		\$292,023,159	\$0	\$0	\$77,452,420	\$369,475,579
Marginal Impact of B&W							
(22) Sale	calculation		-\$0.89	\$0.00	\$0.00	\$0.74	-\$0.15
Marginal Impact of							
(23) Lorillard Sale	calculation		-\$0.89	\$0.00	\$0.00	\$0.74	-\$0.15
Marginal Impact of Philip							
(24) Morris Sale	calculation		-\$0.89	\$0.00	\$0.00	\$0.74	-\$0.15
Marginal Impact of RJR							
(25) Sale	calculation		\$2.19	\$0.00	\$0.00	-\$2.34	-\$0.15
Marginal Impact of SPM							
(26) Sale	calculation		-\$0.27	\$0.00	\$0.00	-\$0.07	-\$0.34
Marginal Impact of NPM							
(27) Sale	calculation		\$5.29	\$0.00	\$0.00	\$1.40	\$6.70
(28) Non-NPM Marginal Cost	calculation		\$5.01	\$5.04	\$4.23	\$4.78	\$3.39
(29) Total Marginal Cost	calculation		\$5.89	\$5.04	\$4.23	\$7.12	\$3.54

Formulas for company share of non-base adjustment: For RJR and B&W: (19)\*(8)/(6).

For Lorillard: MIN(((17)\*(8)/(6)),((19)\*(8)+(F8))/(6))), that is it receives Philip Morris's share of the NPM adjustment until its total equals the amount it would have received but for the Base Adjustment procedure.

For Philip Morris: max(0,(19)\*(8)/(6)-(18)\*(E8)/(6)), that is the residual.

**Table 8**  
**NPM Adjustment 2003**

Co. A	Col. B	Col. C	Col. D	Col. E	Col. F	Col. G	Col. H
(1) Company Name			Brown & Williamson	Lorillard	Philip Morris	RJ Reynolds	OPM Total
(2) Base OPM Amount	data		\$8,000,000,000	\$8,000,000,000	\$8,000,000,000	\$8,000,000,000	\$8,000,000,000
(3) Inflation Adjustment	data		1.1636276	1.1636276	1.1636276	1.1636276	1.1636276
(4) 1997 OPM Sales	data		476,365,606,637	476,365,606,637	476,365,606,637	476,365,606,637	476,365,606,637
(5) 2003 OPM Sales	data		342,210,683,890	342,210,683,890	342,210,683,890	342,210,683,890	342,210,683,890
1997 Relative Market Share							
(6) Share	data		16.43477%	8.96335%	49.60923%	24.99266%	100%
(7) 2003 Company Sales	data		39,399,742,668	35,038,027,955	187,212,788,183	80,560,125,084	342,210,683,890
(8) 2003 SPM Sales	data		29,566,085,893	29,566,085,893	29,566,085,893	29,566,085,893	29,566,085,893
(9) 2003 NPM Sales	data		32,744,368,421	32,744,368,421	32,744,368,421	32,744,368,421	32,744,368,421
(10) 2003 Market Size	data		404,521,138,204	404,521,138,204	404,521,138,204	404,521,138,204	404,521,138,204
Payments Before NPM							
(11) Adjustment	calculation		\$679,367,769	\$604,158,943	\$3,228,100,635	\$1,389,094,161	\$5,875,613,640
Sales Lost via declining							
(12) RMS	max(0, (5)*(6)-(7))		16,841,782,002	0	0	4,967,410,797	21,809,192,799
Cigarette Price Index							
(13) 2001/2000	data		0.950091366	0.950091366	0.950091366	0.950091366	0.950091366
(14) Base Adjustment	.02*(13)*min(15 billion, (12))		\$285,027,410	\$0	\$0	\$94,389,882	\$379,417,292
NPM Adjustment							
(15) Percentage	3*max(0, ((9)/(10))-.0234518)		0.172482603	0.172482603	0.172482603	0.172482603	0.172482603
(16) NPM Adjustment Amount	(15)*(H11)		\$1,013,441,133	\$1,013,441,133	\$1,013,441,133	\$1,013,441,133	\$1,013,441,133
Available for Base							
(17) Adjustments	min((H14),(H16))		\$379,417,292	\$379,417,292	\$379,417,292	\$379,417,292	\$379,417,292
Available Beyond Base							
(18) Adjustments	(16)-(17)		\$634,023,841	\$634,023,841	\$634,023,841	\$634,023,841	\$634,023,841
Company Share of Base							
(19) Adjustment	(17)*(14)/(H14)		\$285,027,410	\$0	\$0	\$94,389,882	\$379,417,292
Company Share of non-							
(20) base Adjustment	see notes		\$72,997,067	\$103,763,501	\$308,007,150	\$149,256,123	\$634,023,841
Total Company							
(21) Adjustment	(19)+(20)		\$358,024,477	\$103,763,501	\$308,007,150	\$243,646,005	\$1,013,441,133
Marginal Impact of B&W							
(22) Sale	calculation		\$0.20	-\$0.07	-\$0.87	\$0.61	-\$0.12
Marginal Impact of							
(23) Lorillard Sale	calculation		-\$0.17	\$0.52	-\$1.09	\$0.61	-\$0.12
Marginal Impact of Philip							
(24) Morris Sale	calculation		-\$0.17	-\$0.07	-\$0.49	\$0.61	-\$0.12
Marginal Impact of RJR							
(25) Sale	calculation		\$0.27	-\$0.07	\$1.60	-\$1.93	-\$0.12
Marginal Impact of SPM							
(26) Sale	calculation		-\$0.08	-\$0.07	-\$0.39	-\$0.17	-\$0.72
Marginal Impact of NPM							
(27) Sale	calculation		\$0.92	\$0.82	\$4.38	\$1.88	\$8.00
(28) Non-NPM Marginal Cost	calculation		\$4.66	\$4.67	\$4.46	\$4.61	\$4.26
(29) Total Marginal Cost	calculation		\$4.46	\$4.15	\$4.96	\$6.53	\$4.38

Formulas for company share of non-base adjustment: For RJR and B&W: (19)\*(8)/(6).

For Lorillard: MIN(((17)\*(8)/(6)),((19)\*(8)+(F8))/(6))), that is it receives Philip Morris's share of the NPM adjustment until its total equals the amount it would have received but for the Base Adjustment procedure.

For Philip Morris: max(0,(19)\*(8)/(6)-(18)\*(E8)/(6)), that is the residual.

Table 9  
General Tobacco MSA Entry Payment Schedule

YEAR	AMOUNT	PER CARTON
2005	\$4,423,607	\$0.14
2006	\$16,843,774	\$0.52
2007	\$19,322,953	\$0.60
2008	\$23,830,140	\$0.74
2009	\$28,023,211	\$0.87
2010	\$29,577,025	\$0.91
2011	\$31,006,589	\$0.96
2012	\$32,334,589	\$1.00
2013	\$35,916,531	\$1.11
2014	\$36,849,095	\$1.14
2015	\$37,657,408	\$1.16
2016	\$40,765,036	\$1.26

Assumes that General Tobacco's sales will be at an annualized rated of 32,376,333 cartons per year, based on its MSA obligations incurred in the second half of 2004. No adjustment is made for expected industry volume declines, which would raise the amounts per carton, or for inflation. Interest is calculated at 5 percent per year, compounded daily. Assumes interest compounds from July 31, 2005 and General Tobacco is required to make repayments of 1,2,3,5,7,8,9,10,12,13,14, and 16 percent of principle on August 30 of the years 2005-16, and pay all interest accrued over the past year on that same day.

Table 10  
OPM Revenues and Profits Per Carton

2004 MSA	B&W	LTR	MO	RAI	TOTAL
volume	N/A	168,744	938,990	463,141	1,570,875
op. income	N/A	1,038,200	4,437,000	1,110,000	6,585,200
revenue	N/A	1,843,800	9,141,847	4,012,456	14,998,103
Rev/Cart	N/A	\$10.927	\$9.736	\$8.664	\$9.548
Profit/Cart	N/A	\$6.153	\$4.725	\$2.397	\$4.192
2003 MSA	B&W	LTR	MO	RJR	TOTAL
volume	197,825	175,925	939,990	404,490	1,718,230
op. income	533,000	912,000	4,173,000	722,000	6,340,000
revenue	2,172,869	1,819,000	8,927,000	3,196,347	16,115,217
Rev/Cart	\$10.984	\$10.340	\$9.497	\$7.902	\$9.379
Profit/Cart	\$2.694	\$5.184	\$4.439	\$1.785	\$3.690
2002 MSA	B&W	LTR	MO	RJR	TOTAL
volume	221,740	180,115	961,810	457,885	1,821,550
op. income	742,000	1,081,500	5,011,000	1,016,000	7,850,500
revenue	2,530,325	2,067,900	9,762,000	3,623,699	17,983,924
Rev/Cart	\$11.411	\$11.481	\$10.150	\$7.914	\$9.873
Profit/Cart	\$3.346	\$6.004	\$5.210	\$2.219	\$4.310
2001 MSA	B&W	LTR	MO	RJR	TOTAL
volume	225,280	192,200	1,039,850	459,230	1,916,560
op. income	662	1,021	5,186	1,313	8,182
revenue	2,438,514	2,109,600	10,446,000	3,753,965	18,748,079
Rev/Cart	\$10.824	\$10.976	\$10.046	\$8.174	\$9.782
Profit/Cart	\$2.939	\$5.312	\$4.987	\$2.859	\$4.269
2000 MSA	B&W	LTR	MO	RJR	TOTAL
volume	249,725	205,545	1,063,965	488,225	2,007,460
op. income	442,000	1,003,900	5,350,000	1,280,000	8,075,900
revenue	2,639,281	2,682,800	13,891,600	5,838,300	25,051,981
Rev/Cart	\$10.569	\$13.052	\$13.056	\$11.958	\$12.479
Profit/Cart	\$1.770	\$4.884	\$5.028	\$2.622	\$4.023
1999 MSA	B&W	LTR	MO	RJR	TOTAL
volume	273,546	221,160	1,065,144	504,363	2,064,213
op. income	651,474	1,026,000	5,045,900	1,267,737	7,991,111
revenue	3,143,337	2,843,700	12,375,000	5,309,732	23,671,769
Rev/Cart	\$11.491	\$12.858	\$11.618	\$10.528	\$11.468
Profit/Cart	\$2.382	\$4.639	\$4.737	\$2.514	\$3.871
1998 MSA	B&W	LTR	MO	RJR	TOTAL
volume	345,497	215,139	1,127,686	553,207	2,241,529
op. income	Not Avail.	540,200	5,207,000	1,583,000	7,330,200
revenue	2,790,577	1,885,482	9,844,697	4,468,256	18,989,013
Rev/Cart	\$8.077	\$8.764	\$8.730	\$8.077	\$8.471
Profit/Cart	Not available	\$2.511	\$4.617	\$2.861	\$3.866*
1997 MSA	B&W	LTR	MO	RJR	TOTAL
volume	386,942	211,440	1,181,607	595,495	2,375,484
op. income	Not available	551,000	4,744,000	1,772,000	7,067,000

revenue	2,782,114	1,585,800	8,862,050	4,281,609	17,511,572
Rev/Cart	\$7.190	\$7.500	\$7.500	\$7.190	\$7.372
Profit/Cart	Not available	\$2.606	\$4.015	\$2.976	\$3.554*
1996 MSA	B&W	LTR	MO	RJR	TOTAL
volume	430,995	202,025	1,154,000	602,917	2,389,937
op. income	801,640	698,200	4,093,000	1,468,000	7,060,840
revenue	2,855,773	1,457,408	8,043,380	3,994,925	16,351,486
Rev/Cart	\$6.626	\$7.214	\$6.970	\$6.626	\$6.842
Profit/Cart	\$1.860	\$3.456	\$3.547	\$2.435	\$2.954

Notes:

Philip Morris (MO) sales data for 1997 and 1999 from 2085615948 letter from Michael Livigni (MO) to independent auditor

Lorillard (LTR) income for 1996-1999 from 12/15/00 Lorillard fax, 1996 data does not match MSA Exhibit Q.

B&W 1997 data is based on attachment 6 of Independent Auditor's final report for 1999 and does not match exhibit Q.

Other volume data for 1997-99 based on same report.

Philip Morris updated 1996 profits from MSA Exhibit Q.

1996 B&W volume from S&P via CRS 98-506 E, price assumed equal to RJR

Profits are calculated according to the methodology employed by the MSA. For 1997 and 1998 profits per carton are based on three firm data. 2004 results based on 10-k data.

Table 11  
Net Prices of OPM Cigarettes

YEAR	3-FIRM AVERAGE NET PRICE	PHILIP MORRIS INTERNATIONAL
2003	\$14.00	\$4.34
2002	\$15.41	\$4.06
2001	\$15.19	\$3.93
2000	\$14.02	\$4.04
1999	\$12.90	\$4.15
1998	\$8.54	\$3.98
1997	\$7.18	\$3.92
1996	\$6.92	\$3.93
1995	\$6.60	\$3.82

Data: Sales data for 2000-2003 can be used to calculate per pack prices directly, but for 1997 and 1998, and for 1999 for Lorillard and Philip Morris, sales revenue includes the value of various coupons and cash rebates which are then treated as a cost. For example, if a carton of cigarettes is priced at \$22.50 but the wholesaler receives a \$5.00 rebate the more recent data will record a price of \$17.50 while the older data will record a price of \$22.50 and an expense of \$5.00

The way I adjust for these data is by subtracting Federal Trade Commission data for total industry promotional allowances, coupons, and retail point of sale promotions from OPM sales for 1997 and 1998. For 1999 I allocate to Philip Morris and Lorillard a share of these price discounts based on their proportion of OPM sales, using the MSA market share data presented by Patricia Tilton of Price Waterhouse in her New York testimony (in *Freedom Holdings v. Spitzer*) but adjusting for the fact that her report allocates approximately 100.4% of the OPM market to the four firms in 1999. (She also has a smaller error for 2001.) I calculate company-by-company average prices and then weight by sales. Data for Brown & Williamson is available for 1999-2003 through the Reynolds American merger documents. Including B&W the four-firm prices for 2003, 2002, 2001, 2000, and 1999 were \$13.75, \$15.08, \$15.03, \$13.69, and \$12.62.

Table 12  
Proposed Cigarette Tax Increases, 2005

State	Proposed Increase	New Proposed Tax
Arkansas	\$2.10	\$8.00
<b>California</b>	<b>\$5.00</b>	\$13.70
<b>Connecticut</b>	<b>\$7.40</b>	\$22.50
Hawaii	\$0.90	\$14.90
<b>Illinois</b>	<b>\$7.50</b>	\$17.30
<b>Indiana</b>	<b>\$16.40</b>	\$22.00
<b>Iowa</b>	<b>\$10.00</b>	\$13.60
<b>Kansas</b>	<b>\$5.00</b>	\$12.90
<b>Kentucky</b>	<b>\$7.50</b>	\$7.80
<b>Maine</b>	<b>\$5.00</b>	\$15.00
<b>Maryland</b>	<b>\$5.00</b>	\$20.00
<b>Minnesota</b>	<b>\$5.40</b>	\$10.20
<b>New Hampshire</b>	<b>\$5.20</b>	\$10.40
<b>North Carolina</b>	<b>\$11.50</b>	\$13.00
<b>Ohio</b>	<b>\$7.50</b>	\$13.00
<b>South Dakota</b>	<b>\$10.00</b>	\$15.30
Tennessee	\$2.70	\$4.70
<b>Texas</b>	<b>\$10.00</b>	\$14.10
<b>Washington</b>	<b>\$6.00</b>	\$20.30
<b>West Virginia</b>	<b>\$10.00</b>	\$15.50

Source: Renee M. Covino, "The Tax Burn Continues", tobonline.com, May/June 2005. States bolded are the ones for which this year's proposed *increase* in the state excise tax exceeds the per carton amount paid by OPMs under the MSA. Kentucky's tax had already passed at the time the table was published.

Table 13

## Estimated Marginal Costs, 2003

Company	No NPM Adj	NPM Adj
Philip Morris	\$4.46	\$4.96
Lorillard	\$4.67	\$4.15
RJ Reynolds	\$4.61	\$6.53
Brown & Williamson	\$4.66	\$4.46
Commonwealth	\$3.91	\$3.27
Liggett	\$3.86	\$3.21
Grandfathered SPM below exemption	\$0.00	\$0.00
Non-Exempt SPM	\$3.94	\$3.26
Hypothetical NPM, increasing volume in current states	\$0.78	\$0.78
Hypothetical NPM, entering non-ASA state at large volume.	\$1.75	\$1.75
Hypothetical NPM, entering non-ASA state at small volume	\$4.67	\$4.67
Hypothetical NPM, ASA state	\$4.67	\$4.67

The “Hypothetical NPM entering a non-ASA state at large volume” is assumed to sell in 20 percent of the country (states weighted by MSA share). None of the states have passed the allocable share amendment. The company assumes that after it has entered the new state its sales in each state will be in proportion to the states’ MSA shares. It is calculating its marginal costs of entering an ASA state with a 5 percent MSA share. NPM amounts are MSA escrow payments; other numbers are MSA taxes. Assumes attorneys general will win disputes with SPMs re General Tobacco and withheld SPM payments will actually be made.

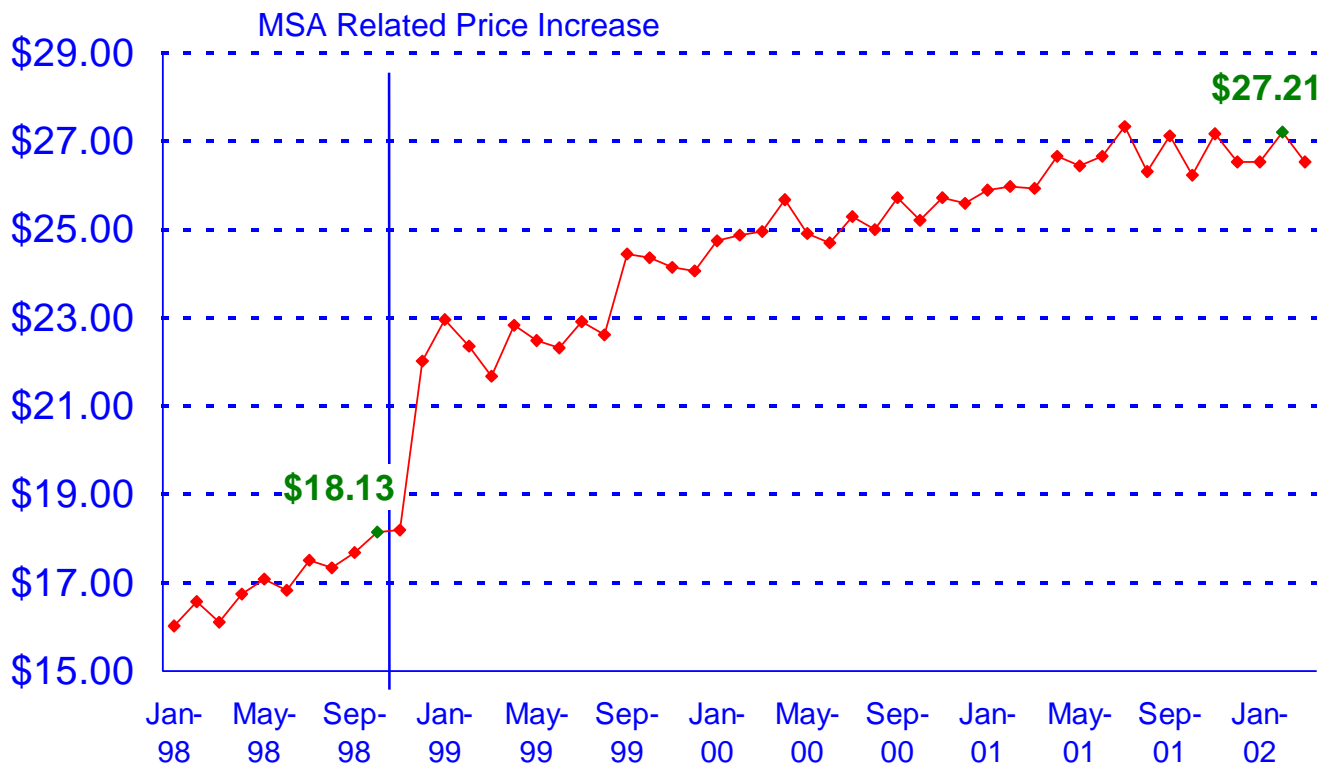
## Percentage of Payments Actually Paid, 2004

Company	Percentage Paid	Dispute Accounts/Unpaid
Philip Morris	100	0
Lorillard	100	0
Reynolds American	100	0
Commonwealth	100	37
Liggett	71	56
Beckenton	2	98
Farmers	100	0

“Percentage paid” includes all amounts placed into dispute accounts. “Percentage disputed” includes all amounts *not* paid into undisputed accounts. The latter column thus understates the amounts in dispute; for example Liggett and Commonwealth have disputed their entire 2004 payments.

Figure 1  
Average Net Carton Price to Consumers

The Average net carton price to consumers has increased 50+% since the MSA

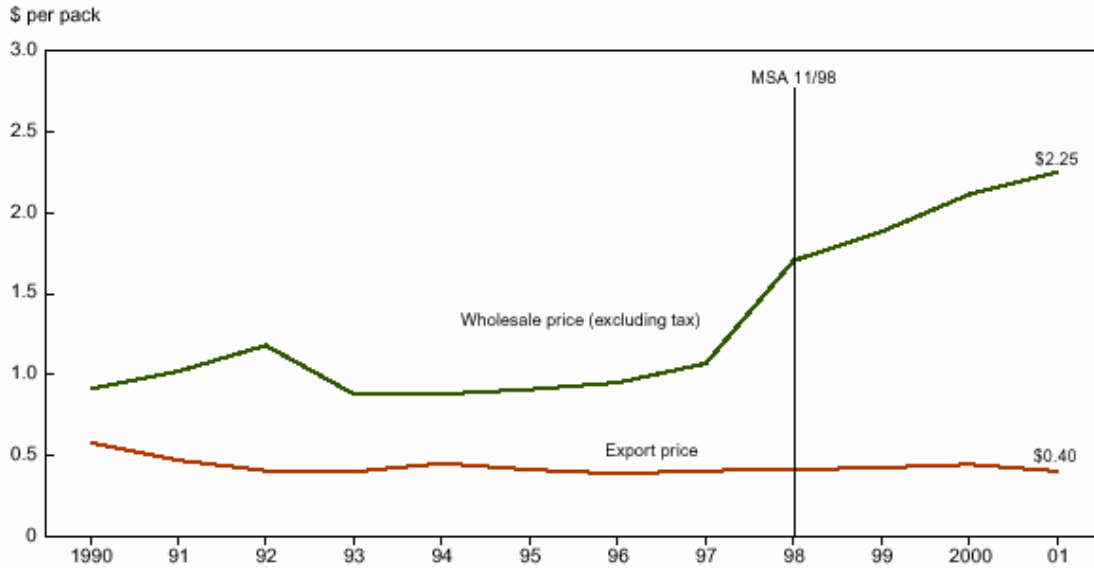


Source: IRI, as reported in B&W finance presentation, Montreal, June 2002.

Figure 2

Premium Cigarette List Prices and Export Prices

**Cigarette prices, 1990-2001**



Source: *Tobacco Situation and Outlook Report*, Economic Research Service, USDA.

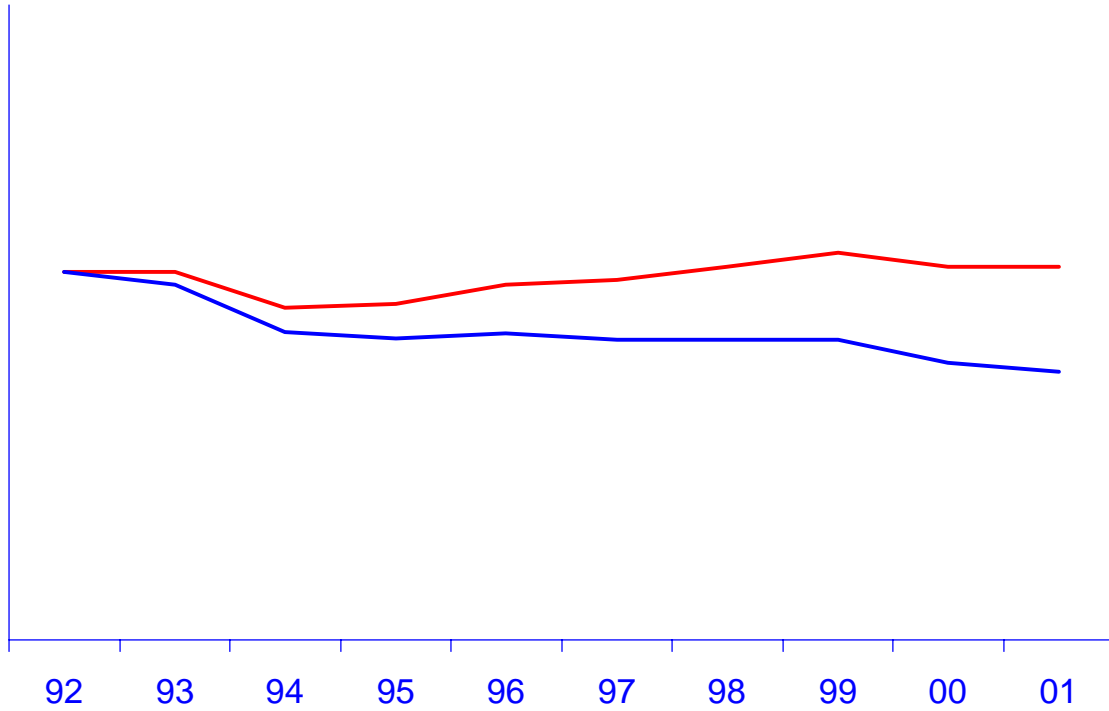
- Cigarette prices surged 45 cents per pack on November 16, 1998, the day the Master Settlement Agreement (MSA) was signed. Cigarette manufacturers raised prices to cover the cost of the settlement.

Source: U.S.D.A. "Trends in the Cigarette Industry after the Master Settlement Agreement" by Thomas C. Capehart, Jr., TBS-250-01, October 2001. The stable export price is an indicator that the competitive domestic price would have remained roughly flat. The increase in wholesale price is partly attributable to the MSA, partly to increased profit margins, and partly to increases in couponing.

Figure 3

Production Costs Do Not Account for Price Increases

B&W USA's Product Cost per Unit aggressively managed, even with declining volume



Source: B&W Montreal finance presentation, slide 35. Top line is nominal (actual dollar) production costs. Bottom line is constant (1992) dollars.

Figure 4  
Marlboro Price Gaps



Source: Written direct testimony of David R. Beran, U.S. v. Philip Morris et.al., Civil Action No. 99-CV-2496 (GK), p. 133.

## Appendix

Data and assumptions for MSA-related payments, 1999-2003.

### (1) Data

Unit sales of the OPMs and NPMs for each year were inferred from the Tilton report in Freedom Holdings. However, the additional 14.9 billion cigarettes in the revised federal data for 2001 that were not included in the Independent Auditor's report were added to the calculations made here, as NPM cigarettes.

Profits for Brown & Williamson for 1996 were taken from the MSA. Lorillard and Philip Morris subsequently provided downward revisions of their 1996 profits as initially reported, and those numbers were used here.

Cigarette prices were taken from the attachment 4(c) calculations of the Independent Auditor for various years. I regard the numbers used as *overestimates* of the actual cigarette prices, because for the early years numbers are used that appear to include the value of cash discounts and for the later years the Brown & Williamson numbers used in constructing the price index appear to be out of sync with the numbers of the other firms; perhaps they continued to report sales data including the value of cash discounts. The ratio of the two lines is relevant for determining the amount by which \$300 million must be multiplied to determine the maximum priority that an OPM can have for any NPM adjustment, based on loss of relative market share.

For Minnesota Blue Cross Blue Shield I based the \$57.45 million annual payment estimate on the following reports: Initial payment of \$160 million, 1999 payment of \$79.2 million, total settlement value of \$469 million, annual payments 2000-2003 of \$57 million, rounded to the nearest million.

For Minnesota lawyers, the reported fees were \$466.5 million over three years for the state case and an additional \$100 million plus for the Blue Cross Blue Shield case. I assumed that this total was split into three equal amounts of \$189 million per year for 1997, 1998, and 1999.

For lawyers, the MSA provided for additional lawyers' fees, on top of the basic \$500 million per year, of up to \$250 million for five years. RJR reported that a total of \$626 million had been awarded by February 2002. I allocated this money, without interest, at \$250 million for 1999 and 2000 and the remainder for 2001. There were also some additional, smaller, legal fees under the MSA that I have not included.

Note that "indexed profits" under the MSA index profits to the rate of increase in the MSA index of inflation, which is the maximum of 3 percent and the December to December increase in the Consumer Price Index, and thus overstates the actual inflation-adjusted 1996 profits of the firms.

## (2) Assumptions

I assumed that the excess profits adjustment was calculated by taking 25 percent of the indexed increase in OPM profits and multiplying by the “cumulative state allocation percentage for settling states with state specific finality based on Exhibit A of the MSA”, which the 1999 Independent Auditor Report listed at 91.36648% (all states except Alabama, Arizona, Arkansas, Missouri, and Tennessee), and the Previously Settled States reduction. The amount was then allocated between Lorillard and Philip Morris pro rata based on the amount of increased index profits each had in 1999 and 2000, the two years in which this provision applied.

I assumed that the excess profit calculation had no effect on SPM payments, and that the Previously Settled States reduction did not apply to the SPMs.

I assumed that the SPMs’ payments net of the NPM reduction were equal to their payments without the reduction minus the “NPM adjustment percentage”, which for all years is the maximum of 0 and three times the difference between the NPM market share for the year and the 1997 NPM market share plus two percent. That is, the reduction applied to their payments net of any subsidy due to their grandfathered share rather than gross of their share.

I assumed that the provisions of the MSA for allocating the NPM adjustment were as follows: First, money is used to compensate firms that lost relative market share, for the first 75 million cartons of sales lost relative to 1997 Relative Market Share (share of 1997 OPM sales), at a rate of \$4.00 per carton, times the ratio of the current year’s price index for OPM cigarettes (net of excise taxes and settlement payments), to the previous year’s index. Next, any remaining money is allocated between the four OPMs in proportion to their sales. Third, Philip Morris gives any money it receives to Lorillard until Lorillard has received its pro rata (based on the current year’s sales) of the total NPM adjustment, notwithstanding the priority given to firms that have lost relative market share. However, Philip Morris does not have to give Lorillard more than 100% of Philip Morris’s NPM adjustment.

Since the table only goes through 2003 I do not have to concern myself with how the merger of Brown & Williamson and RJR would affect the allocation of any NPM adjustment among the OPMs (i.e. would the combined company be treated as two separate entities or would it be treated as one). I don’t know how that is being handled.

OPM price per carton data was calculated from forms 10-k for Philip Morris and Lorillard (Carolina Group) and, for RJR and Brown & Williamson, from the amended form S-4 filed with the SEC in 2004 providing financial data pertaining to the merger, and covering results for 1999-2003. OPM costs per carton are the residual of prices, OPM payments, and OPM profits (as calculated by the MSA). I have not investigated the details of how the companies manage to report such different cost numbers each year.

For comparison with 1999-2003 profits per carton, I estimated 1996 profits per carton using MSA profits for 1996 (with the Philip Morris and Lorillard corrections) and assuming that OPM sales were approximately 479 billion units, corresponding to 1997 sales of 475 billion (according to the MSA), plus a 7 billion decline from 1996 (according to the Department of Agriculture) less an attribution of 3 billion of the decline to Liggett, according to its 10-k report. Note that profits in the base year averaged a bit less than \$3.00 per carton while since the MSA profits have averaged a bit over \$4.00 per carton, or comfortably more even after adjusting for inflation.