# TOBACCO SECURITIZATION & PUBLIC SPENDING

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## INTRODUCTION

In 1994 the attorney general of the State of Mississippi filed a complaint against the tobacco industry,[1] beginning the frontal legal assault by state attorneys general on the tobacco industry.[2] Other state attorneys general quickly followed, suing the tobacco industry to stop tobacco companies from selling cigarettes to minors, and to recoup alleged cigarette-related Medicaid expenditures.[3] After extensive negotiations, on November 23, 1998, the "Master Settlement Agreement" (MSA) was agreed to and signed between the major tobacco companies in the United States and forty-six state governments, the District of Columbia, and five United States territories.[4] The MSA is the largest civil settlement in United States history, and settles all legal claims brought by the signatories against the major tobacco companies.[5] At the signing, the tobacco companies involved in the MSA—Brown & Williamson, Lorillard, Phillip Morris USA (now Altria), R.J. Reynolds, Commonwealth Tobacco, and Liggert & Myers—represented nearly 100% of the United States tobacco industry.[6] The tobacco companies agreed to pay the bereaved governmental parties an amount estimated at the time to be $229 billion (nominal dollars) between 1998 and 2025.[7] But note that settlement payments have no end date; payments are to be made

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[1] Comprehensive Settlement Agreement and Release at 1, In Re Mike Moore, A.G., ex rel. St. Miss. Tobacco Lit., Cause No. 94-1429 (Ch. Ct. Jackson, Miss., filed May 1994), http://www.agjimhood.com/images/uploads/forms/comprehensivesettlementagreement.pdf.

[2] Michael Janofsky, *Mississippi Seeks Damages from Tobacco Companies,* N.Y. TIMES, May 24, 1994, at A12.

[3] MASTER SETTLEMENT AGREEMENT (1998), Exhibit D, http://www.naag.org/backpages/naag/tobacco/msa/msa-pdf.

[4] *Id.* at 9, Exhibit A.

[5] *Master Settlement Agreement,* WASH. ST. ATT'Y GEN., http://www.atg.wa.gov/MSA.aspx (last visited Oct. 31, 2012) [hereinafter WASH. ST. ATT'Y GEN.]. The MSA has no legal import at the federal level. Indeed, the federal Justice Department is currently suing the tobacco industry for $289 billion. *See* United States v. Philip Morris USA, Inc., 396 F.3d 1190 (D.C. Cir. 2005) (deciding, 2-1, that the federal government could not use the federal racketeering statutes to seek the $289 billion civil penalty against the tobacco industry, throwing a major stumbling block into the federal governments' case), *aff'd in part and vacated in part*, 566 F.3d 1095 (2010), *remanded by* 566 F.3d 1095 (2010).

[6] MASTER SETTLEMENT AGREEMENT, *supra* note 3, Exhibit K.

[7] U.S. GOV'T AND ACCOUNTABILITY OFFICE, GAO-01-851, TOBACCO SETTLEMENT: STATES' USE OF MASTER SETTLEMENT AGREEMENT PAYMENTS 14 (2001) [hereinafter GAO-01-851].

in perpetuity.[8]

The settlement represents a substantial windfall of billions of dollars to state government's general funds.[9] The expected settlement payments are structured similarly to an annuity, with roughly equal payments paid by tobacco companies annually.[10] The MSA did not place any legal restrictions on the use of funds; therefore annual funds are general revenue to state governments that can be used for any purpose legislated by the state government.[11] Tobacco companies are responsible for directly making MSA payments, but they are allowed to raise the money for payments by raising cigarette prices.[12] The cigarette price increase represents "the equivalent of a per pack cigarette tax."[13] Effectively, the MSA imposes an increase in each state's cigarette excise tax without going through the standard budgetary channel, the legislature, for imposing a tax increase.[14]

States began receiving MSA payments in 1999.[15] Rather than wait to receive the yearly payments, however, some state governments have used their expected future proceeds, and chosen to securitize all or a portion of their expected payments.[16] These states have sold the right to all or a portion of their expected future payments from the MSA in order to receive substantial upfront proceeds from the sale of a securitization bond issue.[17] We analyze the designs and choices of states in securitizing their expected MSA payments by selling tobacco securitization bonds (TSBs), and we describe the nature of the

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[8] MASTER SETTLEMENT AGREEMENT, *supra* note 3, at 56–57; WASH. ST. ATT'Y GEN., *supra* note 5.

[9] WASH. ST. ATT'Y GEN., *supra* note 5.

[10] MASTER SETTLEMENT AGREEMENT, *supra* note 3, at 56–57; WASH. ST. ATT'Y GEN., *supra* note 5.

[11] Walter J. Jones & Gerard A. Silvestri, *The Master Settlement Agreement and Its Impact on Tobacco Use 10 Years Later,* 137 CHEST 692, 695 (2010).

[12] C. STEPHEN REDHEAD, CONG. RES. SERV., RL 30058, TOBACCO MASTER SETTLEMENT AGREEMENT (1998): OVERVIEW, IMPLEMENTATION BY STATES, AND CONGRESSIONAL ISSUES 5 (1999).

[13] W. Kip Viscusi & Joni Hersch, *Tobacco Regulation Through Litigation* 1 (Nat'l Bureau of Econ. Research, Working Paper No. 15422, 2009).

[14] *Id.* at 1, 6.

[15] *Actual Tobacco Settlement Payments Received by the States, 1998–2009*, CAMPAIGN FOR TOBACCO-FREE KIDS (Aug. 10, 2009), http://www.tobaccofreekids.org/research/factsheets/pdf/0218.pdf.

[16] U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-06-502, TOBACCO SETTLEMENT: STATES' ALLOCATIONS OF FISCAL YEAR 2005 AND EXPECTED FISCAL YEAR 2006 PAYMENTS 2 (2006).

[17] *Id.*

securitization transactions from a risk and reward perspective. We also analyze the use of proceeds from securitizations and conduct an empirical analysis of the impact of securitization on tobacco control and prevention spending. Our analysis has important implications for evaluating the MSA, and implications for designing future negotiated settlements implemented through a public budgeting process. The most recent large settlement with substantial, long-term public budgeting implications was the April 2012 $2.5 billion mortgage and foreclosure settlement between state attorneys general and major banking institutions.[18] We believe our analysis of the securitization of MSA payments will provide useful information to policy makers and other stakeholders involved in large, long-term negotiated settlements because they deal with many of the same fundamental public budgeting and finance issues presented by the MSA. We continue the paper with a discussion of the financial obligations in the MSA, and then we describe and analyze tobacco securitization bonds (TSBs).

## I. TOBACCO COMPANY PAYMENTS

The MSA obligates tobacco companies to make yearly payments each April in perpetuity.[19] MSA payments are the total of three legally distinct payments: initial, annual, and strategic contribution fund payments.[20] "Initial payments" were scheduled to begin almost as soon as the ink of the signatories on the agreement dried, or in legal terms, when the "Escrow Court approves and retains jurisdiction over the Escrow Agreement."[21] The initial payments totaled $12.74 billion to be paid in five yearly installments.[22] The "initial payment" was set as a base amount per year at $2.4 billion, with modest annual increases to $2.7 billion in 2003.[23] Each tobacco company's required contribution was based on its market share of cigarettes sold.[24]

[18] Paul Kiel & Cora Currier, *Billion Dollar Bait & Switch*, PROPUBLICA (May 22, 2012, 11:26 AM), http://www.propublica.org/article/billion-dollar-bait-switch-states-divert-foreclosure-deal-funds.

[19] *See* Viscusi & Hersch, *supra* note 13, at 14; *Actual Tobacco Settlement Payments Received by the States, 1998–2009*, *supra* note 15.

[20] GAO-01-851, *supra* note 7, at 14.

[21] *See* MASTER SETTLEMENT AGREEMENT, *supra* note 3, at 55.

[22] *Id.*

[23] *Id.*

[24] *Id.* at 9.

Payments are distributed to the states based on each state's share of the MSA settlement, referred to as the "allocation percentages."[25] Each state received a certain MSA allocation percentage in the settlement.[26] The allocation percentages were negotiated between the states attorneys general and the tobacco companies.[27] The average state allocation percentage is 2.134%, but varies from 0.3414187% for Alaska to 12.7639554% for California.[28] The allocation percentages are reportedly based on Medicaid program and non-Medicaid smoking-related expenditures incurred by each state.[29] In an empirical study, however, allocation percentages are significantly higher in states with a greater share of medical costs and a higher cigarette tax rate.[30]

Most funds from the MSA are annual payments, which have to be paid by April 15th of each year.[31] Annual payments vary from year to year according to a "volume adjustment" and an "inflation adjustment."[32] The volume adjustment adjusts payments downward, while the inflation adjustment adjusts payments upward.[33] The volume adjustment is a function of annual changes in the participating tobacco manufacturers' cigarette shipments for sale in the United States and their share of the United States market.[34] Payments are reduced if the Original Participating Manufacturer's (OPMs) share of the total United States cigarette market decreases or cigarette shipments decline from decreased sales.[35]

It is important to note that cigarette consumption peaked in 1981, and has declined steadily.[36] Since the MSA was executed in 1998, United States cigarette consumption declined from 465 billion to 301 billion, a decline of 35%.[37] OPM cigarette shipments

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25 *Id.* at 64.
26 *Id.* at A-1, Exhibit A.
27 Viscusi & Hersch, *supra* note 13, at 29.
28 MASTER SETTLEMENT AGREEMENT, *supra* note 3, at A-1, Exhibit A.
29 Viscusi & Hersch, *supra* note 13, at 10.
30 *See id.* at 12.
31 MASTER SETTLEMENT AGREEMENT, *supra* note 3, at 56–57.
32 *Id.* at 8, 18.
33 *Id.* at 8, 18, C-1, Exhibit C.
34 *Id.* at 62–63.
35 *Id.* at 69.
36 *Trends in Tobacco Use*, AM. LUNG ASS'N., July 2011, http://www.lung.org/finding-cures/our-research/trend-reports/Tobacco-Trend-Report.pdf.
37 *Id.* at Table Two. *See* Blake Brown & Will Snell, *U.S. Tobacco Situation and Outlook*, N.C. ST. U. (Oct. 2011), http://www.ncsu.edu/project/tobaccoportal/wp-content/uploads/2011/10/Oct-2011-Tobacco-Outlook.pdf.

reported according to the MSA have dropped by 38%, from 409 billion in 1999 to 250 billion in 2011.[38] The cigarette volume adjustment formula reduces the base annual payment by 0.98% of the annual change in cigarette shipments from the base year, 1997.[39] For example, a 10% decline in the major cigarette companies' United States shipments from 1997 to the prior year would produce a 9.8% reduction in MSA payments to the states for that year. The inflation adjustment is set at the greater of an annual rate of 3% or the actual percentage increase in the Consumer Price Index (CPI).[40] The inflation adjustment increases base payments, and offsets lower payments from decreased cigarette sales.[41]

Finally, Strategic Contribution Fund (SCF) payments started in 2008, causing a substantial increase in total 2008 MSA payments, and will run through 2017.[42] SCF payments are subject to volume and inflation adjustments, but are also based on a distinct allocation formula agreed to by a panel of former state attorneys general.[43] The SCF allocation formula is intended to reflect the level of each state's legal contribution to the final settlement agreement.[44]

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[38] *2012-04-05 MSAI Shipments and Total Market 1999–2011*, NAT'L ASS'N OF ATT'YS GEN., http://www.naag.org/backpages/naag/tobacco/msa-payment-info/2012-04-05%20MSAI%20Shipments%20and%20total%20market%201999-2011.pdf/download (last updated Apr. 5, 2012).

[39] MASTER SETTLEMENT AGREEMENT, *supra* note 3, at E-1, Exhibit E.

[40] *Id.* at C-1, Exhibit C.

[41] *Id.* at E-1, Exhibit E.

[42] *Id.* at 57.

[43] LAURA MARTINEZ & ILYSE KRAMER, THE FINANCE PROJECT, TOBACCO SETTLEMENT REVENUES 2 (2012).

[44] *Id.*

**Table One: Actual MSA Tobacco Settlement Payments Received by States 1999–2012**[45]

| Year | Actual Payments* |
|---|---|
| 1999 | $3,817,589,936 |
| 2000 | $5,862,991,841 |
| 2001 | $6,308,159,253 |
| 2002 | $6,923,578,608 |
| 2003 | $5,739,426,367 |
| 2004 | $6,173,832,316 |
| 2005 | $6,261,773,967 |
| 2006 | $5,728,202,643 |
| 2007 | $5,961,424,271 |
| 2008 | $6,855,077,378 |
| 2009 | $7,499,455,904 |
| 2010 | $6,270,007,624 |
| 2011 | $5,918,782,621 |
| 2012 | $6,035,219,577 |
| **Total** | **$85,355,522,306.49** |
| **Average** | **$6,096,823,021.89** |
| **Std. Deviation** | **$827,445,961.47** |

* excluding Florida, Minnesota, Mississippi, and Texas

The actual MSA tobacco settlement payments received by the states from 1999 to 2012 are shown in Table One.[46] The governments received $85.3 billion over the fourteen-year period from 1999 to 2012.[47] Annual payments varied from $3.9 billion in 1999 to a high of $7.64 billion in 2009.[48] The average annual amount is $6 billion per year, indicating that states have received an annual $6 billion windfall from tobacco companies since 1999.[49] The standard deviation of annual payments, however, is

[45] Table One data derived from *2012-04-26 Payments to States Inception thru April 18 2012*, NAT'L ASS'N OF ATT'YS GEN., http://www.naag.org/backpages/naag/tobacco/msa-payment-info/20120426.payments-to-states/link_view.

[46] *See supra* Table One.

[47] *Id.*

[48] Total payments made in 2008 and 2009 increased when SCF payments started. *Id.*

[49] *Id.*

high at $827 million,[50] indicating that the total year-to-year variation in MSA payments is substantial, and may have an impact on public budgets.

While the payments have been substantial, they have been less than what was expected at the time the settlement was signed in November 1998.[51] Table Two[52] compares expected MSA payments to actual payments for the states.[53] At the time the MSA was signed, payments through 2012 were expected to be approximately $110 billion; actual payments have only been approximately $85 billion, a shortfall of 22.57%.[54] Most states lost 20% or more, with Virginia and Tennessee losing the most (24.56%) and Alaska the least (9.61%).[55]

The average annual difference is approximately $1 billion.[56] This is $1 billion in annual revenue states expected to receive that never materialized. A $1 billion shortfall is also important since beneficiaries of a long-term settlement often agree to "capitalize" or "cash-out" of their expected proceeds by taking an up-front sum of money and foregoing future revenues.[57] Beneficiaries agree to exchange a series of promised future payments for one large up-front payment (which is the present value of expected future cash flows), and this is precisely what states are doing when they sell TSBs.[58]

[50] *Id.*
[51] *See generally* MASTER SETTLEMENT AGREEMENT, *supra* note 3, at 102.
[52] *See infra* Table Two.
[53] MASTER SETTLEMENT AGREEMENT, *supra* note 3, at 102.
[54] *See infra* Table Two.
[55] *Id.*
[56] *Id.*
[57] Jody Sindelar & Tracy Falba, *Securitization of Tobacco Settlement Payments to Reduce States' Conflict of Interest*, 23 HEALTH AFFAIRS 188, 190 (2004).
[58] *Id.*

## Table Two: MSA Estimated and Actual Tobacco Settlements for States 1999 - 2012[59]

| MSA States | Estimated Payouts (through 2012) | Actual Payouts (through 2012) | Actual Payouts (%) | Actual-Estimated | Differences (%) |
|---|---|---|---|---|---|
| Alabama | $1,813,976,335.69 | $1,378,750,741.48 | 76.01% | $(435,225,594.21) | -23.99% |
| Alaska | $383,214,924.41 | $346,370,700.71 | 90.39% | $(36,844,223.70) | -9.61% |
| Arizona | $1,654,316,348.99 | $1,339,961,644.98 | 81.00% | $(314,354,704.01) | -19.00% |
| Arkansas | $929,437,338.73 | $721,416,290.45 | 77.62% | $(208,021,048.28) | -22.38% |
| California | $14,326,509,367.59 | $10,817,392,737.94 | 75.51% | $(3,509,116,629.65) | -24.49% |
| Colorado | $1,538,681,237.38 | $1,227,558,388.51 | 79.78% | $(311,122,848.87) | -20.22% |
| Connecticut | $2,083,813,221.39 | $1,665,868,579.08 | 79.94% | $(417,944,642.31) | -20.06% |
| Delaware | $443,882,583.32 | $357,241,972.44 | 80.48% | $(86,640,610.88) | -19.52% |
| Georgia | $2,754,930,369.48 | $2,079,471,661.51 | 75.48% | $(675,458,707.97) | -24.52% |
| Hawaii | $675,544,867.58 | $586,650,913.60 | 86.84% | $(88,893,953.98) | -13.16% |
| Idaho | $407,733,611.93 | $330,021,458.34 | 80.94% | $(77,712,153.59) | -19.06% |
| Illinois | $5,224,016,695.47 | $3,977,192,186.86 | 76.13% | $(1,246,824,508.61) | -23.87% |
| Indiana | $2,289,514,509.39 | $1,795,756,721.10 | 78.43% | $(493,757,788.29) | -21.57% |
| Iowa | $976,130,990.10 | $823,077,923.69 | 84.32% | $(153,053,066.41) | -15.68% |
| Kansas | $935,728,610.92 | $761,632,986.56 | 81.39% | $(174,095,624.36) | -18.61% |
| Kentucky | $1,976,758,331.57 | $1,494,054,532.37 | 75.58% | $(482,703,799.20) | -24.42% |
| Louisiana | $2,531,451,756.28 | $1,974,611,760.73 | 78.00% | $(556,839,995.55) | -22.00% |
| Maine | $863,533,818.46 | $689,174,272.52 | 79.81% | $(174,359,545.94) | -20.19% |
| Maryland | $2,537,180,471.94 | $2,002,826,883.73 | 78.94% | $(534,353,588.21) | -21.06% |
| Massachusetts | $4,533,427,818.07 | $3,537,629,934.43 | 78.03% | $(995,797,883.64) | -21.97% |
| Michigan | $4,884,709,802.31 | $3,717,613,344.18 | 76.11% | $(1,167,096,458.13) | -23.89% |
| Missouri | $2,553,056,082.18 | $1,967,511,370.19 | 77.06% | $(585,544,711.99) | -22.94% |
| Montana | $476,757,794.46 | $391,740,286.23 | 82.17% | $(85,017,508.23) | -17.83% |
| Nebraska | $667,820,714.97 | $523,147,854.62 | 78.34% | $(144,672,860.35) | -21.66% |
| Nevada | $684,602,903.25 | $545,553,981.70 | 79.69% | $(139,048,921.55) | -20.31% |
| New Hampshire | $747,457,147.12 | $587,482,329.95 | 78.60% | $(159,974,817.17) | -21.40% |
| New Jersey | $4,340,391,123.30 | $3,328,058,040.49 | 76.68% | $(1,012,333,082.81) | -23.32% |
| New Mexico | $669,399,285.41 | $533,022,288.56 | 79.63% | $(136,376,996.85) | -20.37% |

[59] Table Two data is derived from *2012-04-26 Payments to States Inception thru April 18*, *supra* note 38. *See generally*, MASTER SETTLEMENT AGREEMENT, *supra* note 3 at 57, A-1, Exhibit A.

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|---|---|---|---|---|---|
| New York | $14,324,349,383.97 | $10,827,141,423.17 | 75.59% | $(3,497,207,960.80) | -24.41% |
| North Carolina | $2,617,801,602.50 | $2,012,597,431.91 | 76.88% | $(605,204,170.59) | -23.12% |
| North Dakota | $410,820,938.34 | $367,841,916.93 | 89.54% | $(42,979,021.41) | -10.46% |
| Ohio | $5,654,198,019.14 | $4,298,954,267.24 | 76.03% | $(1,355,243,751.90) | -23.97% |
| Oklahoma | $1,162,980,124.22 | $976,217,107.24 | 83.94% | $(186,763,016.98) | -16.06% |
| Oregon | $1,288,153,666.93 | $1,043,079,772.79 | 80.97% | $(245,073,894.14) | -19.03% |
| Pennsylvania | $6,450,384,998.40 | $4,904,566,371.77 | 76.04% | $(1,545,818,626.63) | -23.96% |
| Rhode Island | $806,913,266.68 | $638,727,344.33 | 79.16% | $(168,185,922.35) | -20.84% |
| South Carolina | $1,320,360,028.44 | $1,029,497,920.85 | 77.97% | $(290,862,107.59) | -22.03% |
| South Dakota | $391,663,486.42 | $318,088,715.48 | 81.21% | $(73,574,770.94) | -18.79% |
| Tennessee | $2,739,706,997.06 | $2,066,917,641.71 | 75.44% | $(672,789,355.35) | -24.56% |
| Utah | $499,349,624.83 | $436,718,593.57 | 87.46% | $(62,631,031.26) | -12.54% |
| Vermont | $461,522,075.43 | $408,089,267.25 | 88.42% | $(53,432,808.18) | -11.58% |
| Virginia | $2,295,061,280.89 | $1,731,453,920.38 | 75.44% | $(563,607,360.51) | -24.56% |
| Washington | $2,304,616,548.28 | $1,919,447,767.80 | 83.29% | $(385,168,780.48) | -16.71% |
| West Virginia | $994,980,225.69 | $821,056,517.65 | 82.52% | $(173,923,708.04) | -17.48% |
| Wisconsin | $2,325,696,479.91 | $1,820,237,829.87 | 78.27% | $(505,458,650.04) | -21.73% |
| Wyoming | $278,747,098.74 | $234,096,709.60 | 83.98% | $(44,650,389.14) | -16.02% |
| **Total** | **$110,231,283,907.59** | **$85,355,522,306.49** | | **$(24,875,761,601.10)** | **-22.57%** |
| **Average** | **$2,396,332,258.86** | **$1,855,554,832.75** | **79.89%** | **$(1,058,543,046.86)** | **-20.16%** |
| **Std. Deviation** | **$2,994,075,853.72** | **$2,254,008,149.82** | **3.967%** | **$3,624,526,223.61** | **3.940%** |

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## II. TOBACCO SECURITIZATION BONDS (TSBS): RISK & REWARD

Initially governments were content with the notion of receiving their MSA windfall over time. But soon governments realized that they could either wait to receive their expected MSA payments each year or securitize all, or a portion, of the payments and receive a large cash payment upfront.[60] Moreover, by securitizing, they could simultaneously transfer some or all of the risk associated with the future of the tobacco industry to bond investors.[61]

Most states have not sold bonds backed by the MSA.[62] But those states issuing MSA debt, have sold extremely large bond issues.[63] Indeed it is not uncommon for states to securitize future MSA revenue streams for well over $1 billion, as shown in Table Three.[64] Eighteen states (and the District of Columbia) have sold thirty-four TSB issues; fourteen have sold bond issues for over $1 billion.[65]

All of the $46 billion in net proceeds, however, is not new money. Several of the bond issues are at least partial refundings, where some of the proceeds were used to refinance outstanding bonds.[66] Nevertheless, new revenue is often generated as a part of the TSB refunding transaction.

Another justification given for securitization is that the revenue stream from expected MSA payments is risky and fraught with uncertainty. First, annual payments are volatile, and over time, actual receipts will likely be substantially less than expected when the settlement was signed in 1998. As reported above, our figures indicate a shortfall of 22.57%. One major factor is that the consumption of cigarettes in the United States has dropped an average of 3.37% each year from 1998 to 2010.[67] The reduction in consumption is partly due to price increases, anti-smoking campaigns, and the spread of laws

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[60] Sindelar & Falba, *supra* note 57, at 189.

[61] *Id.* at 190.

[62] *See* Glen R. Anderson, *Tobacco Settlement Bonds*, NUVEEN ASSET MGMT, 2 http://www.nuveen.com/Home/Documents/Viewer.aspx?fileId=55948 (last visited Nov. 1, 2012).

[63] *See infra* Table Three.

[64] *Id.*

[65] Anderson, *supra* note 62, at 2. *See infra* Table Three.

[66] *See infra* Table Three.

[67] *See* James Diffley, *A Forecast of U.S. Cigarette Consumption (2011–2030) for the Tobacco Securitization Authority*, IHS GLOBAL INSIGHT (USA), INC. B-1, B-5 (Nov. 17, 2011).

restricting smoking, all of which reduce the revenue stream.[68] While MSA payments are directly a function of cigarette shipments in the United States, and not of United States cigarette consumption, changes in consumption significantly influence future shipments.

Despite the fact that, to date, tobacco companies have not missed a debt service payment, actual MSA payments have been substantially less than original estimates in bond offering documents. Indeed, in each year, actual total state settlement payments have been less than originally expected. The shortfall in 2009 was 11%, or $1.3 billion.[69] From the beginning, the lower payments have mostly been due to the decline in cigarette sales. Cigarette sales are expected to decline further, which will reduce future payments. Moreover, the alleged growth in market share by nonparticipating manufacturers significantly reduced revenues to the states in 2006–2008.[70]

Finally, tobacco companies may ultimately default on their obligations by simply stopping payment, either under duress from bankrupting lawsuits, or simply as a matter of strategic policy. Indeed, the entire MSA revenue stream is subject to substantial uncertainty. Tobacco firms are defendants in many product liability and personal injury legal cases.[71] Compensatory and punitive damage claims in some cases may be in the billions of dollars.[72] An adverse legal judgment against any one tobacco company could force the firm into bankruptcy, and set a devastating precedent, jeopardizing all future MSA payments. As a result, states could find their expected MSA payments

[68] Settlement induced price increases have had an impact on consumption, but less than projections. David M. Cutler et al., *The Economic Impacts of the Tobacco Settlement*, 21 J. POL'Y ANALYSIS & MGMT. 1, 6 (2002) (estimating that the settlement has resulted in an increase of $0.45 per pack); *cf.* Theodore E. Keeler et al., *The US National Tobacco Settlement: the Effects of Advertising and Price Changes on Cigarette Consumption*, 36 APPLIED ECON. 1623 (2004) (demonstrating that the reduction in actual cigarette consumption has been muted due the increase in tobacco company advertising expenditures).

[69] *See Cigarette Company MSA Payment Withholdings*, CAMPAIGN FOR TOBACCO-FREE KIDS (July 20, 2010), www.tobaccofreekids.org/research/factsh*eets/pdf/0293.pdf*.

[70] *See* ERIC LINDBLOM, *Cigarette Company MSA Payment Withholdings*, CAMPAIGN FOR TOBACCO-FREE KIDS (Apr. 28, 2008), http://staging.tobaccofreekids.org/research/factsheets/pdf/0293.pdf.

[71] *See* Robert L. Rabin, *A Sociolegal History of the Tobacco Tort Litigation*, 44 STAN. L. REV. 853, 857–58 (1992); *see also* Lynn Mather, *Theorizing about Trial Courts*, 23 LAW & SOC. INQUIRY 897, 903–04, 908 (1998).

[72] Viscusi & Hersch, *supra* note 13, at 24.

evaporating overnight.

### Table Three: Tobacco Securitization Bonds Sold by States and the District of Columbia[73]

| STATE | ISSUER | DATE OF ISSUE | PERCENT OF REVENUE SOLD | PAR VALUE | NET PROCEEDS | ACTUAL USE OF FUNDS |
|---|---|---|---|---|---|---|
| AK -1 | Northern Tobacco Securitization Corporation | Oct-00 | 80.00% | $116,050,000 | $112,326,655 | 3, 4 |
| AK -2 | Northern Tobacco Securitization Corporation | Aug-01 | 80.00% | $126,790,000 | $122,589,306 | 3, 4 |
| AK -3 | Northern Tobacco Securitization Corporation | Aug-06 | 80.00% | $411,987,860 | $408,360,730 | 2, 3 |
| CA - 1 | Golden State Tobacco Securitization Corporation | Jan-03 | 56.57% | $3,000,000,000 | $2,889,472,036 | 7 |
| CA - 2 | Golden State Tobacco Securitization Corporation | Sep-03 | 100.00% | $2,572,285,000 | $2,500,041,144 | 1 |
| CA - 3 | Golden State Tobacco Securitization Corporation | Aug-05 | 100.00% | $3,565,715,102 | $3,525,972,266 | 1, 2 |
| CA - 4 | Golden State Tobacco Securitization Corporation | Mar-07 | 100.00% | $4,702,955,549 | $4,678,756,253 | 1, 2 |
| DC - 1 | D.C. Tobacco Settlement Financing Corporation | Mar-01 | 100.00% | $521,105,000 | $503,970,566 | 2 |
| DC - 2 | D.C. Tobacco Settlement Financing Corporation | Aug-06 | 100.00% | $248,264,046 | $245,260,312 | 3 |
| IA - 1 | Iowa Tobacco Settlement Authority | Jan-01 | 78.00% | $644,245,000 | $637,016,602 | 3 |
| IA - 2 | Iowa Tobacco Settlement Authority | Nov-05 | 78.00% | $888,200,389 | $879,714,308 | 1, 2 |
| IL - 1 | Railsplitter Tobacco Settlement Authority (IL) | Dec-10 | 100.00% | $1,510,066,579 | $1,499,518,256 | 1 |
| LA | Louisiana Tobacco Settlement Financing Corporation | Jan-01 | 60.00% | $1,202,770,000 | $1,173,506,376 | 4, 5 |
| MI - 1 | Michigan Tob Settlement Fin Auth Tob Settlement Asset Backed Rev | May-06 | 13.34% | $490,500,589 | $485,765,887 | 3 |
| MI - 2 | Michigan Tob Settlement Fin Auth Tob Settlement Asset Backed Rev | Aug-07 | 24.11% | $508,222,791 | $505,144,739 | 1, 3, 4 |
| MI - 3 | Michigan Tob Settlement Fin Auth Tob Settlement Asset Backed Rev | Jul-08 | 24.11% | $205,752,097 | $204,000,709 | 1, 2, 3, 4 |

[73] The data in Table Three is derived from Individual Bonds Offering Statements and States' Comprehensive Annual Financial Reports, on file with author.

| | | | | | | |
|---|---|---|---|---|---|---|
| **MN** | Tobacco Securitization Authority | Nov-11 | 100.00% | $784,154,678 | $778,956,613 | 1, 2 |
| **NJ-1** | New Jersey Tobacco Settlement Financing Corporation | Aug-02 | 100.00% | $1,801,455,000 | $1,737,016,674 | 1 |
| **NJ- 2** | New Jersey Tobacco Settlement Financing Corporation | Mar-03 | 100.00% | $1,659,170,000 | $1,643,002,995 | 1 |
| **NJ- 3** | New Jersey Tobacco Settlement Financing Corporation | Jan-07 | 100.00% | $3,840,512,307 | $3,820,213,946 | 2 |
| **NY - 1** | New York Tobacco Settlement Financing Corporation | Jun-03 | 50.00% | $2,310,705,000 | $2,270,216,698 | 1 |
| **NY - 2** | New York Tobacco Settlement Financing Corporation | Dec-03 | 100.00% | $2,359,692,171 | $2,334,979,366 | 1 |
| **NY - 3** | New York Tobacco Settlement Financing Corporation | Mar-08 | 100.00% | $232,671,130 | $230,942,948 | 2 |
| **NY - 4** | New York Tobacco Settlement Financing Corporation | Jun-11 | 100.00% | $959,195,000 | $954,049,089 | 2 |
| **OH** | Buckeye Ohio Tob Settlement Fing Auth | Oct-07 | 100.00% | $5,531,594,541 | $5,439,231,603 | 4 |
| **RI** | Rhode Island Tobacco Settlement Financing Corporation | Jun-02 | 100.00% | $685,390,000 | $650,688,989 | 1, 2 |
| **SC - 1** | SC Tobacco Settlement Revenue Management Authority | Mar-01 | 100.00% | $934,530,000 | $910,390,041 | 3, 5, 6 |
| **SC - 2** | SC Tobacco Settlement Revenue Management Authority | Jun-08 | 100.00% | $275,730,000 | $264,965,211 | 2 |
| **SD** | SD Educational Enhancement Funding Corporation | Sep-02 | 100.00% | $278,045,000 | $270,904,789 | 4 |
| **VA - 1** | Tobacco Settlement Fing Corp VA | May-05 | 25.00% | $448,260,000 | $435,096,003 | 6 |
| **VA - 2** | Tobacco Settlement Fing Corp VA | May-07 | 50.00% | $1,207,908,612 | $1,200,823,761 | 2, 6 |
| **WA** | Washington Tobacco Settlement Authority | Nov-02 | 29.20% | $517,905,000 | $501,266,996 | 1 |
| **WI** | Badger Tobacco Asset Securitization Corporation | May-02 | 100.00% | $1,591,095,000 | $1,575,826,971 | 1 |
| **WV** | Tobacco Settlement Fin Auth West VA Asset Backed | Jun-07 | 100% | $911,141,503 | $903,910,995 | 7 |

| | | | | |
|---|---|---|---|---|
| TOTAL | | $47,044,064,944 | $46,293,899,833 | |
| Average | 80.25% | $1,383,648,969 | $1,361,585,289 | |
| Std. Deviation | 28.63% | $1,370,578,750 | $1,352,741,258 | |
| Median | 100% | $899,670,946 | $891,812,652 | |
| Max | 100% | $5,531,594,541 | $5,439,231,603 | |
| Min | 13.34% | $116,050,000 | $112,326,655 | |

Note: Use of funds classification:
1. Unrestricted General Fund Use/General Fund Funding/Deficit Financing
2. Refunding prior tobacco bonds/other bonds
3. Economic development/infrastructure/capital needs
4. Education
5. Health Care
6. Specific Tobacco-related program
7. Other

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State governments have chosen to sell different amounts of their future MSA payments, as shown in Table Three.[74] Several states sold less than 100% of their expected MSA revenue.[75] The states of Alaska, Iowa, Louisiana, Michigan, Virginia and Washington sold between 24% and 80% of their expected settlement payments.[76]

The states of California, Illinois, Minnesota, New Jersey, New York, Ohio, Rhode Island, South Carolina, South Dakota, Wisconsin, and the District of Columbia chose to sell all of their future MSA revenue for the life of the bonds.[77] Some states initially sold less than 100% on their first TSB, and then went back into the market to securitize their entire MSA.[78]

To cash-in on a portion or all of their expected MSA payments, states have turned to securitization.[79] Most securitizations involve taking an illiquid asset, such as a credit card receivable, mortgage loan, or expected settlement payment, pooling it with similar assets, and then issuing securities backed by the expected cash flows from the asset pool.[80] These are commonly referred to as asset-backed securities. The sale of the marketable securities results in transforming the stream of expected (illiquid) cash flows into net proceeds, which is a large, upfront cash flow.

Asset-backed securities have the same basic cash inflows and outflows as most other bonds, but the debt service payments flow from the asset(s) being securitized.[81] This is slightly different than a typical revenue bond, where the revenue generated from a capital project or public enterprise is dedicated to repay the bond issue.[82] The primary difference between a government revenue bond issue and a securitized bond issue is that in the securitization, the government no longer "owns" the cash flows expected to pay debt service.[83] The expected cash flows are, in effect, "sold" to investors for the net proceeds from the

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74 *See supra* Table 3.
75 *Id.*
76 *Id.*
77 *Id.*
78 *Id.*
79 Craig L. Johnson, *The State of the Tobacco Settlement,* 24 PUB. BUDGETING & FIN. 113, 121 (2004).
80 *Id.*
81 *Id.*
82 NOVA EDWARDS, CAL. DEBT & INVESTMENT ADVISORY COMMISSION, ISSUE BRIEF, *www.treasurer.ca.gov/cdiac/reports/tobacco.pdf.*
83 Johnson, *supra* note 79, at 121.

securitization bond issue.[84]

Therefore, in the case of selling tobacco securitization bonds, governments are selling their right to all or some of their future settlement payments. The legal arrangement accompanying the sale of the Golden State Tobacco Securitization Corporation Series 2003A bonds is typical. The state of California established the Golden State Tobacco Securitization Corporation, and then executed a "Purchase and Sale Agreement" to sell future tobacco revenues to the corporation.[85] The language in the section in the bond prospectus describes the sale of future MSA revenue:

Pursuant to the Purchase and Sale Agreement, on the Closing Date . . . the State will sell, transfer, assign, set over and otherwise convey to the Issuer without recourse (subject to the obligations set forth in the Purchase and Sale Agreement) all of its right, title and interest in, to and under the Pledged TSRs.[86]

The purchase and sale agreement goes on to describe the purchase side of the agreement: "the Issuer will pay, to and upon the order of the State, the purchase price of the Pledged TRSs. The purchase price is the net proceeds (after Financing Costs) of sale of the Series 2003A Bonds and the Residual Certificate issued under the Indenture."[87] Table Four[88] lists the use of proceeds for the $3 billion bond issue. Please note that the $2.485 billion on the "transfer to State for General Fund" represents the payment required by the purchase and sale agreement, and the reason behind the transaction.

[84] *Id.*

[85] Molly E. Arnold, *Staff Report*, CAL. INFRASTRUCTURE & ECON. DEV. BANK, Feb. 23, 2010, at 8-1, http://www.ibank.ca.gov/res/docs/pdfs/staff_rpts/8%20Tobacco%20Staff%20Report%20Final.pdf.

[86] GOLDEN STATE TOBACCO SECURITIZATION CORPORATION TOBACCO SETTLEMENT ASSET-BACKED BONDS, SERIES 2003A 83 (2003).

[87] *Id.*

[88] *Id.*

**Table Four: Use of Proceeds**[89]

| GOLDEN STATE TOBACCO SECURITIZATION CORPORATION<br><br>*January 29th, 2003 $3,000,000,000 Tobacco Settlement Asset Backed Bond Issue* | |
|---|---|
| *Transfer to State for General Fund* | $2,485,048,416.50 |
| *Deposit for Liquidity Reserve Account* | $249,240,937.50 |
| *Deposit for Capitalized Interest* | $152,241,425.73 |
| *Deposit for Capitalized Operating Expenses* | $2,491,256.02 |
| *Deposit to Operating Contingency Account* | $450,000.00 |
| *Net Original Issue Discount* | $87,009,684.15 |
| *Underwriting* | $20,655,467.10 |
| *Cost of Issuance* | $2,862,813.00 |
| | **$3,000,000,000.00** |

The net proceeds are the funds the issuer gets to keep, and in most states, transfer to the control of the state's general government. The debt service payable is what the issuer owes the bondholders. The debt service payable captures how much money the TSB issuer owes, but it understates the amount of money the issuer is giving up.[90] Generally, for a revenue bond issue, the annual cash flow supporting debt service repayment is

[89] Table Four data derived from GOLDEN STATE TOBACCO SECURITIZATION CORPORATION TOBACCO SETTLEMENT ASSET-BACKED BONDS, SERIES 2003A, *supra* note 86, at 83.
[90] *Securitizing State Tobacco Settlement Payments Myths vs. Facts*, CAMPAIGN FOR TOBACCO FREE KIDS (Dec. 12, 2002), http://www.tobaccofreekids.org/research/factsheets/pdf/0132.pdf.

greater than the amount of debt service (e.g., debt service coverage is greater than 100%). Debt service coverage will also be greater than 100% on TSBs, and in addition, the legal rights to the revenue stream pledged to repay debt service has been sold, irrevocably, to a third-party that is legally separate and distinct from the general government.[91]

This is different than a traditional enterprise revenue bond, for example, where the government generates revenue by producing a service, retains ownership of the revenue, and appropriates the required debt service payments to bondholders.[92] As long as the government produces the service, it receives revenue; when it stops producing the service, the revenue stops.[93] A TSB issuer, in contrast, does not have to expend funds to produce any service to receive settlement funds.[94] From the issuer's perspective it is free money, and hence the incentive to liquefy the asset as soon as possible to reduce the risk of non-payment, and the willingness to pay a high premium.

## III. TOBACCO SECURITIZATION BONDS: USE OF PROCEEDS AND TOBACCO SPENDING

The large cash infusion represented by securitization became more attractive to governments once they ran into budget problems and recognized that MSA funds were fungible, and could be used for virtually any purpose.[95] During settlement negotiations, many stakeholders believed settlement funds would be used primarily to fund tobacco control, cessation, and prevention programs.[96] Settlement funds, however, were never earmarked exclusively for tobacco programs. In 2000 and 2001, most funds were spent on health care and on other spending (mostly yet to be determined at the time) according to General

[91] *See, e.g.*, THE CALIFORNIA COUNTY TOBACCO SECURITIZATION AGENCY, SERIES 2006 82 (2006) (demonstrating that the average debt service coverage ratio was 1.60 and the revenue stream was sold to multiple underwriters).

[92] *See* CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION, CALIFORNIA DEBT ISSUANCE PRIMER 179 (2005).

[93] *Id.*

[94] *See* Edwards, *supra* note 82, at 2 (discussing how a TSB Issuer only needs to collect the tobacco settlement revenue to which it has acquired rights).

[95] *See* Johnson, *supra* note 79, at 113–25.

[96] Steven A. Schroeder, *Tobacco Control in the Wake of the 1998 Master Settlement Agreement*, 350 NEW ENG. J. MED. 293, 294 (2004); Frank Sloan & Lindsey Chepke, *Litigation, Settlement, and the Public Welfare*, 17 WIDENER L. REV. 159, 215 (2011).

Accountability Office (GAO) information presented in Table Five.[97] By fiscal years 2003 and 2004, with states facing increasing fiscal problems, the largest amount of settlement funding was going to finance budget shortfalls, as high as 44% in 2004.[98] Overall, from 2001 to 2005, 22.9% of MSA funds were allocated to budget shortfalls.[99] By 2005, the states' budget problems lessened, and less was going to cover shortfalls, but more money began to flow into tobacco settlement bond debt service.[100]

[97] LISA SHAMES, U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-534T, TOBACCO SETTLEMENT: STATES' ALLOCATIONS OF PAYMENTS FROM TOBACCO COMPANIES FOR FISCAL YEARS 2000 THROUGH 2005 11 (2007).

[98] *Id.* at 8.

[99] *Id.* at 7.

[100] *Id.* at 11.

**Table Five-a: State Allocations of MSA Payments 2000-2006**[101]

| **Use of Funds** | **2000-2001** | **2002** | **2003** | **2004** | **2005** | **2006 (Expected)** |
|---|---|---|---|---|---|---|
| Health | 38.00% | 37.00% | 24.00% | 20.00% | 32.00% | 32.00% |
| Budget Shortfalls | 0.00% | 20.00% | 36.00% | 44.00% | 4.00% | 2.00% |
| General Purposes | 5.00% | 6.00% | 8.00% | 7.00% | 13.00% | 13.00% |
| Infrastructure | 2.00% | 10.00% | 7.00% | 7.00% | 1.00% | 5.00% |
| Education | 7.00% | 9.00% | 4.00% | 2.00% | 5.00% | 6.00% |
| Debt Service on Securitized Funds | 0.00% | 2.00% | 2.00% | 9.00% | 24.00% | 29.00% |
| Tobacco Control | 6.00% | 3.00% | 2.00% | 2.00% | 5.00% | 5.00% |
| Other* | 42.00% | 13.00% | 17.00% | 9.00% | 16.00% | 8.00% |
| **Total** | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |

* Includes unencumbered funds

[101] Table Five-a data derived from U.S. GOV'T ACCOUNTABILITY OFFICE, TOBACCO SETTLEMENTS STATE ALLOCATIONS OF PAYMENTS FROM TOBACCO COMPANIES FOR FISCAL YEARS 2000 THROUGH 2005, Figure 2 (2007), http://www.gao.gov/assets/120/115580.pdf.

**Table Five-b: Actual Use of Funds 2000-2005**[102]

| Actual Use of Funds | 2000 - 2005 |
|---|---|
| Health | 30.00% |
| Budget Shortfalls | 22.90% |
| General Purposes | 7.10% |
| Infrastructure | 6.00% |
| Education | 5.50% |
| Debt Service on Securitized Funds | 5.40% |
| Tobacco Control | 3.50% |
| Other** | 7.80% |
| Unallocated | 11.90% |
| **Total** | 100% |

** economic development, social services, rainy day funds, tax reductions and payments for tobacco growers

While some states have used bond proceeds to meet basic public policy funding priorities, such as education and economic development, no state has used bond funds exclusively for tobacco prevention and control.[103] Most states have used their TSB proceeds to reduce their operating budget deficits directly or indirectly (by reducing their debt service costs through debt refunding, for example). While in most states TSB issues make up only a small portion of the states' fiscal year revenues, most bond issues cover 100% of the operating budget deficit; moreover, bond proceeds cover multi-year operating budget deficits in many states.[104] From the perspective of a state issuing MSA securitized bonds, TSB proceeds present a windfall that can erase their fiscal year budget problems. Most bond sales of a billion dollars or more have been new issues that directly reduced the budget

[102] Table Five-b data derived from *Id.* at Figure 1.

[103] Virginia used most of the funds from its 2005 TSB issue to fund an endowment managed by the Tobacco Indemnification and Community Revitalization Commission for long-term economic development projects in the states' tobacco farming regions. *See* Matthew Vadum, *Virginia: Tobacco Bonds*, THE BOND BUYER 2005 WLNR 8288974 (May 19, 2005).

[104] *See, e.g.* Joe Kimball, *Minnesota Sells Tobacco Bonds to Raise $640 Million Needed in Budget Fix*, MINN. POST (Nov. 17, 2011), http://www.minnpost.com/political-agenda/2011/11/minnesota-sells-tobacco-bonds-raise-640-million-needed-budget-fix (showing Minnesota selling Tobacco bonds to cover budget deficit).

deficit. Other bond issues have provided indirect budget deficit coverage by refinancing existing debt at a lower rate, and transferring the savings to the general fund.[105]

In the remainder of this section we use an empirical model to test the impact of tobacco securitization on tobacco control, cessation, and prevention spending. We attempt to answer the question: Do states that securitize their MSA payments spend less public money on tobacco control, cessation, and prevention than states that do not securitize?

We model each state's tobacco control, cessation, and prevention spending (hereinafter referred to as "anti-tobacco spending") as a function of securitization, and several financial, demographic, and economic control variables.[106] Variable descriptions, sources of data, and descriptive statistics are provided in Tables Six and Seven.[107]

[105] Elizabeth Albanese, *Tobacco Bonds Could Become 'Gold Mine' in Wake of Refunding Rumors*, THE BOND BUYER 2005 WLNR 11706229 (July 20, 2005).

[106] Frank A. Sloan, et al., *Determinants of States' Allocations of Master Settlement Agreement Payments*, 30 J. HEALTH POL. POL'Y & L. 643, 655–56 (2005) (basing controlling variables on variables that have been used in related empirical studies in the literature, particularly this study).

[107] *See 2012-04-26 Payments to States Inception thru April 18*, *supra* note 38; *Personal Income Per Capita in Current and Constant (2005) Dollars by State: 1980 to 2010*, U.S. CENSUS BUREAU Table 681 (2010); *Resident Population by Sex and Age: 1980 to 2010*, U.S. CENSUS BUREAU Table 7 (2011); *The Fiscal Survey of the States* NAT'L GOVERNORS ASS'N OF ATT'YS GEN. & NAT'L ASS'N OF ST. BUDGET OFFICERS 4, 15 (2011); *Unemployed Workers –Summary: 1990 to 2010*, U.S. CENSUS BUREAU Table 622 (2011); *A Broken Promise to Our Children: The 1998 State Tobacco Settlement 13 Years Later*, CAMPAIGN FOR TOBACCO-FREE KIDS, ix, 103–06 (2011), http://www.tobaccofreekids.org/content/what_we_do/state_local_issues/settlement/FY2012/2011Broken_Promise_Report.pdf. The content of Table .Seven is the result of the author's own research, and data is on file with the author.

**Table Six: Variable Definition and Sources of Information**

| VARIABLE | DEFINITION | SOURCE OF DATA |
|---|---|---|
| Anti-Tobacco Spending ($ Million) | State government anti-tobacco spending | Campaign for Tobacco Free Kids |
| Expected Surplus/Deficit ($ Million) | Appropriated revenues – Appropriated expenditures | Fiscal Survey of the States Publications 2002 - 2011 |
| MSA Payment Received ($ Million) | MSA payment received by States at year t | MSA Payment Information - National Association of Attorneys General |
| Other Tobacco Revenues ($ Million) | Tobacco revenues from sources other than MSA | National Association of Attorneys General |
| Personal Income ($ Million) | Personal Income | U.S. Census Bureau |
| Population age 18- (%) | Percent of state population that is 18 years or younger | U.S. Census Bureau |
| Population age 65+ (%) | Percent of state population that is 65 years or older | U.S. Census Bureau |
| Securitized Tobacco Settlement | State securitized part/all of its tobacco settlement = 1, 0 otherwise | Individual Bond Official Statements |
| Unemployment | Unemployment level | U.S. Census Bureau |

* All dollars are in constant 2002 US dollars.

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**Table Seven: Descriptive Statistics**

| VARIABLE | NO. OF OBS. | MEAN | STD. DEV. | MIN. | MAX. |
|---|---|---|---|---|---|
| Anti-Tobacco Spending ($ Million) | 458 | 13.20527 | 18.28184 | 0 | 134.5 |
| Anti-Tobacco Spending Per capita | 458 | 3.496523 | 3.461561 | 0 | 16.95179 |
| Expected Surplus/Deficit ($ Million) | 458 | 315.3028 | 689.607 | -782.4347 | 5567.946 |
| Expected Surplus/Deficit Per capita | 458 | 73.41128 | 234.3409 | -461.8497 | 4232.007 |
| MSA Payment Received ($ Million) | 458 | 152.7224 | 184.7306 | 14.83046 | 1093.127 |
| MSA Payment Received Per capita | 458 | 30.61301 | 11.74616 | 11.0507 | 81.86544 |
| Other Tobacco Revenues ($ Million) | 458 | 306.7792 | 349.5679 | 7.8 | 1897.086 |
| Other Tobacco Revenues Per capita | 458 | 63.64441 | 37.6725 | 2.26 | 214.6559 |
| Personal Income ($ Million) | 458 | 227,045 | 287,901 | 15,946 | 2,095,939 |
| Personal Income Per Capita | 458 | 40962.3 | 9169.647 | 23131.07 | 71119.32 |
| Population age 18- (%) | 458 | 24.40 | 1.82 | 20.11 | 31.50 |
| Population age 65+ (%) | 458 | 12.83 | 1.64 | 6.07 | 16.27 |
| Securitized Tobacco Settlement | 458 | 0.30131 | 0.4593288 | 0 | 1 |
| Unemployment (%) | 458 | 6.014629 | 2.17223 | 2 | 13.7 |

* All dollars are in constant 2002 US dollars.

** All per capita values are calculated by dividing the variable by population.

Our primary variable of interest is whether the government sold a TSB over our sample period from 2002 to 2011. We directly compare the annual level of anti-tobacco spending in states that sold TSBs and states that did not sell TSBs. We also include several control variables to hold constant factors that may also impact anti-tobacco spending. By controlling for other factors, we can isolate the impact of TSBs. Since securitization proceeds have been used disproportionately for non-tobacco purposes, it is unlikely that securitization will be associated with higher levels of anti-tobacco spending, so we do not expect the test variable, "Securitized Tobacco Settlement," to be positive. Anti-smoking advocates do not typically support securitization, and they believe securitization is unlikely to increase anti-tobacco spending. The Campaign for Tobacco-Free Kids has published several documents critical of securitizing state tobacco settlement payments.[108] In one document they stated:

> States that have securitized settlement payments have eliminated or diminished a stream of future state revenue that could otherwise provide funds for state tobacco-prevention or public health efforts, and have typically failed to allocate any of the securitization revenues to public health tobacco prevention. Even when special public health or tobacco-prevention funds have been established using settlement or securitization payments, the funds often end up being raided for other purposes.[109]

Based on the above statement, securitization should lead to less anti-tobacco spending. On the other hand, if even a small percentage of TSB proceeds are used for anti-tobacco spending, it may result in greater anti-tobacco spending than in states without the large influx of money from TSBs. The average TSB issue is $1.3 billion, which may leave funds available in the general fund for anti-tobacco spending over the intermediate term, even if the majority of funds are not directly budgeted for anti-tobacco programs.

Our dependent variable, anti-tobacco spending, is annual state government tobacco spending as reported by the Campaign for

[108] *Problems with Securitizing State Tobacco Settlements,* CAMPAIGN FOR TOBACCO-FREE KIDS (Dec. 4, 2002), http://www.tobaccofreekids.org/research/factsheets/pdf/0217.pdf; *Securitizing State Tobacco Settlement Payments Myths vs. Facts*, *supra* note 90.

[109] *Securitizing State Tobacco Settlement Payments Myths vs. Facts*, *supra* note 90.

Tobacco-Free Kids.[110] In Model One, anti-tobacco spending is in millions (constant $2002), and in Model Two we use anti-tobacco spending per capita. The empirical results are presented in Table Eight. The model includes forty-six states for years 2002 through 2011. We estimate the model with OLS and control for state and year differences with fixed effects. The data fits both models well, as indicated by the adjusted R squares of 85.38% and 79.38% for Models One and Two, respectively.

**Table Eight: Empirical Model Results**[105]

**Model One:**
**Anti-Tobacco Spending is the Dependent Variable**
(constant $2002 in millions)

| VARIABLE | COEFFICIENT | STANDARD ERROR |
|---|---|---|
| Expected Surplus/Deficit | 0.0028198 | 0.0008848*** |
| MSA Payment | 0.1003396 | 0.0207075*** |
| Other Tobacco Revenues | 0.0034041 | 0.0039875 |
| Personal Income | -0.0000309 | 0.00000785*** |
| Population age 18- (%) | 15.77257 | 138.8644 |
| Population age 65+ (%) | 250.3293 | 200.6517 |
| Securitized Tobacco Settlement | -5.980602 | 2.361474** |
| Unemployment | -0.9567569 | 0.4267382** |
| *****Significant at the 1% level; **Significant at the 5% level** | | |
| **Model F Statistic** | | 44.04 |
| **Prob> F** | | 0.000 |
| **Adjusted R-squared** | | 85.38% |
| **N** | | 458 |
| **No. of States** | | 46 |
| **Years (2002 - 2011)** | | 10 |

110 *State Tobacco-Related Costs and Revenues,* CAMPAIGN FOR TOBACCO-FREE KIDS (Nov. 30, 2011), http://www.tobaccofreekids.org/research/factsheets/pdf/0178.pdf.

105 The content of this chart is the result of the author's own research, and data is on file with the author.

**Model Two:**
**Anti-Tobacco Spending per capita is the Dependent Variable**

| VARIABLE | COEFFICIENT | STANDARD ERROR |
|---|---|---|
| Expected Surplus/ Deficit per capita | 0.0002265 | 0.0003791 |
| MSA Payment Per capita | 0.0813661 | 0.0241558*** |
| Other Tobacco Revenues Per capita | 0.0177339 | 0.0052095*** |
| Personal Income Per Capita | 0.0001797 | 0.000068*** |
| Population age 18- (%) | 57.800 | 36.73 |
| Population age 65+ (%) | 81.90851 | 50.24913 |
| Securitized Tobacco Settlement | -0.4703608 | 0.5327271 |
| Unemployment | -0.3431885 | 0.106606*** |
| *****Significant at the 1% level; **Significant at the 5% level** | | |
| **Model F Statistic** | | 29.37 |
| **Prob> F** | | 0.000 |
| **Adjusted R-squared** | | 79.38% |
| **N** | | 458 |
| **No. of States** | | 46 |
| **Years (2002 - 2011)** | | 10 |

Securitization has a statistically significant, negative effect on the level of real anti-tobacco spending. The coefficient for "Securitized Tobacco Settlement" is -5.9, indicating the states that have securitized, spent on average $5.98 million less on annual anti-tobacco spending. In Model Two we control for population and the coefficient for "Securitized Tobacco Settlement" is not statistically significant. In both models, the coefficients of "MSA Payment" are positive and statistically significant at the 1% level. This indicates that as MSA payments increase, anti-tobacco spending increases in terms of real dollars and per capita.

## CONCLUSION

This paper provides an analysis of the securitization of MSA revenue. We find that securitization has a significant negative effect on the level of public anti-tobacco spending. State governments have issued over $47 billion in TSBs, which are secured by the sale of a portion or all of their expected MSA revenue. TSBs have generated a substantial amount of "new" money for state public budgets. The actual amount of MSA payments received from tobacco companies, however, is 22% less than expected at the time of the settlement. While TSBs enable states to shift some of their exposure to risks associated with the future of the tobacco industry to bond investors, the risk transfer is not costless. TSBs are uniformly large, long-term, and have high transaction costs. Net proceeds on the bond issues are substantially less than gross proceeds.

Though generating windfall proceeds to support additional government expenditures, states have generally not sold TSBs to raise money for anti-tobacco programs. Public health advocates could not have foreseen the budgetary problems states ran into early in the twenty-first century, but by not imposing budgetary control devices such as earmarking settlement proceeds, the opportunity to have the MSA produce even more up-front anti-tobacco spending from securitizing funds has been lost. Moreover, we find empirical evidence that lower levels of real anti-tobacco spending are associated with securitization.