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## **TOBACCO SETTLEMENT BONDS: A LOOK AT THE EFFECT OF SECURITIZATION ON THE CREDIT OF STATES USING CAPITAL APPRECIATION BONDS**

### **Abstract:**

Tobacco Settlement bonds have been issued by several states to obtain early use of funds awarded to them in the Tobacco Master Settlement Agreement (MSA) of 1998. The MSA awarded monies in perpetuity to states to settle claims and lawsuits against the tobacco industry that had been ongoing for over a decade. Nine states, and Washington, DC, Puerto Rico, and Guam, have chosen to cash in on future MSA payments by issuing capital appreciation bonds in order to receive funds immediately and postpone any type of repayment for 55 years. This paper critically analyzes how using capital appreciation bonds backed by diminishing future MSA revenue streams will inevitably lead to default and higher borrowing costs in all bonds for these states and territories.

### **Keywords:**

tobacco settlement bonds, capital appreciation bonds, default, securitization

**JEL Classification:** G11, G18, G35

## Introduction

This paper explores the looming consequences for nine states and three U.S. territories (“the 12”) that issued capital appreciation bonds (CABs) as Tobacco-Settlement bonds. The CABs in question all have the following specs: a) their maturity dates range from 29 to 55 years; b) they are frequently held with no insurance or are insured by a troubled company; c) they have no sinking fund and d) the unusual structure of the CAB allows for compounding of deferred interest until the maturity of the bond. This “perfect storm” has fiduciary consequences for “the 12” as the payback of accumulated interest and principal will range from of 10.41 to more than 1800 times the amount borrowed, leading to the inevitable conclusion that many, if not all of the issuers, will default at some point in the future (Quigley, 2003). While this has serious consequences for the twelve, the other concern rests with the Oppenheimer Rochester Funds which has 25% of its total holdings in these bonds and in excess of \$5 billion in assets. Oppenheimer is carrying these bonds at cost, not the maturing value. For example in the case of New York County’s Tobacco Trust V Bond, the bond is carried at \$3.845 million in value but matures in 2060 for \$70.372 million, an increase of 51.9 times. While this is conservative there is no mention that no sinking fund or provision for repayment exists. The Guilliano Law Firm Securities Arbitration Blog, in March 2011, stated that “Investors suffering losses in the Oppenheimer Rochester Funds may have claims against their stockbrokers or financial advisors for failure to perform due diligence.” This statement followed a loss of 66% of the value in the fund in 2010. The majority of the municipal bonds held in the Oppenheimer Rochester Funds are capital appreciation bonds. This is all in addition to the current arbitrations against these funds for poor risk management during the 2008 financial crisis, per the securities litigation website.

## Background

In November 1998, after more than a decade of lawsuits and arbitration, the Tobacco Master Settlement Agreement (MSA) was reached between the attorneys general of 46 states and the major tobacco companies, ([www.legacyforhealth.org](http://www.legacyforhealth.org)). These tobacco producers, known as the Original Participating Manufacturers (OPM), agreed to settle Medicaid lawsuits and to provide states with money to cover tobacco-related healthcare costs. The OPMs agreed to pay a minimum of \$206 billion over 25 years. To date, part of the monies collected have been used to fund the American Legacy Foundation, an anti-smoking advocacy group, and to dissolve the tobacco industry’s self-serving and discredited institutions: the Tobacco Institute, the Center for Indoor Air Research, and the Council for Tobacco Research (Brescoli, 1986; Greene, 2000; Sullivan, 1996; *Tribune News Service*, 1998). In return for agreeing to the terms of the MSA, cigarette manufacturers were released from past, present, and future tort liability related to damages caused by smoking. Approximately 40 additional cigarette-related companies have signed the agreement since 1998 ([www.legacyforhealth.org](http://www.legacyforhealth.org)).

More recently, however, fewer and fewer states are using the money as it was originally intended, i.e., to promote tobacco prevention and cessation programs and cover the tobacco related medical expenses that had been borne by the states and was the original basis for the lawsuit. According to the Campaign for Tobacco-Free Kids 2011 report on state tobacco prevention spending vs. state tobacco revenues, of the 12 states that issued

capital appreciation bonds, only Alaska currently funds tobacco prevention and cessation programs at the level recommended by the Centers for Disease Control and Prevention ([www.tobaccofreekids.org](http://www.tobaccofreekids.org)). One reason for the downturn in support of this intended funding is the market crash and recession of 2008. When state revenues dropped precipitously, public officials needed a way to balance budgets, complete capital projects, and keep the state agencies running. In other words, they needed cash, and the 1998 settlement did not preclude states from using the money for purposes other than research and education (Podkul, 2014). This led to the imperfect solution of issuing Tobacco Settlement bonds as CABs to increase the immediate influx of cash and postpone any repayment up to 55 years.

### **Tobacco Settlement Bonds**

As noted in *The Economist* (September 7, 2013), “Tobacco-settlement bonds are a tribute both to the inventiveness of bankers and the childlike impatience of politicians.” With forecasts of extended uncertainty in the economy, several states chose to relinquish their future MSA payments in exchange for an immediate inflow of cash to the states’ coffers. To do this, they securitized all of the tobacco proceeds they expected to receive from future settlement revenues, and in return, received a discounted lump-sum payment. Designed by some of the biggest banks and financial institutions in the country, including Barclays, Citigroup, JPMorgan, UBS, Morgan Stanley, Goldman Sachs and the now defunct Bear Stearns, the tobacco settlement CABs are “structured with a bewildering array of maturities, prepayment schedules and other special features that made them easier to sell, but hard for even determined analysts to evaluate and compare” (Walsh, May 4, 2014, *New York Times*). The investment firms made sure to pass on the risk to investors, while at the same time securing fees and commissions.

Capital Appreciation Bonds are municipal securities that do not adhere to long-time fiscal municipal norms and accountability controls (Estes, Fudge, Van Wart, 2014). Unlike regular municipal bonds, which pay interest on a semiannual basis at the coupon rate over their entire life, and are generally issued from 10 to 30 years, CABs are securities “on which the investment return of an initial principal amount is reinvested at a state rate until maturity, at which time the investor receives a single payment representing the face value of the bond and all accrued and compounded interest” (Fudge, 2013). In essence, CABs assign the rights to future income from settlement dollars in return for discounted rights to immediate funds (Estes, 2013; Estes & Sheil, 2015). Since CABs do not pay periodic interest payments like typical municipals bonds, there are neither periodic payments to investors nor sinking fund payments to retire the bonds, and therefore no debt service to report on budgets (Ayala, 2013).

CABs often look attractive to cash-strapped states and municipalities because they are carried on the books at their principal value (the discounted amount at which they are first issued). The purchase price, which is much lower than the ultimate payout, reflects both the risk of a bond maturing in up to 55 years, decreasing revenues supporting the bonds and no sinking fund requirements as well as no regular interest payments to the bondholders. The sucker punch comes at the end on the bonds’ maturity date when the payoff costs and accreted values are factored in; i.e., the face value of the bond (not the discounted amount) and all accrued and accumulated interest (Adelmann, 2013; Lusvardi, 2012). With their long delayed payback (up to 55 years) and their ability to accrue interest on the interest, CABs go from attractive to scary fairly quickly as the cost of the money

received is dwarfed by the money that must eventually be repaid. CABs are often pejoratively described as “surprise” loans because the amount due can be 10 to more than 100 times the size of the original bond (Adelmann, 2013). By contrast, a normal payback for a municipal bond is 2 to 3 times the amount borrowed by the municipal bond issuer.

Mathematically, CABs are similar to zero coupon bonds. The difference, according to the Municipal Securities Rulemaking Board (MSRB), is that the initial amount of funds received by the issuing entity is considered to be the principal amount for a CAB, while the value at maturity is considered to be the principal amount for a zero coupon bond (<http://www.msrb.org/Glossary.aspx>). Fortunately, not all tobacco settlement bonds are issued as capital appreciation bonds. Only the 12 have chosen to utilize CABs as the vehicle to receive immediate funds and they are listed in Table 1. The face amount of the bonds issued is \$22,604,520,000 with only \$573,180,000 received by the states issuing the bonds after the discount leaving a total amount to be repaid of \$67,134,019,000 at maturity. Considering the difference between the funds received and the amount to be paid back at maturity for the total of the outstanding tobacco settlement bonds issued, these twelve states will repay a staggering 117.13 times the amount borrowed. While these CABs represent only a small portion (8.3%) of the total tobacco bonds outstanding—the rest are normal bonds—they represent a very significant liability for “the 12” in the future.

Table 1

State issuance	of Face Value (\$Mils)	Maturity Amount (Mils)	Number of Bonds issued	Discounted Amount Received (\$Mils)	Payback Ratio
Alaska	411.99	537.21	5	1.07	503.47
California	9355.59	20724.17	103	126.07	164.4
DC	248.26	4424.00	4	13.93	317.59
Guam	50.48	164.02	3	2.76	59.49
Iowa	609.05	1365.00	6	40.46	33.74
Michigan	650.40	6751.87	9	3.75	1800.02
New Jersey	3622.21	4717.00	19	27.01	174.67
New York	820.92	2485.15	25	238.81	10.41
Ohio	5531.59	11836.45	22	51.81	228.47
Puerto Rico	195.88	8634.58	2	51.81	166.67

Rhode Island	197.01	2834.18	3	13.37	206.97
West Virginia	911.14	2660.07	2	2.35	1030.7 2
<b>Totals</b>	<b>22604.52</b>	<b>67134.02</b>	<b>203</b>	<b>573.18</b>	<b>117.13</b>

Source: Reuters Data Base, eMAXX

Initially, an investor may believe that the risk for default is mitigated by the insurance on these bonds. While this may normally be true, the selection of the carriers and the problems these carriers are experiencing undermines this assumption. The status of these insurance carriers, shown in Table 2, clearly illustrates the risk to those bonds that are insured. These statistics are for California only; no other states have insured their tobacco settlement bonds. The total insured represents 10.7% of the bonds issued by California and less than .1% of the total outstanding tobacco settlement bonds. This tiny amount is insured by two companies under restructure or bankruptcy and one with a credit rating of only AA-.

Table 2

Insurer	Amount Covered	Issues
AMBAC	\$80,890,000	Filed chapter 11, Nov 8, 2010
AGM	\$96,780,000	Credit rating Aa3
FGIC	\$44,876,000	Under restructure by MD Ins Commissioner

Source: Reuters Data Base, eMAXX

Almost all of the bonds (96.8%) have a call provision, but only 57.1% have a provision for a sinking fund (Estes, 2013). Some bonds include a turbo redemption feature that requires settlement payments not used to pay debt service in any given year be used to accelerate debt retirement (Albanese, 2004). However, the turbo provision also includes a proviso well toward the end of the offering statement that indicates if the state does not redeem the bonds, this failure shall not be considered a default on the bond (Podkul, 2014). Many states and counties set up tobacco settlement agencies to act as remote bankruptcy corporations in an attempt to distance themselves from potential lawsuits and other liabilities arising from activist bondholders, while at the same time using these agencies to transfer funds to state budgetary control. In reality, these faux corporations do not shield the states from liability. To do so, would adversely impact the states' credit ratings. However, the cover that a bankruptcy corporation provides is enough to dissuade many investors from trying to collect. In the case of Niagara County, New York, John Ottaviano,

attorney for the Niagara Tobacco Asset Securitization Corporation, indicated that if someday the bonds default because of a lack of tobacco revenue, there would be no recourse. “These are sophisticated buyers and investors. They knew what they were getting into, and they got tax-exempt money,” (Prohaska, 2014).

Since no money is being set aside to refund or call the bonds, for these bonds to be refunded there would need to be another source of funding sometime in the future. Given the amount required, the percentage needed to support a sinking fund, and the states’ budgetary constraints, the likelihood of refunding the speculative investment is questionable, at best. However, while individual bond holders have little recourse when it comes to refunding, major institutional players and large investment firms are more than willing to play hardball with the states’ credit ratings and integrity. For example, when Niagara County issued CABs in 2005 it received \$6.6 million upfront and agreed to pay back an astonishing \$437 million upon maturity in 2060. By 2014, Niagara County determined that it needed to refinance its tobacco bonds at a lower interest rate, but Oppenheimer Funds filed a lawsuit to block the county from receiving any money for refinancing until the county paid off the investment firm’s riskiest bonds (Prohaska, 2014). The bonds on Oppenheimer’s books were valued at \$1,782,960. The negotiated redemption paid to the company was \$6,887,568.00 on an accreted value of \$12,651,150 for a difference of \$5,763,582. Thus, Oppenheimer was made whole on a very speculative investment. In an article from the *Buffalo News* (October 24, 2014), legislator Clyde L. Burmaster said, “We’re going to do everything we can to pay off those people [Oppenheimer Funds] as long as I’m president of this corporation” [the Niagara Tobacco Asset Securitization Corporation].

### **Looming Default**

Predictions from Reuters and the Wall Street credit agency, Fitch, indicate that the majority of tobacco bonds sold by U.S. states, counties and cities will default if cigarette consumption keeps falling at a 3 – 4 percent annual pace (Gralla, 2012). As another sign of the times, Moody’s Investor Services has placed more than \$20 billion of municipal bonds backed by funds from the MSA under review (January 22, 2013). Moody’s analysts have two concerns: First, is the accelerated decrease in adult U.S. smokers, which is reducing the amount of money the states receive. The second is an ongoing dispute regarding a specific clause in the MSA. The tobacco companies held back some \$7 billion in funds, settling with the states only 54% or \$4 billion of the approximately \$7 billion withheld in the dispute, significantly less than expected by the states. Thus, to retire the securitized settlement payments will require a growing percentage of tobacco sales revenues, which are on a steep and steady decline. Both Virginia and Ohio already have been forced to move funds from their debt reserves in order to meet interest and serial bond repayments. New Jersey set aside 76% of the tobacco-settlement revenue in 2007 to repay investors who bought tobacco settlement bonds. But by 2014, revenues were short and the state could not cover the bonds’ interest and principal payments (Sloan, 2014). If future tobacco shipments continue to decline at this rate, the state of New Jersey will be unable to retire a \$673 million bond, with a tax-free coupon of 4.75% until 2055—21 years late (Farrell, 2011). A recent article by Spencer Jakab in the *Wall Street Journal* stated that on average 40 years ago Americans consumed 4,123 cigarettes annually as compared to 850 today. Further, IHS, a Colorado company that provides support for the decision-making

process of businesses and governments forecasts an annual global decline in cigarette sales of 2.8%, in spite of increasing sales in Russia and China, acknowledging the increasingly steep decent of US sales, the basis for the settlement payments.

### **From securitization to general obligations**

With the increasing inevitability of defaults, some of “the 12” are considering moving their newer issues to general obligations status, thus placing the states directly behind the good faith and credit of the bonds, which could lead to serious problems (Fuerbringer, 2002). According to the Federal Reserve Bank of Boston, “coupled with other indicators, the sale of tobacco bonds for deficit financing may adversely affect a state’s overall credit rating,” (Quigley, 2003). For example, Standard & Poor’s downgraded New Jersey’s taxpayer-backed debt indicating that the “state’s reliance on one-time measures” would add pressure to future budgets (Podkul, 2014).

These issues are further emphasized in a white paper published by the Campaign for Tobacco-Free Kids. “States that use securitization funds to address budget deficits may also have their credit or bond ratings downgraded because securitizing eliminates a substantial future state revenue stream in exchange for a one-time budgetary band-aid that does nothing to address underlying state revenue and expenditure problems” ([www.tobaccofreekids.org](http://www.tobaccofreekids.org)).

States like New Jersey are already grappling with this problem. They increased their pledge of receipts from the MSA to 76%, which helped to improve the credit rating on the revised bond issue to an ‘A’, but at the same time, it drove the state’s credit rating down. S&P downgraded New Jersey to a C credit rating, which has major implications for the state’s ability to borrow money in the future.

### **The Master Settlement Agreement Details**

In the Master Settlement Agreement of 1998, a very complicated formula was devised to determine the amount of annual contribution each state would receive. The payment was dependent on many factors, but was primarily based on the number of cigarettes sold beyond the grandfathered volume calculated as either the highest of the individual company’s individual market share in 1998 or 125% of the individual company’s market share in 1997. The OPMs agreed to pay the states \$206 billion over 25 years from an escrow account.

The payments were predicated upon U.S. smoking patterns, and included a proviso for reduced payments if smoking decreased. This, in fact, has been the case as U.S. smoking has been decreasing steadily since 1998. According to a Gallup poll taken in 2012, the percentage of adults who smoke cigarettes has declined from 25% in 1997 to 20% in 2012, having reached a high in 2002 of 28%.

The reduction in smoking has been dramatic, and has already caused problems for the cash flow to the states, and correspondingly to the bonds, reversing a rising trend when most of the bonds were issued. This trend does not bode well for the solvency of the bonds. For example, in New York, the counties that have “securitized the payments by issuing bonds are receiving about 40 cents on the dollar through 2025 (Prokul, 2014).

States, like “the 12” that securitized their tobacco bonds, are quick to rationalize their decision to accept a greatly reduced lump-sum payment. Richard Cordray, who was Ohio’s

state treasurer in 2007, fully endorsed securitizing the state's tobacco money predicting that with smoking bans and increased cigarette taxes, the tobacco companies might never be able to make the full payments by 2025. However, the logic for securitizing tobacco bonds was shortsighted. Cordray's predictions are starting to come true—tobacco companies might not be able to make full payments by 2025. But that also means that the state of Ohio will have neither the future cash flow to meet existing state obligations nor the ability to retire the debt early, if at all.

### Use of funds

The money received from the MSA was intended for tobacco related health care costs and anti-smoking campaigns. The table below is an indication of how well the states are using the funds for this intended purpose. Even though the agreement on the use of funds is not binding on the states, the intent was clear. The only state or territory of the 12 issuing CAB tobacco settlement bonds that is funding at the levels recommended by the Center for Disease Control and Prevention (CDC) is Alaska. The budget amount for the US in total is only 12.4% of the \$3.7 billion recommended by the CDC in 2013. Table 3 compares the amount received under the MSA to the amount spent then shows the amount recommended by the CDC. Puerto Rico and Guam figures were not available.

Table 3

State	MSA Receipts in \$Mils	Dollars Spent in Prevention	Percentage of Receipts Spent	CDC Recom Spending	Percent of CDC Recom Spent
	1998 - 2012		Spent		Spent
Alaska	\$345.9	\$10.8	3.1%	\$10.2	105.9%
California	\$10,800.5	\$70.0	0.6%	\$347.9	20.1%
Iowa	\$800.2	\$3.3	0.4%	\$30.1	11.0%
Michigan	\$3,618.2	\$1.8	0.0%	\$110.6	1.6%
New Jersey	\$3,322.9	\$1.2	0.0%	\$103.3	1.2%
New York	10,535.8	\$41.4	0.4%	\$203.0	20.4%
Ohio	\$4,183.9	\$ 0.0	0.0%	\$132.0	0.0%
Rhode Island	622.3	\$0.4	0.1%	\$12.8	3.1%
West Virginia	\$800.8	\$5.7	0.7%	\$27.4	20.8%



D.C.	\$531.8	\$ 0.0	0.0%	\$10.0	0.0%
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Source: Campaign for Tobacco Free Kids

States are using tobacco funds for purposes other than prevention and cessation programs. While it is true there is no requirement that the funds be used as intended, it seems only logical that some acknowledgment for the purpose of the money be exercised through clear public disclosure. There are several states that have allocated no funding whatsoever from the billions received to prevention programs. These include New Hampshire, New Jersey, North Carolina and Ohio. Washington has elected to cut its tobacco prevention programs by 90% while Maryland has reduced its prevention programs by 75% for 2013. The most blatant example of the use of the tobacco settlement funds is North Carolina which gave \$42 million of the settlement funds to market tobacco and modernize the tobacco curing process and an additional \$200,000 of the tobacco money to the Carolina Horse Park, an equestrian center near Pinehurst, N.C. (ABC News, July 2013).

### **A Dark Outlook for the Bonds**

The overall rating for the tobacco settlement bonds has been dropping. In California, the bonds are rated BBB+, which is a concern for an upcoming new issuance by the Golden State Tobacco Securitization Corporation (GSTSC). The state director of finance will request the governor to include in the annual state budget an appropriation for the full amount of debt service and operating expenses due in the next fiscal year. Thus, the rating is based on the credit quality of the state of California, whose general obligation bonds are rated 'A-' with a positive outlook by Fitch. This will effectively convert the tobacco settlement bonds to a general obligation bond and insure that their rating will track with that of the State of California's A- with a positive outlook. With revenue from bonds continuing to decline, states are looking for ways to maintain their credit rating on bonds in order to allow refinancing on new issues. This step would place the state of California behind the referenced bonds bypassing the MSA, which makes the revenue from the bonds the sole source of backing for the bonds.

According to HJ Sims Company, a nationwide broker-dealer, Moody's downgraded \$3.5 Million of long term tobacco bonds from Baa3 to a range of B1 through Caa1. This dramatic change in long term bonds could lead to a series of lawsuits against firms like Oppenheimer Rochester Funds, whose tobacco bonds lost 66% of their value in 2010 (Guiliano, 2011). It is not unthinkable that stockbrokers and financial advisors might be sued for failure to perform due diligence. The majority of the municipal bonds held in the Oppenheimer Rochester Funds are capital appreciation bonds, and the fall in their value reflects the downgrades and revised settlement agreement on their value. Compounding the issue of sustainable cash flows is the proposal by President Obama to increase the taxes on cigarettes from \$1.01 to \$1.95 per pack. The result, according to Kenneth Shea, a senior tobacco analyst at Bloomberg, would cut consumption by 12%. When this is added to the already downward slope of cigarette sales it clearly does not bode well for any continuous sustainability of current cash flow.

The simple concept of duration on these mutual funds decline in the event of an increase in interest rates can be calculated by multiplying the duration by the increase in interest rates. This number will approximate the percentage fall in the retail value of the bond. Since a major factor in duration is the annual or semiannual payments received on the bond, and since these bonds have no payments for the life of the bond, the effect of any increase in interest rates would be catastrophic on the two Oppenheimer Mutual Funds holding the majority of these bonds.

For example: if a bond has 40 years until maturity and the interest rates increase by 2%, the fall in the value would be approximately 80%, from the current market value which is less than 15 cents on the dollar. This would reduce the value of the bonds to the neighborhood of \$30 per bond, well below the issue value and force Oppenheimer to mark the bond to its market value. The authors believe that this could have serious legal and regulatory ramifications for Oppenheimer and those states and territories issuing the bonds, forcing full disclosures of the process and consequences of having taken this path to raise capital.

When bonds were first issued, projections of potential payment declines by the tobacco companies seemed to hover around 1.8% per year which reflected slowing cigarette sales. In reality this decline has fallen by just over 4% per year (Podkul and Sleight, 2014). Considering that these capital appreciation bonds have maturities ranging from forty to fifty years, the reserves will run out of money and defaults will be the result. Looking at Table 5 below, the trend is obvious. Projections are made from 2013 on, with 2013 reflecting an estimate of 4% decline plus the 12% prediction of decline as a result of President Obama's cigarette increase of \$.95 per pack (shown in red in the table).

Table 4

Total Cigarettes			Projected Total Cigarettes		
Year	Sold in billions	Percentage Decrease	Year	Sold in billions	Projected Percentage decrease
1997	476	Base Year	2013	225	16.00%
1998	465	2.31%	2014	189	4.00%
1999	435	6.45%	2015	182	4.00%
2000	430	1.15%	2016	174	4.00%
2001	425	1.16%	2017	167	4.00%
2002	415	2.35%	2018	161	4.00%
2003	400	3.61%	2019	154	4.00%

2004	388	3.00%	2020	148	4.00%
2005	376	3.09%	2021	142	4.00%
2006	372	1.06%	2022	136	4.00%
2007	360	3.23%	2023	131	4.00%
2008	323	10.28%	2024	126	4.00%
2009	290	9.20%	2025	121	4.00%
2010	282	6.45%	2026	116	4.00%
2011	274	5.60%	2027	111	4.00%
2012	265	3.28%	2028	107	4.00%
			2029	103	4.00%
			2030	98	4.00%

Source: Tobacco Settlement and Outlook, US Department of Agriculture

With this trend the number of cigarettes sold will be just over 20% of sales from the base year of 1997.

The actual payments set forth in the Master Settlement Agreement are more complicated than a simple drop in tobacco shipments by the original participating manufactures (OPM). While the payments are subject to volume of cigarettes sold, there are some modifications for prior year's operating income and cigarette shipments for the OPM' and inflation.

### Discussion

Is it any wonder that tobacco settlement bonds issued as CABs are sold at deep discounts and carried on the books of the investment banks at their principal value? There is an inherent and obvious risk for both the state and the investor when assumptions are not calculated correctly. For years after the MSA was signed, it was generally assumed and accepted that cigarette volumes would decline slowly, at a rate of less than 2.0% annually. Based on this assumption, California issued \$4.1 billion in tobacco bonds in 2007, and assured investors and the legislature that the debt would be retired on time in 2047. Two years later, cigarette sales in California had dropped 9.3% due in part to stricter antismoking laws and higher taxes. As cigarette sales plummeted, so did tobacco settlement payments, by 16.4%, netting the state \$1.7 billion less than expected (Farrell, 2011).

By November 2010, rapidly falling demand for cigarettes pushed Standard & Poor's to downgrade 51 tobacco bonds in 16 states to junk status. The chief analyst at Herbert J. Sims & Company, has predicted that if tobacco payments continue to decline by 4 percent per year, full-blown defaults will begin in 2024, when Ohio will be about \$350 million short on \$1.1 billion of tobacco bonds scheduled to mature (Larkin, 2014).

## Conclusion

CABs are not, and never will be, a good deal for states, municipalities and investors. They are fundamentally risky financial instruments that seduce public officials into gambling away future revenues for an immediate influx of cash to state coffers. Nowhere in the review of public documents is there any indication or recognition of the oxymoronic assumption of expecting a certain level of tobacco settlement payouts for decades to come, while at the same time, initiating anti-smoking measures to effectively reduce smoking.

With the lump sum netted from the tobacco settlement bonds, "the 12" examined in this paper were able to, in some cases, retire debt, and fulfill a wish list of projects, but at a huge cost to current and future taxpayers. Some of the states mentioned in this paper have had to dig into special tobacco-bond reserves to pay bondholders. Many analysts consider this to be a "technical default because it effectively means the bondholders are being paid with their own money" (Walsh, 2012).

Not only are the tobacco settlement bonds in danger of default, perhaps as early as 2024, as suggested by bond analyst, Richard Larkin and illustrated in Table 4, but several states are actually discussing the possibility of making these tobacco settlement bonds general obligation bonds. This would put taxpayers and the states on the hook for the total value of the bonds, but give a huge boost to those entities holding the bulk of the CABs, such as Oppenheimer Funds. All this does is to remove those monies from the general fund, thereby reducing the money available to meet existing state obligations. Why would states do this?

In discussions with Governors and State's Attorney Generals, Pro Publica found that none of them wanted a bond default "during their watch" (Podkul, 2014). Reasons cited varied from the effect on future borrowing ability and increased interest costs, to damaged relationships with the bond underwriters and bond brokers who handle their new bond issues. Regardless of the logic or reasons given, the probability of a default without some sort of state backed guarantee is high. Any type of guarantee would involve taxpayer funds. Left unattended, these festering CABs will have a detrimental effect on the states' credit ratings, and will mostly likely necessitate a tax increase to pay the costs of a new bond issue to refund the existing tobacco settlement bonds that are outstanding.

Herbert Simon (1916 – 2001), the Nobel prize-winning economist, in his seminal research on organizations, coined the term "satisficing" to describe a decision making process that a group undertakes to solve an organizational problem (Simon, 1956). As soon as the group finds an available alternative to the problem that meets a low-level threshold of acceptability, the group stops searching. The group thereby gives up the possibility for the optimal solution and settles for the expedient solution. It is not a far stretch to say "the 12" that issued Tobacco Settlement bonds as CABs thought they had found the optimal solution to their states' needs. Instead, they capitulated to a "satisficed" alternative based on expediency, too-good-to-be-true packaging by investment firms, and poorly analyzed

assumptions, which will eventually lead to default, and possibly, malfeasance by public officials if alternative solutions are not found.

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