



Issue Brief

By Brigitte Blom Ramsey

The Right Tobacco Tax Rate: Balancing Efficiency and Equity

In the wake of the ever growing budget shortfall, Kentucky's governor has repeatedly proposed an increase in the cigarette tax rate so the state can continue to provide an adequate level of services for programs like education, health care, and public safety. Naturally, public debate has ensued – of course over raising taxes – but, also over the fairness of singling out one commodity to shore up the state budget. First, taxation is the means by which governments provide the services that you and I need and have come to expect. Taxation is necessary, and is the only way to provide services that we can afford as a community but none of us can afford individually, like roads or ambulance services. Second, there are generally agreed upon guiding principles that governments use to arrive at tax rates on various goods and services. **Under the guiding principles of optimal taxation, the cigarette tax rate in Kentucky is too low.**

Why is the cigarette tax rate too low?

The facts are clear: Kentucky has the third lowest cigarette tax in the nation, making smoking a relatively cheap habit.¹ Consequently, we also have the highest smoking rate in the nation.² Our high smoking rate means that we spend comparatively more than other states both directly on smoking-related Medicaid and indirectly through private medical premiums. In addition, high smoking rates are linked to decreased productivity indirectly affecting the state economy. **The cigarette tax rate is too low because it does not cover the full cost that the state incurs both directly and indirectly.**

In fact, it could be said that Kentucky subsidizes tobacco use by not incorporating the full public cost of smoking into the cost of a pack of cigarettes. Consequently, we all pay for the treatment of preventable illnesses related to smoking. This effectively results in the loss and/or diversion of precious state revenue that could be used for other things.

A responsible tax code identifies products and activities, like smoking, that are exceptionally costly to all taxpayers, and taxes those goods at a higher rate. This way people still have the choice to smoke but they are expected to pay for the cost of their smoking habit. Currently, all Kentucky taxpayers pay for health costs related to smoking. It is estimated that smoking costs Kentucky households \$599 annually in smoking-related medical costs.³ Make no mistake; this cost is paid by taxpaying smokers and non-smokers alike.

Medicaid expenditures for smoking-related health problems amount to \$487 million dollars annually (Table 1).⁴ This is a *direct* cost paid by taxpayers. Kentucky's share of this cost is about \$146 million because the federal government picks up the rest. Currently, tobacco tax revenue brings in an average of \$178 million, so one could say that the state Medicaid costs are covered by the current rate. However, the current tax rate does little to compensate for the indirect costs to individuals and businesses in the state.

Table 1: Smoking-Attributable Costs in Kentucky (2004)

	Private Medical Costs	Lost Productivity	Medicaid Costs
Total	\$1.5 billion	\$2.1 billion	\$487 million
Per Pack	\$2.09	\$2.98	\$0.68

Source: Centers for Disease Control and Prevention

Social costs attributed to smoking that are *indirect* are realized in higher medical insurance premiums and lost productivity. These costs are not paid by taxpayers but they are still a burden to individuals and businesses across the state. Smoking-related illnesses are responsible for an additional \$1.5 billion in private medical costs (Table 1).⁵ This results in higher individual medical insurance premiums paid by the self-insured, businesses insuring their employees, and the government with a large sector of public employees and retirees. Smoking also indirectly affects the state's economy through decreased productivity. It is estimated that Kentucky loses \$2.1 billion in productivity annually because of increased absenteeism, time spent on smoke breaks, and injuries and illnesses related to workplace smoking (Table 1).⁶ These losses result in decreased economic activity in the state and make the Commonwealth a less attractive place to do business. **A responsible tax code would account for both the direct and indirect costs of smoking.**

What is an efficient tax rate on cigarettes?

An efficient tax rate on cigarettes is one that adequately covers the social costs of smoking and effectively decreases the rate of smoking in the state. The efficient tax rate on most goods and services generally is one that does not affect demand. However, in the case of tobacco products an efficient tax rate is one that compensates society for the health costs incurred and results in a decrease in the smoking rate in the state.

The most effective way to decrease demand is a steep hike in the price of cigarettes that causes an economic shock – much like the recent skyrocketing price for gasoline that caused us all to think about our driving habits. Because tobacco products are addictive, it is hard to decrease consumer demand and small increases in the price have little effect on consumption. **The increase in price on tobacco products must be significant to decrease demand.**

Studies find that a 10 percent increase in the price of cigarettes results in a relatively small overall decrease in demand. However, there is general consensus that a 25 percent increase in the price of cigarettes decreases smoking by 11 percent overall (Table 2).⁷ It's important to note that youth are much more price sensitive and youth who do not start smoking are much less likely to be smokers as adults. Thus price increases that reduce youth smoking rates create significant long-term cost savings. **When it comes to tobacco, higher increases are more efficient. Therefore a 70-cent increase should be the minimum level adopted.**

In Kentucky, an additional 70 cents for a pack of cigarettes is equal to an increase of approximately 25 percent depending on the pack price in different areas of the state. This is a significant increase in the price of cigarettes and would likely result in an 11 percent decline in the rate of smoking, effectively reducing medical premiums and increasing business productivity. In the long term the decline in the smoking rate would reduce state spending on smoking-related Medicaid. **The proposed 70-cent increase would raise approximately \$237.2 million in state revenue and save countless more in direct and indirect expenditures down the road.**⁸

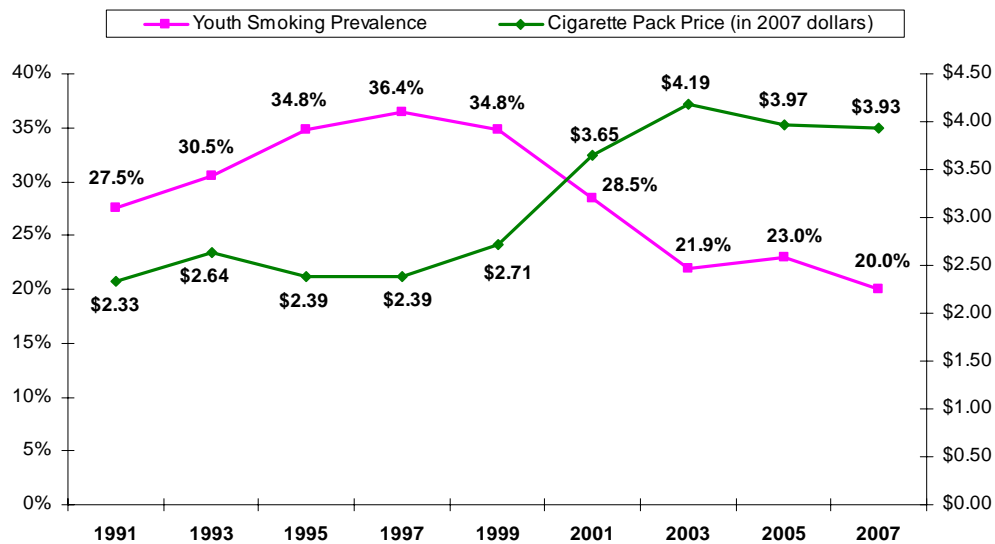
Table 2: Level of Tax Increase and Estimated Decline in Demand

	10% increase	20% increase	25% increase
Youth Smoking Rates	6.5	13.0	16.5
Adult Smoking Rates	2.0	4.0	5.0
Combined Decrease	4.0	8.0	11.0

Source: Campaign for Tobacco Free Kids and Iris Lav (2002)

Chart 1 illustrates the power of cigarette prices on the smoking rate. Cigarette prices began to increase in 1998 as a result of the Master Tobacco Settlement which effectively increased the price of cigarettes across the nation. In addition, many states followed with cigarette tax increases of their own. As a result, the average national cigarette price increased from \$2.39 a pack in 1997 to a high of \$4.19 a pack in 2003. At the same time smoking rates for youth declined from a high of 36.4 percent down to 21.9 percent in 2003.

Chart 1: Decline in Youth Smoking as Cigarette Price Increases



Source: Campaign for Tobacco Free Kids

Equity concerns

Some people have concerns that an increase in the tobacco tax will disproportionately affect low-income people because they are more likely to smoke. This is a valid concern; smokers are more likely to have low incomes. Therefore, low-income smokers spend a higher proportion of their income on cigarettes than wealthier smokers – this is simply a function of disposable income. Therefore, taxes on cigarettes can be considered regressive because the tax is more of a burden on the poor than on the wealthy, at least in the short run.

However, in the long run, if the effective tax rate is high enough that it induces low-income smokers to quit smoking, the tax is arguably progressive.⁹ Low-income smokers, who quit smoking as a result of the increased price, both give up an expensive habit and stop paying the tax, thereby providing themselves with more disposable income than they had as smokers. **Hence, whether cigarette taxes are regressive over time is dependent on the level of taxation and the likelihood that it will induce a decrease in demand for cigarettes.**

It is important to note that in the short run, between the time when a cigarette tax is increased and the time it takes smokers to quit smoking, the higher tax is a burden on low-income smokers. One way that the regressive nature can be offset, while maintaining the incentive to quit smoking, is by enacting a state Earned Income Tax Credit (EITC) that compensates for the increased tax burden on the poor.¹⁰ A state EITC at 3 percent of the federal EITC would fully compensate a pack-a-day smoker for the increased tax on a pack of cigarettes while not diminishing the shock factor of the increased price that will lead to a decline in demand.

How do Kentucky's different cigarette tax proposals measure up?

Recently, three prominent proposals regarding an increase in the tobacco tax rate have been debated in Kentucky. Using the framework of optimal taxation to arrive at the best rate this is how they stack up:

- **A 25-cent increase, as previously proposed by the House of Representatives,** is roughly a 10 percent increase in the cost of a pack of cigarettes. This rate of increase is estimated to result in a mere 4 percent decline in the smoking rate in the state. Although this would increase revenue it would do little to decrease the cost of smoking. *This rate is neither efficient nor equitable because it does little to reduce the cost of smoking in the state – it is merely a revenue producer.*
- **Indexing the cigarette tax rate to just below the rate of surrounding states** is also roughly equivalent to a 10 percent increase in the current tax. Likewise, it would increase revenue but have little impact on the smoking rate in the state. Pegging the cigarette tax rate to surrounding states may be politically preferable because legislators would likely not have to deal with the issue again. *However, like a flat 25-cent increase, the indexed rate is neither efficient nor equitable because it would do little to discourage smoking.*
- **A 70-cent increase, as proposed by the governor** is a nearly 25 percent increase in the price of cigarettes and would likely result in a decrease in the rate of smoking of 11 percent, including a decline in youth smoking of 16.5 percent. *This rate is more efficient and equitable than the lower rates because of the high probability that it will reduce smoking in the state and encourage low-income smokers to give up a costly habit.*

An increase in the cigarette tax rate of 70-cents is the only proposal that is both efficient and equitable.

The best uses for tobacco taxes

The proposed tobacco tax is an excise tax, meaning it is a flat rate based on the quantity of the good purchased – in this case a pack of cigarettes. Unless an excise tax is indexed to inflation, it does not grow with the economy. For this reason, reliance on tobacco excise taxes as general revenue could contribute to Kentucky's structural deficit.

A structural deficit simply means the government has more financial obligations than it can cover with current revenue. Cigarette taxes can contribute to the structural deficit over time because, as an excise tax, the revenue does not keep up with inflation. As an example, if all the revenue from cigarette taxes is earmarked to provide funding for children's health insurance, then over time, as inflation increases the cost of providing for children's health, the revenue from the tax will no longer fully fund the program. New revenue streams would be necessary or the cigarette tax would have to increase to provide the same level of service.

In addition, demand for cigarettes decreases with a natural decline in the smoking rate as smoking becomes less and less socially acceptable. Granted, the natural decline in smoking is small and

therefore the year-to-year decline in the tax revenue would also be marginally small. However, this is still an important consideration when budgeting with cigarette tax revenue.

In the short term, it is appropriate to use new revenues from the tobacco tax to fill the budget gap. However, once the economic down-turn has passed, tobacco tax revenue should be redirected to guard against an exacerbation of Kentucky's structural deficit. Over the long term, continued awareness of the declining nature of the tax is very important to ensuring its proper use. Good long term uses for the tobacco tax include:

- One-time capital projects that can match revenue receipts from year to year;
- Building up the Budget Reserve Trust Fund, often called the Rainy Day Fund;
- Funding tobacco cessation programs to further decrease the rate of smoking; and
- As one part of a broad and sustainable tax system.

Finding the right balance

Kentucky has the third lowest cigarette tax in the nation and the highest smoking rate in the nation. Consequently, we spend comparatively more than other states both directly on smoking-related Medicaid and indirectly through private medical premiums. In addition, high smoking rates are linked to decreased productivity indirectly affecting the state economy.

Policymakers considering raising the tobacco tax must balance a number of factors in setting an optimal tax rate and deciding how to use the revenues. A significant increase in the tobacco tax would result in a decrease in the rate of smoking in the short term and in the long term would decrease state spending on Medicaid, lower private medical premiums, and make the state a more attractive place to do business. A decrease in smoking and resultant savings will only occur if the tax increase is significant. The proposed 70-cent increase is estimated to raise \$237.2 million annually in new state revenue and save countless more down the road.

Finally, policymakers should consider the need to ensure a sustainable and equitable tax system. This suggests using tobacco tax revenues to meet temporary needs rather than annually recurring needs in order to attain long-term fiscal health and to avoid carving a deeper structural deficit in Kentucky's budget. To ensure the equity of the tax structure policymakers would do well to consider funding a state EITC to offset the increased tax burden on low-income people while maintaining the increased pack price on cigarettes that will decrease demand.

Bottom line – Kentucky's tax rate on cigarettes needs to increase significantly to compensate for smoking-related social costs and to effectively discourage smoking. This will take at least a 70 cent per pack increase.

¹ Boonn, Ann (2008). "State Cigarette Tax Rates and Rank, Date of Last Increase, Annual Pack Sales and Revenues, and Related Data." Campaign for Tobacco Free Kids. Available at <http://www.tobaccofreekids.org>. Accessed December 2008.

² Ibid.

³ Lindblom, Eric (2008). "Smoking-Caused Federal & State Government Expenditures And Related Tax Burdens on Each State's Citizens." Campaign for Tobacco Free Kids. Available at <http://www.tobaccofreekids.org>. Accessed December 2008.

⁴ Centers for Disease Control and Prevention (2006). *Sustaining State Programs for Tobacco Control: Data Highlights 2006*. Available at <http://www.cdc.gov>. Accessed December 2008.

⁵ Ibid.

⁶ Ibid.

⁷ Lav, Iris (2002). "Cigarette Tax Increases: Cautions and Considerations." Center on Budget and Policy Priorities. Available at <http://www.cbpp.org>. Accessed November 2008.

⁸ Lindblom, Eric (2008). "Benefits from a 70-Cent Cigarette Tax Increase in Kentucky." Campaign for Tobacco Free Kids.

⁹ Gruber, J. and Koszegi, B. (2004). "A Theory of Government Regulation of Addictive Bads: Optimal Tax Levels and Tax Incidence for Cigarette Taxation," National Bureau for Economic Research. NBER Working Paper No. [8777](#).

¹⁰ Lav, Iris (2002). "Cigarette Tax Increases: Cautions and Considerations." Center on Budget and Policy Priorities. Available at <http://www.cbpp.org>. Accessed November 2008.