

Taxes, Youth Smoking, and the Social Market for Cigarettes

Joseph J. Sabia, United States Military Academy

(co-authored with Daniel Rees, University of Colorado Denver and Benjamin Hansen, University of Oregon)

Extended Abstract

Using data drawn from the Teenage Attitudes and Behavior Study (TABS), we explore the effectiveness of two public policies aimed at curbing youth smoking: cigarette tax increases and increases in the minimum legal purchasing age (MLPA). We find that state cigarette tax increases are associated with significant reductions in youth smoking, though the effects may be somewhat smaller in the post-Master Settlement Agreement period. Difference-in-difference estimates that control for state-specific time-varying anti-smoking sentiment suggest that a \$1 increase in cigarette taxes during the 1999-2007 period was associated with a 5 percent reduction in youth smoking participation and a 15-20 percent reduction in frequent and heavier smoking among 11-to-17 year-olds.

Next, we explore New Jersey's recent experience (April 2006) with an increase in their minimum legal purchasing age. Using a difference-in-difference approach and a synthetic control group design, we find that raising the MLPA from age 18 to 19 reduced smoking participation among 14-to-15 year-olds in New Jersey by 18 percent. This result suggests that restricting access to cigarettes among high school students may have spillover effects to younger youths who obtain their cigarettes in the social market.

Finally, we turn to the national Youth Risk Behavior Surveillance (YRBS) survey to explore how the social market for cigarettes is affected by tobacco policy. Our findings suggest that cigarette tax hikes not only reduce youth smoking, but also appear to influence where and how youths obtain their cigarettes. We find that tax increases reduce smoking among buyers, borrowers, and those who rely on third-party purchases. Moreover, we find that among those who remain smokers, cigarette tax hikes increase the probability of bumming cigarettes or taking cigarettes from family rather than buying cigarettes for themselves.