The Economics of Smoking Bans:

PEERING THROUGH THE HAZE

BY MICHAEL R. PAKKO

Across the nation, communities are debating the efficacy of banning smoking in all public places, including private establishments. The policy issues involved are multidimensional, but the public debate often boils down to public health vs. economic impact. Discerning the economic impact can be difficult, however. Widespread smoking bans are a recent phenomenon; so, data are limited. Many smoking bans are riddled with exemptions or were passed in communities where nonsmoking establishments were already becoming the norm. A case study of Maryville, Mo., serves to illustrate some of the difficulties in gauging the economic impact of smoking bans—demonstrating that the issues remain hazy.

Aggregate and Distributional Effects

In evaluating the economic effects of smoking bans, the focus of policy-makers is often directed toward considering the overall effects of smoking bans on business in a community.[1] The consensus view of these studies is that no definitive impact can be ascertained. Economic activity in some communities appears to decrease; others seem to experience an increase over time. However, the statistical significance of these findings is often weak or lacking.

There are a number of reasons that this finding is not very surprising.

First, these studies are necessarily conducted with limited data. Sample periods are short, and detailed local data are often scarce. Accordingly, it can be difficult to control for the many possible factors that might be relevant to local economic conditions without sacrificing some ability to adequately test hypotheses. On the other hand, the possibility that important variables may have been omitted from an analysis implies that the statistical significance of its findings is often fragile.

More important, basic consumer theory suggests a fundamental reason that the overall effects of smoking bans might be limited: When an option is denied to consumers, they tend to substitute other similar products and services. A smoking ban might lead both smokers and nonsmokers to reallocate their expenditures—perhaps skewing spending patterns temporarily—but with the ultimate effect of leaving total spending on broad categories such as "entertainment" unchanged.

However, the lack of a measurable overall effect can mask some important features of the distribution of gains and losses among specific businesses or types of businesses. The pattern of these effects is not surprising. Proprietors and customers of establishments like bars, bingo halls, bowling alleys and casinos tend to express concerns about business losses.[2] Family-oriented restaurants, chain outlets, fast-food restaurants and take-out establishments, on the other hand, are less likely to be affected. Survey results reveal that bar owners perceive smoking bans to be a particularly significant threat to their business. In one nationwide survey of restaurant and bar owners, 39 percent of restaurant owners expected revenue losses after a smoking ban, while 83 percent of bar owners expected losses.[3]

Nevertheless, as public attitudes evolve, many businesses have found it advantageous to offer smoke-free environments for their customers and employees. Each proprietor makes careful business decisions about how to best fill a niche in the market and make a profit in the process. A government regulation that tries to force the market toward a new equilibrium, however, can impose transitional costs and/or long-term hardship for many individual businesses.

Political Economy

Establishments that cater to a largely smoking clientele are likely to oppose a smoking ban, and those that explicitly cater to a nonsmoking customer base might also be driven to oppose it—to protect their own market niche. Businesses in communities with a relatively high proportion of smokers relative to nonsmokers will be opposed to regional smoking bans, as will businesses and municipalities bordering communities that have not adopted a smoking ban. Many establishments that would be largely unaffected might be inclined to stay on the sidelines of the debate.

Tavern and bar owners have been among the most vociferous opponents of 100 percent smoking bans. As a result, many ordinances include exemptions for stand-alone bars or other establishments with a high proportion of revenue from alcohol sales. In some ordinances, exemptions also exist for casinos, bowling alleys, bingo halls, fraternal organizations, etc.

These political compromises arise in response to the economic pressures that drive particular businesses to be vocal in opposition to smoking-ban ordinances. Those who are most threatened by a public policy proposal tend to be more adamant in their opposition and are more likely to have their interests accommodated in final legislation. Exemptions represent something of a second-best outcome (achieved through the political process rather than through market mechanisms) for mitigating the most economically disruptive effects of a proposed public policy.

The prevalence of such exemptions in existing smoking ordinances raises two important points: First, exemptions reflect underlying economic pressures that provide indirect evidence of the potential adverse effects of comprehensive smoking-ban proposals. Second, since many existing smoking ordinances have included exemptions, data from case studies cannot necessarily be extrapolated to evaluate the effects of more comprehensive or restrictive proposals in other communities.

The Maryville Experience

Many of these principles are illustrated by the case of Maryville, Mo. On June 9, 2003, Maryville implemented an ordinance that prohibited smoking in restaurants. A study of the first year of the smoking ban, recently released by the Missouri Department of Health and Senior Services (DHSS), presents data on taxable sales receipts for Maryville bars and restaurants before and after the implementation of the ordinance.

The authors of the study state at the outset that their findings are consistent with the consensus view of no significant impact. But after noting that taxable sales at eating and drinking establishments in Maryville grew sharply after the imposition of a Clean Indoor Air Law, the authors go on to speculate that "the ordinance may have been beneficial for this area of business."

As seen in the figure, bar and restaurants sales in Maryville clearly rose following the smoking ban.[4] But why?

An investigation of local business developments in Maryville turned up one important event that is relevant to the analysis: the opening of a new Applebee's in Maryville in February 2004. According to local news reports, the Applebee's franchise has been a phenomenal success.[5] Maryville is a fairly small town, with a resident population of 11,000. It has only 37 restaurants and bars. It is quite conceivable that the opening of a new, popular restaurant chain outlet would have a significant independent effect on the Maryville data.

As shown in the figure, this factor clearly accounts for the surge in restaurant and bar sales in the first two quarters of 2004. After adjustment for the Applebee's effect, sales are not different from the long-term trend.[6]

Exemptions to the Maryville ordinance are also a factor to consider. The smoking ban exempts seven establishments by name and also excludes other businesses that receive more than 60 percent of their revenue from alcohol sales. The specific exemptions included in the ordinance suggest that it represented a political compromise that accommodated concerns raised by local business owners.

In the end, the ordinance in Maryville affected very few businesses at all. According to the Missouri Tobacco Use Prevention Program, 70 percent of the restaurants in Maryville were smoke-free well before the ban. Assuming that figure excludes bars that were exempted, the ordinance affected only a handful of restaurants. It would be very surprising to find that the smoking ban had any significant effect on total bar and restaurant sales in Maryville.

This raises one final issue to consider: Existing studies necessarily focus on communities that are among the first to implement smoke-free ordinances. Maryville's ordinance is cited as "the first such ordinance in Missouri to completely prohibit smoking in all restaurants." Such communities are more likely to have a proportionately smaller smoking population and/or fewer businesses that would be adversely affected by a smoking ban. This introduces a "sample-selection bias" that limits the general applicability of existing case studies.

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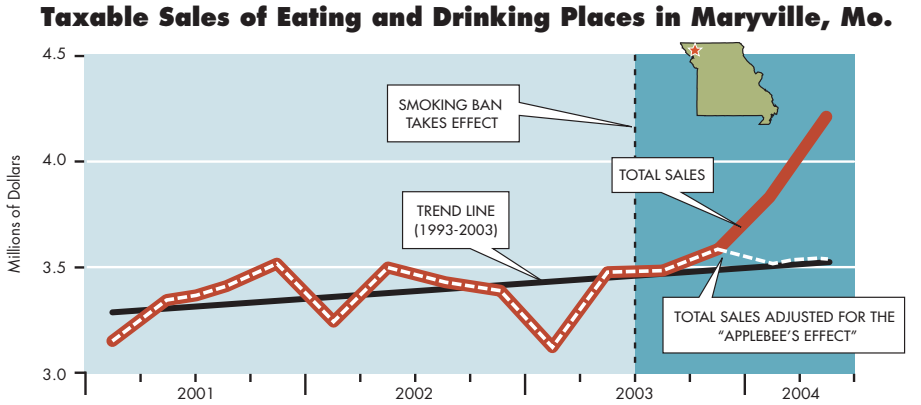
Taxable Sales of Eating and Drinking Places in Maryville, Mo.



The raw data show an increase in sales at eating and drinking places following the introduction of the Maryville smoking ban in 2003. After accounting for the effect of a new Applebee's, however, sales are no different from the long-term trend.

ENDNOTES

1 For a review of this literature that emphasizes the public health perspective, see Scollo et al (2003).

2 Indeed, one recent paper found that a smoking ban in Ottawa, Ontario, reduced sales at bars and pubs by more than 20 percent (Evans, 2005). Another found that a ban in Delaware reduced revenues at racetrack casinos by more than 12 percent (Pakko, 2005b).

3 Dunham and Marlow (2000).

4 Note that the data are quarterly, covering six years—a total of only 26 observations. In a simple regression including a dummy variable for the Maryville smoking ban, the effect of the ban is found to be statistically significant. When data on local and regional economic activity are included in the analysis, however, the positive effect of the smoking ban remains but its statistical significance is eroded. The effect of the smoking ban is not statistically significant in regressions that include bar and restaurant sales for Missouri or in regressions that include the unemployment rate for Nodaway County (Pakko, 2005a).

5 In a report on the restaurant's one-year anniversary, the *Maryville Daily Forum* quotes the vice president of operations for Applebee's parent company as saying that "Maryville has been one of the busiest stores in the country since its opening. We call it our crown jewel." (Goff, 2005).

6 The adjustment is based on a regression equation reported in Pakko (2005a). The addition of other economic variables does not alter the finding that the Applebee's effect dominates the smoking-ban effect for explaining the surge in Maryville bar and restaurant sales in the first half of 2004.

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