The Economic Impact of Indoor Smoking Bans

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I. Background

State or community-wide ordinances banning indoor smoking in public places have gained increased momentum in recent years as clear scientific evidence has established the link between exposure to second-hand smoke (SHS) and increased risk of disease and illness. The CDC (2001) estimates over 3,000 lung cancer deaths and 62,000 deaths from coronary heart disease in adult nonsmokers are attributable to second-hand smoke in the U.S. each year, with estimates of respiratory illnesses affecting hundreds of thousands of persons, and consequent health care costs in the billions. According to recent data cited by the CDC (3/2005), California, Connecticut, Delaware, Maine, Massachusetts, New York, South Dakota and Rhode Island, encompassing 358 municipalities in the U.S., have passed laws prohibiting smoking in virtually all public places, including restaurants and bars.

While no recent literature credibly argues against the dangers of second-hand smoke exposure, there is literature that argues against the need for ordinances banning indoor smoking, primarily based on three factors:

- the *freedom* of smokers to smoke in public places and freedom of workers to choose not to work in places where smoking is allowed;
- the *scientific validity* of studies that cite little or no economic hardship in places where ordinances have banned smoking; and
- the need for *private markets* to accommodate the demands of a diverse clientele, including both smokers and non-smokers. This is closely aligned with what many would term *business rights.*

II. Summarizing Economic Arguments Against Indoor Smoke-free Policies

A. The Quality and Objectivity of the Research

A recent exhaustive review of 97 studies evaluating the economic impact of smoke-free policies led by an Austrialian research team (Scollo, et.al. 2003) and published in a sponsored journal of the British Medical Association looked closely at the quality and funding sources of each research study.

"Quality" was determined by having independent reviewers use four criteria:

- use of objective data,
- use of multiple observation points over time,
- use of statistical methods that control for random events, and
- use of statistical methods that control for economic trends.

In addition, funding sources were considered as being either connected to the tobacco industry or not.

They found:

- One of 31 (3%) tobacco industry supported studies has been published in a peer reviewed journal, compared to 23 of 60 (38%) of non-industry funded studies;

- None (0/31) of the tobacco industry funded studies met all four independent criteria of methodological quality and 84% (26/31) met none of the criteria, while 35% (21/60) of studies that were not supported by the tobacco industry met all criteria.

- Of these 21 non-tobacco funded studies meeting all criteria for quality, **none** (0) reported a negative economic impact of smoking bans, while four (4) reported a positive impact, with business growth occurring after a ban.

- 94% (29/31) of tobacco industry supported studies concluded that there would be a negative economic impact after enactment of a smoke free policy, though none of these studies is based upon the use of objective (i.e., non survey) data. One of 35 studies (3%) funded by a source independent of tobacco industry funding reported a negative impact.

IN SUMMARY, TOBACCO FUNDED RESEARCH LOOKING AT ECONOMIC IMPACT IS LESS SCIENTIFICALLY VALID THAN RESEARCH FUNDED BY INDEPENDENT SOURCES

B. Dunham and Marlow Studies:

Two economists have written extensively on the economic impact of smoking Bans (Dunham and Marlow, 2000) disputing research that suggests no negative effects to smoke-free policies and supporting arguments for free markets to determine appropriate controls. Most recently, results of a seven year old survey of restaurant owners in Wisconsin were published in an economic journal as an "industry overview" (Dunham and Marlow, 2003). The authors highlighted the fear and uncertainty among bar and restaurant owners about the impacts of a possible ban and argued for the freedom of the market to determine what was best to minimize potential economic hardship. An earlier published article contends that sales and tax revenues are inappropriate measures of economic impact because of their inability to distinguish what the authors feel are "differential effects" that might influence some establishments more than others.

The primary difficulties with these studies and with other work undertaken by these two economists are:

1. Their reliance upon survey data that are highly subjective and play to the fear of business owners speculating on unknown consequences or disruptions to their past practice;
2. Their dismissal of economic outcomes such as sales and tax revenues as appropriate measures to determine success or failure of smoking bans;
3. Their inability to control for time using multiple observation points in any of their own economic forecasting;

4. Their use of citations that themselves have no published or in some cases even unpublished (Evans, www.speakup.org/pdf/misc003.pdf, March 1997) sources;
5. The self-stated objectivity of the economists with respect to undertaking scientific research. In the case of Mr. Dunham, he holds a masters degree in business and economics and is president of a self proclaimed "guerrilla economics" consulting company whose marketing logo is "Economics of Crisis and Controversy" (http://www.guerrillaeconomics.com/). In the case of Dr. Marlow, a more centrist economist (Brad DeLong, of the Univ. of California, http://econ161.berkeley.edu/movable_type/2003_archives/000811.html) has characterized him as being among the "Gamma Gradient" of far right supply side economists in our country who represent a fringe element within the Republican party who interpose political philosophy freely with economic theory in expressing their ideas. In a recent letter to President Bush, Dr. Marlow and this group of economists enthusiastically endorsed what they termed the "fiscally responsible" economic policies of this Administration. Yet the letter was signed by only four of seventeen past members and chairs of Republican Councils of Economic Advisors.

IN ADDITION TO LACKING OBJECTIVITY, DUNHAM AND MARLOW HAVE NOT MADE A SCIENTIFICALLY VALID CASE FOR ECONOMIC HARDSHIP AMONG BUSINESSES AFFECTED BY INDOOR SMOKING ORDINANCES, RELYING AS THEY DO UPON SURVEY DATA THAT REQUIRE RESPONDENTS TO PREDICT THEIR OWN ECONOMIC CONSEQUENCES TO CHANGES IN THEIR BUSINESS CLIMATE.

III. Recent Economic Arguments that Support Indoor Smoke-Free Policies

A. A recent issue of Morbidity and Mortality Weekly Reports, an official publication of the Centers for Disease Control and Prevention (CDC), reports on the impact of a smoking ban on restaurant and bar revenues in El Paso, Texas, tracking revenues from 1990 and through the end of 2002, the first year in which the ban occurred. Data were controlled for inflation and seasonal factors. No significant changes in revenues occurred among restaurants, bars or mixed beverage establishments affected by the ban.

Other economic studies, such as that undertaken by the Worker's Compensation Board of British Columbia (2001), identify lower operating costs for businesses operating in a smoke-free environment, including a reduced need for improved ventilation systems, reduced health claims and absenteeism among employees, reduced building insurance and cleaning costs, and other related savings.

Similar results have been found in studies of the influence of a ban in California, communities in Texas, North Carolina, Arizona and Massachusetts and in New York City, also cited in the CDC article or the Canadian Worker's Compensation study. In fact, there appears to be consistent evidence that supports either no effect of a smoking ban on a community's economic health

or an improvement, based on scientific studies that use objective, non-opinion data such as tax or business revenues to evaluate outcomes. In the first year after the smoke-free ordinance took effect in NYC, for example, tax revenues from all bars and restaurants rose 12%. A study published in 2001 by Cremieux and Ouellette found that in Quebec restaurants, anticipated costs of regulating smoking in restaurants were not realized – there was essentially no impact due to infrastructure costs, decreased productivity, or decreased patronage. They concluded that smoking regulations do not impose undue economic hardship on the industry. Another study published in 2002 by Bartosch and Pope came to the same conclusion – no measurable difference in meals tax revenue was found in Massachusetts following implementation of a highly restrictive restaurant smoking policy.

THERE IS NO CREDIBLE EVIDENCE TO SUPPORT THE SOMETIMES PASSIONATELY EXPRESSED VIEW THAT SMOKE-FREE ORDINANCES WILL HARM BUSINESS. INDEED, IT APPEARS THAT MANY STUDIES SUPPORT EVIDENCE OF BUSINESS GROWTH.

IV. Learning from the Lawrence, Kansas Experience: The Mayor's Task Force, Economic Impact Statement, March 31, 2004

The author of the Economic Impact Statement, a restaurant owner who was a member of the Mayor's Task Force, raised numerous points leading to the conclusion that a full impact, exemption free smoking ban would lead to a 10% reduction in alcohol beverage sales and $2.5 million loss in revenues to businesses in Lawrence.

Point: While community-wide studies show little or no overall effect of smoke-free ordinances, the influence on sales and profits for individual restaurants can be substantial. Because of this "macro" approach to researching the economic impact, these studies are "not particularly useful."
Response: Community-wide actions require community-wide ways of measuring these actions. While the author is correct in assuming that there will be losers, there will also be winners, and on balance the evidence overwhelmingly points to no long term community-wide business hardships resulting from smoke-free policies enacted elsewhere.

Point: 54% of restaurant owners and 81% of bar owners "indicated profit reductions" based on smoking bans.
Response: This is incorrect on two levels: research on which this is based is seriously flawed, and the data used from this bad research are incorrect. First, the study (Dunham and Marlow, 2003, discussed above) is a survey of perceptions of respondents in which results are pooled between those in which some unspecified "ban" occurred – even though none appear to be documented in Wisconsin according to the American Nonsmoker's Rights Foundation's listing of smoke-free ordinances – and those in which persons

were asked to predict what would happen if government imposed a “ban.” The author of the Economic Impact Statement should have used the figure in this survey referring to restaurants affected by the “ban”: 38% of restaurants – not 54% - in which they claimed a ban would lead to loss in revenues. 55% claimed no loss or increase in revenues, using the original data cited. ***In other words, bad research was misquoted to suggest that more than half of restaurants experiencing “government bans” would lose money.***

Point: Smokers consume more food and drink than non-smokers.
Response: While evidence suggests that this is true, there are also over twice as many adults who are non-smokers as there are smokers and they represent a potential market share who can make up for any drop in consumption by smokers. Also, this is assuming that smokers will simply drop their patronage or spending on food or drink based on the requirement to smoke outdoors. There is no evidence that this will occur.

Point: Draft beer sales dropped by 13% in British Columbia during a four month experiment with a smoke free policy.
Response: The independent evaluation of this four month trial, however, came to the conclusion that there would be no long-term economic impacts of continuing a smoke free policy, and recent regulations in BC now call for either smoke-free accommodations or construction of well ventilated, separately walled designated smoking rooms in restaurants and bars in BC in which employees who elect to work cannot spend more than 20% of their work time.

Point: Restaurant sales increases in California lag behind those of Lawrence because of the state-wide smoking ban.
Response: There are many factors that could explain this, but no existing research which attributes this difference to smoking policy.

Point: Examples of economic growth in the hospitality industry are slanted towards new, largely national chains which can afford to be more flexible to changing business conditions, including smoke-free policies.
Response: There will be individual businesses adversely affected, but those who can adapt to changing business conditions should remain competitive. Many other factors go into competitiveness with national chains, including product quality, location, pricing, marketing strategy, customer loyalty, etc.

Point: Lawrence will lose $2.5 million in sales if a smoking ban is enacted.
Response: There remains absolutely no evidence to justify this prediction. A group of bar owners and leaders of the state hospitality lobby spent months gathering signatures to put the smoking ordinance to a vote last summer. At the deadline for submitting the required 3,750 signatures from registered voters in the city of Lawrence, the lobby decided not to submit the petition, stating their intended desire to work on developing a reasonable compromise without further polarizing the community. Some discussions have been forwarded now (3/05) on extending outdoor patio seating for bars.

Meanwhile, newspaper articles suggest mixed economic effects of the ordinance. Alcohol consumption in Lawrence (see attached) continues to increase at similar rates as those in other communities in the state.

V. Summary

Evaluating the existing literature on economic impact of indoor smoking bans leads to the following:

1. Though no studies are without limitations, the overwhelming majority of studies that maintain a rigorous scientific element suggest that the economic impact of a smoking ban is minimal if it exists at all;

2. The leading researchers who appear to argue consistently against smoking bans give little evidence of objectivity in their work in this or other areas they are involved in;

3. Arguments that mask the economics of the issue, such as smoker/non-smoker or business "rights," are issues entirely separate from those having to do with economic impact, and should be separated out from any discussion of them.

References

U.S. Environmental Protection Agency (2004). Health Effects/Adult Nonsmokers.
http://www.epa.gov/smokefree/healthrisks.html#Other%20Studies

U.S. Centers for Disease Control and Prevention (CDC). Morbidity and Mortality Weekly Report. Impact of a Smoking Ban on Restaurant and Bar Revenues – El Paso, Texas, 2002. February 27, 2004; 53(7):150-152.

U.S. Centers for Disease Control and Prevention (CDC). Morbidity and Mortality Weekly Report. State-Specific Prevalence of Current Cigarette Smoking Among Adults, and Policies and Attitudes About Secondhand Smoke – United States, 2000. December 14, 2001; 50(49): 101-105.

U.S. Centers for Disease Control and Prevention (CDC). Morbidity and Mortality Weekly Report, Recommendations and Reports. Strategies for REducign Exposure to Environmental Tobacco Smoke, Increasing Tobacco-use Cessation, and Reducing Initiation in Community Health Care Systems. November 10, 2000; 49(RR-12): 1-11.

Scollo M., Lal A., Glantz S. Review of the Quality of Studies on the Economic Effects of Smoke-free Policies on the Hospitality Industry. *Tobacco Control*. March 2003 v12 i1 p13(8). COPYRIGHT 2003 British Medical Association.

Dunham J., Marlow M. Smoking Laws and their Differential Effects on Restaurants, Bars, and Taverns. *Contemporary Economic Policy* 2000;18:326-333.

Dunham J., Marlow M. The Effects of Smoking Laws on Seating Allocations of Restaurants, Bars, and Taverns. *Economic Inquiry* 2000;38:151-157.

Dunham J., Marlow M. The Economic Incidence of Smoking Laws. (Industry Overview). *Applied Economics,* Dec. 15, 2003;35(18):1935-1943.

Workers Compensation Board of British Columbia . The Economic Impacts of the Proposed Amendment to the ETS Regulation. February, 2001.

Cremieux P., Ouellette P. Actual and Perceived Impacts of Tobacco Regulation on Restaurants and Firms. *Tobacco Control*. March 2001; v10i2 p33-37.

Bartosch W., Pope G. Economic Effect of Restaurant Smoking Restrictions on Restaurant Business in Massachusetts, 1992 to 1998. *Tobacco Control*. June 2002; v11i3 p38-42.