The Economic Impact of the New York State Smoking Ban on New York's Bars

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New York Nightlife Association

Empire State Restaurant and Tavern Association

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by

REA
Ridgewood Economic Associates, Ltd.
77 Walthery Avenue
Ridgewood, New Jersey 07450
(201) 444-4196 fax (201) 670-4835

About REA and its Founder, Brian O'Connor, Ph.D.

Brian O'Connor, formerly IBM's director of U.S. economics, is credited with creating a database combining elements of macroeconomics, industry and regional forecasting to gauge the impact of the economy on the company's business. He established an internal consulting practice to serve the planning needs of IBM U.S. and many of its key clients.
Brian's doctorate, at the University of Maryland, was in input/output analysis and econometric modeling. He served as technical consultant to the Federal Trade Commission in the late 1960's, where he designed a quantitative system to support the agency's enforcement mission.

Brian came to IBM in 1969 to develop an input/output model for forecasting the industrial composition of the United States. He took over the running of IBM's quarterly econometric model in 1975 and was responsible for all U.S. macroeconomic forecasting: assessing current conditions, evaluating public policy and providing IBM senior management with economic forecasts to run its domestic operations.

For twenty-five years, he has worked with IBM and customer executives to help them assess the impact of economic conditions on their businesses, to anticipate developments in their markets and to track their performance against potential.

In 1993, Brian founded Ridgewood Economic Associates (REA), a consulting firm, dedicated to helping business clients meet the challenge of today's competitive environment. Its primary focus is on the development of economic databases and a system of interlocking forecasting models designed to improve operating and strategic planning systems.

For the last few years, Brian has held the position of Senior Technical Consultant to Texas Perspectives, Inc., an economic consulting firm based in Austin, Texas which specializes in regional economic and public policy analysis.

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I. Executive Summary

Since its passage in July 2003, a significant amount of anecdotal evidence has suggested that New York's statewide smoking ban has negatively affected bars, clubs and taverns across New York State. Countless media accounts have described a dramatic drop in customers for bars throughout the state, as well as a steep decline in bar revenue and significant job losses.

To date, the only statistical evidence put forth to gauge the ban's economic impact has analyzed the combined revenue and job totals from both restaurant and bar industries. The following economic study is the first detailed economic analysis focused exclusively on the economic effects of the state smoking ban on New York State's bars. This report measures the direct and indirect economic impact of the New York smoking ban on bars, taverns and clubs*.

The major findings are that the passage of the state smoking ban in 2003 has directly resulted in a dramatic loss in revenue and jobs in New York's bars, taverns and clubs.

Specifically, the following statewide economic losses have occurred in New York's bar and tavern industry as a direct result of the statewide smoking ban:

- 2,000 jobs (10.7% of actual employment)
- $28.5 million in wages and salary payments
- $37 million in gross state product

In addition, there are indirect losses to other businesses which supply and service the state's bars and taverns:

- 650 jobs
- $21.5 million in labor earnings
- $34.5 million in gross state product

In summary, the enactment of the New York State smoking ban has had a dramatic negative impact on the bar and tavern business and related businesses. The total economic impact is:

- 2650 jobs
- $50 million in worker earnings
- $71.5 million in gross state product (output)

**This analysis, defines bars, taverns and clubs using the following North American Industry Classification System (NAICS) definition: "This industry comprises establishments known as bars, taverns, nightclubs, or drinking places primarily engaged in preparing and serving alcoholic beverages for immediate consumption. These establishments may also provide limited food services."*

Direct Economic Impacts

The main focus of the economic analysis is on industry employment. While industry revenue would be a preferred indicator of industry economic health, these data are normally not available at the regional level on a consistent basis over time. In these instances, economists tend to study industry employment patterns. An industry employment function was estimated separately for the bar/tavern and restaurant industries. A multiple regression approach was used to explain the number of employed workers in each industry as a function of personal income, an industry price factor and proxy variables to capture the impacts of anti-smoking regulations and the transitional recovery from the 2001 attack on the World Trade Center. These functions were estimated at the state level, using a log - log format (see Appendix II for the regression results).

The employment function for the bar/tavern industry exhibited strong statistical properties. The coefficient of the price deflator is negative, reflecting the normal inverse relationship that exists between price and sales volume and, in a derived manner, with employment. Adjusting the estimated price impact from the regression by industry labor productivity, the price elasticity of demand (customer sensitivity to changes in product price) is -1.9. The magnitude of the number puts the elasticity in the elastic zone, indicating a relatively high price sensitivity of bar/tavern patrons to prices. The income elasticity (the responsiveness of product demand to changes in consumer income) derived from the employment function is estimated to be 1.65, indicating that the bar/tavern industry provides products that economists call "normal" goods. These types of products respond positively to income gains. Both elasticities are consistent with the existing body of research literature.

Employment losses from the anti-smoking regulations are estimated by comparing two versions of industry employment predictions. The first estimate of employment comes from the fitted regression with the ban-coverage proxy variable coded to reflect the current status of these regulations. The alternate estimate uses the same regression parameters, but sets the proxy variable to zero to simulate the removal of all anti-smoking rules. The difference between these two estimates indicates that approximately 2,000 jobs (10.7% of actual employment) were lost in New York State last year.

Using data from the New York State Department of Labor, the average wage per employed worker in 2003 was approximately $14,175 per year. Combining the job loss with the average annual worker compensation estimate, lost wage and salary payments amounted to $28.5 million in 2003. These 2,000 workers would have added nearly $37 million to constant-dollar Gross State Product (output) in New York State.

A similar approach was used to calculate loss jobs in the restaurant industry. The price elasticity of restaurant meals is quite similar to the price sensitivity of bar/tavern patrons (-1.8 versus -1.9 for bars). However, in contrast, the income elasticity in this segment of the hospitality industry is significantly greater than for bars/taverns. Based on the fitted regression, the elasticity is approximately 2.1 (versus 1.65 for bars/taverns). This

difference is a major reason why the recent employment pattern in the restaurant industry is substantially stronger than for bars/taverns. The upturn in general economic conditions, combined with the increase in State tourism following 9/11, have added significant income to the local economy. Also, the data analysis suggests that the impact of the anti-smoking regulations is smaller on restaurants than on bars/taverns.

Indirect Economic Impacts

These direct output/employment/earnings effects are only the first wave of economic change. In addition to the direct economic impacts, there are indirect and induced changes to the local economic landscape. A system of regional input/output multipliers was used to assess these total changes. These effects are: (1) the change in output for a given industry needed to meet the initial dollar change in spending by final users (customer purchases at bars/taverns); (2) changes in the output of all industries to meet the direct requirements of a given industry; (3) changes in the output of all industries to meet the changes in production in (2) above; and (4) the regional production required to meet changes in demand by final users created by higher local income generated by the first three effects. These regional impact factors were developed by researchers at the U.S. Bureau of Economic Analysis, U.S. Department of Commerce. These output, employment and earnings multipliers provide the basis for translating the estimated direct impacts on the bar or restaurant industry into total economic change.

The New York State employment multiplier for the bar and tavern industry is 1.33. This factor implies that for each job created in the bar industry, the ultimate change in employment across all industries in New York State is 1.33 jobs. The direct loss of slightly more than 2,000 workers from the 2003 smoking ban regulations means a total reduction in job count of more than 2,650 jobs across the State.

The local regional earnings multiplier is 1.76, indicating a decline of $1.76 dollars for each dollar lost in the bar/tavern industry. The direct earnings loss of $28.5 million by workers in the bar/tavern industry would result in a total change of labor earnings of $50 million. When the indirect impacts are taken into account, the $37 million loss in gross state product by the bar industry would translate into a total decline in production of slightly more than $70 million. These losses are occurring in the context of the current weakness in local job markets and the lack of strong growth in the State's economy.

Conclusion

New York State's public smoking ban has resulted in dramatic economic losses in bars and taverns across the state. This reduction translates into a negative overall economic impact in 2003 of more than $70 million in economic activity, $50 million in lost wages, and the elimination of more than 2,650 jobs statewide. These dramatic economic losses to the state should be factored into the public policy debate going forward.

II. Background

Overview

Restrictions on the time, place and manner in which public smoking may occur have been increasing over the last several years. While the early focus of anti-smoking initiatives was on consumer education and industry advertising restrictions, over past two decades, smoking opponents have increasingly taken their battle to state and local governments, seeking prohibitions on smoking in a wide variety of public establishments. Advocates of these bans claim to be protecting the nonsmoking public and workers from the adverse health effects of secondhand smoke. Opponents of smoking restrictions dispute the existence and/or severity of these adverse consequences and claim that bans have the unintended consequence of hurting business.

State and Local Smoking Ordinances Nationwide

Nationwide, the number of local communities implementing full or partial bans on smoking in public facilities --including worksites, bars and restaurants -- has increased more than eight-fold over the past two decades. More than 200 U.S. municipalities had local clean indoor air laws in effect during 1985; by April 2004, over 1,700 communities had enacted such laws.1 Almost one-third of the U.S. population now is subject to some type of smoking restriction, with various combinations of constrains being imposed.

Some smoking laws are less restrictive than others. Many provide for full or partial bans on smoking; some apply only to workplaces, restaurants, or bars, or a combination of these three.

A total of 80 out of 291 municipalities with 100% smoke free provisions apply that restriction to all three target environments - workplaces, restaurants, and bars, more than four times the number of communities with such full-scale bans in effect in the year 2000. Approximately one-third of the U.S. population is estimated to live in areas covered by these ordinances and laws providing for 100% smoke free workplaces, restaurants and bars.

While these 80 municipalities are scattered across 15 states, Massachusetts (with 45 such areas) and California (with 11) account for 70 percent of the total. Eight states have only one municipality within their borders that has this blanket prohibition. The first such comprehensive ban was enacted just over 11 years ago, and the movement did not grow rapidly, reaching a total of just 20 localities over seven years by 2000. Sixty more municipalities have signed on to full-scale bans since then.

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[1] *See http://no-smoke.org/lists. Unless otherwise noted, all data concerning the spread of smoking ban ordinances in* the United States are derived from the ANRF surveys reported at this website.

Statewide Bans

While every state except Alabama has some kind of clean indoor air legislation or policy in effect, only a handful have enacted complete smoking bans in workplaces, restaurants, or bars. Proposed anti-smoking regulations failed to pass in at least 21 states during 2003.

As of April 2004, a total of eight states had enacted 100% smoke free bans in workplaces, restaurants, or bars. In most cases, these laws are more stringent than any local ordinances that preceded them, creating potential conflicts between local and state requirements.

California and Utah initiated the process, with laws banning all smoking in restaurants that took effect January 1, 1995. Three years later, California extended this prohibition to all free-standing bars in the state.

At the time it implemented the statewide ban in restaurants, California was at the tail end of a recessionary period, with the economy exhibiting essentially zero growth. Nevertheless, eating establishments that do not serve alcohol had increased sales of about 11.7 percent in the four years leading up to the ban, while restaurants and bars increased sales by just 1.2 percent. Following the ban, taxable sales statewide increased by 31.9 percent in the following five years, but restaurants and bars were well below this figure, and more than a thousand went out of business.2

More than seven years passed before another state, South Dakota, implemented a smoking ban. South Dakota's ban applied only to workplaces, exempting alcohol-serving restaurants and bars. One of the interesting and unanticipated consequences of this legislation was the surge in applications for liquor licenses by restaurants that had previously been dry. The law exempted restaurants that served alcohol, and many business owners felt it necessary to begin serving alcohol so that their patrons could continue to smoke and their revenue streams would be safeguarded.

Delaware's ban was signed into law in November 2001. Delaware's law included a pre-emption provision under which municipal governments couldn't implement their own anti-smoking policies. Similar preemption laws are included in state laws in 18 other states. The Delaware smoking ban was modified in March 2003. Among other things, the amendment permitted smoking in bars, casinos that install air systems, and nursing homes.

About a year later, Florida banned smoking in workplaces and restaurants. In contrast to most other states where bans have been put into place, the issue was settled by voter referendum (November 2002), rather than enacted as legislation by state lawmakers.

Connecticut banned smoking in restaurants effective October 1, 2003, and extended the

[2] See http://www/forces.onz/evidence/files/ban-csr.html.

ban to bars on April 1, 2004. Workplaces remain free of state restrictions. The ban exempts private clubs and the state's two casinos. While an analysis of the impact of this law has not yet been prepared, some Connecticut bar owners claim to have seen a drop of 60 percent in revenues as smokers flock to places where they can still light up while they drink, and these owners are forming an alliance to fight for repeal of this measure.

Maine implemented full bans on smoking in restaurants and bars at the beginning of 2004, keeping workplaces free of state intervention. Within weeks of the ban's effective date, the Associated Press reported that many restaurant and bar patrons were driving across the border to New Hampshire or Canada in order to avoid standing out in the winter cold if they wished to light up. An unusual degree of opposition has arisen in Maine, with one former state representative going so far as to advise bar owners to file a class-action suit against the measure.

New York Smoking Policy

In August of 2002, New York City Mayor Michael Bloomberg signaled his intention to prohibit smoking in establishments that had been exempted from the City's earlier smoking ban enacted in 1995. Free-standing bars, smaller restaurants, pool halls, bingo parlors and bowling alleys were now to be required to implement smoke free policies and environments. Predictably, there was much acrimony in the months that followed, as representatives of the city's 13,000 bars and smaller restaurants that had allowed smoking complained businesses would suffer, while public health advocates pushed the case for protecting the tens of thousands of customers and workers in those establishments from second-hand smoke.

By the end of the year, however, New York City had adopted its new law and businesses had three months to prepare their facilities and clientele for a smoke free environment by the end of March 2003. Many bars and smaller restaurants took advantage of those three months to construct separate smoking areas and install costly ventilation systems that they anticipated would qualify them for exemptions from the ban, as had been negotiated.

However, just days before the New York City ban was scheduled to go into effect, the New York State Legislature approved a statewide smoking ban in workplaces, including bars and restaurants, that was considerably more stringent than the City ordinance and superseded most of the exemptions that had been included in the City version. New York joined just five other states - California, Delaware, Utah, Vermont and Maine - that had implemented smoking bans at that time, and the severity of its provisions was only surpassed by the original Delaware law (which was subsequently weakened with respect to bars).

Comprehensive economic evidence is difficult to assemble with respect to assessing the impact of this new law. In early December of 2003, eight months after the City's ban went into effect, International Communications Research (ICR) released an impact study[3] claiming that:

[3] Reported at http://www.bantheban.ori/archives/009491.php.

- One-third of New York City bars, hotels and nightclubs have reduced staffing by an average of 16 percent since the ban took effect, and three-fourths of them cited the ban as the cause.

- Three-fourths of all affected bars and restaurants have experienced a decline in patronage averaging 30 percent, and almost 80 percent of businesses claim to have been negatively affected by the bans.

- Bars and nightclubs that do not offer food reported a reduction in alcohol sales approaching 20 percent.

But the City and Mayor remain upbeat about the consequences of the ban. One year after the ban went into place, four City departments released a joint report[4] asserting that:

- Business tax receipts in bars and restaurants had grown almost 9 percent.
- An additional 10,600 jobs had been created in these establishments.
- 150,000 fewer New Yorkers were exposed to second-hand smoke on the job.

Each of these analyses has been subjected to criticism from the opposition, generally either because it is overly anecdotal or overly aggregated.

The Status of the Bar and Restaurant Industries in New York

Historically, the financial performance of eating and drinking establishments has tended to track the overall economy, as economic growth creates disposable income which is spent at New York's bars and restaurants. However, the recent past has seen a deviation from the long-term trend, as bars have reduced payrolls more sharply in the last two years than restaurants and the overall economy.

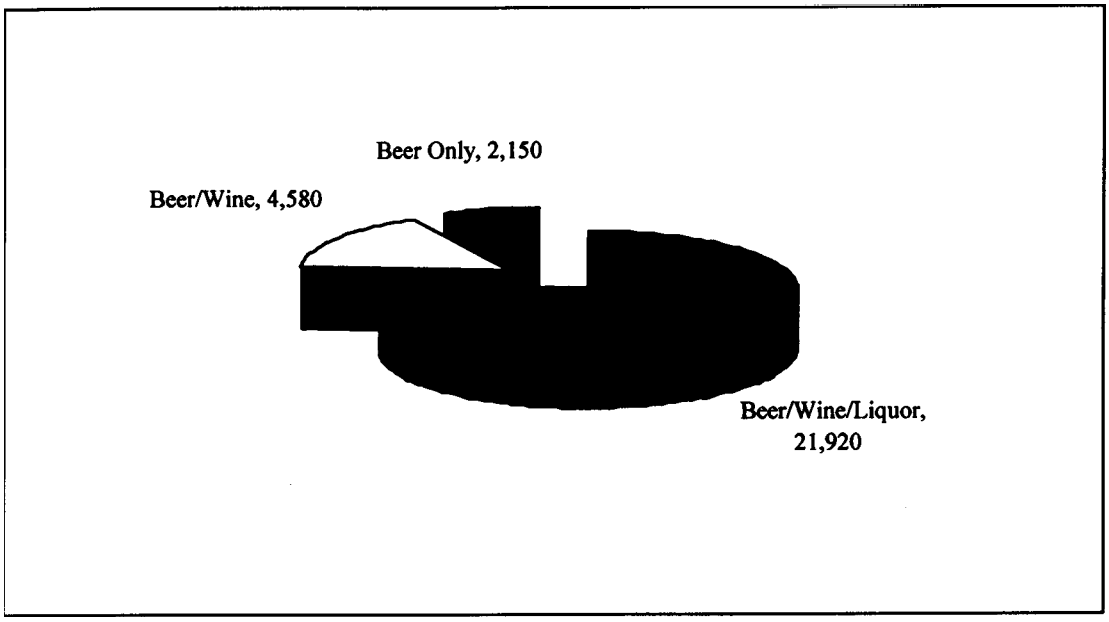
In terms of structure, bars and restaurants are somewhat different, as bars tend to employ far fewer people per establishment. As Figure 1 indicates, nearly 75% of all bars employ less than 5 people, while the comparable figure for restaurants is 41%. Overall, average bar employment across New York is 5 workers, while restaurants average over 15 employees per establishment statewide. Within the alcoholic beverage sector, bars and restaurants account for a rising share of liquor licenses, with the vast majority of those licenses authorizing the sale of beer, wine, and liquor. See Figures 2 and 3 for more details.

[4] "The State of Smoke-Free New York City: A One-Year Review," New York City department of Finance, New York City Department of Health & Mental Hygiene, New York City Department of Small Business Services, New York City Economic Development Corporation, March 2004.

Figure 1: Distribution of New York Establishments by Number of Employees (2001)

Figure 2: 2004 Bar and Restaurant Share of Total New York state Liquor licenses

Figure3: 2004 Distribution of New York Bar and Restaurant Liquor Licenses by Type



Source: New York State Liquor Authority