Tourism and Hotel Revenues Before and After Passage of Smoke-Free Restaurant Ordinances

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Context Claims that ordinances requiring smoke-free restaurants will adversely affect tourism have been used to argue against passing such ordinances. Data exist regarding the validity of these claims.

Objective To determine the changes in hotel revenues and international tourism after passage of smoke-free restaurant ordinances in locales where the effect has been debated.

Design Comparison of hotel revenues and tourism rates before and after passage of 100% smoke-free restaurant ordinances and comparison with US hotel revenue overall.

Setting Three states (California, Utah, and Vermont) and 6 cities (Boulder, Colo; Flagstaff, Ariz; Los Angeles, Calif; Mesa, Ariz; New York, NY; and San Francisco, Calif) in which the effect on tourism of smoke-free restaurant ordinances had been debated.

Main Outcome Measures Hotel room revenues and hotel revenues as a fraction of total retail sales compared with preordinance revenues and overall US revenues.

Results In constant 1997 dollars, passage of the smoke-free restaurant ordinance was associated with a statistically significant increase in the rate of change of hotel revenues in 4 localities, no significant change in 4 localities, and a significant slowing in the rate of increase (but not a decrease) in 1 locality. There was no significant change in the rate of change of hotel revenues as a fraction of total retail sales ($P = .16$) or total US hotel revenues associated with the ordinances when pooled across all localities ($P = .93$). International tourism was either unaffected or increased following implementation of the smoke-free ordinances.

Conclusion Smoke-free ordinances do not appear to adversely affect, and may increase, tourist business.

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AS THE EVIDENCE THAT SECONDhand tobacco smoke endangers nonsmokers has accumulated,[1,2] more and more communities have eliminated smoking in public places and workplaces. As of September 1998, 212 communities and 3 states had enacted laws mandating smoke-free restaurants[3] and 1 state (California[4]) and 31 communities[3] had enacted local ordinances requiring smoke-free bars. These ordinances not only protect nonsmokers from the toxins in secondhand smoke, they also create an environment that encourages smokers to quit.[5]

The tobacco industry vigorously opposes these public health measures to protect its sales. During the debates over these laws, it is common for the tobacco industry (acting directly or through front groups[6-8]) to claim that these ordinances create severe economic problems for the restaurants and bars. After Glantz and Smith[9,10] published their study demonstrating that smoke-free restaurant ordinances have had no effect on restaurant revenues in the first 15 cities to pass such ordinances, the tobacco industry's claims of economic chaos lost credibility, particularly in California and Colorado, where the cities were located. Glantz and Smith[11,12] later updated this study and extended it to include smoke-free bars. Subsequent work by other researchers yielded similar findings for smoke-free restaurant ordinances in 89 cities in 6 states.[13-19] Despite tobacco industry protestations to the contrary, all the empirical evidence supports the proposition that smoke-free restaurant ordinances do not hurt the restaurant business.[20]

As the tobacco industry's claims of adverse effects on the restaurant and bar business have lost credibility, it has advanced a new economic argument against passing smoke-free restaurant ordinances: these ordinances will adversely affect tourism. In some places, the industry has claimed that tourism from countries such as Japan and Germany will be particularly affected. There is only 1 study of 1 city on the effects of a smoke-free ordinance on tourism.[18] We identified 3 states and 6 cit-

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ies in which opponents of clean indoor air ordinances specifically advanced claims that the ordinance would adversely affect tourism (TABLE 1[21-35]) and obtained data on tourism from the local authorities. Contrary to industry claims, these ordinances were not associated with significant drops in tourism. Quite the contrary, in several locales the ordinances were associated with significant increases in tourism.

METHODS

We searched newspaper databases and publications by tobacco industry groups (such as the National Smokers' Alliance that was created for Philip Morris Incorporated[36]) and contacted

Table 1. Predicted Effects of Smoke-Free Restaurant Ordinance on Tourism Made by the Tobacco Industry and Related Groups*

Location Effective Date of Law Population[21] (1989)	Predicted Effect
California January 1, 1995 29 760 021	Revenues of hotels and other lodging places create a significant number of jobs in California. If the proposed smoking ban is adopted by the state of California, some tourists, visitors, and convention delegates may travel to other states or forgo traveling altogether. In particular, a smoking ban in California could reduce expenditures in the following way: • *Reduced Domestic Out-of-State Tourism*—Many travelers, visitors, vacationers, and businesspeople may choose not to travel to California. • *Reduced Foreign Tourism*—Some foreign tourists, visitors, and business people may choose not to visit California. • *Reduced Conventions*—Some groups may decide not to hold conventions in California. The expenditures of these consumers significantly contribute to California's economy: Potential Losses for Each 1 Percent Reduction in Foreign Visitor Expenditures, $31 017 518[22]
Utah January 1, 1995 1 722 850	Richard Davis, Salt Lake Convention & Visitors Bureau president, said his agency supported the concept of protecting nonsmokers from dangerous second-hand smoke in restaurants. But he said making Utah the first state to enact such a ban would result in tourism losses. "Utah already is a leader in liquor control and abortion," Mr Davis said. Leading in restricting smokers would "have a negative effect on our tourism marketing efforts." Mr Davis warned passage of the bill could cost Utah $50 million in lost conventions right off the bat.[23] Opponents—including the Tobacco Institute—say Utah's measure will burden public establishments by separating smokers and could damage Utah's tourism industry.[24]
Vermont July 1, 1995 562 758	Since the Vermont Clean Indoor Act took effect on July 1, 1995, owners have claimed sales losses between 3% and 30%. Members of the Vermont Business and Restaurant Coalition and the Vermont Lodging and Restaurant Association said the ban would reduce tourism, average restaurant tabs, and sales overall.[25]
Boulder, Colo November 14, 1995 83 312	After a ferocious campaign to defeat the measure, some bar and restaurant owners said the ban would slash their business and drive smoking customers out of town. Some said they likely would go out of business.[26]
Flagstaff, Ariz June 18, 1993 45 857	Vote Yes on Proposition 310. . .to protect tourism revenues (estimated $150 million annual economic impact to Flagstaff from tourism!).[27] This could be a great loss for Flagstaff. Tour groups won't return, guests will never come to Flagstaff again.[28]
Los Angeles, Calif July 26, 1993 3 485 398	"Forget about loss of local business: that's bad enough," Richard Schilling, general manager of Hotel Sofitel Los Angeles, says. "What about tourism receipts?" The throngs of European visitors who flock to LA annually will instead fly south to Florida if they can't smoke while they dine, he says. "And we're not the only ones who are going to get hurt: These tourists take cabs, rent cars, and shop in local boutiques," he adds.[29] "Since implementation of the ban in January 1995, 46.2% of the California restaurants surveyed reported lower gross sales receipts while only 15.5% reported higher gross sales receipts," states Barbara Boultinghouse, a KPMG Peat Marwick LLP manager who coordinated the survey. "The reported losses of this magnitude are devastating to California's hospitality industry."[30]
Mesa, Ariz December 20, 1996 288 091	Tom Lauria, spokesman for the Tobacco Institute, a tobacco manufacturing industry trade association, said he expects local hospitality and restaurant associations to mount the defense against the initiative. "If they're not already well organized, they will be once they gauge the economic impact."[31] Chaos is the only word to describe what is happening in Mesa, Ariz. Business owners felt the economic blow immediately. Restaurant and bar owners are losing customers to nearby communities where smoking is still allowed, and one restaurateur cited the ban as the reason he went out of business. A convention has changed its meeting site from Mesa.[32]
New York, NY April 10, 1995 7 322 564	On a larger scale, New York stands to lose millions of dollars as the meetings and conventions that bring visitors from all over the world take their business and vacations elsewhere. New York today has over 25 million visitors every year. Tourism is a $14 billion industry. This helps support our city. It means jobs. Other big cities that compete for this business will be very glad to see this smoking ban pass.[33] New York has over 25 million visitors a year. Tourism is a $14 billion industry. But if this bill passes in its present form, tourists will steer clear of a city so harshly intolerant of smokers. The bill would encourage many smokers, tourists and residents alike, to abandon restaurants altogether in favor of bars and cabarets, where smoking would not be restricted.[34]
San Francisco, Calif January 1, 1995 723 959	The hospitality industry as a group is and has long been one of the largest employers in San Francisco. However, the current recession, combined with the aftereffects of the 1989 earthquake, has caused nearly every restaurant and hotel to cut their staffing drastically. The jobs are scarce; the job/labor pool ratio have reduced some wages to the lowest levels in 4 years. Any attempt to restrict activities of our patrons would reduce the traffic in our restaurants. Not only do the hardworking operators lose but their employees lose as well (Golden Gate Restaurant Association, written communication, February 13, 1992).

*All data are direct quotes from respective sources.

Table 2. Data Sources*

Location	Hotel Revenue/Total Retail Data	International Tourism	Consumer Price Index
California	*California Travel Impacts by County*, prepared for the Division of Tourism, California Trade and Commerce Agency, California Travel Spending and Related Impacts, Travel Spending by Type of Business, Accommodations (CY 1987-1997)[36]	*A Market Profile of Overseas Visitors to California (1996),* Division of Tourism, California Trade and Commerce Agency, March 1998[37]	West urban
	Taxable Sales in California (Sales & Use Tax), statewide taxable sales, by type of business, retail stores totals, prepared by the California State Board of Equalization (CY 1986-1997, second quarter)[38]†‡		
Utah	*Gross Taxable Retail Sales, Services & (Use Tax) Purchases in Utah*, prepared by State of Utah Tax Commission, OBS 19, Services, Hotels & Lodging (7011-7041) (CY 1990-1997)	"International Visitation to Utah, 1990-97," provided by Division of Travel Development, US Department of Commerce, Tourism Industries[39]	US city average
	Gross Taxable Retail Sales, Services & (Use Tax) Purchases in Utah, prepared by State of Utah Tax Commission, Gross Retail Sales and Purchases Total (CY 1990-1997)		
Vermont	*State of Vermont, Department of Taxes, M&R Statistics*, gross (taxable) rents, grand total, prepared by State of Vermont Department of Taxes (FY 1988-1997)		Northeast urban
	State of Vermont, Department of Taxes Sales Statistics, gross sales, grand total, prepared by State of Vermont Department of Taxes (FY 1988-1997)		
Boulder, Colo	*Accommodations Tax Revenue*, prepared by City of Boulder, Finance Division (CY 1990-1998)§		Denver, Boulder, and Greenley, Colo
	Sales and Use Tax Revenue Report, retail sales tax, prepared by City of Boulder finance director, revenue collection supervisor, and budget director for acting city manager, May 1998 (CY 1990-1998)[40]§		
Flagstaff, Ariz	*City of Flagstaff BBB Sales History*, hotels/campgrounds, prepared by City of Flagstaff (CY 1988-1998)		West urban
	Retail Sales Report, prepared by City of Flagstaff (CY 1988-1998)		
Los Angeles, Calif	*Transient Occupancy Tax Revenue*, prepared by City of Los Angeles, Office of the City Clerk, Tax and Permit Division (FY 1988-1997)§		Los Angeles, Riverside, and Orange County, California
	Taxable Sales in California (Sales & Use Tax), taxable sales in the 240 largest cities, by type of business, retail stores totals, prepared by the California State Board of Equalization (CY 1986-1997, second quarter)[38]‡		
Mesa, Ariz	*Summary of Total Transient Occupancy Tax Revenue*, prepared by City of Mesa Tax & Licensing Administrator (CY 1989-1997)[41]§		West urban
	Sales Tax Revenue Information, prepared by City of Mesa Tax & Licensing (FY 1990-1998)§		
New York, NY	*NYC Hotel Tax Collections by Quarter*, prepared by New York City Department of Finance, Office of Tax Policy (FY 1989-1998)§	*New York City Visitor Statistics*, prepared by New York City Convention & Visitor's Bureau[42]	New York, northern New Jersey, Long Island, Connecticut, and Pennsylvania
	NYC Sales Tax Collections by Quarter, prepared by New York City Department of Finance, Office of Tax Policy (FY 1989-1998)§		
San Francisco, Calif	*Annual Report*, business tax section, statistical activity, hotel tax collection, prepared by San Francisco Treasurer/Tax Collector (FY 1989-1997)[43,44]§		San Francisco, Oakland, and San Jose, Calif
	Taxable Sales in California (Sales & Use Tax), taxable sales in the 240 largest cities, by type of business, retail stores totals, prepared by the California State Board of Equalization (CY 1986-1997, second quarter)†		
United States	*National Accounts Data, Gross Domestic Product by Industry in Current Dollars*, 1987-1991 and 1992-1997, line 62: Hotels and other lodging places, US Department of Commerce Bureau of Economic Analysis[45]¶		

*CY indicates calendar year; FY, fiscal year.
†Added quarterly figures to obtain annual results.
‡Added quarterly figures to obtain FY results.
§Revenues calculated based on tax receipts and tax rate.
¶Fiscal-year results by averaging 2 relevant CYs.

tobacco control advocates in voluntary health agencies, nonsmokers' rights groups, and health departments to identify localities in which the issue of effect on tourism was raised in the debate over clean indoor air ordinances.

We then identified those local ordinances and state laws that required 100% smoke-free restaurants. (An exemption for the bar area of a restaurant did not disqualify a smoke-free restaurant ordinance from our study, so long as the eating areas were smoke-free.) Smoke-free restaurant ordinances and their effective dates were confirmed with local health department officials. This process yielded the 3 states and 6 cities that met the criteria for inclusion in the study outlined earlier. Because hotel revenue data for Aspen, Colo, were not available predating passage of its ordinance in 1985, we could not include it, leaving 6 cities for analysis (Table 1).

We used revenues from hotel rooms as our measure of tourism. Data on hotel revenues were obtained from the appropriate authorities (TABLE 2[37-46]). We analyzed the hotel revenues directly and in constant 1997 dollars using the appropriate seasonally unadjusted all-items consumer price index.

We also analyzed hotel revenues as a fraction of total retail sales, similar to the analysis we did in our studies of restaurant revenues.[9-12] Analyzing hotel revenues as a fraction of total retail sales accounts for underlying economic conditions and inflation.

In our earlier studies,[9-12] we compared restaurant revenues in similar control cities that did not have 100% smoke-free restaurant ordinances. Rather than doing a locality-by-locality matching, in this study our comparisons against control are done by comparing hotel revenues in the study localities with hotel revenues for the entire United States. We followed this approach because, unlike our earlier study, there was often not a natural match to the study cities and states or, when there may have been a logical match, the "control" locality did not have available data or had a smoking-restriction ordinance in place that prevented it from qualifying as a control locality. Comparing revenues in the study localities with the United States as a whole controlled for the overall health of the tourist industry.

The issue of impact of smoke-free ordinances on international tourism was raised in California, Utah, and New York City (Table 1). We obtained data on the numbers of international tourists for California, Utah, and New York City (Table 2) and analyzed the ef-

Table 3. Change in Hotel Revenues After Passage of Smoke-Free Restaurant Ordinances*

Location	Mean Value	Slope Change, y^{-1}		*P*	R^2
		Slope ± SE	95% CI		
1997 Dollars, Millions					
California	7386	291 ± 145	−43 to 625	.08	0.78
Utah	369	12.75 ± 4.85	0.28 to 25.22	.05	0.99
Vermont	200	7.18 ± 4.76	−4.08 to 18.44	.18	0.48
Boulder, Colo	3	−0.107 ± 0.067	−0.240 to 0.026	.12	0.89
Flagstaff, Ariz	4	−0.286 ± 0.038	−0.361 to −0.211	.001	0.97
Los Angeles, Calif	549	47.2 ± 14.6	12.7 to 81.7	.01	0.77
Mesa, Ariz	8	2.07 ± 0.65	0.78 to 3.36	.002	0.81
New York, NY	488	85.5 ± 15.3	54.4 to 116.6	.001	0.71
San Francisco, Calif	797	49.9 ± 26.0	−13.7 to 113.5	.10	0.83
Current Dollars, Millions					
California	6437	252 ± 129	−45 to 549	.09	0.96
Utah	307	16.23 ± 4.69	4.17 to 28.29	.02	0.995
Vermont	207	3.43 ± 3.52	−4.90 to 11.76	.36	0.94
Boulder	3	−0.060 ± 0.066	−0.191 to 0.071	.36	0.90
Flagstaff	4	−0.285 ± 0.042	−0.368 to −0.202	.001	0.96
Los Angeles	483	28.2 ± 14.8	−6.8 to 63.2	.10	0.42
Mesa	8	2.27 ± 0.69	0.90 to 3.64	.001	0.82
New York	440	77.4 ± 12.3	52.4 to 102.4	.00	0.86
San Francisco	724	42.6 ± 23.7	−15.4 to 100.6	.12	0.94
Fraction of Hotel Sales to Total Retail Sales, %					
California	3.45	−0.080 ± 0.057	−0.211 to 0.051	.21	0.92
Utah	1.97	−0.058 ± 0.039	−0.158 to 0.042	.20	0.50
Vermont	1.49	−0.034 ± 0.031	−0.107 to 0.039	.31	0.68
Boulder	2.28	0.037 ± 0.069	−0.100 to 0.174	.60	0.78
Flagstaff	3.99	−0.389 ± 0.038	−0.464 to −0.314	.001	0.96
Los Angeles	2.83	0.122 ± 0.049	0.006 to 0.238	.04	0.55
Mesa	1.90	0.262 ± 0.114	0.036 to 0.488	.02	0.79
New York	2.75	0.264 ± 0.069	0.124 to 0.404	.001	0.73
San Francisco	12.89	−0.589 ± 0.506	−1.827 to 0.649	.29	0.59
Pooled	2.43	0.054 ± 0.038	−0.128 to 0.020	.16	0.997
Hotel Revenues Divided by National Hotel Revenues (Normalized)					
California	1.037	0.150 ± 0.020	0.104 to 0.196	.47	0.32
Utah	1.080	0.005 ± .016	−0.036 to 0.046	.75	0.90
Vermont	1.786	0.026 ± 0.031	−0.047 to 0.099	.43	0.95
Boulder	1.656	−0.119 ± 0.016	−0.160 to −0.078	.001	0.99
Flagstaff	4.595	−0.479 ± 0.061	−0.628 to −0.330	.001	0.91
Los Angeles	0.663	0.057 ± 0.015	0.020 to 0.094	.01	0.94
Mesa	1.322	0.311 ± 0.047	0.190 to 0.432	.001	0.98
New York	1.058	0.140 ± 0.067	−0.024 to 0.304	.08	0.45
San Francisco	4.638	0.122 ± 0.151	−0.247 to 0.491	.45	0.13
Pooled	1.979	0.011 ± 0.012	−0.013 to 0.035	.93	0.99

*CI indicates confidence interval.

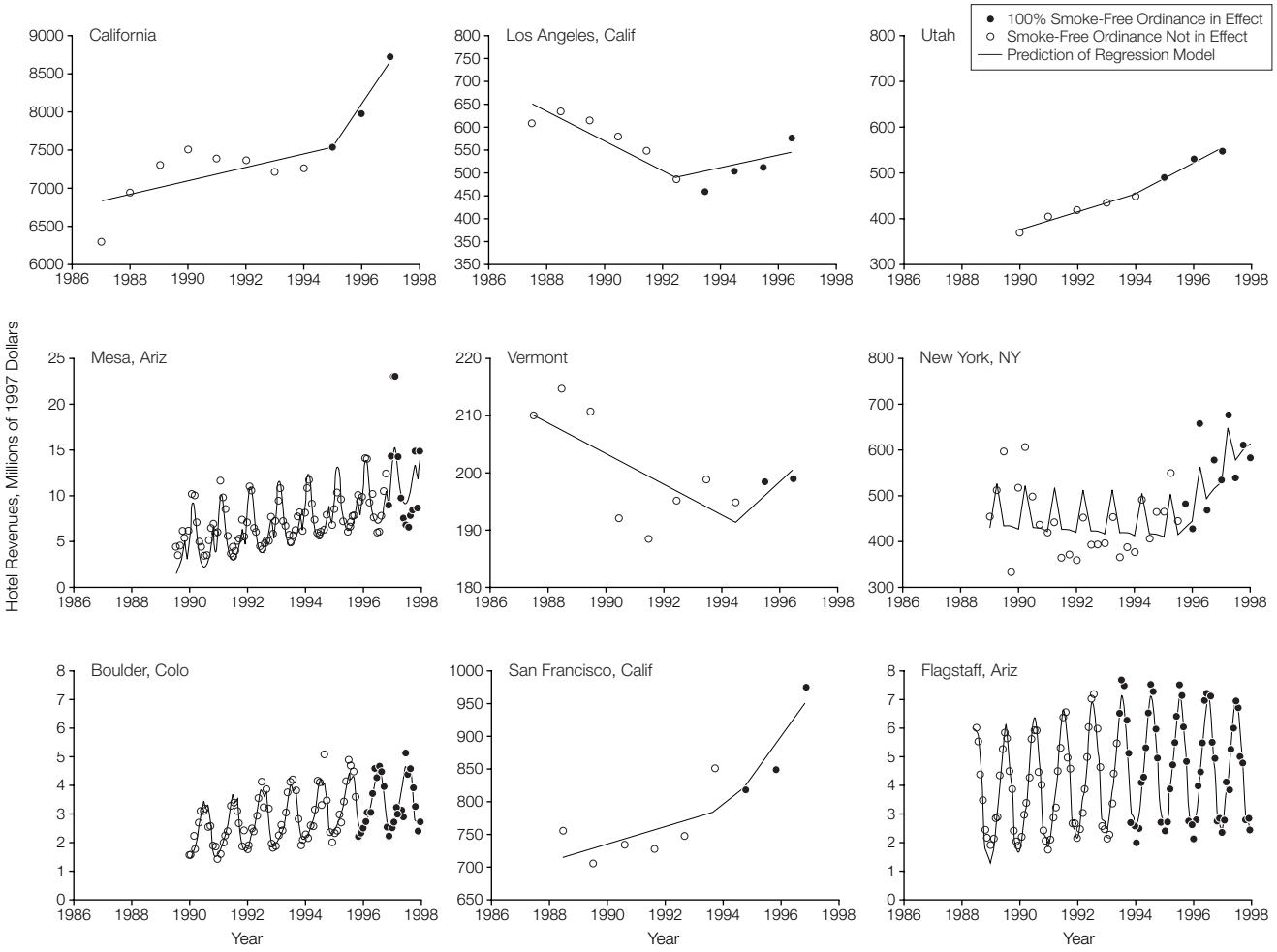
fects of the ordinance on the number of tourists over time. The dependent variable was the hotel revenues in the study locality divided by total US hotel revenues for the same year. To facilitate comparisons between localities, this ratio was normalized by 1989 population for each locality (Table 1) divided by the US population (248 709 873) from the 1990 census.[21] Data were analyzed with linear regression: $y = b_0 + b_t t + b_L(t - t_{law}) L + \Sigma b_i S_i$ where y indicates the dependent variables in TABLE 3 and TABLE 4; t, time to represent the underlying secular trend; L, a dummy variable that indicates whether a smoke-free restaurant law is in force; and t_{law}, the time the law went into force. The dummy variable L quantifies the presence of a smoke-free restaurant ordinance according to $L = 0$ if no ordinance and $L = 1$ if an ordinance is in effect. For the period in which the ordinance goes into

Table 4. Number of International Tourists in Thousands*

Tourist Home	Mean No.	Slope Change, y^{-1} Slope ± SE	95% CI	*P*	R^2
		California			
Germany	481	−32 ± 25	−89 to 25	.23	0.79
Japan	929	117 ± 45	14 to 220	.03	0.51
		Utah			
Germany	115	−25 ± 13	−59 to 8	.11	0.48
Japan	19.8	7 ± 3	−1 to 16	.07	0.65
		New York City			
Europe	2248.6	230 ± 41	116 to 345	.005	0.95
Asia	766.1	37 ± 55	−117 to 191	.54	0.75

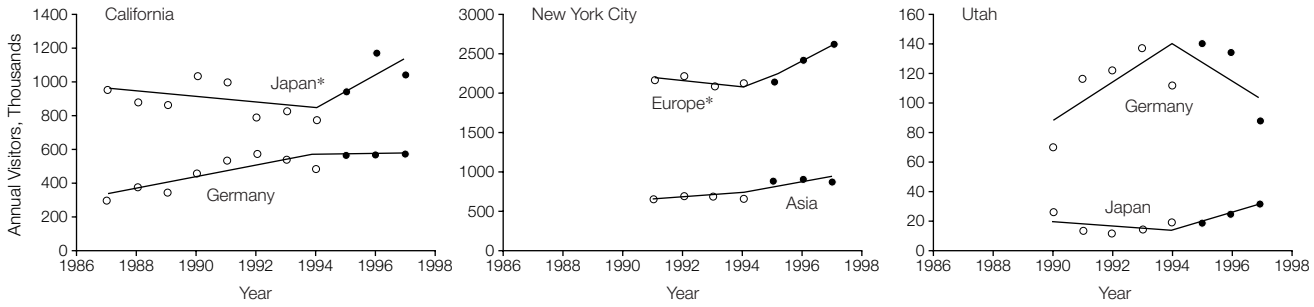
*CI indicates confidence interval.

Figure 1. Hotel Revenues Before and After Implementation of the Ordinance



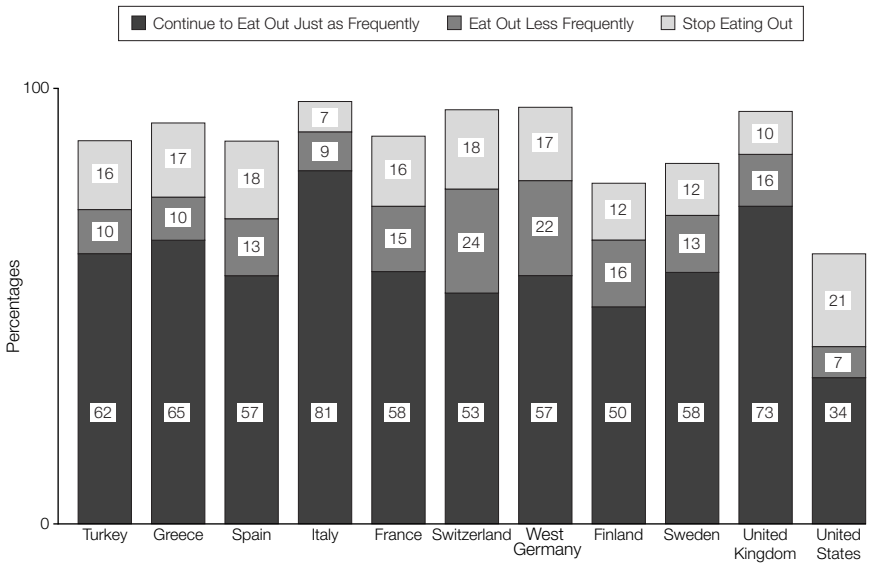
Hotel revenues in constant 1997 dollars for the 3 states and 6 cities with smoke-free restaurants included in this study. Significant changes in slope ($P<.05$) occurred for Utah, Los Angeles, Mesa, New York City, and Flagstaff.

Figure 2. Annual International Tourists and Effect of Smoke-Free Ordinances



Annual visitors from Japan (or Asia) and Germany (or Europe) to 3 locales where the effects of smoke-free restaurant ordinances on international tourism were an issue. The years in which 100% smoke-free bar ordinances were in effect are shown as solid points. Asterisks indicate significant changes in slope.

Figure 3. Reactions of European and American Smokers to Smoke-Free Ordinances in Restaurants



A survey done by Philip Morris Incorporated in 1989 demonstrated that European smokers were more accepting of smoke-free regulations than were Americans. Source of the data was the Minnesota Tobacco Litigation Depository (Bates No. 2500147496).[46]

effect, L is set to a value between 0 and 1 that corresponds to the fraction of the period that the ordinance was in force. The term $b_L\ (t - t_{law})L$ models the effect of the smoke-free law as a change in the slope of tourism revenues or volume over time. This approach differs from our earlier work, which modeled the effect of the ordinance as a simple intercept change. We found that modeling it as a slope change consistently gave better fits to the data than an intercept change model; the results obtained with an intercept change model were qualitatively similar to those presented in this article using the model above. For locations where data were available more frequently than annually (ie, quarterly or monthly), we also included a dummy variable, S_i, to allow for seasonal variability. The estimate of the coefficient b_t quantifies the annual rate of increase (or decrease) in the dependent variable y each year. The coefficient b_L quantifies the magnitude of the effect of the ordinance on the rate of change over time of the dependent variable.

For hotel revenues as a fraction of retail sales and normalized locality hotel revenues divided by total US revenues, we also conducted a pooled analysis with the equation above by adding effects-coded dummy variables to code for between-locality effects. The pooled analysis was done using annual data for all localities. A change is considered statistically significant when $P<.05$.

RESULTS

Table 3 and FIGURE 1 present the results for total hotel revenues over time before and after implementation of the law. In terms of constant 1997 dollars, the smoke-free law was associated with a significant increase in the rate of growth of hotel revenues in 4 localities, no significant change in 4 localities, and a significant slowing in the rate of increase of hotel revenues in 1 city (Flagstaff) where revenues tended to flatten out. Analysis of hotel revenues in current dollars or as a fraction of total retail sales (Table 3) yielded similar results. Pooled across all localities, there was no significant change in the fraction of hotel revenues as total retail sales ($P = .16$).

The smoke-free law was associated with no significant change in the rate of growth of hotel revenues compared with the United States as a whole in 5 localities, a significant speeding in 2, and a significant slowing in 2 localities (Table 3). Pooled across all localities, there was no significant change in the rate of change of hotel revenues compared with the United States as a whole ($P = .93$).

FIGURE 2 and Table 4 show the changes in the number of tourists from

Japan (or Asia) and Germany (or Europe) associated with implementation of the California, Utah, and New York City smoke-free restaurant ordinances. The implementation of the ordinances was associated with a significant increase in the rate of change of tourists from Japan to California and from Europe to New York City. The other trends were not significantly affected by the ordinances.

The regressions for Flagstaff and Mesa, Ariz, exhibited significant Durbin-Watson statistics, indicating the presence of serial correlations in the residuals. We attempted a variety of alternate models using functions of time, changes in the intercept term associated with the ordinance, or interactions between the seasonal variables and the presence of the ordinance. None of these approaches substantially changed the value of the Durbin-Watson statistics. Figure 1 suggests that the significant Durbin-Watson statistic for Flagstaff is due to a period of rapid hotel building between 1989 and 1993; the rate of change in hotel revenues before and after this period (which includes the time covered by the smoke-free ordinance) were similar. For Mesa, the significant Durbin-Watson statistic is due to the disproportionate seasonal increase in business following implementation of the smoke-free ordinance.

COMMENT

This study debunks the tobacco industry allegation that smoke-free restaurant laws adversely affect tourism, including international tourism. Quite the contrary, implementation of these laws is often associated with an increase in the rate of growth of tourism revenues. In the pooled analysis, the ordinances had no significant effect, one way or the other, on tourist revenues as a fraction of total retail sales or compared with the rate of change in the United States as a whole. The cities and states included in this study represent a wide range of geographic locations and types of tourist destinations, a fact that increases the confidence one can have in the generality of the results.

The result that smoke-free restaurant ordinances did not hurt, and may have helped, international tourism was surprising because of the commonly held belief that Europeans are more willing to tolerate secondhand smoke and less supportive of clean indoor air regulations than are Americans. Secret research conducted for Philip Morris Incorporated in 1989, however, shows that this belief is incorrect.[46] Philip Morris polled 1000 people in each of 10 European countries and found that smokers were more accepting of smoke-free restaurant ordinances than were Americans (FIGURE 3).

In our analysis of smoke-free restaurant ordinances, we include Boulder, Colo, which permits the construction of a separately ventilated smoking room. While the Boulder Environmental Enforcement Office has not done a formal survey, they reported that "actual use" of such separate smoking rooms is rare. We also included Flagstaff and Mesa, cities that allowed for the application of hardship exemptions or exceptions. The Flagstaff County Health Department reported that no such hardship exemptions have been granted. As of August 1998, the City of Mesa Code Compliance Office cited 73 (3.5%) of 2080 businesses (including smoke shops) that were granted such exceptions. Our results are based on aggregate data, not results from individual businesses. As a result, we cannot exclude the possibility that some establishments experienced gains in business that exactly offset losses in other businesses. At the same time, no data have ever been published to support this possibility. In any event, it is the aggregate data that are necessary to test the tobacco industry's hypothesis that business is severely depressed by these laws.

Food-service workers enjoy the least protection from secondhand tobacco smoke of any employee group.[47] Legislators and government officials can enact such health and safety requirements to protect patrons and employees[48] in restaurants from the toxins in secondhand tobacco smoke without the fear of adverse effects on tourism. Indeed, these ordinances may even be beneficial for business.

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If you could write lucidly, simply, euphoniously and yet with liveliness you would write perfectly: you would write like Voltaire.
—W. Somerset Maugham (1874-1965)