Effects of the Tobacco Products Control Amendment Act of 1999 on restaurant revenues in South Africa – a survey approach

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Objective. To investigate the impact of the restrictions on smoking in indoor public places on the financial situation of the hospitality industry.

Methods. A telephone survey was undertaken of 1 011 restaurants, selected by searching public-access Internet databases.

Results. Fifty per cent of surveyed restaurants spent an average of R67 000 (median of R25 000) to comply with the clean indoor air legislation. The capital cost for the remaining 50% of restaurants was zero. The impact on restaurant revenues was limited: 59% of restaurants reported no change in revenue, 22% an increase and 19% a decrease as a result of the legislation. Franchised restaurants experienced a net gain in revenue (34% reporting an increase, 16% reporting a decrease, and 50% reporting no change), although on average they incurred more costs to comply with the legislation than independent restaurants. On average, independent restaurants reported a decrease in their revenues as a result of the legislation (21% reporting a decrease, 13% reporting an increase, and 66% reporting no change). Ninety-two per cent of respondents believed that their restaurants complied with the legislation. The new smoking policies have been well accepted by non-smokers (nearly 100%) and smokers (87%) alike.

Conclusion. Despite the hospitality and tobacco industries' claim that the law restricting smoking in restaurants would have very detrimental financial consequences, the retrospective evidence does not support this.

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Since 1994 tobacco control has been an important public health issue in South Africa. Initially the strategy was driven by rapid cigarette excise tax increases. While increases in the excise tax also benefited the government's coffers, the explicit aim of this strategy was to reduce cigarette consumption. Increases in the excise tax were passed on to consumers in the form of increased retail prices. As the retail price increased, cigarettes became less affordable, with the result that per capita cigarette consumption fell by one-third between 1994 and 2000 and by another 15% between 2000 and 2004.[1] In 1999 the government passed the Tobacco Products Control Amendment Act, which, among other things, banned tobacco advertising and promotion, and prohibited smoking in all public places, with the latter defined to include the workplace.[2] The rationale for the legislation was to protect non-smokers from environmental tobacco smoke and to protect children from misleading pro-tobacco messages.

The tobacco and hospitality industries strongly opposed the proposed clean indoor air legislation, i.e. the legislation banning smoking in workplaces and other public places. They argued that smokers would patronise restaurants and bars less frequently, and that the hospitality industry would lose income, profits and jobs as a result. According to the International Hotel and Restaurant Association,[3] a survey among Cape Town restaurant operators indicated that the proposed legislation would decrease their turnover by 32%. Opponents of the legislation argued that the decision whether or not to allow smoking should rest with the restaurateur, not the government.

Despite the opposition to the bill, it became law in 1999 and was implemented on 1 January 2001. A 6-month extension was granted to some restaurants to comply with the law, with the result that the law became generally effective on 1 July 2001. As a concession to the hospitality industry, establishments were allowed to create smoking sections comprising no more than 25% of the total area, provided that the smoking section was sealed off from the rest of the restaurant, had separate ventilation, and was marked with statutory signs on the door.

While tobacco control is usually seen as a public health issue, there is a strong economic component as well. Even the tobacco industry admits that the product has detrimental public health consequences. Tobacco control interventions are fought on economic, not public health, grounds.[4] The industry argues that a decrease in tobacco use will have detrimental economic consequences, not only for the industry itself, but for a number of related industries. We set out to investigate one such economic aspect, namely how the legislation has affected the hospitality industry, and in particular restaurants. The focus was on the financial impact, although perceptions were considered as well. The results are based on a telephonic survey of more than 1 000 restaurants.

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Methods

A database of restaurants was generated by searching public-access Internet databases of restaurants and the websites of known franchises. The search yielded 1 431 restaurants. All restaurants in the database were contacted telephonically between November 2004 and January 2005, and 1 011 (70.6%) completed the survey. The main reasons for non-completion of the survey were: (*i*) the restaurant no longer existed; (*ii*) the contact details had changed; (*iii*) it proved impossible to make contact; (*iv*) the respondent lost interest and terminated the call before the end of the survey; (*v*) the respondent was ignorant about the impact of the legislation; (*vi*) the respondent did not speak English or Afrikaans; and (*vii*) the respondent had no time or was not interested. Of the 1 011 responding restaurants, 230 (22.7%) had been established after the legislation was implemented.

The sample could not be selected randomly because a complete database of all South African restaurants does not exist. Of the responding restaurants, 45% were based in the Western Cape, 29% in Gauteng, 11% in KwaZulu-Natal and 15% in the rest of the country. Compared with Statistics South Africa's analysis of hotel trading statistics,[5] the chosen sample over-represents the Western Cape and Gauteng, and under-represents KwaZulu-Natal and the rest of the country. Take-away outlets (e.g. Kentucky Fried Chicken (KFC) and Steers) were excluded from the sample because the legislation does not affect them. One-third of restaurants were located in shopping malls, while two-thirds were not. Forty-four per cent of restaurants surveyed were part of a franchised group (e.g. Spur), 52% were independent, and 4% belonged to a non-franchised group.

The interviews were conducted either with the owner (38%) or the manager of the restaurant (62%). The focus of the survey was on restaurants, not bars. Ninety-three per cent of respondents indicated that at least 60% of their turnover was from the sale of food. Most respondents (65%) were male, and a substantial proportion of respondents were either current smokers (47%) or ex-smokers (12%).

Results

Changes to restaurant layout

Even before the clean indoor air legislation came into force, 54% of restaurants (of 704 respondents) had specific smoking sections, while 75% had specific non-smoking sections. After the legislation was enacted the percentage of restaurants with specific smoking and non-smoking sections increased to 74% and 97%, respectively. Approximately one-quarter of restaurants became completely smoke-free after implementation of the legislation.

Both before and after implementation of the legislation the average occupancy of smoking sections at peak times (87%) was slightly, but not significantly, higher than occupancy of the non-smoking sections (85%).

Ninety-two per cent of respondents believed that their restaurants met the requirements of the legislation, while 8% of respondents believed that their restaurants did not. In response to the question 'In retrospect, how would you have handled the anti-smoking legislation?', 52% of respondents indicated that they would have created separately ventilated smoking areas as required by the legislation, 23% said they would have gone completely smoke-free, while 25% said they would have ignored the legislation and operated as before.

Financial impact

Regarding the cost of the alterations required to comply with the legislation, 50% of respondents (of 781 who answered this question) indicated that it did not cost them anything, 22% spent less than R20 000, 21% spent between R20 000 and R100 000, and 7% spent more than R100 000 (Table I). The average capital expenditure of restaurants that made structural changes to their restaurants in order to comply was approximately R67 000 (median about R25 000). Fifty-eight per cent of restaurants located in shopping malls spent some money on making the necessary alterations, and their expenditure was generally higher (average R95 000, median R37 500) than restaurants not located in shopping malls (average R51 000, median R19 200). Of restaurants not located in shopping malls, only 46% spent money on making the necessary alterations. A larger proportion of franchised restaurants (60%) spent money on alterations than independent restaurants (44%), and the expenditure by the franchised restaurants was higher (average R72 000, median R35 500, versus average of R63 000 and median of R18 000 of independent restaurants).

The impact of the tobacco control legislation on restaurant revenue has been modest, as indicated in Fig. 1. Of the 736 respondents who answered the question 'As a result of the legislation, has your business seen a change in revenue?', 59% indicated no change in revenue, 22% reported an increase, while 19% reported a decrease. On average, franchised

Table I. Cost of compliance with the clean air legislation

Response	Frequency	Percentage (of valid responses)
Not answered	228	N/A
Zero expenditure	392	50.1
< R20 000	177	22.6
R20 000 - R50 000	105	13.4
R50 000 - R100 000	57	7.3
R100 000 - R250 000	31	4.0
R250 000 - R500 000	12	1.5
> R500 000	9	1.1
Total	1 011	100.0

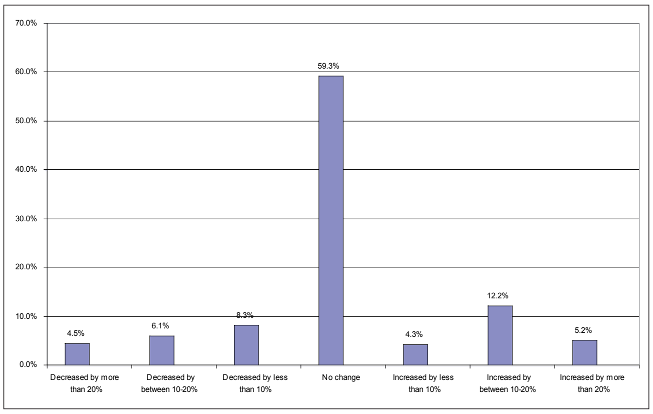

Fig. 1. Change in restaurant revenue as a result of the clean air legislation.

restaurants seem to have benefited from the legislation, with 50% reporting no change, 34% reporting an increase, and 16% reporting a decrease in revenue. On the other hand, independent restaurants seem to have been negatively affected, on average, by the legislation. Sixty-six per cent of independent restaurants reported no change in revenue, 13% reported an increase and 21% reported a decrease.

Respondents indicated that, overall, 7% of smoking customers had on average spent more and 13% less after the implementation of the legislation. This decrease in smokers' expenditure was again not distributed equally between different types of restaurants; independent restaurants reported that a significantly greater proportion of smokers decreased their expenditure (15.2%) than franchised restaurants (10.7%). The impact of the legislation on the average expenditure of non-smokers was also modest; 6% of non-smokers were reported to have spent more on average after the implementation of the legislation, while 3% were reported to have spent less.

The overall impression is therefore that franchised restaurants have on average incurred greater costs in complying with the clean air legislation, but that they have benefited in the form of (moderately) increased revenues. On average independent restaurants have incurred lower capital expenses in order to comply, but they have experienced a decrease in their revenue.

Perceptions

Since the clean air legislation aimed to protect non-smokers from environmental tobacco smoke, it comes as no surprise that non-smokers accepted the legislation well. Despite the initial fears by the hospitality industry that the legislation would alienate the restaurants' smoking clientele, it has also been accepted 'very well' or 'fairly well' by a large majority (87%) of smokers, as indicated in Fig. 2. Of the restaurants with smoking customers who did not accept the restaurants' smoking policy well, 39% did not have a specific smoking section and were presumably completely smoke-free. While this may suggest that not having a smoking section alienates

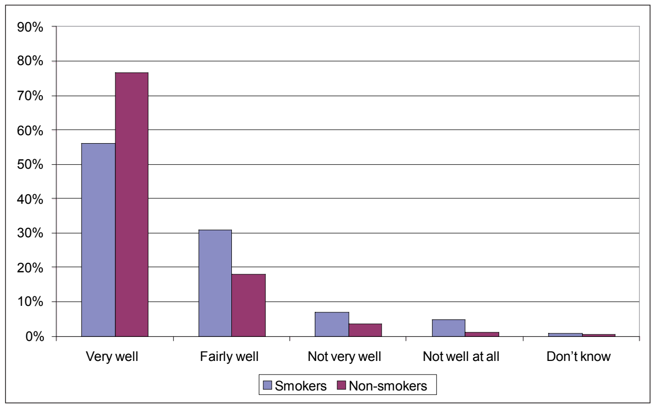

Fig. 2. Acceptance of the restaurants' smoking policies by smokers and non-smokers.

smoking customers, it is balanced by the fact that 23.5% of restaurants without specific smoking sections had smoking customers who accepted the smoking policies 'very well' or 'fairly well'.

Discussion

The literature on the impact of clean indoor air policies on the hospitality industry can be divided into two categories. The first category covers studies that have been published in peer-reviewed academic journals, and typically investigates the impact of smoking restrictions retrospectively. The second category comprises studies that are commissioned by trade bodies or government authorities, and typically investigates the expected impact of smoking restrictions. A survey[6] of 97 studies found that studies that met certain criteria typically found that restaurants experienced no significant negative effects, and sometimes even experienced a positive effect, after the clean indoor air legislation was implemented. These criteria were: (*i*) controlling for economic conditions that affect the hospitality industry; (*ii*) use of funding sources independent of the tobacco industry; (*iii*) publication subject to peer review; and (*iv*) measurement of actual events rather than predicted outcomes or assessments.[7] Studies that did not meet these four criteria generally found that clean indoor air legislation had a negative impact on the industry in terms of financial performance, customer satisfaction and employment.

The present study is not without its limitations. As indicated earlier, the sample was not random, but drawn from Internet databases of restaurants. These databases are likely to contain larger, more expensive and possibly better-managed restaurants than the country average. Other than a potential geographical bias, discussed previously, it seems likely that larger, franchised restaurants, based in metropolitan areas are over-represented and that smaller independent restaurants based in smaller towns are under-represented. Also, all conclusions are based on perceptions rather than on verifiable financial data.

Despite these limitations, a number of conclusions can be drawn. The overall conclusion of this study is that restaurants have not been systematically harmed by the clean indoor air legislation. This conclusion is in line with most other studies that retrospectively investigated the impact of restrictions on smoking in restaurants.[8] However this is not an unqualified conclusion. There is some evidence to suggest that independent restaurants have experienced a net decrease in revenue, while franchised restaurants have experienced an increase in revenue after the clean indoor air regulations were passed. At least two reasons could explain this differential impact: (*i*) meals at franchised restaurants are typically cheaper (median = R60/meal) than at independent restaurants (median = R112/meal), and are therefore more focused on families; and (*ii*) on average, franchised restaurants have incurred greater expense than independent restaurants to accommodate both smokers and non-smokers. Anecdotal evidence indicates that franchise holders (i.e. head offices) have played a significant role in ensuring that franchisees comply with the law, possibly explaining the franchise restaurants' larger capital expenditure.

Despite all the rhetoric by the tobacco and hospitality industries that the clean indoor air policies would have disastrous economic consequences for them, there is very little evidence to suggest this. This study is not alone in this conclusion. A South African study[9] that investigated trends in the revenues of 'restaurants/tearooms selling food, consumption mainly on premises', found that the impact of the clean indoor air legislation was positive but insignificant. The revenue data were based on gross value-added tax (VAT) receipts, and controlled for changes in economic activity, as well as the South African Revenue Services' improved efficiency in collecting taxes. Since restaurateurs have no incentive to overstate their revenues for VAT purposes, the study provides 'hard' evidence that the impact of smoking restrictions on restaurant turnover is insignificant.

Also, despite the rhetoric that the regulations discriminate against smokers, there is very little evidence that restaurants' smoking policies have caused major offence. Not surprisingly, non-smokers have appreciated the legislation. Somewhat surprisingly, at least to detractors of the legislation, is the fact that more than 85% of restaurants reported that their smoking customers have accepted the new smoking policies fairly well or very well.

While having a smoking section certainly does appeal to smoking customers, the analysis indicates that a smoking section is not an absolute requirement in terms of appealing to smoking customers. Whether a restaurant decides to incur the cost of creating a smoking section in order to attract more smokers, or whether it decides to become completely smoke-free, is a business decision. The analysis suggests that the 'cost' of being completely smoke-free is small, both in terms of foregone revenue and perceptions of smoking customers.

Since 2004 a number of countries (Ireland, Norway, Italy, Malta, England and New Zealand) have passed laws restricting smoking in public places. The groundswell of support for clean air policies is likely to result in many more European countries passing similar legislation. According to the Swedish Minister of Health 'in five years' time there will be a majority of European Union countries with smoke free laws, and in another five years, it will be the exception to the rule not to be smoke free'.[8]

South African legislators are currently considering further amendments to the Tobacco Products Control Amendment Act. The aim of the intended amendments is to strengthen the original Act by closing some loopholes, introducing pictorial warning messages and increasing the penalties for non-compliance. The tobacco and hospitality industries are likely to decry the intended amendments as draconian and that they would have detrimental economic consequences. What this analysis shows is that the industry's alarm is likely to be exaggerated. Like the boy who cried 'wolf!' a few times too many, the tobacco industry is not believable when it comes to analysing the economic impact of tobacco control interventions in which they have a significant stake.

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1. Van Walbeek CP. The economics of tobacco control in South Africa. PhD thesis, University of Cape Town, 2005.
2. Republic of South Africa. Tobacco Products Control Amendment Act. Act No. 12 of 1999.
3. International Hotel and Restaurant Association. Public Submission to the Health Portfolio Committee on the Tobacco Products Control Amendment Bill. 20 October 1998. http://www.jutastat.com/CGI-BIN/om _isapi.dll?clientID=321652&infobase=pmg&jump=ps-b117-98IH%26RA&softpage=Document42#JUMPDEST_ps-b117-98IH&RA (accessed June 2006).
4. British American Tobacco. http://www.bat.com/ (accessed June 2006).
5. Statistics South Africa. *Hotels: Trading Statistics*. Statistical Release P6441. Pretoria: Statistics South Africa, 2004.
6. Scollo M, Hyland A, Glantz S. Review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tobacco Control* 2003; 12: 13-20.
7. Siegel M. Economic impact of 100% smoke-free restaurant ordinances. In: Siegel M, ed. *Smoking and Restaurants: A Guide for Policy Makers*. Berkeley, Calif: University of California, 1992.
8. Smoke Free Partnership. *Lifting the Smokescreen: 10 Reasons for a Smoke-Free Europe*. Brussels: European Respiratory Society, 2006. www.ersnet.org (accessed November 2006).
9. Blecher EH. The effects of the Tobacco Products Control Amendment Act of 1999 on restuarant revenues in South Africa: a panel data approach. *South African Journal of Economics* 2006; 74(1): 123-130.

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