Bed taxes and local tourism development: an outline and annotated bibliography

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For Professor Mildred Warner,
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And her course: Devolution, Privatization and the New Public Management
Overview

In this paper outline, I explore the impact of the bed tax (or room tax, hotel tax, hotel occupancy tax or lodging tax – I use the terms interchangeably) on hotels and the local tourism industry. To a lesser extent, I report on evidence of the impact of these revenues on local communities. States and local governments across the United States levy a hotel tax almost ubiquitously. Their popularity is driven by the perception of taxing authorities that the tax is paid almost exclusively by people from outside the area, and that it has very little negative impact on the hotel industry. Available research demonstrates that the first assumption is correct, and that the second assumption is very accurate for some locations, but perhaps less true for other locations, depending on several factors.

I begin the outline with a brief review of the history of the hotel tax in the United States. I then turn to a description of the bed tax, followed by a discussion of factors by which to judge its effectiveness. Next, I touch briefly on the evidence for the effectiveness of hotel tax expenditures (i.e. for tourism promotion and marketing) before concluding with several recommendations for local tourism officials. I find that bed taxes are indeed a highly progressive and efficient tax if they are applied and used appropriately. An annotated bibliography follows the outline.

Paper Outline

I. History of bed taxes and their use in the United States
   a. Hotel occupancy taxes are extremely common.
   b. Strong early adoption due to the notion that costs are exported to tourists from outside the area without negatively effecting the local hotel industry (Bonham et al, 1992; Hughes, 1981)
   c. First use is in New York City in 1946; it was “vigorously opposed by the New York Hotel Association” (Ford and Peeper, 2006).
   d. Became very widely adopted in the 70s and 80s.
   e. By 1983 all but one US state (Wyoming) had occupancy taxes (Weston, 1983) levied either at the local level, state level or a combination.
      i. Usually levied by local governments up to a certain limit allowed by state authorizing legislation¹.
      ii. Local and statewide combined is also common. An example is Oregon which levies a 1% statewide tax on hotel rooms in addition to any local bed taxes.²
      iii. Current trend is for states to shift the assessment to the local level to decrease exportability (Bender, 2009, pg. 51).

¹ For example, New York State and Pennsylvania allow municipalities to impose a room tax of up to 3%; specific authorizing legislation is required to increase it from there.
f. Many states levy a bed tax for statewide tourism promotion, usually in addition to a local bed tax. (Bender, 2009, pg. 12)
   i. In 1990, 18 states. (Bender, 2009, pg. 12)
   ii. In 1997, 21 states plus D.C. (Bender, 2009, pg. 12)
   iii. In 2003, 25 states plus D.C. (Bender, 2009, pg. 12)
   iv. In 2008, dropped to 21 states, but the number of states allowing local jurisdictions to levy a hotel tax increase. (Bender, 2009, pg. 12)

g. Currently 47 of 50 states have some hotel occupancy tax (Bender, 2009).

h. Cities and counties in Oregon began applying the tax in 1969. Reasons given:
   i. Already fairly common throughout the US and so acceptable to tourists (Weston, 1983, pg. 196).
   ii. Minimal administration required (Weston, 1983, pg. 196).
   iii. Costs to collect were small – 1% to 5% (Weston, 1983, pg. 196).

i. Las Vegas was the first to establish a convention center using hotel tax dollars (Ford and Peeper, 2006). Now a common source for convention center funds.

j. The average hotel tax rate increased between 1990 and 2008 from 9.8% to 12.6% (Bender, 2009, pg. 49).
   i. This figure lumps general sales taxes with specific lodging taxes.

II. Description of bed taxes:
   a. A type of tax on tourists.
      i. Other tourism taxes include:
         1. Car rental taxes
         2. Restaurants, gas stations, other services
         3. Departure (airport taxes)
      ii. Bed taxes are the most common type of tourist tax; indeed they are “ubiquitous” (Weston, 1983).
      iii. Bed taxes may be more effective than other types of potential tourism taxes, such as airport taxes or general sales taxes.
         1. Impact higher income earners more than lower-income earners.
         2. Paid exclusively by people from outside the area.
         3. Easily levied. (Weston, 1983)

   b. Bed taxes are attractive to local governments.
      i. Capture tax revenues from outside the area.
         1. Politically easy – voters don’t pay the tax; tourists from outside the area do. (Weston, 1983;)
         2. But this is also a potential “taxation without representation” problem (Hughes, 1984, pg. 75)
         3. My response to the above: governments are accountable to tourists through a market mechanism; if investments from the tax do not support the development of a tourist-friendly environment, then they will take their tourism dollars elsewhere.
ii. Can be used to offset costs of tourism, like increased road, police, fire and other service costs (Hughes, 1981).

c. Different ways of assessing the tax:
   i. Differentiated tax. Different priced rooms taxed at different rates. (Hughes, 1981). Not very common.
   ii. Ad valorem.
      1. By far the most common (Hiemstra and Ismael, 1992, pg. 84)
      2. A percent on top of the room charge.
   iii. Per-unit tax - less common, NYC uses this in addition to an ad valorem tax (Weston, 1983; Bender, 2009).
   iv. Most localities allow tax exemptions on hotel stays longer than a certain period.
   v. Some jurisdictions have instituted a tax to fill short-term revenue shortfalls and add to a general fund, which is not seen as desirable by the industry or tax experts (Hughes, 1981; Bender, 2009).
   vi. Sometimes levied in lieu of general sales tax, sometimes on top of.

d. What does the hotel and travel industry think of the hotel tax?
   i. The industry generally opposes hotel taxes (AHLA, US Travel Association, The Tax Foundation; Hughes, 1981; Bender, 2009; Winkelblech et al, 1998)
   ii. But opposition appears to be more or less placated if some funds are spent directly on tourism promotion efforts, such as by supporting CVBs (Weston, 1983).

e. No evidence of current BID\textsuperscript{4}-style self-assessed room taxes, BUT:
   i. Historically CVBs\textsuperscript{5} were privately funded like BIDs
   ii. Some evidence that local governments are pulling back some of the hotel tax funds from CVBs, and that the CVB industry is looking at private funding sources again (Ford and Peeper, 2006)
   iii. Important area for further research.

III. Judging the effectiveness of a bed tax

   a. Through a theoretical taxation/public finance lens: How effective is a hotel tax compared to other types of taxes? (Weston, 1983, drawing from Hughes, 1981). The hotel tax meets each of the seven following criteria well except for the “adequacy criterion” and is therefore seen to outperform the property tax (Hughes, 1981; Weston, 1983).

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\textsuperscript{3} As one example, Tompkins County, NY offers an exemption from the hotel tax for all stays longer than 30 days, with any tax paid for the first 30 days refunded to the long-term guests. This is to ensure that only the tourist or transient population is paying the tax, not people working in the area or lower-income residents for whom downscale motel accommodations can be an important source of interim housing.

\textsuperscript{4} BID – Business-Improvement District. Common in downtown areas, these private “club” organizations tax themselves to fund initiatives to improve the environment for their businesses, such as by improving a downtown retail shopping street.

\textsuperscript{5} Convention and Visitors Bureaus
i. “Equality criterion” (Hughes, 1981; Weston, 1983). The thrust of this criterion is “who is taxed”, rich or poor?
   1. Primarily higher-income people are taxed, so it is fair.
   2. The ad valorem nature of most hotel tax schemes achieves this.

ii. “Efficiency/neutrality criterion” (Hughes, 1981; Weston, 1983)
   1. Lodging demand seems to be relatively price inelastic, in which case it is an efficient tax (Weston, 1981, pg. 195).
   2. See section on price elasticity of demand below for a discussion of evidence.

iii. “Adequacy criterion” (Hughes, 1981; Weston, 1983)
   1. This is the only theoretical criterion that the hotel tax fails.
   2. The hotel tax cannot provide enough revenue to support all of the community’s tax needs (Hughes, 1981; Weston, 1983)

iv. “Administrative cost criterion” (Hughes, 1981; Weston, 1983)
   1. It is affordable to administer both for governments and for hotels (Weston, 1983;
   2. Only 1-5% of the total tax revenues are eaten up by administrative costs (Hiemstra and Ismail, 1992)

v. Growth potential – yes, it can grow (Hughes, 1981; Weston, 1983).

vi. Non-resident contribution
   1. Room taxes are highly exportable (Fujii, Khaled and Mak, 1985).
   People from outside the area pay the tax, not local residents.
   2. Bender (2009) concurs but cites an industry-funded study which doesn’t refute this but claims that the tax has a suppression effect on the overall economy which impacts residents negatively.

vii. Distribution of revenue – it depends (Weston, 1983).
   1. Distribution depends on local government decisions (Weston, 1983) and state enabling legislation (Bender, 2009).
   2. At least a portion usually goes to support the tourism industry (Hiemstra and Ismail, 1992; Weston, 1983).

b. Through a governance lens:
   i. Local, state or national control?
      1. Local control is better to address an accountability/taxation-representation issue (Hiemstra and Ismail, 1992; Bender, 2009).
      2. A local tax can also better deal with differential demand elasticities than a state-levied tax.
      3. Recent trend towards increasing local control (vs. a state tax) – (Bender, 2009).
      4. There is no federal hotel tax.

   ii. Do revenues support 1) direct tourism promotion efforts, 2) tourism supportive services and tourism product development and/or 3) general fund services.
1. I found no empirical studies deal with the normative question of what is the appropriate mix.

2. Some revenues should go to offsetting any negative impacts on the lodging industry to avoid killing the goose that lays the golden egg (Hiemstra and Ismail, 1992).

3. Convention and visitors bureaus (CVBs)
   a. 22% of tax spent on CVB activities (Hiemstra and Ismail, 1992); this accounts for the large majority of CVB funds (Ford and Peeper, 1996).

4. Tourism product development and other non-marketing tourism-related expenditures.
   a. Estimated at 28% of expenditures (Hiemstra and Ismail, 1992)

5. Non-tourism expenditure - approximately 50% (Hiemstra and Ismail, 1992);
   a. General fund expenditures.
   b. Supportive investments: transportation, arts and culture.
   c. Distribution of room tax revenues to a general fund vs. a fund earmarked for tourism investment (Hughes, 1981) is a significant concern of the lodging industry (AHLA; USTA; Hiemstra and Ismail, 1992).

6. Some states have “earmarking” guidelines on where dollars should be spent while others do not (Bender, 2009, pg 14).

   c. What is the impact of hotel taxes on hotel demand? This is the most important question for judging the effectiveness of a hotel tax.
      i. Measured by price elasticity of demand. If demand for lodging is price inelastic, then the incidence of the tourism tax will fall almost entirely on the tourist, and the local lodging industry will not suffer.
      ii. There have been numerous studies, most showing that demand is indeed price inelastic (see annotated bibliography for details).
         1. Hiemstra and Ismail, 1992: somewhat inelastic (-0.44)
         5. Canina and Carvell, 2005: very inelastic for urban hotels, -0.13.
      iii. What do these numbers mean? Hypothetical: If a 5% hotel tax is applied, and the hotel operator passes on the full cost of the tax to the consumer and the elasticity of demand for lodging is -.13 (holding other factors
constant), then the hotel operator can expect to see a 0.65% drop in room stays.

iv. Drilling down – several more factors to consider:
   1. Smaller properties (with fewer rooms) are more adversely affected by hotel taxes (Canina and Carvell, 2005).
   2. Possibly more inelastic in urban areas with strong draw (Canina and Carvell, 2005).
   3. Either higher-priced properties (Hiemstra and Ismail, 1992, 1993), or lower-priced properties (Canina and Carvell, 2005) are more price sensitive in terms of demand: different studies yield different results on this point.
   4. Geographic region: price elasticity of demand is different depending on the individual destination (Damonte et al, 1998).
      a. What makes demand price elastic in one location and inelastic in another:
      b. Level of uniqueness of destination, number of available substitutes, time of year differences (Damonte et al, 1998, pg. 23)

v. The rate can be set too high. One example is from the early 1990s when a very high tax in New York City actually reduced hotel occupancy tax revenues (Bender, 2009, pg. 2).
   1. What is the mechanism by which this occurs? How might tourists avoid bed taxes (Hiemstra and Ismael, 1992; Hughes, 1981)?
      a. Staying with friends or relatives.
      b. Shortening stays.
      c. Staying in cheaper rooms.
      d. Staying in a different jurisdiction

   d. A different angle: in the case where an area is at or over capacity for tourists, a tax on tourists which suppresses visits, can be seen as a good thing.
      i. Tourism can hurt tourism; if there are too many tourists, the environmental quality of a destination can be diminished (Brida and Pereyra, 2008).
      ii. Hotel taxes maintain environmental quality of a tourism destination (Brida and Pereyra, 2007).

IV. Impact of tourism investments on bed nights
   a. Successful destination marketing organizations are able to influence the key economic variables \(^6\) positively (Bornhorst, Ritchie and Sheehan, 2010, pg. 598), including bed nights.

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\(^6\) The key economic variables they describe are number of visitors, tourist spending, tourism industry jobs, tax revenues.
b. But little research available on investments other than direct tourism-marketing/CVB style investments.
   i. Tourism product development – impacts of specific properties can be measured, but I found no comprehensive study that looked across many types of properties and assigned a measure of success of the tourism tax dollars investment.
   ii. Even less is available on the question of how more “place-based tourism” or “community-based tourism initiatives” impact the tourism industry.
   iii. We would expect to see some returns from general fund investments as well, such as from the benefits to tourists of maintaining functioning transportation and public safety systems.
      1. I found no study examining the use of hotel tax dollars for these investments
      2. It was outside the scope of this study to examine the general impact of these types of investments on tourism.

V. Lessons for tourism planners
   a. Bed taxes theoretically are extremely attractive source of local government revenues based on nearly all theoretical criteria.
   b. No ‘one size fits all approach” It may be possible to kill the goose that laid the golden egg by creating too high a burden relative to substitutes.
   c. Know your local tourism economy. Local planners and government officials should conduct local research on these metrics to determine the appropriate room tax rate”
      i. What is the price elasticity of demand for lodging in your area.
         1. Are there nearby substitutes that might make the elasticity higher in your area?
         2. What are the tax rates in neighboring jurisdictions?
      ii. Are positive effects of previous investments in tourism apparent and quantifiable?
   d. Where to put the dollars:
      i. Some funds should be spent on tourism and destination marketing.
      ii. Invest in tourism product development as well to enhance the quality of the environment for visitors and residents alike.
      iii. Investments in tourism-supporting infrastructure should be clearly linked to tourism when possible.
   e. The details of how the tax is levied can have significant impacts on tax revenues and tourism demand.
      i. A current issue illustrates: online travel companies pay tax only on the wholesale price in most locations, not the retail price paid by consumers. A proposed federal law aims to codify this exemption (Berkey, 2011).
   f. Measure and communicate the impacts of hotel tax investments to stakeholders
i. To maintain lodging community support.
ii. To maintain support of related industries.
iii. To demonstrate value to tourists and residents.

Annotated Bibliography


Using existing research from four American Hotel and Lodging Association surveys between the 1990s and 2008, the author performs a qualitative analysis to question the prevailing wisdom of other studies about the relatively inelastic demand for hotels. She finds that “locations with high lodging taxes, relative to neighboring areas, can be adversely burdened by high taxes.” Although not robust a robust analysis compared to other cited works, this paper provides a useful history and overview of the use of the hotel occupancy tax in the United States.


Like the 1985 Fujii, Khaled and Mak study, this paper uses an econometric model to estimate the impact of the 5% Hawaiian room tax on hotel revenues. They distinguish their analysis from the earlier study by looking at data from before and after the 1987 imposition of the tax using a quasi-experimental, before and after study. They essentially reverse the earlier findings of high price elasticity of demand for hotel rooms in Hawaii, stating, “our results suggest that the hotel room tax is almost fully shifted forward to tourists (i.e. the price to buyers rose by the full amount of the tax) with no significant revenue loss to hotel operators” (pg. 437). This corroborates the theoretical findings of the 1979 Combs and Elledge article, as well. They posit several reasons for the very inelastic demand finding, including the fact that tourists may not have known about the tax before they arrived and that lodging is just 1.5% of the cost of a typical Hawaiian vacation. It is a notable finding nonetheless, particularly because this is the only available study that uses this particularly robust methodology.


This study replicates the findings from the 1992 Bonham, Fujii, Im and Mak study, using a slightly different model. The major finding is that the State of Hawaii’s occupancy tax had little to no impact on room stays. The authors again disclaim that the findings may not be generalizable to all areas.

This article examines “whether efforts to induce greater private funding of destination travel promotion are likely to succeed” (from abstract), in light of evidence that several US states (including Colorado which got rid of its state tourism board in 1993) were looking at cutting back on the use of bed tax dollars to fund tourism promotion. The authors argue for retaining a public subsidy for state tourism promotion rather than reverting to private financing.

**Bornhorst, Tom; Ritchie, J.R.; and Sheehan, Lorn. (2010). Determinants of tourism success for DMOs & destinations: an empirical examination of stakeholders’ perspectives.**

This study works to create a clear definition of tourism success for destinations and destination management organizations (DMOs), including on economic variables for destinations. It offers a comprehensive review of studies of the success of destination marketing and promotion programs. This is valuable because we know that a majority of hotel tax dollars go to tourism marketing and promotion programs in the United States. Their research suggests that successful DMOs are able to influence the key economic variables positively (pg. 598). But they also note that there are a number of external factors which will influence the success of a destination, and the tourism system is extremely “dynamic and complex” (pg. 598).


Operating under an assumption that the success of a local tourism industry both depends on the quality of the destination’s environment (natural resources, infrastructure, facilities, etc), and impacts it, this paper models the theoretical impact of a hotel taxes on “environmental quality”. The authors’ model uses “vertical differentiation” of tourists’ willingness to pay for environmental quality, and finds that hotel taxes “maintain the environmental quality of a tourism destination” (pg. 56). The specific effect of a tax, and therefore the appropriate level depends on the willingness of different types of tourists to pay for environmental quality. The optimal level of the tax will be less when tourists have a low willingness to pay for environmental quality, than when they have a high willingness to pay.

It is unclear from this paper whether the mechanism for an improved environment is the investments from the tax dollars or the mere reduction in tourist congestion. It seems likely that it is a combination of these two factors.


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7 DMO (Destination Management Organization) is one level of generality above CVB – convention and visitors bureaus; CVBs are the most common type of DMO.
8 The key economic variables they describe are number of visitors, tourist spending, tourism industry jobs, tax revenues.
This article provides an example from York County, Pennsylvania of a dialogue currently taking place between government officials proposing an increase in a local hotel tax from 3% to 5%, and local hotel operators. The lodging industry claims that the 2% increase in taxes would reduce occupancy and force lodge owners to lower prices, further cutting into their bottom line unless the tax dollars go directly to funding tourism promotion efforts to put “heads in beds”. Local tourism officials want to split the estimated $700,000 to $1 million in new tax revenues three ways, with some going to traditional tourism promotion, but the rest going to developing a new convention center and a new grant program for tourism product development.


This piece uses property-level data for 481 hotels in 22 major urban markets between 1989 and 2000 to assess the impacts of income and prices on lodging demand. They distinguish their method from an aggregate approach (county, state of all US figures) which cannot uncover the impact of economic factors on demand at the property level. This is important for my analysis because individual property owners may base their level of support or opposition to hotel taxes on their perceived impact on demand for their specific properties.

Canina and Carvell’s econometric model estimates the impact of four basic variables on rooms rented: income, expectations of future income, room rate and room rate of substitutes. They apply the model across five different market segments. Although they do not evaluate the impact of hotel taxes explicitly, we can use their findings related to price effects to evaluate the potential incidence of a hotel tax on different types of hotels. Their main finding related to price effects is that across all market segments, the demand for rooms is very price inelastic. The coefficient for average daily room rate is -0.13. Economy and midprice limited service hotels are more price sensitive (elasticities of -.31 and -.21 at 95% confidence, respectively) than the upscale hotels. This corroborates the general findings of two previous studies, that “hotels catering to different clienteles exhibit difference price and income elasticities”, but differs from the Hiemstra and Ismail study which found that the more expensive hotels are more price elastic than the lower-end hotels. Another interesting finding is that as prices go up market-wide, demand will increase for lower-priced properties.

A limitation of this study is that it focuses mainly on chain hotels in large urban markets. They authors caution against applying the findings indiscriminately to other types of markets or other property types.

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9 This is the basic theoretical model. The more detailed model estimates the number of rooms rented relative to a constant plus GDP (or other income measures for a secondary regression equation), consumer confidence index, average daily rate and market average average daily rate.

10 The five market segments are: 1) upper upscale, 2) upscale, 3) mid-price full-service, 4) mid-price limited service, and 5) economy.


This early article analyzes the potential impact of a hotel occupancy tax on the hotel industry and low-income people. The authors base their analysis on public finance and economic theory. They assume a hypothetical resort location, and find that a small ad valorem tax theoretically has little or no impact on demand (due to almost perfect inelasticity of demand for hotels) and that the hotel tax in this environment is a progressive tax which is paid almost entirely by higher income people. An obvious weakness of this study is that it relies almost entirely on theory; it does not use any actual price and room demand data to estimate an econometric model, due to a lack of available data.

Combs and Elledge assume that lodging costs are one small component (20%) of vacation costs\(^\text{12}\); the other costs are food, recreation, transportation, and the vacationers’ time. This assumption likely influences price elasticity of demand for hotel rooms toward zero. If lodging for a given type of tourist or destination makes up a larger portion of total vacation costs, then we would expect to see this elasticity of demand for lodging increase. The authors also identify the relative demand for substitutes as a critical component and they warn readers about a potential “spillover effect” whereby higher prices from hotel taxes may push people to stay in a jurisdiction with less tax.


This study expands the literature related to price elasticity of demand for lodging by demonstrating that price elasticity of demand “measured at the individual destination level may be more useful than at the aggregate level to local governments setting accommodation tax rates and to lodging industry management in setting prices” (Damonte et al, 1998, pg 19). Specifically, the authors estimate a demand function for rooms in two similar sized counties in South Carolina\(^\text{13}\) with the same tax rates\(^\text{14}\). They show that demand for rooms is price inelastic in Charleston County, but quite price elastic in Richmond County; these differences do not show up in an aggregate model, but have critical local policy implications.


\(^{12}\) Using 1970s BLS data, they estimate lodging to be 20% of vacationers’ expenditures. One problem with this analysis is that not all hotel stays fall are vacation-driven stays, in the narrow definition of vacation from which the 20% figure appears to be derived.

\(^{13}\) Richland and Charleston Counties.

\(^{14}\) 5% sales tax and 2% hotel tax in both counties.
This paper describes the history of the Convention and Visitors Bureau (CVB) industry and makes several predictions for the future of the industry based on this history and interviews with 22 CVB leaders. The author points out that the advent/passage of hotel taxes was a major source of growth in the CVB industry, and that CVBs have historically lobbied local governments for taxes by funding studies showing their effectiveness, etc. In fact, originally CVBs were funded through voluntary payments/self-taxation from “those that directly benefitted from the visitor business” (pg. 1110). The authors predict a decline in the portion of bed tax revenues going to CVBs. Given this “increasing interest in local communities recapturing higher percentages of this money” (pg. 1110), the CVB leaders interviewed are preparing for a partial return to the old methods of raising private funds. They also point out that the easy money from the bed taxes may have led to overbuilding of convention center capacity (pg. 1112).


Using a “systems approach and time-series data”, this 1985 paper finds that a 5% room tax in Hawaii would be “highly exportable” (with about 2/3 paid by non-residents vs. residents), but quite elastic. The authors estimate that the demand elasticity for lodging is -1, meaning that an increase of 1% in the room price will correspond with a decrease of 1% in demand for lodging. At this elasticity, there would be a fairly negative impact on the lodging industry. One problem with this study is that their model does not incorporate other control variables such as income or the price of substitutes. Also, the authors are unable to use data from before and after the date when the tax was first imposed, since the tax was first imposed in 1987. This problem is addressed in the 1992 Bonham, Fujii and Mak study, which more or less reverses the findings related to price elasticity of demand.


This article examines the impact of hotel taxes on tourist demand and the lodging industry using regression analysis for data on 310 hotel properties from a 1991 American Hotel and Motel Association survey. In estimating price elasticity of demand for various industry segments, the model accounts for size of a property, average room rates, types and location of properties, and ownership and management characteristics. Hiemstra and Ismail’s analysis suggests an average price elasticity of demand for lodging of -0.44 which is as much as three times higher than other previous studies. Their more detailed market segment analysis suggests that smaller properties are impacted more heavily by price increases than larger properties and that more expensive properties are impacted more heavily than more affordable properties.

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15 Price elasticities of demand are calculated for different industry segments based on the number of rooms and room rates.

16 For example, the price elasticity of demand for a $40-75 room with less than 150 beds is estimated to be -0.68, but only -0.28 to -0.16 for a similarly priced room in a larger hotel. The ranges of price elasticities of demand for a mid-size hotel with 151-300 rooms go from -0.19 for a <$40 room to -0.72 for a >$100 room.
Higher-priced accommodations may be impacted more strongly because of a ‘trade-down’ effect (pg 87).

Using their price elasticity of demand figures, the authors calculate the related drop in rooms rented and occupancy rates for different sizes of hotels in several price ranges\(^\text{17}\). For hotels under $100, they estimate declines in occupancy rates of about 0.5% to 3%, depending on the size of the hotel.

One potential problem with this study is that the authors use simple averages to calculate the average price elasticity of demand of -0.44, not weighted averages. This could be skewing the average elasticity number a little high. For instance, if we were to remove the very expensive rooms (those more than $100 a night in 1992), the average non-weighted price elasticity of demand would drop to -0.36, which is more strongly in the inelastic range.


This article reports on results of the same regression model as the 1992 Hiemstra and Ismail article, but expands the analysis slightly to include a tax incidence calculation. After calculating the average tax burden from hotel taxes across their sample, they come up with a tax incidence of 6.2. “This means that about $6 out of $7 of the tax is ultimately paid by guests and $1 is paid indirectly by the lodging industry” (Hiemstra and Ismail, 1993, abstract).


This 1981 article lays out theoretical arguments for and against tourism taxes from a general public finance/taxation perspective. The author evaluates tourism taxes (especially, but not exclusively hotel taxes) using a broad literature review of existing evidence about their application in the UK, US, and several European countries and their impact on the tourism industry. The main contribution is to provide a framework for evaluating the effectiveness of tourism taxes. His framework is elaborated by Weston in a 1983 article (but Weston has a different bias).

Hughes comes across as slightly biased against tourism taxes, but he raises valuable questions. For example, he is concerned about the potential for tourists to evade the hotel tax such as by “shifting to self-accommodation” (pg. 202, 204), even if he offers no empirical evidence on this phenomenon. He highlights the critical importance of the relative elasticity of demand to weighing the effectiveness of a tourism tax; this is a theme that others will follow up on in later studies. He raises a hypothetical concern about implementation costs of a hotel tax, both potential administrative costs borne by the government and compliance costs borne by industry. He promotes what he calls “earmarking” or assigning tourism funds specifically for tourism initiatives (pg. 201), and speaks to the potential for tourism taxes (although probably

\(^{17}\) They use four categories of hotel size (1-150 people, 151-300, 301-600 and >600), and four categories of room-rate (<$40, $40-75, $75-100, >$100).
not hotel taxes) to ration congested tourism services (pg. 200). He speaks to the potential for tourism taxes to be an effective means of redistribution if tourists are higher income, and touches on the locus of control of tourism tax funds. Finally, for many of the potential benefits that he described to play out, he argues that the revenues should be controlled locally.

**Hughes, Howard. Room taxes – a response (response to September 1983 article by Rae Weston). Tourism Management, March 1984, Pages 75-76**

In this short letter to the editor, Hughes responds to Weston’s 1983 article outlining seven criteria for assessing the effectiveness of room taxes. He agrees with Weston that the room tax is more progressive than a property tax. His main problems with Weston’s analysis are: 1) that tourists have no way to exercise democratic control over the use of the tourism tax dollars (“taxation without representation”), and 2) that he doesn’t think the administrative costs can be kept low.

This exchange is useful for seeing an early theoretical argument play out between two economists, even if the both Weston and Hughes offer little empirical evidence for their claims.


This article uses a comparative static analysis to estimate the effect on hotel revenues of a proposed increase in the room tax rate from 5% to 7% in Hawaii. Taking the result for elasticity of demand of -1 from the 1985 Fujii et al study, their model suggests that hotel operators will pay for all of the increase in the tax out of revenues. This finding relies heavily on an elastic demand for lodging, which is refuted in a later, more robust study of the Hawaiian room tax (Bonham et al, 1992)


Here, Rae Weston responds to Hughes’ framework for evaluating tourism taxes, treating room taxes specifically. Heralding their ubiquity (room taxes between 3% and 11% in every US state but Montana in 1981), he justifies the popularity of room taxes by placing them up against seven evaluative criteria: equity, efficiency, adequacy, administrative cost, non-resident contribution, growth potential and distribution. He compares the room tax to the property tax and argues that it “scores more highly than the property tax” on all of the criteria except for the adequacy criterion (it would not be enough by itself to fund government services).

**Weston, Rae. Letter to the editor (reply to Howard Hughes letter). Tourism Management, March 1984, Page 76**
Weston responds to Hughes again in this little academic argument playing out in the journal Tourism Management. He argues that the room tax is better than another form or tourism tax (the departure tax) on several of the established criteria.


This is a report to a Convention and visitor’s bureau in Irving, Texas (home of the Dallas, Cowboys). The results of qualitative interviews conducted with hotel operators serve as just one more example of their perception that revenue losses to the lodging industry will result from any increase in occupancy taxes.


The official position of the U.S. Travel Association (a broad national advocacy organization supporting the travel industry) is that they are opposed to “discriminatory taxes on the traveling public” and that any tax revenues should be spent directly on tourism products/programs.


This policy statement from the AHLLA demonstrates their opposition to a proposed federal law which would codify an exemption that online booking intermediaries (Priceline, Expedia, etc.) have in some jurisdictions on paying hotel tax on the full retail cost of a room. This is due to their concern that local governments may try to make up lost revenues from the potential exemption of online travel wholesalers by raising the hotel rate. The hotel industry doesn’t want these third-party intermediaries to have to just pay tax on the wholesale cost of the room, but on the retail price paid by the consumer.


This anti-tax advocacy site offers a variety of opinion articles generally opposing the hotel occupancy tax.