Tourist Tax Increments for MLB Spring Training in Florida: Spatial Effects of County Level Tax Rate Variation

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Introduction and Literature
As recently highlighted by Crompton (2013), addressing opportunity costs of sports facilities can only help to inform local residents and public officials about the full costs of sports facilities. One overlooked area of costs in this context, however, includes deadweight loss from taxation. This is a central issue in public finance, as public officials often face resistance from new taxes to fund public projects such as sport venues or support the hosting of mega-events. Revenue, supply, and demand elasticity related to the implementation of any tax strategy are therefore vital issues to form new public policies. Taxes may increase prices faced by consumers and create an incentive to substitute products or services for those that are taxed (or taxed in specific locations). As a result, businesses may have to choose between lowering the price of products or losing business to areas with lower taxes.

For some taxes, such as hotel/motel or rental car taxes, public officials argue that the burden falls upon non-residents. The argument that follows is that the tax is exported to those non-residents – and not borne by residents – while the funded projects provide local benefit. However, the behavioral implications of tourist taxes related to visitor choice have received very little attention in the tourism and sport tourism literature (exceptions include Aguilo, Riera, & Rossello [2005] and Mak & Nishimura [1979]). Further, the salience of these taxes has been shown to be an important component in influencing tax-related behavior (Chetty, Looney, Kroft, 2009), highlighting the need for a more recent understanding of these effects in the internet age, where prices are more salient at purchase time. In the largely fixed-supply hotel market, the demand elasticity ultimately determines whether consumers or businesses bear the largest burden of the proposed tax. Ultimately, if visitors have accessible untaxed substitutes, then the question remains as to whether hotel owners, for example, would need to lower prices to ensure that visitors continue to travel to the area.

These behavioral changes are particularly relevant when nearby areas have similar geographic characteristics and amenities for tourists. If visitors are particularly sensitive to hotel prices – or have very similar nearby alternatives with lower rates – then the incidence of the tax could fall upon local hotel owners and employees. However, most past studies have focused only on exportability of tourist taxes without consideration of spatial characteristics of tax rate variation. As shown in Mills, Rosentraub, Winfree, and Cantor (2014), if taxes used to fund sports facilities can be easily avoided, this could result in net negative economic activity, despite increases in tax collections used to fund a new sports facility. Therefore, in this work, we take advantage of public data on county level tourist tax collections in Florida – often used to fund MLB spring training facilities – to estimate the temporal and spatial characteristics of tourist tax revenue elasticity.

Research Context, Data, and Methods
We use data from counties in the state of Florida to examine the temporal and spatial effects of variation in tourist taxes on county level tax collections from 2003 through 2015. Florida is home to 67 independent counties, many with relatively homogenous geographic characteristics (e.g., nearby beaches, warm weather, etc.). The state also allows tourist development tax increments applied at the county level of up to 2% specifically to fund spring training facilities in those counties. This allowance, along with other increments to tourist taxes, results in considerable variation in tax rates across neighboring counties.

In addition to tax rates and tax collections, we identify the presence of spring training venues (and when teams leave or arrive to the area), geographic characteristics (coastal counties, regional location), demographic information such
as median income and county population, the state and local sales tax rate, and bordering county rates.

We use a panel regression to estimate the changes in logged tax collections associated with changes in the logged tax rates across all counties. Regressions are estimated first with geographic characteristics (constant across time) as well as with county fixed effects (time invariant geographic characteristics are thus dropped from the model), and include standard errors robust to both clustering within county and heteroscedasticity. The coefficients for tax rates are therefore directly estimated as tax revenue elasticities.

Preliminary Results
Our preliminary models show mixed evidence of behavioral impacts of tourist tax rates in Florida. While there is some evidence that the county level tax rate elasticity has an absolute value less than one – indicating a reduction in total activity or prices – there is some heterogeneity in the effect size related to the size and geography of the county.

While this work is ongoing, we are currently integrating the neighboring county rates into our models to identify the moderating effect of nearby area rates on the tax collections in a given county. This information could provide additional context for the geographic variation in tax revenue elasticities estimated in the preliminary models. With this data, we will also estimate tax collection models that directly account for the non-independence of county collections through more comprehensive econometric models that account for spatial correlation in our data.

Contributions to Sport Management
The deadweight loss in tourist taxation is therefore especially relevant when used to fund sports facilities. Our presentation will further provide recommendations to public officials and sports practitioners as to the expected loss from increased taxation and ease of avoidance among tourists as we expand the empirical investigation.