



## **The Influence of Property Tax on Rental Rates**

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Comments Welcome

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*The views expressed in this paper are those of the authors and do not reflect those of the Ball State University or its governing bodies.*

## Introduction

This paper analyzes the incidence of property tax rates on rental property in Indiana. Governor Daniels' proposed property tax plan calls for a cap of 2 percent cap of total assessed value on rental property taxes. This cap is modestly higher (about 0.18 percent) than the current statewide average paid by all properties. We note that property taxes currently treat rental property differently than other residential property in that it is not typically subject to a homestead exemption. In practice, most rental property owners are likely paying more than the average homeowner due to the absence of the homestead exemption. However, the prospect of a differential treatment of rental property from residential property motivates an analysis of the incidence of this tax.

## Rental Property and Taxes

The influence of property tax rates on rental property are most useful in determining the level of regressivity of Indiana's current tax plan as well as changes proposed by the Governor. As we reported in our initial study Indiana has over 1,800 rental establishments with annual revenues of over \$1.33 billion. This does not include rental by individuals of houses or rooms. Data providing some ball-park evidence as to the size of this market is surprisingly unavailable. What we do know is that rental markets are important for younger and lower income residents of the state.

The prime question regarding property taxes and rental property is primarily whether market rents vary significantly with property tax rates. In order to test this, we have collected data from the U.S. Department of Housing and Urban Development on the median rent in U.S. Counties. In this survey, only 46 of Indiana's 92 counties were represented. More disaggregated data (such as township level rent variability) are not directly available.

A common method of testing the relationship between two variables is elasticity. So, we propose to test the elasticity – or responsiveness – of median market rents in 46 Indiana counties to the average property tax rate in each county. We select 2003 as the most current year where both sets of data are available.

We construct an equation where:

$$\varepsilon_{R,T} = \frac{\partial \log(\text{Rent})_i}{\partial \log(\text{Property Tax})_i}$$

which is the standard elasticity formula. We derive the value from a standard linear model, which has been corrected for potential data related bias.<sup>1</sup>

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<sup>1</sup> We incorporate bias tests presented by Qian, C and D. E. Miles "The Bias of Elasticity Estimators in Linear Regression: Some Analytic Results" Economics Letters, Vol. 94(2), February 2007, Pages 185-191.

We find no evidence that property tax rate differentials have been transferred to rental properties. Indeed, under no alternative test did property tax rates present any influence on rent prices. We are heartened that this finding is largely consistent with other studies of tax differentials and rents.<sup>2</sup>

Our findings suggest that changes to property tax rates on rental properties in Indiana will not affect rent prices. Thus, most of the incidence of property tax changes on rental property will affect businesses. This lessens the regressivity of the overall tax proposal, as renters are more likely to be less affluent than homeowners.

Importantly, the incidence of property tax changes on rental property is not confined to price effects. Different rates may alter the mix of available housing units. This difference may alter land use, but both the magnitude and direction of these effects are dependent upon whether or not the proposed impacts of the Governor's changes to rental property are an increase or decrease, which is highly dependent on the individual location of the property.

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<sup>2</sup> See Goodman, J. "Houses, Apartments and Property Tax Incidence, Feb 2005, Joint Center for Housing Studies, Harvard University. For a review.