

Property taxes: Effective, But Regressive? A Review of the Evidence

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 - ▶ Support team from the Munk School of Global Affairs and Public Policy.
 - ▶ Many people who reached out prior to this talk.

Introduction

- ▶ A little bit on me:
 - ▶ First-year PhD student in economics at the University of Toronto.
 - ▶ Research interests in public and urban economics.
- ▶ Started to think about the property tax while working on Finances of the Nation, a project to bring together public finance data in Canada.
 - ▶ Data concerns are very important when analyzing the property tax.
- ▶ Discuss current literature on property tax, present some preliminary results and research direction going forward.

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 - ▶ Data concerns are very important when analyzing the property tax.
- ▶ Discuss current literature on property tax, present some preliminary results and research direction going forward.

Why is the property tax unique?

- ▶ The property tax is a recurring tax on the value of a property.
 - ▶ Paid at set times each year.
 - ▶ The tax is based on the assessed value of a property.
 - ▶ Taxes the value of an asset rather than some form of income.
- ▶ The structure of the tax poses unique challenges:
 - ▶ What is the value of the asset? (i.e. the property)
 - ▶ How should tax rates be set?
 - ▶ How are tax revenues collected?
 - ▶ Is a tax on an asset fair?

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A residential example:



House	Left	Right
Income	\$100,000	\$60,000
Mortgage payments	\$20,000	\$0
Property value	\$1,000,000	\$1,000,000
Property tax rate	1%	1%
Property tax paid	\$10,000	\$10,000

An example

- ▶ What does this example capture?
 - ▶ The property tax is based on the value of the property, not the income of the individual.
 - ▶ This might be a source of unfairness in the property tax.
- ▶ What does this example miss?
 - ▶ The property tax can be passed on from landlords to tenants.
 - ▶ Affects both residential and commercial property.
 - ▶ Might distort decisions that individuals and businesses make about where to locate.
 - ▶ Likely to have effects on other areas of the economy, e.g. labor markets, construction, transportation, etc.
- ▶ Discussion of the property tax needs to go beyond the impact on homeowners.

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Tax incidence

- ▶ **Statutory incidence** measures who actually pays the tax (property owners).
 - ▶ If only looking at households and businesses that directly pay the property tax, we are looking at the statutory incidence.
- ▶ **Economic incidence** examines who pays the tax and who is affected by the tax.
 - ▶ If we examine all households and businesses affected by the property tax, we are looking at the economic incidence.

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Progressive or regressive?

- ▶ Once we know incidence, we can determine the progressivity or regressivity of a tax.
- ▶ Characterize taxes by the percentage of income that goes to a tax.
 - ▶ If the percentage of income increases as income increases \Rightarrow tax is progressive.
 - ▶ If the percentage of income stays the same as income increases \Rightarrow tax is proportional.
 - ▶ If the percentage of income decreases as income increases \Rightarrow tax is regressive.
- ▶ For example, the personal income tax is progressive.

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Two theories

- ▶ We have two theories of the economic incidence of the property tax, with contradictory predictions of incidence and progressivity.
- ▶ The "Capital Tax View" says the property tax is progressive because property is primarily owned by high income individuals.
 - ▶ The tax also distorts where people choose to build.
- ▶ The "Benefit View" says the property tax is neither progressive or regressive, because households and businesses choose where to move based on the services they receive.
 - ▶ There is no distortion from the property tax.

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The property tax is not well understood

- ▶ Knowing which theory of tax incidence is more accurate tells us what policies to pursue.
 - ▶ e.g. If the property tax is very regressive, it justifies having policies that provide property tax relief for low income individuals.
 - ▶ e.g. If the property is a tax on capital, we may want to lower tax rates on businesses to encourage development.
- ▶ Despite significant research into the property tax, we don't have a good understanding of the incidence of the property tax.
- ▶ Previous empirical results were limited by data and often reflected the researcher's assumptions.
- ▶ A new generation of results on tax incidence is starting that is far more robust.

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Lutz (2015)

- ▶ Looks at the relationship between residential property tax and new home construction in New Hampshire.
- ▶ Finds different responses to changes in the property tax in areas close to Boston, relative to far outside of Boston.
- ▶ Demonstrates a relationship between property tax incidence and housing supply elasticity (how easy is it to increase the housing supply in response to a change in house prices)
 - ▶ Easier to increase housing supply \Rightarrow more progressive property tax.
- ▶ Hypothesizes, but does not prove that zoning is a key driver of this relationship.

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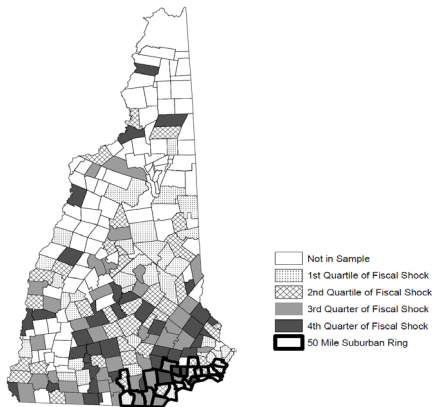
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Figure 2: Geographic Distribution of Fiscal Shock



⁰Source: Lutz, Byron. 2015. "Quasi-Experimental Evidence on the Connection between Property Taxes and Residential Capital Investment." *American Economic Journal: Economic Policy*, 7(1): 300–330.

Löffler and Siegloch (2021)

- ▶ Examine welfare effects of property taxation, with emphasis on the effects on renters and local labor markets.
- ▶ Utilize data from Germany, which has unique institutional features:
 - ▶ Property taxes are similar for residential and commercial uses.
 - ▶ Tax rates are scaled by municipalities, but otherwise unchanged.
 - ▶ Landlords can directly bill tenants for their property taxes.
- ▶ Find that the economic incidence of the property tax is regressive, and driven by the pass-through from landlords to renters.
- ▶ Without pass-through from landlords to renters, the property tax is progressive.

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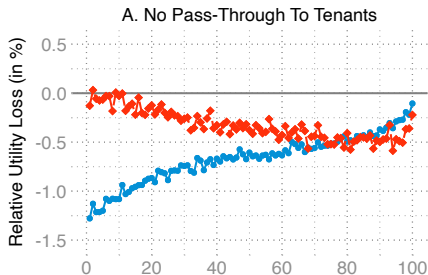
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- ▶ Blue - change in welfare from a 1% increase in the property tax.
- ▶ Red - change in welfare from a 1% increase in the property tax, excluding landlords passing on property tax increases.

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What about Canada?

- ▶ Studies of the property tax in general have been hampered by a lack of high quality data.
- ▶ This is especially evident in Canada where we have multiple levels of government, each with different taxation powers.
 - ▶ Property tax payments are municipal.
 - ▶ Property assessments are provincial or municipal (depending on province).
 - ▶ Income data is federal.
 - ▶ Property tax rates are municipal (aggregated by provinces).
- ▶ Some workarounds, like using survey data.

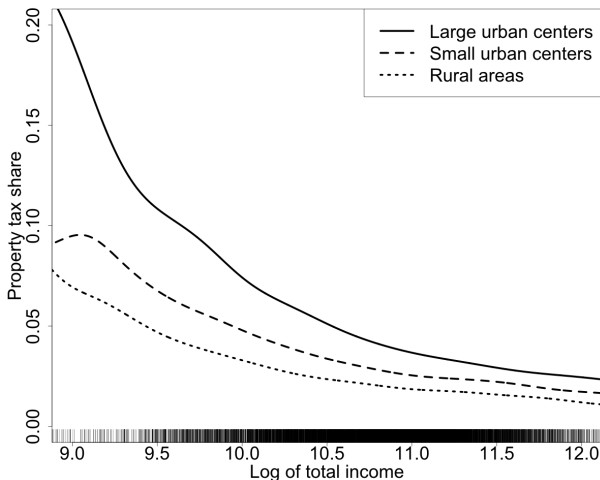
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Statutory property tax incidence for Canada



¹Data: Survey of Household Spending [Canada] (2002)

Using survey data

▶ Advantages:

- ▶ Representative of Canada as a whole.
- ▶ Captures actual property tax payments, instead of housing valuations and property tax rates.
- ▶ Solves problem of matching property tax payments and household income.

▶ Disadvantages:

- ▶ Data only captures one-year snapshots, can't see changes over time.
- ▶ Don't have detailed geographic data, which is essential when considering municipalities.
- ▶ Don't know how reliable self-reported values are.

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Data limitations

- ▶ **Survey data is not sufficient - what do we need?**
- ▶ What we need is a dataset which is long (has many years of observations) and wide (contains many individual entries for each year).
- ▶ Also need some form of "Natural Experiment" that allows us to observe how changes to the property tax affect other aspects of the economy.
- ▶ The dataset should include:
 - ▶ Data on incomes. (must have)
 - ▶ Data on property taxes paid. (must have)
 - ▶ Data on rent paid to landlords.
 - ▶ Data on property assessment values.
 - ▶ Data on property sale values.
 - ▶ Data on property tax rates.
- ▶ We don't have all of these pieces for Canada - this is the next step in my research.

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Conclusion

- ▶ We still don't know if the property tax is progressive or regressive in Canada.
- ▶ When discussing the property tax need to remember:
 - ▶ The property tax impacts renters as landlords pass the property tax on to their tenants.
 - ▶ The commercial property tax affects businesses and shouldn't be ignored.
- ▶ Previous results from other countries suggest that these indirect forces play a large role in who bears the burden of the property tax.
- ▶ There is inconclusive evidence that municipal zoning affects the burden of the property tax.
 - ▶ Can't think about the property tax system in a vacuum.

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