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

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Thank you!

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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:

<table>
<thead>
<tr>
<th>House</th>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>$100,000</td>
<td>$60,000</td>
</tr>
<tr>
<td>Mortgage payments</td>
<td>$20,000</td>
<td>$0</td>
</tr>
<tr>
<td>Property value</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Property tax rate</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Property tax paid</td>
<td>$10,000</td>
<td>$10,000</td>
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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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Lutz (2015)

Figure 2: Geographic Distribution of Fiscal Shock

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Löeffler 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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Löeffler and Siegloch (2021)

- 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.

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

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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Next steps in Canada

▶ Next step to assemble data for Canada.
▶ Statistics Canada has a new product that covers assessment values for residential properties.
▶ Need to assemble tax rate data by municipality for Canada.
    ▶ This is a daunting task.
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