



# Tax Incidence Models or Who Pays State and Local Taxes?

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# What questions does a tax incidence model answer?

- How is the tax burden distributed over income classes?
- How does a change in tax policy affect the tax burden by income class?
- For New Mexico: Examples: how would putting the gross receipts tax back on food affect households by income group?
- Or: how would ending preferential treatment of capital gains affect household tax burden?

# Types of Tax Incidence Models

- Representative Taxpayer: selected example of taxpayer household designed for each income group: District of Columbia, Vermont;
- Computable General Equilibrium [CGE] Models: Oregon TIM, California DRAM, Massachusetts;
- Tax Incidence Model: attempts to estimate final incidence as well as initial impact of tax;
- Impact models not considered here – too limited – Utah has one;
- Thanks to Michael Mazerov at the Center on Budget for his help in locating and categorizing tax incidence models.

# Types of Tax Incidence Models

- Representative Taxpayer: usually includes only taxes on individuals, not businesses; estimates initial impact, not final incidence;
- CGE Models: most sophisticated, attempts to model the changes in economic behavior that result from the tax system;
- Tax Incidence Model: uses a statistical sample to estimate the tax burden by income group; therefore allows for scaling to the entire population; attempts to estimate incidence of business taxes.

# National [all state] Studies of Tax Incidence

- District of Columbia: extremely useful annual study of state and local tax burden using the representative taxpayer model; the DC study is for income classes in the largest city in each state;
- DC model does not estimate the incidence of business taxes [such as corporate income tax and property tax on commercial property];
- DC model does not estimate how much of the burden of a state tax system is exported.

# National [all state] Studies of Tax Incidence

- Citizens for Tax Justice [ITEP] performs an analysis of state and local tax burden by income group [quintiles or fifths] that comes out every 5-7 years;
- ITEP attempts to measure the burden of taxes on businesses – in general ITEP assumes that businesses taxes are passed back to business owners – this is the most ‘progressive’ assumption;
- ITEP covers only non-elderly households [below age 65];
- ITEP does not model how much of each state’s tax burden is exported;
- ITEP does not model how economic behavior is affected by the tax system – only CGE models may possibly do this.

# State Level Tax Incidence Models

## Minnesota

- Minnesota Tax Department performs a tax incidence study every 2 years;
- Study is required by statute;
- Includes state and local taxes;
- Based on a statistical sample of households in each income group and includes taxes paid by both households and businesses;
  - Business taxes include both income taxes and property taxes on commercial property;
  - Incidence assumptions for business taxes are explicitly spelled out;
- Estimates taxes exported from the state to the rest of the country to other states and internationally;
- Breaks out the burdens for senior and non-senior households;
- Has been done for 20 years and is estimated to cost \$85,000 annually.

# State Level Incidence Models

## Texas

- Exemption and Tax Incidence study is done every 2 years
- Study is required by statute;
- Is closely patterned on the Minnesota study;
- Models business taxes and taxes exported [such as severance taxes] to other states and countries;
  - Modeling severance tax incidence is especially important to states with significant natural resources taxation, like New Mexico;
- Business tax incidence assumptions are spelled out explicitly.

# State Level Tax Incidence Models

## Oregon

- Oregon Tax Incidence Model (OTIM) 2001 (not clear if this report is done annually or if the model is still used in Oregon);
- OTIM is a CGE [Computable General Equilibrium] model that models not only impact and incidence but the changes in behavior that result from the tax system or changes to the tax system;
  - California has also had a CGE model called DRAM and Massachusetts has also had a CGE
    - more information on these is needed;
- Models individual and business taxes with explicit assumptions, although there is no reference to taxes exported to other states or internationally;
- Consensus: CGE models are the most sophisticated and interesting but are also the hardest to design and to maintain;
  - New Mexico attempted to design a CGE model in the 1990s.

# State Level Tax Incidence Models

## Maine

- State and local tax burden report done annually;
- Reports tax incidence for taxes on households: income, sales and property taxes;
- Includes business taxes such as CIT and state commercial taxes;
- Does not put report online.

# State level Tax Incidence Models

## Kansas

- Tax Incidence Study 2006 (not clear on whether this was a one-time effort or an annual report);
- Covers only taxes on households;
- Individual income tax, residential property tax, and retail sales tax;
- No business taxes included;
- Study makes no attempt to estimate taxes exported;
- Study has fine geographic detail.

# State Level Tax Incidence Models

## Wisconsin

- Tax Incidence Study 2004;
- Study is comprehensive and thorough;
- State and local taxes included;
- Both individual and business taxes included;
- Study is unique in that it uses 3 different sets of incidence assumptions;
  - Incidence assumptions are called regressive, plausible and progressive.

# State Level Tax Incidence Models

## Vermont

- Vermont study is unique;
- Is restricted to personal Income tax;
- Has a very large number of ‘case studies’ – different PIT scenarios for a very large variety of returns;
- Vermont used its ‘microsimulation’ model for running all of these iterations;
  - New Mexico has a ‘microsimulation’ model;
  - New Mexico used its ‘microsimulation model to model the incidence of the 2003 PIT cuts.

# State Level Tax Incidence Models

## Colorado

- Tax Profile Study 2001 and Statistics of Income;
- Report provides a narrative description of the Colorado revenue context with the annual Census state and local government expenditure data;
- Reports income tax data by detailed income class;
  - New Mexico used to do this but stopped in the mid-2000s.

# Final Comments

- Minnesota published a table in their most recent report providing a state regressivity ranking (Suits Index);
- This ranking was based on the 2002 *Who Pays?* report from ITEP, discussed earlier;
- In 2002, New Mexico ranked 21<sup>st</sup> out of the 51 states and DC – could have been worse;
- Of course, that was before the 2003 tax cuts, which were phased in by 2008;
- New Mexico probably had more regressivity by 2007, the date of the next ITEP snapshot.

# Final comments (continued)

## What would a tax incidence study do?

- A tax incidence model would allow an objective look at the state's tax system in terms of the income distribution – who pays state and local taxes?
- A tax incidence model would also allow the state to assess the regressivity-progressivity of proposed tax increases and decreases: GRT, PIT, even CIT and severance taxes.
- A tax incidence model would allow us to know how much of a given tax would be exported to other states.