

Introduction

Flow variables

- Associated with a time dimension
- E.g., income, consumption, sales

Stock variables

- Have no time dimension
- E.g., Wealth

Wealth Taxes

Different types of wealth taxation:

- Tax on owner-occupied homes
- Tax on business properties
- Annual tax on net wealth
- Inheritance tax
- Gift tax
- Estate tax

Justifications for taxing wealth:

- Improve wealth distribution
- Taxes related to "ability to pay" increase progressivity

Distribution of Wealth in Canada

Distribution of Wealth in Canada in 2019 by Wealth Decile (Families and Unattached Individuals)

WEALTH DISTRIBUTION BASED ON:

Net Worth Decile	Share of Total Net Wealth (%)	Median Net Worth (\$)
1 (lowest)	-0.2	-1,000
2	0.2	11,700
3	0.7	48,500
4	1.9	138,200
5	3.5	259,000
6	5.7	417,500
7	8.6	632,600
8	12.4	902,600
9	19.1	1,379,700
10 (highest)	48.1	2,565,200
Total and overall median	100	329,900

The Role of Taxes on Wealth and Property

Countries that rely more heavily on taxes on wealth and property are those that draw substantial revenues from taxes on immovable property owned by individuals and businesses.

- Thus, although the immovable property tax base in Canada does not, in most cases, accurately reflect personal net wealth, Canadians may feel that wealth in Canada is taxed relatively heavily.
- Other taxes on wealth raise substantially less revenue than do property taxes.

Property Taxes

Tax on real property is the major form of wealth taxation in Canada.

Pre-dominantly local and no federal property tax

Property tax assessments:

- Assessed value the value the jurisdiction assigns to the property
- Assessment ratio the ratio of the assessed ratio to the market value

Jurisdictions differ with respect to what types of property are excluded and what rate applies.

Local Government Property and Related Tax Revenue, 2020

Province	Local Government Revenue from Taxes on Property	Percentage of Total Local Government Revenue
	(in \$ millions)	
ВС	\$6,701	45.10%
AB	7,581	42.2
SK	1,115	32.1
MB	1,326	42.4
ON	24,477	40.3
QC	14,313	63.3
NB	808	54.5
NS	1,515	59.3
PE	58	28.2
NL	479	50.3
YT	51	37
NT	52	16.7
NU	21	8.5
Canada	58,497	47.4

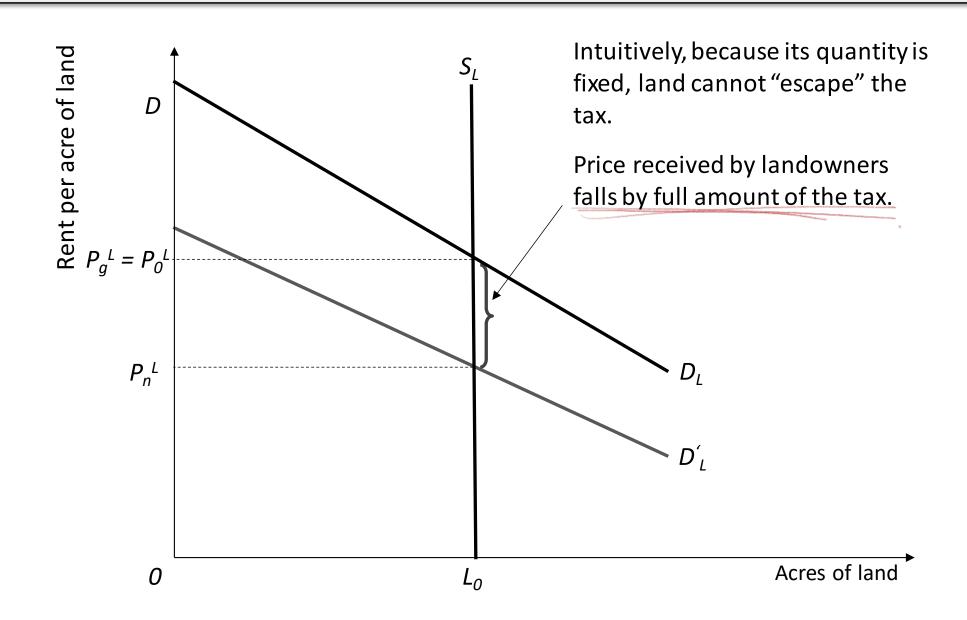
Real Property Taxes in Canada, 1933–2020

Year	Share of Total Consolidated	Share of Canada's GDP	Real per Capita (2020 \$)
	Government Revenue		
1933	31.70%	6.50%	\$427
1945	7.8	2.4	351
1955	11.2	2.7	477
1965	11.6	3.2	744
1975	8.9	3.3	1,139
1985	8.7	3.4	1,314
1995	10.1	4.3	1,900
2005	8.8	3.5	1,998
2015	9.5	3.8	2,299
2020	9.6	4	2,324

Residential and Commercial Property Tax Rates Effective Tax Rates (Selected Cities, 2021)

City	Residential Property	Commercial Property
Vancouver	0.29%	1.00%
Calgary	0.74	2.06
Edmonton	0.96	2.41
Saskatoon	0.97	1.56
Regina	1.11	1.67
Winnipeg	1.19	2.31
Toronto	0.61	2.1
Ottawa	1.12	2.65
Montreal	0.87	3.62
Quebec City	1.01	3.5
Halifax	1.19	3.39

Incidence of a Tax on Land



Tax Incidence and Capitalization

Taxes on Land

•
$$PR = \$R_0 + \$R_1/(1+r) + \$R_2/(1+r)^2 + ... + \$R_T/(1+r)^T$$

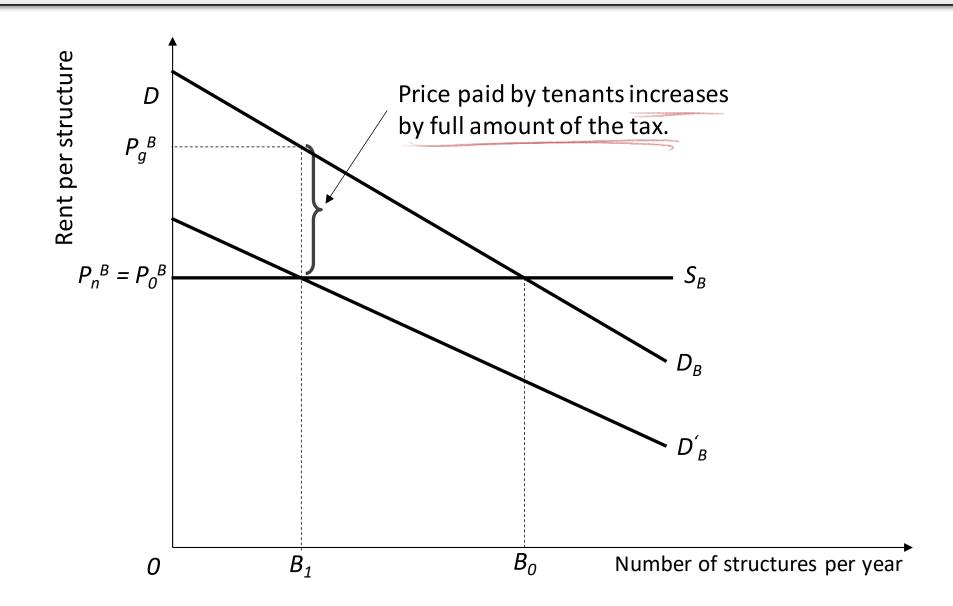
•
$$PR' = \frac{(R_0 - u_0) + \frac{(R_1 - u_1)}{(1 + r)} + \frac{(R_2 - u_2)}{(1 + r)^2} + ... + \frac{(R_T - u_T)}{(1 + r)}$$

• PR' = PR -
$$u_0 + u_1/(1 + r) + u_2/(1 + r)^2 + ... + uT/(1 + r)^T$$

Capitalization

- A stream of tax liabilities becomes incorporated into the price of an asset.
- The value of land today decreases by the present value of future tax payments

Incidence of a Tax on Structures



Property Taxes as Excise Taxes

Summary of the traditional view:

- Land part of property tax is borne by landowners in proportion to the amount of rental income they receive.
- Structures part of the tax is passed on to tenants in proportion to the amount of housing they consume.

Implications for progressiveness

Implications for efficiency

Property Tax as a Capital Tax

- General equilibrium perspective (Mieszkowski [1972])
- General tax effect
 - Progressive—stark contrast to the traditional view
- Excise tax effects
- Long-run effects (Jorgenson and Yun [1993])

Estimates of Property Tax Incidence: Annual Incidence versus Lifetime Incidence

	New View (1971; Davies et al.)		Traditional View†	
Income Decile			(1969; Vermaeten et (1988; Vermaeten et al.)	
_	Annual	Lifetime*		
	(A)	(B)	(C)	(D)
1 (low)	1.1	2.4	8.5	8
2	1.5	3.1	5.8	6.5
3	1.8	2.8	5.7	5.7
4	1.7	3.3	5.3	5.1
5	1.3	3.2	4.5	4.8
6	1.5	3.6	4.4	4.2
7	1.3	3.6	4.1	3.8
8	1.9	4.5	4.1	3.6
9	2.9	3.7	3.7	3.3
10 (high)	10.6	5.6	3.6	3
All	4.5	3.9	4.1	3.8

^{*}Deciles for lifetime incidence are ranked by lifetime resources, and the property tax is calculated as a share of resources available over lifetimes. Here it is assumed that property taxes are borne by recipients of investment income.

[†]Property taxes are expressed as a share of "broad income," which includes employment and investment income; non-taxed income, such as capital gains on residences, retirement savings earnings, and inheritances; and government transfer payments. The share of property taxes on land is assumed to be borne by owners and the share on residential structures by homeowners and renters. The tax on business structures is borne by consumers.

Property Tax as a User Fee

Discussion so far has ignored that property taxes are often used by communities.

View property taxes as the cost of purchasing public services.

Two important implications of this view:

- The notion of the incidence of the property tax is meaningless.
- The property tax creates no excess burden.

Empirical findings:

- Hamilton (1975)
- Oates (1969)

Property Tax as a User Fee

Reconciling the three views

- Not mutually exclusive alternatives
- Each may be valid in different contexts
- If considering the consequences of eliminating all property taxes and replacing them with an increase in the federal GST rate, the "new view" is appropriate—a change that affects all communities requires a general equilibrium framework.
- If considering lowering property tax rates and making up the revenue loss from a local sales tax, the "traditional view" offers the most insight.

The Future of the Property Tax

Property taxes will continue to be criticized by those seeking fair and efficient taxes.

Justification for continued reliance on the current system of property taxation as the way to finance local services:

- The local autonomy that is provided by taxes on real property
- The extent to which the property tax serves as a user fee for locally provided services

Questions For Discussion (1 of 3)

Suppose the market value of a property is \$500,000 before considering future tax payments. However, both the buyer and seller know there will be a tax of \$15,000 at the date of purchase, and \$10,000 and \$7,500 the next year. The risk-free interest rate is 10%. Taking into account the capitalization of taxes, how much would a prospective buyer be willing to pay for the property?

Questions For Discussion (2 of 3)

The City of Calgary opened a new airport runway in 2014. To avoid having to close direct road access to the airport from the city's northeast, the city plans to build a tunnel under the new runway. The cost of the tunnel is about \$300 million and is to be financed mainly by an increase in property tax rates in Calgary. Discuss the incidence and efficiency effects of the tunnel project from a capital tax view and a user fee view of the property tax. Which view of the property tax do you think is more appropriate for the tunnel project? Explain your reasoning.

Questions For Discussion (3 of 3)

Heal (2001, p. 1) notes that when Frederick Law Olmsted, the developer of New York City's Central Park, was asked how the city would pay for the park, "he responded that its presence would raise property values and the extra tax revenues would easily repay the construction costs. History shows that he was correct." This episode illustrates best which of the three views of the nature of the local property tax?