

A low-angle, upward-looking photograph of several large, light-colored stone columns of a classical building. The columns are fluted and have ornate capitals. The sky is a clear, pale blue. The perspective creates a sense of height and grandeur.

# THE CORPORATION TAX

## Chapter 21

Presentation prepared by Seuren Williams to teach Economics  
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# Introduction

**Corporation:** a form of business organization.

- It is owned by its shareholders, with ownership represented by transferable stock certificates.
- Shareholders have limited liability.
  - Liability to creditors is limited to the amount invested.

Corporations are “artificial legal persons.”

- Can make contracts, hold property, incur debt, sue, and be sued.
- And, just like any other person, it must pay tax on its income.

# The Corporation Tax

## Corporate Income Taxes in Canada, 1945–2020

Year	Federal Revenue (millions)	Provincial Revenue (millions)	Federal + Provincial (millions)	As a Percent of Government Revenue (%)	Real per Capita (\$2020)
1945	\$645	\$–	\$645	17.8	\$796
1955	1,081	54	1,135	16.5	703
1965	1,759	523	2,282	13.7	948
1975	5,748	2,091	7,921	12.6	1,620
1985	9,210	4,033	13,243	7.3	1,116
1995	12,432	7,093	19,525	6.1	1,043
2005	30,528	16,400	46,928	8.7	1,866
2015	41,730	26,947	68,667	9.7	2,083
2020	55,226	35,308	90,534	10.7	2,383

# The Corporation Tax (cont.)

Department of Finance (1997) reported a variety of deficiencies in Canada's corporate income taxes:

- Higher corporate income tax rates on non-manufacturing activities in Canada compared with the United States and other countries
- An erosion of Canada's corporate income tax base
- Distortions that favour debt over equity financing
- Distortions among industrial sectors with differing tax rates across industries
- Distortions among kinds of assets due to preferential tax treatment of some assets relative to others
- Distortions that favour small corporations over large corporations

These problems adversely affect economic efficiency, fairness, and administrative and compliance costs.

# Why Tax Corporations?

Only real people can pay a tax.

Justifications:

- Corporations are distinct entities
- Corporations receive special privileges from society
- Serves as a withholding tax
- Serves as a rent-gathering device
- Protects the integrity of the personal income tax

# Corporate Income Tax Statutory Rates

## Combined Federal and Provincial Corporate Income Tax Rates, 2022

	Small Business	Manufacturing and Processing	General
<b>Federal</b>	9.0%	15.0%	15.0%
<b>Province (federal plus provincial)</b>			
Newfoundland and Labrador	12	30	30
Prince Edward Island	10	31	31
Nova Scotia	11.5	29	29
New Brunswick	11.5	29	29
Quebec	12.2	26.5	26.5
Ontario	12.2	25	26.5
Manitoba	9	27	27
Saskatchewan	10	25	27
Alberta	11	23	23
British Columbia	11	27	27
Northwest Territories	13	26.5	26.5
Nunavut	12	27	27
Yukon	9	17.5	27
<b>Unweighted average</b>	11.1	26.4	27.4

# Corporate Income Tax Statutory Rates (cont.)

## Corporate Tax Rates for Selected OECD Countries (%)

	2000	2021
Australia	34	30
Canada	42.4	26.2
France	37.8	28.4
Germany	51.6	29.9
Ireland	24	12.5
Italy	41.2	27.8
Japan	40.9	29.7
Poland	30	19
Sweden	28	20.6
United Kingdom	30	19
United States	39.3	25.8

# Depreciation Deducted

## Economic depreciation

- Durable vs. non-durable good (e.g., drill press vs. stationery)
- Whether consumed within the year
- Capital cost allowance (CCA)
  - Tax law has rules that indicate for each type of asset what proportion of its acquisition value can be depreciated each year
  - Tax life of an asset



# Depreciation Deducted Example

Calculating the value of depreciation allowances:

- Assume that the tax life of a \$1,000 drill press is 10 years, and the firm is allowed to depreciate  $1/10^{\text{th}}$  the machine's value each year, and the corporate income tax rate is 35 percent.
- The present value of the depreciation allowance is

$$PV = \frac{\$35}{(1+r)} + \frac{\$35}{(1+r)^2} + \frac{\$35}{(1+r)^3} + \cdots + \frac{\$35}{(1+r)^{10}}$$

- If  $r = 10$  percent:

$$PV = \frac{\$35}{(1.10)} + \frac{\$35}{(1.10)^2} + \frac{\$35}{(1.10)^3} + \cdots + \frac{\$35}{(1.10)^{10}} = \$215.10$$

- The depreciation allowances lower the price of the drill press from \$1,000 to **\$784.90** (= \$1,000 – \$215.10).

# Other Depreciation Methods

**Accelerated depreciation:** Schemes that permit firms to take depreciation allowances faster than true economic depreciation.

**Expensing:** Deducting the entire value of an asset in the computation of taxable income.

Declining-balance method

- If the applicable rate is 20 percent and the cost of the depreciable asset is \$1,000, the deduction permitted is \$200 ( $0.2 \times 1,000$ ) in the first year, \$160 ( $0.2 \times 800$ ) in the second year, and \$128 ( $0.2 \times 640$ ) in the third year, and so on.

Straight-line method

- If the tax life of the asset is  $T$  years, the firm can write off  $1/T$  of the cost each year.
- For a \$1,000 asset that may be depreciated over five years, \$200 is deducted each year.

# Investment Tax Credits

- Income Tax Act has included sizable **Investment Tax Credits (ITCs)** to encourage new investment and to achieve development objectives in depressed areas of the country.
- ITCs permit a firm to subtract some portion of the purchase price of an asset from its tax liability at the time the asset is acquired.
- The value to the firm of an ITC does not depend on the corporate income tax rate.

# Treatment of Interest

Calculating the value of interest deductions:

- Assume that a firm borrows \$1,000 to invest in a machine that has a 10-year lifespan.
- The firm pays annual interest of 7.5%, or \$75, for the duration of the loan and repays the full \$1,000 after 10 years.
- With interest deductible, taxable income is reduced by \$75 each year, and if the corporate tax rate is 35% this saves \$26.25 per year.

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- With interest deductible, taxable income is reduced by \$75 each year, and if the corporate tax rate is 35% this saves \$26.25 per year.
- The present value of this stream of tax savings is

$$PV = \frac{\$26.25}{(1+r)} + \frac{\$26.25}{(1+r)^2} + \frac{\$26.25}{(1+r)^3} + \cdots + \frac{\$26.25}{(1+r)^{10}}$$

- if  $r = 10$  percent:

$$PV = \frac{\$26.25}{(1.10)} + \frac{\$26.25}{(1.10)^2} + \frac{\$26.25}{(1.10)^3} + \cdots + \frac{\$26.25}{(1.10)^{10}} = \$161.33$$

- The cost of the machine is reduced from \$1,000 to **\$838.67**.

# Treatment of Dividends

- Corporate profits may either be retained by the firm or paid to stakeholders in the form of dividends.
  - Double taxation
  - Dividend tax credit system

## Example: Canadian Dividend Tax Credit

a) Taxable corporate income	\$125
b) – Corporate tax collected at a 20% tax rate	25
c) = Corporate income for distribution [(a) – (b)]	100
d) Paid as dividends to individual =	100
e) Gross-up of dividends by 25 percent [ $0.25 \times (d)$ ]	25
f) Taxable individual income [(d) + (e)]	125
g) Individual tax liability at a 40% tax rate [ $0.4 \times (f)$ ]	50
h) – Dividend tax credit [20% of (f)]	25
i) Individual tax payable after credit [(g) – (h)]	25
<b>j) Total tax on \$125 originating in a corporation = (b) + (i)</b>	<b>50</b>

- The total marginal tax rate on the corporate taxable income is 40 percent (\$50/\$125).
- The same as the assumed personal marginal tax rate.

# Corporate Taxes: Other Factors

## Treatment of retained earnings

- Complicated—impacts the stock's price
- Incentives for firms to retain earnings rather than pay them out as dividends

## Tax expenditures under the Corporate Income Tax

- “Special” provisions exclude certain items from the tax base
  - Deduction in calculating the tax base or tax liability

# Effective Tax Rate on Corporate Capital

Statutory rate versus effective rate

- Interest deductibility
- Depreciation allowances
- Inflation
- Dividends and realized capital gains
- Provincial and local property taxes

Some effects of inflation

- 1970s highlighted the impact of inflation on effective corporate tax rates
- FIFO accounting



## Questions For Discussion (1 of 2)

The ABC corporation bought a new computer system. The tax life of the asset is 5 years. The risk free rate is 8% and corporate tax rate is 35%. The purchase price is \$5,000. What is the effective purchase price, taking savings from depreciation related tax deductions into account?

## Questions For Discussion (2 of 2)

Jimbo Corporation distributes its after-tax earnings to shareholders as dividends. Jimbo's before-tax earnings per share are \$200 and the corporate tax rate is 50 percent. Roodly and Drey each own one share in Jimbo and they face marginal personal income tax rates of 20 percent and 40 percent, respectively. Give the total tax rates (corporate plus personal) faced by Roodly and Drey on the \$200 per share of corporate earnings, if

- a. The corporate and personal income tax systems are not integrated.
- b. The corporate and personal income tax systems are fully integrated via the partnership method.
- c. Show that full integration reduces the total tax rate faced by Roodly by more than it reduces it for Drey.