THE PERSONAL INCOME TAX

Chapter 17

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Personal Income Tax Revenues in Canada, 1933 to 2019

Year	Number of Returns (thousands)	PIT Revenues (millions $)	Per Capita 2014 $*	PERSONAL INCOME TAXES AS % OF: Total Revenues	GDP
1933	52	38	60	5.1	1.1
1946	3,162	671	668	17.9	5.6
1955	4,923	1,318	682	19.2	4.6
1965	7,163	3,563	1,253	20.8	6.2
1975	12,002	18,538	3,300	28.4	10.7
1985	15,864	53,262	3,815	30.5	11
2000	22,237	143,951	5,833	30.7	13.4
2012†	25,453	164,692	4,970	23.7	10
2019	27,815	227,404	5,463	24.2	13.1

*The deflator used was the GDP price index for personal expenditure for consumer goods and services. †The change in financial reporting from the Financial Management System (FMS) to the Government Finance Statistics (GFS) makes the 2012 figures not directly comparable to the pre-2010 figures. Under FMS, personal income tax in 2009 was $5,675 per capita (in 2014 dollars) and 30.1 and 11.6 percent of total revenues and GDP, respectively.

Personal Income Taxes as a Percentage of GDP, Selected Countries, 1965–2020

Year	Canada	U.S.	U.K.	Australia	Sweden
1965	5.7	7.4	9.7	7.1	15.1
1980	10.4	10	9.8	11.5	17.7
1990	14.4	9.7	10	12.1	18.8
2000	12.9	11.9	10.2	11.5	17.7
2010	10.7	7.9	9.4	9.8	12.1
2020	12.5	10.5	9.5	11.6	12.4

Computation of Personal Income Tax Liability

STEP 1: Calculate Total Income

ADD Income from taxable sources

- Employment income; pension income; Employment Insurance income; interest and other investment income; dividends (grossed-up); rental income; income from partnerships; taxable capital gains; taxable support payments received; royalties; pension and employment insurance benefits; net self-employment income; provincial workers’ compensation benefits and income assistance; net federal supplements

Computation of Personal Income Tax Liability (cont.)

STEP 2: Calculate Net income

SUBTRACT Deductions

- Pension contributions; pension income transferred to spouse (pension income splitting); union dues and certain employment expenses; childcare expenses; disability supports; allowable business losses; moving expenses; deductible support payments; interest expenses; other special deductions; any repayments to Old Age Security, Employment Insurance, and any economic recovery benefits

Computation of Personal Income Tax Liability (cont.)

STEP 3: Calculate Federal Tax Owing

APPLY: Tax rate schedule to Taxable income

= Income tax before tax credits

Computation of Personal Income Tax Liability (cont.)

STEP 4: Calculate Nonrefundable Tax Credits

SUBTRACT from tax owing:

- Nonrefundable tax credits for taxpayer and dependents, medical expenses and disabilities, age and pension income, contributions to QPP and CPP, premiums paid for EI, eligible tuition and education expenses, gifts to charities and to the Crown, any other tax credits

= Federal tax payable

Computation of Personal Income Tax Liability (cont.)

STEP 5: Calculate Provincial Tax Payable

- REPEAT steps 4 and 5 for provincial taxes

Defining Income

The ability to identify “income” is necessary to operate an income tax.

Haig-Simons (H-S) definition of income: Income is the money value of the net increase to an individual’s power to consume during a period.

Income = Consumption + Net Additions to Wealth

- Includes all sources of potential increases in consumption, regardless of the following:
  - Whether the actual consumption takes place.
  - The form in which the consumption occurs.
- Decreases in an individual’s potential to consume should be subtracted.

Items Included in Haig-Simons Income

- Wages and salaries, business profits, rents, royalties, dividends, and interest
- Employer pension contributions and insurance purchases
- Transfer payments, including CPP/QPP retirement benefits, EI benefits, and worker’s compensation payments
- Capital gains
  - Realized versus unrealized
- Income in-kind
  - Imputed rent
- Gifts and inheritances

Some Practical and Conceptual Problems

Computing income net of business expenses

operating expense

- Often hard to distinguish between consumption expenditures and costs of obtaining income.

Computing capital gains and losses

- Difficult to measure, particularly when they are unrealized.

the value of a security is not "real" since it is not sold.

(估算的

Measuring imputed income from durables

住宅

- E.g., hard to estimate the market rent of a dwelling.

实体.

Valuing in-kind services

- E.g., income produced by people who do housework rather than participate in the market.

Evaluating the Haig-Simons Criterion

- No definition of income can make the administration of an income tax simple and straightforward.
- However, Haig-Simons criterion has often been regarded as an ideal toward which policymakers should strive.
- There are two reasons why the Haig-Simons criterion is so attractive:

    1. Fairness (equity) – people with equal incomes should pay equal taxes.
    2. Efficiency – neutrality; treats all forms of income the same and does not distort the pattern of economic activity.

How Canada’s Tax System Defines Income

Capital Gains

- Currently, for most taxpayers, one-half of realized capital gains are taxed as ordinary income. taxable income
- Only realizations taxed.
  - Unless a capital gain is actually realized—the asset is sold—no tax is levied. taxed
  - Taxes deferred are taxes saved. <= making pre-tax to pay less tax.
  - Lock-in effect.

only investors withdraw investion
and realize the capital gain could
be taxed.

Tax Deductions and Tax Credits

Deductions: an amount is subtracted from total income in order to reach taxable income.

- The deduction reduces taxable income.
- Then apply the tax rates to taxable income to obtain the tax payable.

Tax credits: the amount of the credit is subtracted from taxes that would otherwise be payable.

- The credit directly reduces taxes payable.

Deductions or tax credits may be used to stimulate private saving for retirement, increased spending on education, and donations to charities.

Tax Deduction Examples

- Childcare expenses
- Union Dues
- Interest on borrowed funds

Tax Credit Examples

Charitable Contributions and Education

- Nonrefundable tax credit

CPP, QPP, and EI

- Nonrefundable tax credit

Canada Worker's Benefit

- Refundable tax credit

Tax Credits Versus Deductions

- Some argue that deductions and exemptions should be converted into credits. (Exceptions: personal; spouse and dependents; age)
- Proponents of credits argue that they are fairer than deductions.

The Simplicity Issue

The federal personal income tax has been railed for its complexity and the compliance burden it has placed on taxpayers.

complained.

- Growing length of the Income Tax Act

One of five objectives in the 1987 tax reform was that the tax system “be simpler to understand and comply with.”

The tax law in Canada is complex and will remain so.

- But taxpayers may feel the complexity of the law now contributes more to fairness and less to the special treatment of some taxpayers.

Federal and Provincial Tax Rates, and Surtaxes, 2022

1. Rates of Federal Income Tax

TAXABLE INCOME	TAX RATE
$50,197 or less	15%
$50,198 to $100,392	20.50%
$100,393 to $155,625	26%
$155,626 to $221,708	29.38%
over $221,708	33%

Federal and Provincial Tax Rates, and Surtaxes, 2022

2. Provincial Income Tax Rates and Surtaxes

Province	Lowest Rate (%)	Highest Rate (%)	Surtax (%) (if any)	Basic Exemption ($)
Newfoundland and Labrador	8.7	21.8		9,804
Prince Edward Island	9.8	16.7	10	11,250
Nova Scotia	8.79	21		8,481
New Brunswick	9.4	20.3		10,817
Quebec	15	25.75		16,143
Ontario	5.05	13.16	20.0–36.0	11,141
Manitoba	10.8	17.4		10,145
Saskatchewan	10.5	14.5		16,615
Alberta	10	15		19,814
British Columbia	5.06	20.5		11,302
Northwest Territories	5.9	14.05		15,609
Nunavut	4	11.50		16,862
Yukon	6.4	15		14,398

Maximum Federal and Provincial Combined Rates for Three Types of Income, by Province, 2022

Province	Ordinary Income (%)	Dividends (%)	Capital Gains (%)
Newfoundland and Labrador	54.8	46.2	27.4
Prince Edward Island	51.37	34.22	25.69
Nova Scotia	54	41.58	27
New Brunswick	53.3	33.51	26.65
Quebec	53.31	40.1	26.65
Ontario	53.53	39.34	26.76
Manitoba	50.4	37.78	25.5
Saskatchewan	47.5	29.64	23.75
Alberta	48	34.31	24
British Columbia	53.5	36.54	26.75
Northwest Territories	47.05	28.33	23.53
Nunavut	44.5	33.08	22.25
Yukon	48	28.93	24

Note: These tax rates do not reflect various preferences given to certain investments in some provinces. Rather, they reflect the top marginal rates that may apply where such preferences do not exist or already have been fully realized.

The Structure Of Personal Tax Rates in Canada

Factors affecting marginal rates:

- Surtaxes
  - Only in a few provinces, not at the federal level.
- Payroll taxes
  - E.g., Canada Pension Plan (CPP)
- Clawbacks
  - Benefits to taxpayers are cut back once income reaches certain levels.
  - E.g., Canada Child Benefit (CCB) and the GST/HST credit.

Factors Affecting Marginal Rates

Factors Affecting Marginal Tax Rates: A British Columbia Example in 2019*			
Income ($)	**Tax Provision†**	**Change in Marginal Tax Rate (%)**	**Marginal Tax Rate (%)**
0	Start of EI premiums	1.62	1.62
3,000	Start of the CWB phase-in	−26.00	−24.38
3,500	Start of CPP premiums	4.95	−19.43
11,981	End of CWB phase-in	26	6.57
17,025	Start of CWB clawback: first threshold	12	18.57
20,744	Start of 1st provincial bracket	5.06	23.63
24,138	Start of 1st federal bracket	15	38.63
31,711	Start of CCB clawback	13.5	52.13
36,483	End of CWB clawback	−12.00	40.13
38,507	Start of GST clawback	5	45.13
40,707	Start of 2nd provincial bracket	2.64	47.77
47,630	Start of 2nd federal bracket	5.5	53.27

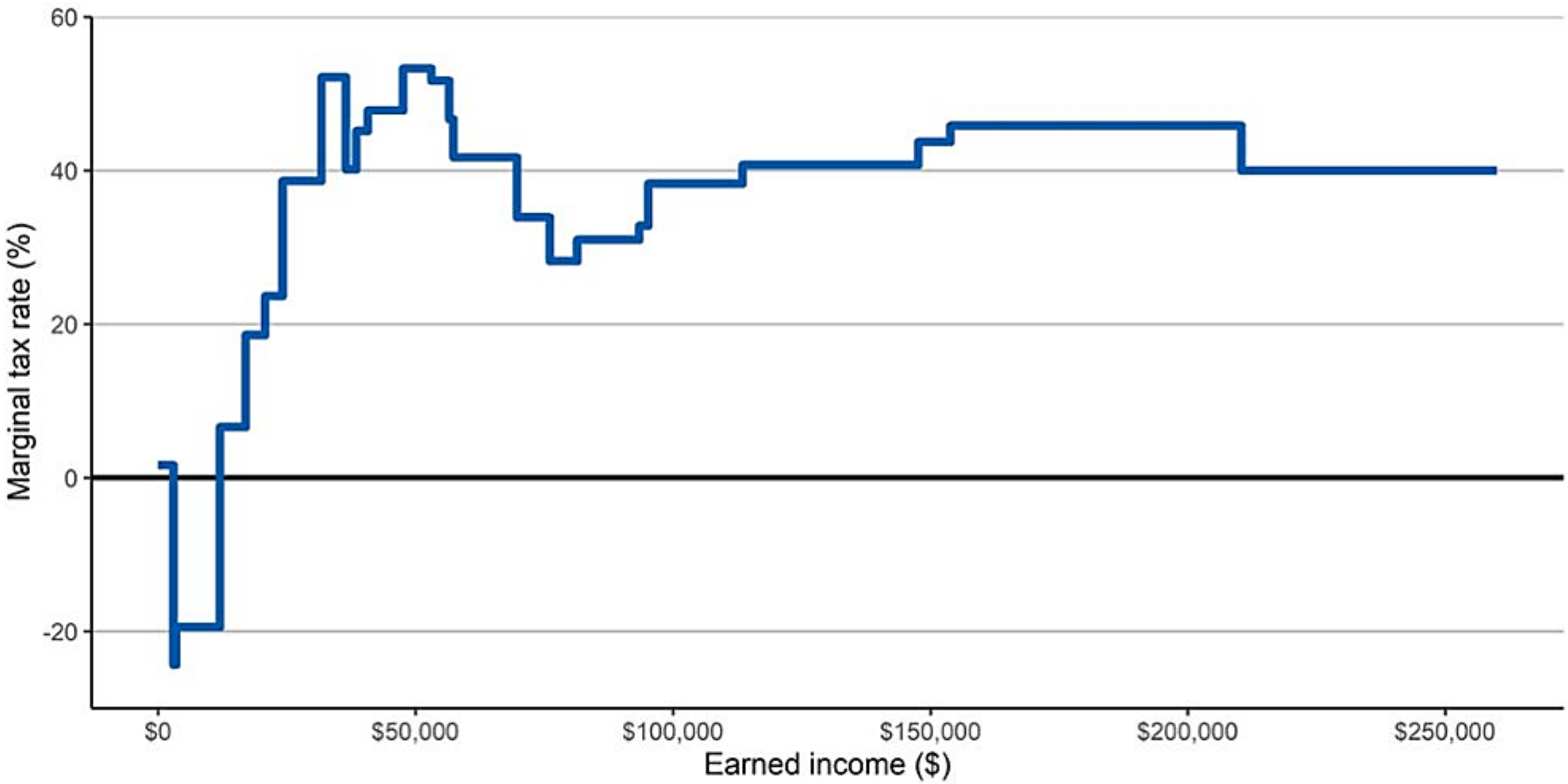
*This is for a one-earner couple with two children between ages 7 and 17. Applicable credits include those for self, spouse, and employment and maximum EI and CCP contributions. Only the employee shares of EI and CPP premiums are reflected in the table. B.C.'s statutory marginal tax rates in 2019 were 5.06, 7.70, 10.50, 12.29, 17.70, 16.80, and 20.00. †EI = Employment Insurance; CPP = Canada Pension Plan; CWB = Canada Worker Benefit; CCB = Canada Child Benefit; GST = Goods and Services Tax.

Factors Affecting Marginal Rates (cont.)

Factors Affecting Marginal Tax Rates: A British Columbia Example in 2019*			
Income ($)	**Tax Provision†**	**Change in Marginal Tax Rate (%)**	**Marginal Tax Rate (%)**
53,100	Maximum EI premiums	− 1.62	51.65
56,547	End of GST clawback	−5.00	46.65
57,400	Maximum CPP premiums	−4.95	41.7
69,708	Start of CCB clawback: second threshold	−7.80	33.9
76,137	End of CCB clawback	−5.70	28.2
81.416	Start of 3rd provincial bracket	2.8	31
93,476	Start of 4th provincial bracket	1.79	32.79
95,259	Start of 3rd federal bracket	5.5	38.29
113,506	Start of 5th provincial bracket	2.41	40.7
147.667	Start of 4th federal bracket	3	43.7
153,900	Start of 6th provincial bracket	2.1	45.8
210,371	Start of 5th federal bracket	0.25	40

*This is for a one-earner couple with two children between ages 7 and 17. Applicable credits include those for self, spouse, and employment and maximum EI and CCP contributions. Only the employee shares of EI and CPP premiums are reflected in the table. B.C.'s statutory marginal tax rates in 2019 were 5.06, 7.70, 10.50, 12.29, 17.70, 16.80, and 20.00. †EI = Employment Insurance; CPP = Canada Pension Plan; CWB = Canada Worker Benefit; CCB = Canada Child Benefit; GST = Goods and Services Tax.

Marginal Tax Rates, 2019 (British Columbia Example)



Based on table “Factors Affecting Marginal Tax Rates: A British Columbia Example in 2019.”

Effective versus Statutory Rates

Statutory rates differ from effective rates in three ways:

1. Tax system treats some forms of income preferentially
   - Taxable income may be much lower than some more-comprehensive measures
2. Tax shifting
   - E.g., shifting the burden of tax by the taxpayer to another person
   - No reason to believe that income taxes will really be borne by the people who pay the money to the government
3. Excess burden
   - Can arise because taxes distort behaviour away from patterns that otherwise would have occurred

Taxes and Inflation

The tax system is indexed for inflation.

How does inflation affect taxes?

- Bracket creep
- Deductions and exemptions set in nominal terms
  - Real and nominal income
- Taxation of nominal capital gains
- Taxation of nominal interest
  - Real and nominal interest rate

Taxation of Nominal Interest

- Real after-tax rate of return:

$$r = (1 - t)i - \pi$$

Coping with the Tax/Inflation Problem

Historically, indexing has been neither comprehensive nor permanent.

Full indexing of tax brackets and tax credit levels was restored in 2000.

Should indexing be maintained or diminished?

- **NO**
  - Ad hoc adjustments allow legislators to examine and revise the Income Tax Act.
- **YES**
  - Desirable to have a stable and predictable tax law and fewer chances for legislative mischief.

Questions For Discussion (1 of 3)

Suppose the Working Income Tax Benefit (WITB) tops up a single individual's income by 25 percent of the amount that employment earnings exceed $3000, up to a maximum payment of $1000.

a. Assume that the refundable WITB credit is reduced by 15 percent on the amount of earnings in excess of $11,500. Over what range of earnings is the credit at its maximum value? At what income is the credit reduced to zero?

b. Now let the statutory income tax be a flat rate of 30 percent, with a basic personal exemption of $5,000. Ignoring all other taxes and program benefits in the economy, except for the income tax and the WITB, calculate and describe the effective marginal tax rate (EMTR) faced by this individual on income ranging from zero to $20,000. Discuss the incentive effects associated with this EMTR schedule, regarding the decision to join the workforce and to increase hours worked, say, from part-time to full-time.

Questions For Discussion (2 of 3)

Suppose that a taxpayer has a marginal personal income tax rate (including provincial taxes) of 40 percent. The nominal interest rate is 12 percent, and the expected inflation rate is 5 percent.

a. What is the real, after-tax rate of interest?

b. Suppose that the expected inflation rate increases by three percentage points to 8 percent, and the nominal interest rate increases by the same amount. What happens to the real after-tax rate of return?

Questions For Discussion (3 of 3)

Parents with children under 18 can split their incomes for tax purposes: one spouse may shift up to $50,000 to the other in order to lower their combined income taxes. Suppose this policy is implemented in Hibernia, where the tax structure is 20 percent of income up to $30,000, and 40 percent of all income in excess of $30,000. The table below gives the incomes of three married couples. Alyss and Will have a 6-year-old daughter, while Paulina and Halt have an 18-year-old son, and Cassandra and Horace are childless. Using the incomes in the table, compare the total tax paid by each couple before and after the tax proposal.

Alyss	Will	Paulina	Halt	Cassandra	Horace
$70,000	$10,000	$70,000	$10,000	$40,000	$40,000