

# Taxes internationally

Zhengxi Lin

Total tax revenues in Canada reached \$324.6 billion in 1997—36.8% of gross domestic product (GDP),<sup>1</sup> which was substantially higher than the 29.7% in the United States. Compared with other developed nations, however, Canada tended to fall in the middle, although its ranking in terms of various components varied considerably. This note compares taxation among the G-7 and other members of the Organisation for Economic Co-operation and Development (OECD) through a series of charts and one table.

## Comparison of effective tax rates

Even under the common OECD classification, different bases are used to calculate tax liabilities for different components (see *OECD classification of taxes*). Furthermore, the tax liability for each component depends upon not only the tax base and the statutory (legislated) tax rate but also various exemptions, deductions, credits and surtaxes. These factors differ between countries as well as within countries over time.

Following common international practice, this article uses GDP as the base to compute effective tax rates. Many factors can affect the tax-to-GDP ratios: the extent to which countries provide social or economic assistance through tax expenditures or direct government spending, differences in the degree of tax avoidance and the size of the underground economy, as well as differences in GDP measurement (OECD, 1999).

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## OECD classification of taxes

Tax systems differ substantially from country to country and the OECD member states are no exception. While federal countries (for example, Canada, Germany and the United States) generally have three levels of government with authority to levy taxes (federal/central, state/provincial and local/municipal), unitary countries (for example, France, Italy and Japan) have two (federal/central and local/municipal). And different governments raise tax revenues through many different forms; some rely upon certain forms more heavily than others. Therefore, a meaningful international study requires a comparison at the same level using a common classification system and comparable data. This study uses the OECD tax classification system and its most recent data (1997).<sup>2</sup> It focuses on aggregate taxation at the national level, regardless of the levying authority (level of government).

### Class of tax

- 1000 Taxes on income, profits and capital gains
  - 1100 Taxes on income, profits and capital gains of individuals
  - 1200 Corporate taxes on income, profits and capital gains
- 2000 Social security contributions
- 3000 Taxes on payroll and workforce<sup>3</sup>
- 4000 Taxes on property
  - 4100 Recurrent taxes on immovable property
  - 4200 Recurrent taxes on net wealth
  - 4300 Estate, inheritance and gift taxes
  - 4400 Taxes on financial and capital transactions
  - 4500 Other non-recurrent taxes on property
  - 4600 Other recurrent taxes on property
- 5000 Taxes on goods and services<sup>4</sup>
  - 5100 Taxes on production, sale, transfer, leasing and delivery of goods and rendering of services
  - 5200 Taxes on use of goods, or on permission to use goods or perform activities
- 6000 Other taxes

Table: Tax-to-GDP ratios in OECD countries, 1997

	Total taxes		Personal tax		Corporate tax		Payroll tax		Property tax		Goods and services tax	
	Rate	Rank*	Rate	Rank*	Rate	Rank*	Rate	Rank*	Rate	Rank*	Rate	Rank*
	%		%		%		%		%		%	
Australia	29.8	6	12.5	22	4.4	25	2.0	3	2.7	22	8.2	4
Austria	44.3	22	9.8	15	2.1	6	18.0	29	0.6	2	12.5	16
Belgium	46.0	25	14.3	24	3.4	17	14.6	22	1.3	10	12.3	14
<b>Canada</b>	<b>36.8</b>	<b>15</b>	<b>14.0</b>	<b>23</b>	<b>3.8</b>	<b>19</b>	<b>5.7</b>	<b>9</b>	<b>3.7</b>	<b>27</b>	<b>9.0</b>	<b>5</b>
Czech Republic	38.6	17	5.2	3	3.3	15	16.9	25	0.5	1	12.6	17
Denmark	49.5	28	25.9	28	2.6	9	1.9	2	1.7	13	16.3	29
Finland	46.5	26	15.5	25	3.8	19	11.7	16	1.1	7	14.4	23
France	45.1	24	6.3	7	2.6	9	19.4	28	2.4	19	12.6	17
Germany	37.2	16	8.9	13	1.5	2	15.5	24	1.0	6	10.3	9
Greece	33.7	9	4.5	2	2.1	6	10.9	15	1.3	10	13.8	22
Hungary	39.4	18	6.6	9	1.9	4	14.3	21	0.6	2	15.5	27
Iceland	32.2	7	10.6	17	0.9	1	2.8	6	2.6	20	15.3	26
Ireland	32.8	8	10.3	16	3.3	15	4.6	8	1.6	12	13.0	21
Italy	44.4	23	11.2	20	4.2	22	15.0	23	2.3	18	11.5	11
Japan	28.8	4	5.9	4	4.3	23	10.6	14	3.1	24	4.8	1
Korea	21.4	2	3.6	1	2.2	8	2.0	3	2.9	23	9.7	7
Luxembourg	46.5	26	9.5	14	8.6	28	11.8	17	3.6	26	12.6	17
Mexico	16.9	1	..	..	..	..	2.7	5	..	..	9.3	6
Netherlands	41.9	20	6.5	8	4.4	25	17.1	27	1.9	14	11.7	13
New Zealand	36.4	14	15.7	26	3.9	21	0.3	1	2.0	15	12.6	17
Norway	42.6	21	11.0	19	5.2	27	9.6	13	1.1	7	15.8	28
Poland	41.2	19	8.8	11	3.2	13	13.5	20	1.2	9	14.4	23
Portugal	34.2	12	6.1	6	3.7	18	8.9	12	0.8	4	14.4	23
Spain	33.7	9	7.4	10	2.6	9	11.8	17	2.0	15	9.7	7
Sweden	51.9	29	18.2	27	3.2	14	16.9	25	2.0	15	11.6	12
Switzerland	33.8	11	10.6	17	2.0	5	12.5	19	2.6	20	6.2	3
Turkey	27.9	3	6.0	5	1.6	3	4.0	7	0.8	4	10.3	9
United Kingdom	35.4	13	8.8	11	4.3	23	6.1	10	3.8	28	12.4	15
United States	29.7	5	11.6	21	2.8	12	7.2	11	3.2	25	4.9	2
<b>Unweighted average</b>												
G-7**	36.8		9.5		3.4		11.4		2.8		9.4	
OECD total	37.2		10.2		3.3		10.0		1.9		11.6	
OECD Europe	39.9		10.1		3.2		11.7		1.7		12.7	
European Union†	41.5		10.9		3.5		12.2		1.8		12.6	

Source: Organisation for Economic Co-operation and Development

Note: Components do not add to total because some are not shown here.

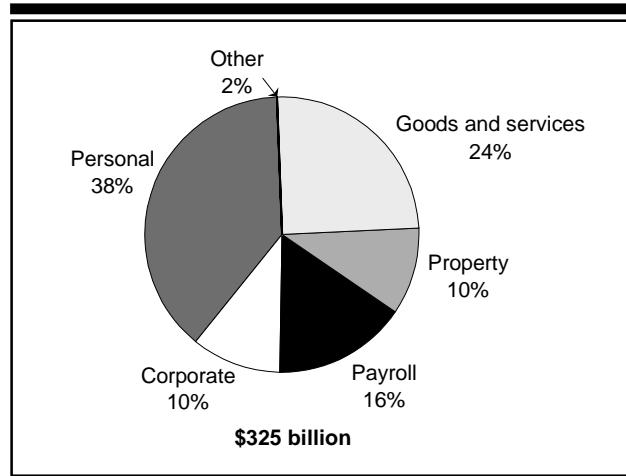
\* From low to high (1 to 28 or 29).

\*\* The G-7 nations are Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

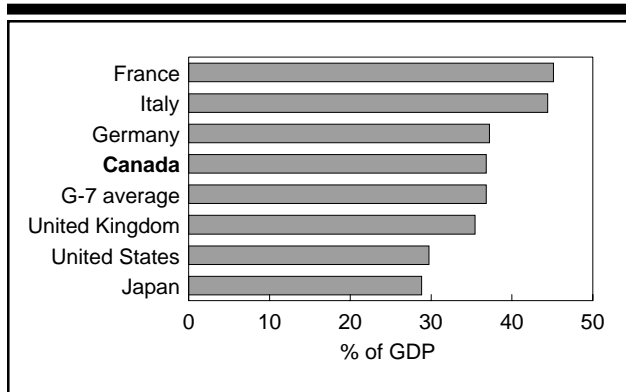
† The European Union comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.

### Canada's tax composition

Taxes on personal income, profits and capital gains (personal taxes) constituted the largest component (38%) of Canada's overall \$325 billion in 1997 taxation. Taxes on goods and services were next (24%), followed by payroll taxes (16%). Taxes on corporate income, profits and capital gains (corporate taxes) and those on property each represented about 10% of total tax revenues.



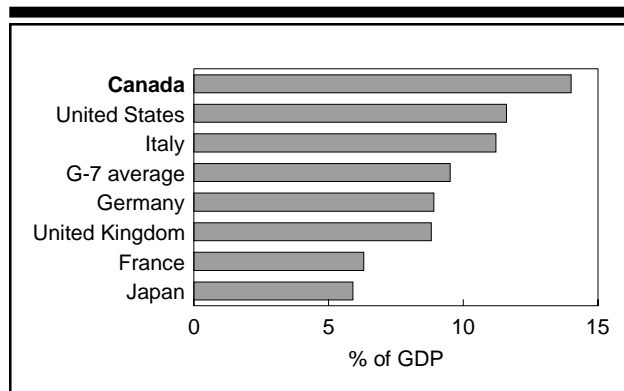
### Canada's total taxation in the middle of the G-7 pack



In 1997, Canada's overall tax rate matched the G-7 average, higher than that of Japan, the United States or the United Kingdom, but lower than that of France, Italy or Germany. When the comparison is extended to the entire OECD membership, Canada's overall tax rate was lower than average, as it was when compared with OECD European members and the 15 European Union countries. It ranked 14<sup>th</sup> among all 29 OECD countries.

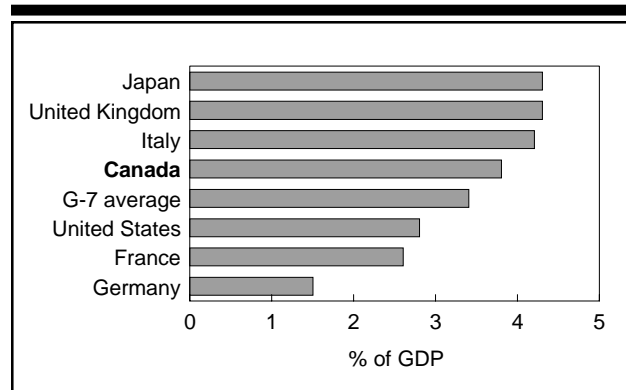
### Canada's personal taxation one of the highest

Personal tax revenues in Canada (\$123.4 billion in 1997) amounted to 14% of GDP. This ratio was the highest among the world's richest nations—more than double those of Japan and France and over 20% higher than that of the United States. This ratio was also one of the highest among the world's leading economies. It was the sixth highest among the 28 OECD countries for which data are available.<sup>5</sup>

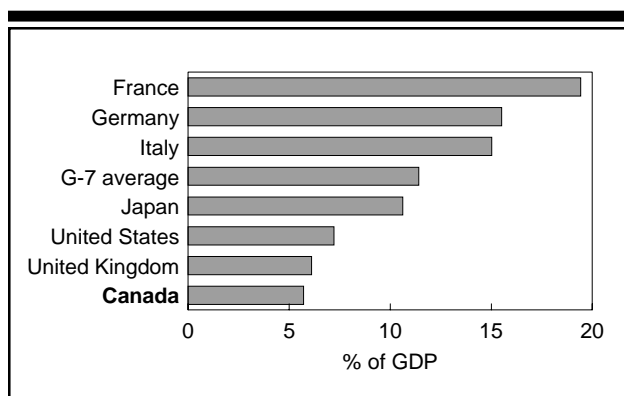


### Canada's corporate taxation on the middle-to-high side

Canada's corporate tax revenues reached \$33.6 billion in 1997, amounting to 3.8% of GDP. This ratio was in the middle of the G-7 pack—over two-and-a-half times that of Germany. It tied with that of Finland for the ninth highest place among the 28 OECD countries for which data are available.



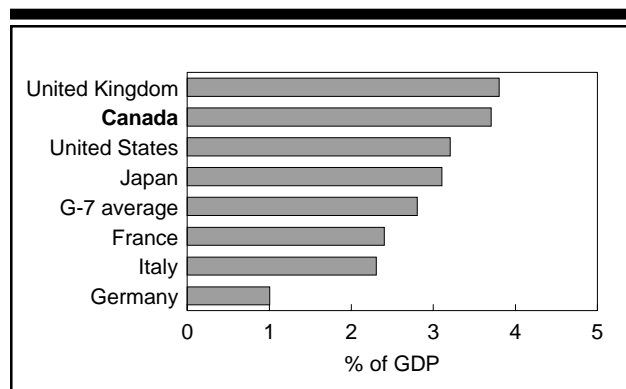
### Canada's payroll taxation one of the lowest



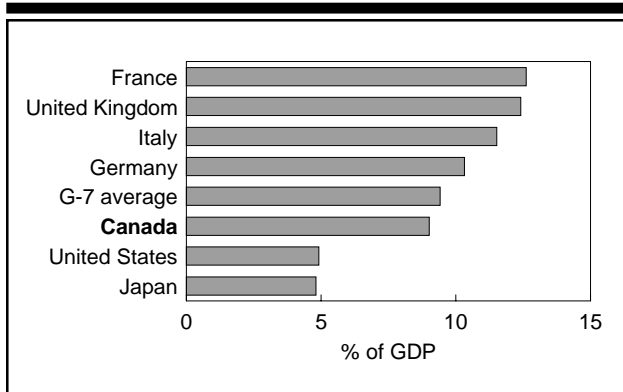
Payroll tax revenues (employer and employee contributions combined) in Canada totalled \$50.4 billion in 1997, some 5.7% of GDP. This ratio was the lowest among the G-7 countries, equivalent to half their average. When the comparison is broadened to all OECD members, Canada's payroll tax ratio was still one of the lowest.

### Canada's property taxation one of the highest

Property tax revenues in Canada amounted to 3.7% of GDP, the second highest among the G-7, just surpassed by that of the United Kingdom. This ratio was also the second highest among the 28 OECD member countries for which data are available.



## Canada's goods and services taxation one of the lowest



The goods and services tax ratio in Canada was nearly double that of Japan or the United States, but lower than those of the other four G-7 countries. Among OECD countries, Canada's tax ratio ranked fifth lowest.

### Perspectives

#### ■ Notes

- 1 GDP is measured in market prices throughout the article.
- 2 Only certain member states have provided estimates for 1998. Thus the most recent year for which complete data are available is 1997.
- 3 Given that some countries have only class 2000 while others have both classes 2000 and 3000, the two are combined here ("payroll taxes") to improve comparability. The bulk of payroll-type taxes are placed in class 2000.

4 Unallocable items within each class and other taxes (class 6000) are excluded in the comparison here.

5 Data for Mexico are not available.

#### ■ Reference

Organisation for Economic Co-operation and Development. *Revenue Statistics, 1965-1998*. Paris: OECD, 1999.