
FISCAL FIGURES

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INTERNATIONAL TAX COMPARISONS

The OECD's annual examination of tax collections in member countries shows little change in Canada's tax burden relative to the burden in other member countries, although our ratio finally shows a slight reduction in relation to gross domestic product.

KEYWORDS: OECD ■ SALES TAXES ■ SOCIAL SECURITY ■ TAX BURDEN ■ TAX COLLECTIONS ■ INCOME TAXES

The 2001 edition of *Revenue Statistics*¹ from the Organisation for Economic Co-operation and Development (OECD) provides a useful indicator of the demands imposed on taxpayers by government in the 30 member countries of the OECD, as measured by the ratio of tax collections to gross domestic product (GDP). However, several cautions need to be raised before examining the ratios in detail. The rough measure—tax collections as a percentage of GDP—does not necessarily indicate the tax burden imposed on a particular type of taxpayer. The balance between businesses and individuals, between ordinary taxation and social security levies, and between income and consumption taxes is as important in determining the impact of a nation's tax burden as the total burden itself. The design is equally important: a low rate of tax on a broad base may produce as much revenue as a high rate of tax on a narrow base, but the economic effect—and the impact on particular taxpayers—will be substantially different.

It is impossible to determine the real significance of a tax system without examining the spending side. If tax dollars are used to finance services, such as health care, which would otherwise be financed directly by the private sector, the impact on the economy of extracting those dollars will be different from raising tax dollars that will be used to cover interest on the public debt.

These broad ratios cannot be used for individual tax comparisons. The income tax burdens of specific individuals will vary from country to country depending on such factors as private savings for retirement, types of investment income, family status, and even home ownership. To determine tax burdens for individuals in different countries, the best comparisons use the actual income tax legislation, with adaptations for specific tax-favoured activities.

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While the overall ratios attract attention in debates on international competitiveness, they are not useful in assessing the competitive position of a particular country. Similarly, the ratio of corporate income tax collections to GDP is of little help in determining where new investment will take place. The specific factors peculiar to each business, such as capital investment and its tax treatment, and the use of labour, will be the determining factors in establishing the marginal rate of tax on the return from new capital invested. The most useful comparisons involve applying the rules for each jurisdiction to the details of the proposed investment.

The overall Canadian tax burden in 1999, as measured by the ratio of total collections to GDP, was 38.2 percent, 13th highest in the OECD. Provisional information for 2000, as shown in table 1, indicates that our ratio dropped to 37.5 percent, moving us down to 16th highest. This put us slightly below the ratios for Germany and the United Kingdom for the first time in several years. We remained well below the 52.2 percent level recorded in Sweden in 1999 and the average of 39.9 percent for European members of the OECD. Our burden remained well above that of the United States, which showed a ratio of only 28.9 percent in 1999, the 27th highest in the OECD, and Japan, which followed at 26.2 percent.

Canada's personal income tax level, as shown in table 2, was 14.6 percent of GDP in 1999, fifth highest in the 30 member countries and well above the average of 10.1 percent for all OECD countries, but far from the highest. The ratio in 1999 was 25.5 percent in Denmark and 18.6 percent in Sweden. Canada's corporate income taxes were 3.7 percent of GDP in 1999, above the OECD average of 3.3 percent. Most of our trading partners levied larger social security taxes than we did. At 5.2 percent of GDP, we were the sixth lowest, well below the OECD average of 9.5 percent in 1999. Similarly, our taxes on goods and services were the sixth lowest at 9.4 percent of GDP, double the ratio in the United States, but well below the OECD average of 11.6 percent. At 4.0 percent, only Luxembourg's taxes on property were higher than the 3.9 percent of GDP shown for Canada in 1999, but the average was only 1.9 percent for all member countries.

Our heavy dependence on personal income tax, which in 1999 accounted for 38.1 percent of all of our taxes, is illustrated in table 3. Only 4 of the 30 OECD member countries relied more heavily on this source. We also collected more than the OECD average from taxes on corporate income and property, but less than the average from social security contributions and taxes on goods and services.

Tables 1 to 3 are based on data from the OECD's *Revenue Statistics*, which uses a national income and expenditure accounts analysis designed by the organization. The definition of tax revenue differs slightly from the one used by Statistics Canada. Table 4 shows the main ratios for Canada for the years 1998 to 2000, using Statistics Canada information. The overall ratio dropped slightly from the 38.2 percent shown in the OECD publication to 36.5 percent in 1999. Further, the Statistics Canada ratio remained unchanged for 2000, in contrast to the significant drop shown in the OECD data. Table 5 shows the main tax ratios for each province, using Statistics Canada data for the calendar year 1998, the latest year for which detailed information is available. The highest total tax burden, as measured by the

ratio of all tax collections to gross domestic provincial product, occurred in Quebec (41.1 percent) and the lowest in Alberta (30.5 percent).

The general ratios of tax collections to GDP hide differences between types of taxpayers and levels of income. The OECD provides annual comparisons of the tax position of a number of different households in each country earning the average industrial wage or a multiple of that amount.² The results for 2001 are briefly summarized in table 6, which shows that the single worker earning the average industrial wage in Canada retained about 75 percent of gross wages after income taxes and social security contributions, about the same as his or her US counterpart. The family of one employed adult and one spouse caring for two children was able to spend 85 percent of gross income, thanks to tax concessions and cash benefits for families. With both spouses employed, at 100 percent and 67 percent of the average industrial wage, the after-tax/after-transfer income dropped to 78 percent of gross wages, slightly less than their US counterparts in both cases. The table shows considerable variation: cash benefits for families were sufficient to more than offset the income tax payable by a single-earner family in Iceland and Luxembourg. There were no cash benefits or tax concessions available to comparable families in Mexico, Greece, and Turkey.

For the first time, the OECD publication contains a comparison of income taxes and social security contributions payable by retired taxpayers as well, but for only the nine countries shown in table 7 for the year 1999. The income taxes and social security levies for the retiree with total income equal to the average industrial wage are compared with the comparable burden borne by workers with the same income. The Canadian retiree would have paid 75 percent of the tax burden imposed on his or her working counterpart. In other countries covered in the table, the retiree's burden ranged from a low of 18 percent of the worker's burden in Germany to a high of 101 percent in Finland.

The final two tables look beyond the tax burdens to the fiscal policies of the G7 countries. As shown in table 8, Canada is the only country in the G7 to register consistent surpluses since 1996 and is projected to be the only one in surplus in the years 2001 to 2003. The result of running these surpluses can be seen in table 9, which shows how much Canadian governments have been able to reduce their outstanding debt, in relative terms.

NOTES

- 1 Organisation for Economic Co-operation and Development, *Revenue Statistics, 1965-2000* (Paris: OECD, 2001).
- 2 Organisation for Economic Co-operation and Development, *Taxing Wages, 2000-2001* (Paris: OECD, 2002).

TABLE 1 Total Tax Revenue as a Percentage of Gross Domestic Product, OECD Member Countries,^a 1998-2000

	1998	1999	2000 ^b
Sweden	51.6	52.2	53.3
Denmark	49.5	50.4	48.4
Finland	45.9	46.2	45.5
France	45.1	45.8	45.5
Belgium	45.9	45.7	46.0
Austria	44.2	43.9	43.3
Italy	42.5	43.3	42.3
Netherlands	40.9	42.1	41.8
Luxembourg	41.1	41.8	42.0
Norway	43.4	41.6	40.2
Czech Republic	38.1	40.4	39.5
Hungary	38.8	39.2	38.7
Canada	38.3	38.2	37.5
Germany	37.0	37.7	37.8
Greece	35.7	37.1	38.0
Iceland	34.1	36.3	37.3
United Kingdom	37.1	36.3	37.7
New Zealand	35.5	35.6	36.2
Slovak Republic	37.1	35.3	35.8
Poland	37.6	35.2	na
Spain	34.1	35.1	35.3
Switzerland	34.6	34.4	35.9
Portugal	33.5	34.3	34.7
Ireland	31.7	32.3	31.5
Turkey	28.4	31.3	32.8
Australia	29.8	30.6	na
United States	28.8	28.9	na
Japan	26.8	26.2	27.1
Korea	22.9	23.6	26.4
Mexico	16.5	16.8	18.1
OECD average	36.9	37.3	na
OECD Europe	39.5	39.9	na
EU 15	41.1	41.6	na

^a Ranked in descending order by 1999 ratios.

^b Provisional.

na Not available.

Source: Organisation for Economic Co-operation and Development, *Revenue Statistics*, 1965-2000 (Paris: OECD, 2001).

TABLE 2 Major Tax Revenues as a Percentage of Gross Domestic Product, OECD Member Countries, 1999

	Taxes on personal income	Taxes on corporate income	Social security contributions	Payroll taxes	Taxes on property	Taxes on goods and services
Canada	14.6	3.7	5.2	0.8	3.9	9.4
Mexico	na	na	3.0	—	na	8.6
United States	11.8	2.4	6.9	—	3.1	4.7
Australia	13.2	4.9	—	2.0	2.9	7.6
Japan	4.8	3.4	9.7	—	2.9	5.3
Korea	3.7	2.1	4.1	0.1	3.2	9.5
New Zealand	14.9	4.0	—	0.3	2.1	12.9
Austria	10.1	1.8	15.1	2.7	0.6	12.4
Belgium	14.0	3.6	14.5	—	1.5	11.6
Czech Republic	5.2	3.8	17.6	—	0.6	13.1
Denmark	25.5	3.0	2.1	0.3	1.8	16.3
Finland	14.7	4.2	11.8	—	1.1	14.3
France	8.1	2.9	16.6	0.9	3.2	12.3
Germany	9.4	1.8	14.8	—	0.9	10.6
Greece	5.3	3.2	11.5	0.2	1.9	13.6
Hungary	6.8	2.3	13.2	0.1	0.6	15.8
Iceland	12.7	1.5	2.9	—	2.5	16.6
Ireland	9.7	3.9	4.2	0.1	1.8	12.4
Italy	11.4	3.3	12.3	—	2.0	11.9
Luxembourg	7.8	7.3	10.9	—	4.0	11.6
Netherlands	6.4	4.2	16.8	—	2.2	11.8
Norway	11.7	3.2	10.2	—	1.0	15.5
Poland	8.1	2.6	9.9	0.2	1.1	13.2
Portugal	5.8	4.0	8.7	—	1.1	14.2
Slovak Republic	4.4	2.8	14.2	—	0.6	12.0
Spain	6.9	2.8	12.2	—	2.2	10.5
Sweden	18.6	3.2	13.2	3.9	1.9	11.2
Switzerland	10.0	2.5	12.2	—	2.9	6.8
Turkey	7.4	2.4	5.8	—	0.9	11.2
United Kingdom ...	10.5	3.8	6.2	—	3.9	11.7
OECD average	10.1	3.3	9.5	0.4	1.9	11.6
OECD Europe	10.0	3.2	11.2	0.4	1.8	12.6
EU 15	10.9	3.5	11.4	0.6	2.0	12.4

na Not available.

— Not applicable.

Source: Same as table 1.

**TABLE 3 Percentage Distribution of Major Tax Revenues,
OECD Member Countries, 1999**

	Taxes on personal income	Taxes on corporate income	Social security contributions	Payroll taxes	Taxes on property	Taxes on goods and services
Canada	38.1	9.8	13.6	2.1	10.1	24.7
Mexico	na	na	17.8	—	..	51.0
United States	40.7	8.3	23.9	—	10.7	16.4
Australia	43.3	15.9	—	6.4	9.4	25.0
Japan	18.5	12.9	37.2	—	11.0	20.1
Korea	15.6	8.9	17.2	0.2	13.7	40.2
New Zealand	41.8	11.1	—	0.8	5.8	36.2
Austria	22.9	4.1	34.3	6.2	1.3	28.3
Belgium	30.6	7.9	31.7	—	3.3	25.4
Czech Republic	12.9	9.5	43.7	—	1.5	32.5
Denmark	50.6	5.9	4.2	0.6	3.5	32.5
Finland	31.9	9.1	25.5	—	2.4	31.0
France	17.6	6.4	36.1	2.1	7.0	26.8
Germany	25.1	4.8	39.3	—	2.5	28.0
Greece	14.2	8.7	30.9	0.5	5.1	36.7
Hungary	17.3	5.9	33.7	0.3	1.7	40.4
Iceland	34.9	4.2	7.9	—	7.0	45.8
Ireland	30.1	12.1	12.9	0.3	5.5	38.4
Italy	26.4	7.7	28.5	—	4.6	27.5
Luxembourg	18.7	17.6	26.0	—	9.5	27.8
Netherlands	15.2	10.1	40.0	—	5.1	28.0
Norway	28.2	7.6	24.5	—	2.4	37.2
Poland	23.1	7.4	28.1	0.6	3.2	37.6
Portugal	16.9	11.7	25.4	—	3.3	41.3
Slovak Republic	12.6	8.0	40.2	—	1.7	34.1
Spain	19.5	8.0	34.8	—	6.2	30.0
Sweden	35.6	6.0	25.3	7.5	3.7	21.4
Switzerland	29.0	7.2	35.6	—	8.3	19.9
Turkey	23.8	7.6	18.5	—	2.8	35.9
United Kingdom ...	28.8	10.4	17.1	—	10.9	32.3
OECD average	26.3	8.8	25.1	0.9	5.4	31.7
OECD Europe	24.6	8.2	28.0	0.9	4.5	32.1
EU 15	25.6	8.7	27.5	1.2	4.9	30.4

.. Less than 0.1 percent.

na Not available.

— Not applicable.

Source: Same as table 1.

TABLE 4 Taxes as a Percentage of Gross Domestic Product, Canada, Calendar Years 1998 to 2000

	1998	1999	2000
<i>Taxes on personal income</i>			
Federal	8.7	8.4	8.5
Provincial	5.3	5.3	5.1
Total	14.0	13.7	13.6
<i>Taxes on corporate income</i>			
Federal	2.1	2.5	2.9
Provincial	1.2	1.3	1.5
Total	3.3	3.8	4.4
<i>All taxes</i>			
Federal	17.1	16.9	17.3
Provincial	14.0	14.1	13.8
Local	3.4	3.3	3.1
Canada and Quebec pension plans	2.0	2.2	2.4
Total	36.6	36.5	36.5

Source: Statistics Canada, CANSIM II, table 380-0007, July 2001.

TABLE 5 Taxes as a Percentage of Gross Domestic Provincial Product, by Province, Canada, Calendar Year 1998

	Federal	Provincial	Local	CPP and QPP	Total
Nfld.	15.7	15.2	1.6	2.2	34.8
PEI	19.0	16.3	1.2	2.5	38.9
NS	17.5	13.4	3.0	2.3	36.1
NB	16.3	14.0	1.7	2.3	34.3
Que.	16.2	19.0	3.7	2.1	41.1
Ont.	18.0	13.4	4.4	2.0	37.8
Man.	16.4	14.6	3.5	2.1	36.6
Sask.	14.4	14.1	3.9	1.7	34.1
Alta.	16.7	9.9	2.1	1.7	30.5
BC	17.5	14.4	2.3	2.2	36.3
National average	17.2	14.4	3.5	2.0	37.1

Source: Statistics Canada, *Provincial Economic Accounts, 2000*, catalogue no. 13-213-XDB.

TABLE 6 Net Tax Burden on Average Industrial Worker as a Percentage of Gross Wages, OECD Member Countries, 2001

	Single, no children, average industrial wages	One earner, one spouse, two children, ^a average industrial wages	Two earners, two children, 100% and 67% average industrial wages
Canada	25.3	14.9	21.9
Mexico	3.1	3.1	0.3
United States	24.6	13.2	19.7
Australia	23.1	13.1	18.6
Japan	16.2	12.0	14.5
Korea	9.3	8.5	8.4
New Zealand	19.6	16.8	19.2
Austria	28.5	8.7	15.1
Belgium	41.7	21.5	33.2
Czech Republic	23.1	2.5	17.5
Denmark	43.8	30.9	38.5
Finland	32.4	23.5	24.5
France	27.0	14.4	19.0
Germany	40.6	18.8	31.3
Greece	18.1	18.3	17.4
Hungary	34.3	15.4	20.9
Iceland	22.2	-1.8	15.9
Ireland	16.9	2.3	11.0
Italy	27.9	13.8	23.6
Luxembourg	24.8	-0.7	7.4
Netherlands	33.0	21.4	26.2
Norway	29.0	17.9	22.6
Poland	31.3	25.4	30.7
Portugal	16.5	6.2	10.4
Slovak Republic	19.9	3.6	12.8
Spain	18.9	9.9	14.3
Sweden	31.7	22.2	25.2
Switzerland	21.4	8.4	14.6
Turkey	30.4	30.4	29.9
United Kingdom	23.3	10.3	15.8

^a Includes tax provisions or cash benefits for children.

Source: Organisation for Economic Co-operation and Development, *Taxing Wages, 2000-2001* (Paris: OECD, 2002).

TABLE 7 Tax Burden of Pensioners as a Percentage of Gross Income, Selected OECD Countries, 1999

	Income tax	Social security	Total	Worker earning average industrial wage
<i>Income equal to average industrial worker</i>				
Canada	20.0		20.0	26.7
Finland	30.3	3.9	34.2	33.7
Germany	nil	7.7	7.7	41.9
Italy	23.1		23.1	29.1
Japan	4.0		4.0	16.0
Netherlands	6.1	9.4	15.5	35.4
Sweden	29.3		29.3	34.2
United Kingdom	15.1		15.1	24.4
United States	10.9		10.9	25.8
<i>Income equal to twice average industrial worker</i>				
Canada	31.2		31.2	34.0
Finland	39.1	3.9	43.0	43.1
Germany	3.1	4.8	7.9	47.7
Italy	30.6		30.6	36.1
Japan	10.8		10.8	21.2
Netherlands	28.2	4.7	33.0	40.9
Sweden	40.5		40.5	42.6
United Kingdom	21.2		21.2	27.5
United States	18.6		18.6	33.8

Source: Same as table 6.

TABLE 8 G7 General Government Financial Balance as a Percentage of Gross Domestic Product, 1990 to 2003

	Canada	United States	Japan	United Kingdom	Germany	France	Italy
1990	-5.8	-4.3	1.9	-1.6	-2.0	-2.1	-11.8
1991	-8.3	-5.0	1.8	-3.1	-3.0	-2.4	-11.7
1992	-9.1	-5.9	0.8	-6.4	-2.5	-4.2	-10.7
1993	-8.7	-5.0	-2.4	-7.9	-3.1	-6.0	-10.3
1994	-6.7	-3.6	-2.8	-6.7	-2.4	-5.5	9.3
1995	-5.3	-3.1	-4.2	-5.8	-3.3	-5.5	-7.6
1996	-2.8	-2.2	-4.9	-4.4	-3.4	-4.1	-7.1
1997	0.2	-0.9	-3.7	-2.2	-2.7	-3.0	-2.7
1998	0.5	0.3	-5.5	0.4	-2.2	-2.7	-2.8
1999	1.6	0.8	-7.0	1.1	-1.6	-1.6	-1.8
2000	3.2	1.7	-6.6	1.9	1.2	-1.4	-0.3
2001 est.	2.8	0.6	-6.4	1.1	-2.5	-1.5	-1.4
2002 est.	2.1	-1.1	-6.7	0	-2.5	-1.8	-1.1
2003 est.	2.2	-0.6	-6.6	-0.7	-1.8	-1.4	-1.1

Source: *OECD Economic Outlook*, December 2001.

TABLE 9 G7 General Government Net Financial Liabilities as a Percentage of Gross Domestic Product, 1990 to 2003

	Canada	United States	Japan	United Kingdom	Germany	France	Italy	Euro area average	Partial OECD average ^a
1990	61.2	49.9	12.4	15.1	17.8	16.1	83.7	37.5	35.0
1991	69.2	53.6	6.4	15.3	20.2	16.3	88.6	39.4	36.4
1992	78.4	57.1	7.3	21.6	24.4	18.4	97.3	43.5	40.1
1993	83.8	59.1	10.1	30.9	27.9	26.6	105.4	48.2	44.0
1994	86.2	59.7	12.1	31.1	29.1	29.4	110.7	50.8	45.8
1995	88.0	59.2	16.9	36.9	39.4	35.9	108.7	56.0	48.2
1996	87.5	58.8	21.6	38.7	42.2	41.5	108.8	59.3	49.2
1997	82.7	56.7	27.9	40.1	43.0	41.4	106.8	59.4	48.9
1998	80.2	53.0	38.0	41.9	45.4	42.4	105.0	58.9	48.7
1999	73.9	48.6	44.4	36.7	43.6	42.6	103.5	57.4	46.8
2000	65.0	43.4	51.1	33.1	41.5	42.2	98.7	54.7	44.2
2001 est.	59.7	41.1	58.7	30.5	41.5	42.2	95.5	53.4	43.4
2002 est.	56.1	41.4	66.8	29.2	43.2	42.6	93.0	53.1	44.3
2003 est.	51.0	40.0	74.0	28.5	43.4	42.2	89.8	51.8	44.1

^a Data for all OECD countries are not available.

Source: Same as table 8.