

# EconomicLetter



## How the U.S. Tax System Stacks Up Against Other G-7 Economies

by Anthony Landry

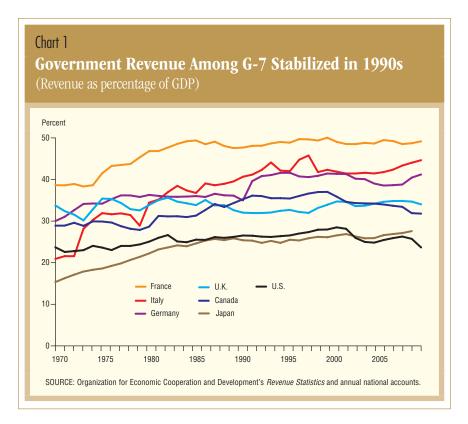
he recent financial crisis, Europe's sovereign debt problems and the U.S. political dispute about raising the national debt ceiling have prompted fiscal policy debate about the size of government and the type of tax structure needed to fund public expenditures.

Government revenue of the so-called Group of Seven (G-7) largest industrialized nations expressed as a percentage of gross domestic product (GDP) from 1970 to 2009 generally trended upward before stabilizing in the 1990s (*Chart 1*). Revenue averaged 27 percent of GDP in 1970, rising to 36 percent in 2009. Over the past four decades, revenue increased significantly in France, Germany, Italy and Japan, while remaining roughly constant in Canada, the U.K. and the U.S.

In this *Economic Letter*, I compare G-7 nations' revenue and taxation. Labor income tax is the greatest source of government revenue in all G-7 economies, a review of tax receipts finds. Consumption sales taxes in the U.S. are the lowest among the G-7 economies, far below those in Europe. The U.S., however, relies more heavily on taxes on capital income and corporate income than most other G-7 economies do.

In today's economy, globalization eases the flow of goods, capital and labor across countries. In this environment, differences in countries' tax rates may distort economic activity and influence the tax revenue nations collect. I find that while U.S. tax rates on labor income and consumption are competitive, tax rates on capital income and firms' profits are relatively high.

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#### **Sources of Government Revenue**

Taxes provide most government revenue. 1 One category of tax receipts is levies on consumption sales, such as a value-added tax (VAT) on goods and services and an excise tax. For the consumer, the VAT is a tax applied on the purchase price of a good or service. For firms, it's levied on the "value added" that a company provides to a product, material or service. 2

An excise tax is applied on the sale or use of a specific product or transaction. The first tax imposed by the U.S. government was an excise tax on whiskey to fund operations and to help promote economic development through the construction of roads and post offices. The whiskey tax, introduced in 1791 by George Washington, was levied on farmers selling their corn for the liquor's manufacture. It was repealed in 1801 when the opposition party came to power.

Another kind of tax is the income tax, applied on the earnings of individuals or firms. These levies were introduced in the U.S. in 1862 to meet

Civil War debts. At the time, tax rates were very low and largely paid by the richest individuals—ensuring that the assessment was based on a citizen's ability to pay.

There are three kinds of income taxes. The first type is applied to labor income, including taxes on payroll and workforce and Social Security contributions by individuals and employers.

The second kind is a tax on capital gains and includes levies on profits from the gains of capital assets such as stocks and bonds, recurrent taxes on immovable properties such as real estate and taxes on financial and capital transactions (when assets change hands).

The last type is applied on company profits and is known as the corporate income tax.

The Organization for Economic Cooperation and Development's (OECD) annual publication *Revenue Statistics* is extremely useful for comparing government revenue for members of nation groups, such as the G-7, because the world body collects tax information from country sources and organizes it under a uniform format, aggregating all levels of government.<sup>3</sup>

Recent sources of tax receipts as a share of total government revenue are shown in Table 1.

Revenue from the last 10 years of available data—2000 through 2009—were averaged to mitigate short-run variations (such as business cycles) and to provide a better idea of the long-term share of revenue sources. The most heavily used tax in all G-7 economies is the labor income tax, accounting for 55 to 72 percent of government monies—70 percent in the U.S. The share of U.S. funding com-

Labor Income Tax Leads as G-7 Revenue Source							
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	2000–2009 Averages (percent)						
	Canada	France	Germany	Italy	Japan	U.K.	U.S.
Revenue from:							
Consumption sales	19	19	23	18	14	26	11
Labor income	62	70	72	71	65	55	70
Capital income	9	5	2	4	8	11	10
Corporate income	10	5	4	7	12	9	9

ing from the consumption sales tax is the lowest among the G-7 economies, far below European counterparts. The U.S. government, however, relies more heavily on capital income taxes and corporate income taxes than do many other G-7 economies.

#### **Income and Consumption Tax Rates**

Politicians and the public understand that government fiscal choices directly affect the amount of taxes paid. Although necessary for the functioning of government, taxes distort economic incentives and change behavior. When two kinds of activity are taxed at different rates, the one more highly assessed tends to diminish and the other tends to expand. Once tax rates drive economic activity, resources tend to become misallocated because assets aren't deployed to their most valuable opportunities. These deviations from the free-market outcome are called distortions.

The choices countries make about their tax structure are significant for two reasons. First, in domestic economic behavior, individuals and firms respond to incentives the tax structure creates. Such purely domestic distortions may occur regardless of other countries' tax systems.

Second, tax structures in different countries interact with one another to distort individuals' and firms' decisions. Globalization has increased the mobility of skilled labor and capital; taxation influences where to invest and where individuals seek to work. It also influences firms' decisions on where to operate, while inviting all sorts of international tax planning. Such international distortions provide a rationale for comparing countries' tax rates.

Comparing international tax rates on incomes and consumption is difficult. I computed average tax rates on income and consumption for G-7 economies using the methodology of Enrique Mendoza, Assaf Razin and Linda Tesar (1994) based on tax payments and national accounts.<sup>4</sup> Information on taxes, credits, deduc-

tions and exemptions is aggregated to calculate an overall tax burden imposed by all levels of government. This methodology produces rates consistent with the concept of aggregate tax rates at the national level.

Consumption sales taxes, labor income taxes and capital income taxes for G-7 economies in 2009—the last available year of data—are shown in Chart 2.

The U.S. had the lowest consumption sales and labor income tax rates among G-7 members. The tax rate on consumption sales was 3.7 percent in the U.S., compared with an average 11.1 percent in G-7 economies, while the rate on labor income was 22.3 percent in the U.S., compared with an average 35.7 percent in G-7 economies.

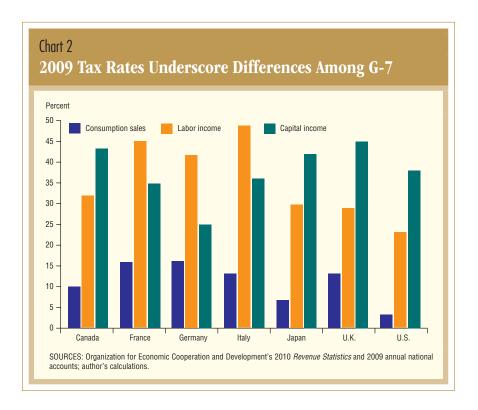
On the other hand, the U.S. had one of the highest capital income tax rates. The tax rate on capital income was 38 percent in the U.S., compared with an average of 37.6 percent in G-7 economies. Germany offered the lowest tax rate, 24.7 percent of capital income.

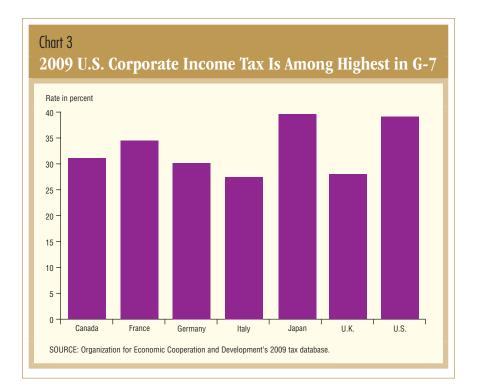
Data on taxation of corporate and capital income available from the OECD tax database allowed corporate income tax rate comparison among the G-7 economies. These rates reflect the top marginal tax rates from all levels of government. In 2009, the U.S. corporate income tax rate was high relative to other G-7 economies, averaging 39.1 percent, second within the G-7 to Japan's 39.5 percent (*Chart 3*). European countries offer the lowest tax rates on corporate income.

#### **Expenditures Matter**

An economy's health depends not only on the size of the government, but also on how the government spends its revenue. Expenditures on infrastructure such as roads, schools and hospitals as well as on education and social programs may lead to a stronger society, a more productive workforce and better future economic performance. In the end, how government achieves long-run social and economic objectives without distorting economic incentives is important.

Fiscal considerations will be





important for the foreseeable future, and a sound basis for any kind of fruitful debate should include how the U.S. tax system stacks up against comparable economies. The real challenge will be to narrow the U.S. deficit while offering a tax structure that helps maintain a strong, competitive international position that keeps and attracts investment and jobs.

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#### **Notes**

- <sup>1</sup> The other source of government revenue is investment income.
- <sup>2</sup> In the U.S., a consumption sales tax is charged to the end buyer only.
- <sup>3</sup> The data are from the Organization for Economic Cooperation and Development's (OECD) annual

national accounts. The different measures of tax revenue are aggregated using the four-digit codes in the OECD's *Revenue Statistics*. Revenue from consumption sales is tax revenue on goods and services (5110) and excise taxes (5121). Revenue from labor income tax is aggregates of taxes on individual incomes (1100), Social Security contributions (2000 and 2200) and payroll and workforce (3000). Revenue from capital income is aggregates of tax revenue from immovable properties (4100) and financial and capital transactions (4400). Revenue from corporate income is aggregates of tax revenue from corporations (1200).

<sup>4</sup> See "Effective Tax Rates in Macroeconomics: Cross-Country Estimates of Tax Rates on Factor Incomes and Consumption," by Enrique G. Mendoza, Assaf Razin and Linda L. Tesar, *Journal of Monetary Economics*, vol. 34, no. 3, 1994, pp. 297–323. I use data from OECD's 2010 *Revenue Statistics* and 2009 annual national accounts.

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