

INTERNATIONAL TAX COMPETITIVENESS INDEX 2018



DANIEL BUNN, KYLE POMERLEAU, AND SCOTT A. HODGE



PRINCIPLED
INSIGHTFUL
ENGAGED

INTRODUCTION

The structure of a country's tax code is an important determinant of its economic performance. A well-structured tax code is easy for taxpayers to comply with and can promote economic development while raising sufficient revenue for a government's priorities. In contrast, poorly structured tax systems can be costly, distort economic decision-making, and harm domestic economies.

Many countries have recognized this and have reformed their tax codes. Over the past few decades, marginal tax rates on corporate and individual income have declined significantly across the Organisation for Economic Co-operation and Development (OECD). Now, most nations raise a significant amount of revenue from broad-based taxes such as payroll taxes and value-added taxes (VAT).

New Zealand is a good example of a country that has reformed its tax system. In a 2010 presentation, the chief economist of the New Zealand Treasury stated, "Global trends in corporate and personal taxes are making New Zealand's system less internationally competitive."¹ In response to these global trends, New Zealand cut its top marginal individual income tax rate from 38 percent to 33 percent, shifted to a greater reliance on the goods and services tax, and cut its corporate tax rate to 28 percent from 30 percent. New Zealand added these changes to a tax system that already had multiple competitive features, including no inheritance tax, no general capital gains tax, and no payroll taxes.

Some nations, however, have not kept up with the global trend. Over the last few decades, France has introduced a number of policy changes that have significantly increased marginal tax rates on work, saving, and investment. For example, France recently instituted a corporate income surtax, which joined other distortive taxes such as the financial transactions tax, a net wealth tax, and an inheritance tax.

Following tax reform in the United States, France now has the highest taxes on corporate income—a combined rate of about 34 percent. Though the central government statutory rate is scheduled to be lowered over the next several years, many more changes are necessary for France to have a competitive tax code.

1 Norman Gemmell, "Tax Reform in New Zealand: Current Developments," from Australia's Future Tax System: A Post-Henry Review Conference in Sydney, June 2010, <https://web.archive.org/web/20160429192333/http://www.victoria.ac.nz/sacl/about/cpf/publications/pdfs/4GemmellPostHenrypaper.pdf>.

The *International Tax Competitiveness Index*

The *International Tax Competitiveness Index (ITCI)* seeks to measure the extent to which a country's tax system adheres to two important aspects of tax policy: competitiveness and neutrality.

A competitive tax code is one that keeps marginal tax rates low. In today's globalized world, capital is highly mobile. Businesses can choose to invest in any number of countries throughout the world to find the highest rate of return. This means that businesses will look for countries with lower tax rates on investment to maximize their after-tax rate of return. If a country's tax rate is too high, it will drive investment elsewhere, leading to slower economic growth. In addition, high marginal tax rates can lead to tax avoidance.

According to research from the OECD, corporate taxes are most harmful for economic growth, with personal income taxes and consumption taxes being less harmful. Taxes on immovable property have the smallest impact on growth.²

Separately, a neutral tax code is simply one that seeks to raise the most revenue with the fewest economic distortions. This means that it doesn't favor consumption over saving, as happens with investment taxes and wealth taxes. This also means few or no targeted tax breaks for specific activities carried out by businesses or individuals.

A tax code that is competitive and neutral promotes sustainable economic growth and investment while raising sufficient revenue for government priorities.

There are many factors unrelated to taxes which affect a country's economic performance. Nevertheless, taxes play an important role in the health of a country's economy.

To measure whether a country's tax system is neutral and competitive, the *ITCI* looks at more than 40 tax policy variables. These variables measure not only the level of taxes, but also how taxes are structured. The *Index* looks at a country's corporate taxes, individual income taxes, consumption taxes, property taxes, and the treatment of profits earned overseas. The *ITCI* gives a comprehensive overview of how developed countries' tax codes compare, explains why certain tax codes stand out as good or bad models for reform, and provides important insight into how to think about tax policy.

2018 Rankings

For the fifth year in a row, Estonia has the best tax code in the OECD. Its top score is driven by four positive features of its tax code. First, it has a 20 percent tax rate on corporate income that is only applied to distributed profits. Second, it has a flat 20 percent tax on individual income that does not apply to personal dividend income. Third, its property tax applies only to the value of land, rather than to the value of real property or capital. Finally, it has a territorial tax system that exempts 100 percent of foreign profits earned by domestic corporations from domestic taxation, with few restrictions.

2 Organisation for Economic Co-operation and Development (OECD), "Tax and Economic Growth," Economics Department Working Paper No. 620, July 11, 2008.

TABLE 1.
2018 International Tax Competitiveness Index Rankings

Country	Overall Rank	Overall Score	Corporate Tax Rank	Consumption Taxes Rank	Property Taxes Rank	Individual Taxes Rank	International Tax Rules Rank
Estonia	1	100.0	1	1	9	1	6
Latvia	2	86.0	2	2	27	6	5
New Zealand	3	83.0	18	3	6	3	15
Luxembourg	4	80.5	21	17	2	18	1
Netherlands	5	77.5	19	8	12	10	3
Switzerland	6	77.0	6	9	1	34	8
Sweden	7	75.0	7	20	16	7	7
Australia	8	72.2	27	19	7	4	17
Czech Republic	9	69.6	8	4	33	13	9
Austria	10	69.6	15	21	10	9	13
Slovak Republic	11	69.4	10	6	32	2	27
Turkey	12	68.8	17	5	24	17	10
Hungary	13	68.4	3	15	34	26	2
Finland	14	67.7	5	27	14	11	18
Norway	15	66.2	13	11	18	24	14
Germany	16	65.3	24	28	11	14	11
Korea	17	64.4	28	10	5	25	31
Canada	18	64.0	22	23	8	20	22
Belgium	19	63.8	23	7	25	23	12
Ireland	20	63.7	4	33	23	12	21
Denmark	21	63.7	14	30	17	8	23
Slovenia	22	63.6	12	12	28	21	16
United Kingdom	23	63.1	16	24	22	30	4
United States	24	61.5	20	26	4	28	32
Iceland	25	60.2	11	31	19	22	20
Japan	26	59.5	35	25	3	29	25
Spain	27	57.4	26	18	15	31	19
Mexico	28	57.2	31	13	26	5	34
Greece	29	51.9	25	14	30	27	29
Israel	30	51.7	29	35	13	15	33
Chile	31	48.3	30	22	29	16	35
Portugal	32	48.2	33	29	31	19	28
Poland	33	47.7	9	16	35	32	30
Italy	34	46.9	32	32	20	33	26
France	35	41.4	34	34	21	35	24

While Estonia's tax system is the most competitive in the OECD, the other top countries' tax systems receive high scores due to excellence in one or more of the major tax categories. Latvia, which recently adopted the Estonian system for corporate taxation, also has a relatively efficient system for taxing labor. New Zealand has a relatively flat, low-rate individual income tax that also exempts capital gains (with a combined top rate of 33 percent), a well-structured property tax, and a broad-based value-added tax. Switzerland has a relatively low corporate tax rate (21.1 percent), a low, broad-based consumption tax, and a relatively flat individual income tax that exempts capital gains from taxation. Sweden has a corporate income tax rate of 22 percent, below the OECD average of 23.9 percent, no estate or wealth taxes, and a well-structured value-added tax and individual income tax.

For the fifth year in a row, France has the least competitive tax system in the OECD. It has one of the highest corporate income tax rates in the OECD (34.4 percent), high property taxes, an annual net wealth tax, a financial transaction tax, and an estate tax. France also has high, progressive, individual income taxes that apply to both dividend and capital gains income.

In general, countries that rank poorly on the *ITCI* levy relatively high marginal tax rates on corporate income. The five countries at the bottom of the rankings all have higher than average corporate tax rates, except for Poland at 19 percent. In addition, all five countries have high consumption taxes, with rates of 20 percent or higher, except for Chile at 19 percent.

NOTABLE CHANGES FROM LAST YEAR³

Belgium

Belgium's ranking improved from 25th to 19th after adopting a significant tax reform package that will progressively reduce its statutory income tax rate over the next several years. For 2018, the combined corporate income tax rate is 29.6 percent, a reduction from 34 percent in 2017. The participation exemption was also increased from 95 percent to 100 percent.

Compliance time for consumption taxes fell by 25 hours from 100 in 2017 to 75 hours in 2018.

Chile

Chile amended its personal income tax and reduced its top marginal tax rate from 40 percent to 35 percent, partially flattening its rate structure. Chile improved from 33rd to 31st.

Estonia

Estonia instituted changes to its VAT and individual income tax. The threshold for the VAT was increased by 8.5 percent, from \$28,571 to \$74,074. Estonia remained ranked 1st overall.

Israel

Israel reduced its corporate income tax rate from 24 percent to 23 percent, but fell one place from 29th to 30th on the *Index*.

Japan

Though Japan improved compliance costs associated with its corporate income taxes, the country fell three spots on its ranking from 23rd to 26th, being passed by countries making more significant improvements to their tax systems. Compliance time associated with corporate income taxes fell from 62 hours to 38 hours, a reduction of nearly 40 percent.

Korea

Korea increased tax rates on corporate income and dividends, dropping its overall ranking from 15th in 2017 to 17th this year. The corporate income tax rate went from 24.2 percent to 27.5 percent and the rate applied to dividends increased from 37.4 percent to 40.3 percent.

Latvia

Latvia implemented a business tax reform package that matches the competitive Estonian system. Latvia now applies a corporate income tax at a rate of 20 percent to distributed corporate profits. It was already among the top five most competitive countries, and these reforms helped Latvia move to 2nd place behind Estonia.

³ Due to some data limitations, some more recent tax changes in some countries may not be reflected in this year's version of the *International Tax Competitiveness Index*. Last year's scores published in this report can differ from previously published rankings due to both methodological changes and corrections made to previous years' data.

TABLE 2.
Changes from Last Year

Country	2016 Rank	2016 Score	2017 Rank	2017 Score	2018 Rank	2018 Score	Change in Rank	Change in Score
Australia	8	74.17	8	75.73	8	72.20	0	-3.53
Austria	13	69.56	11	74.09	10	69.59	1	-4.50
Belgium	24	62.20	25	62.89	19	63.76	6	0.87
Canada	18	66.45	19	67.40	18	64.00	1	-3.40
Chile	31	51.55	33	50.91	31	48.30	2	-2.61
Czech Republic	14	69.45	9	74.37	9	69.65	0	-4.72
Denmark	23	64.50	18	67.78	21	63.72	-3	-4.06
Estonia	1	100.00	1	100.00	1	100.00	0	0.00
Finland	11	71.53	13	70.01	14	67.75	-1	-2.26
France	35	43.19	35	41.22	35	41.42	0	0.20
Germany	15	68.47	16	68.87	16	65.33	0	-3.55
Greece	30	51.82	30	54.63	29	51.94	1	-2.68
Hungary	19	65.51	14	69.90	13	68.36	1	-1.55
Iceland	20	65.36	24	63.23	25	60.24	-1	-2.98
Ireland	21	64.72	22	65.50	20	63.75	2	-1.75
Israel	28	54.51	29	54.83	30	51.68	-1	-3.15
Italy	34	46.44	34	49.56	34	46.86	0	-2.69
Japan	26	59.12	23	64.89	26	59.51	-3	-5.38
Korea	12	70.17	15	69.13	17	64.36	-2	-4.77
Latvia	2	86.56	3	84.72	2	85.97	1	1.24
Luxembourg	5	80.86	4	83.25	4	80.46	0	-2.80
Mexico	27	58.39	27	59.06	28	57.20	-1	-1.85
Netherlands	4	83.80	5	80.31	5	77.53	0	-2.78
New Zealand	3	84.09	2	85.08	3	82.95	-1	-2.13
Norway	17	66.61	17	68.34	15	66.23	2	-2.11
Poland	32	51.32	32	52.13	33	47.70	-1	-4.43
Portugal	33	50.14	31	52.80	32	48.20	-1	-4.60
Slovak Republic	10	71.89	10	74.18	11	69.36	-1	-4.82
Slovenia	16	67.62	20	66.76	22	63.65	-2	-3.12
Spain	25	59.46	26	61.01	27	57.45	-1	-3.56
Sweden	7	79.03	7	79.31	7	75.03	0	-4.28
Switzerland	6	79.06	6	79.53	6	77.05	0	-2.48
Turkey	9	72.43	12	73.05	12	68.78	0	-4.28
United Kingdom	22	64.67	21	66.56	23	63.05	-2	-3.51
United States	29	53.43	28	55.41	24	61.49	4	6.08

Luxembourg

Luxembourg replaced a previously repealed patent box with an 80 percent exemption on income from patents, software, and other intellectual property. Luxembourg maintained its ranking of 4th on the *Index*.

Mexico

Though compliance time still remains relatively high at 102 hours, Mexico reduced the time necessary to comply with corporate taxes by 16 percent, down from 122 hours. Still, Mexico fell one place from 27th to 28th on the *Index*.

New Zealand

New Zealand fell to 3rd place on the *Index* from 2nd place last year. Compliance time connected to consumption taxes did fall from 59 to 47 hours.

Norway

Norway improved from 17th to 15th on the *Index* after cutting its corporate tax rate from 24 percent to 23 percent.

Poland

Poland increased the top marginal tax rate on individual income from 38.8 percent to 39.9 percent. It also imposed an asset tax on certain financial institutions. It fell from 32th to 33rd on the *Index* ranking.

United States

The United States adopted a comprehensive tax reform package that included a reduction of the corporate income tax rate from 35 percent to 21 percent, improvements to expensing of capital investments, and rate changes for the personal income tax. As a result, the U.S. improved its ranking from 28th to 24th.

CORPORATE INCOME TAX

The corporate income tax is a direct tax on the profits of a corporation. All OECD countries levy a tax on corporate profits, but the rates and bases vary widely from country to country. Corporate income taxes reduce the after-tax rate of return on corporate investment. This increases the cost of capital, which leads to lower levels of investment and economic output. Additionally, the corporate tax can lead to lower wages for workers, lower returns for investors, and higher prices for consumers.

Although the corporate income tax has a relatively significant impact on a country's economy, it raises a relatively low amount of tax revenue for most governments. The *ITCI* breaks the corporate income tax category into three subcategories.

Table 3 displays each country's Corporate Income Tax category rank and score along with the ranks and scores of the subcategories, which are the corporate rate, cost recovery, and incentives and complexity.

Top Marginal Corporate Income Tax Rate

The top marginal corporate tax rate measures the rate at which each additional dollar of taxable profit is taxed. High marginal corporate tax rates tend to discourage capital formation and slow economic growth.⁴ Countries with higher top marginal corporate income tax rates than the OECD average receive lower scores than those with lower, more competitive rates.

France has the highest top marginal corporate income tax rate at 34.4 percent. This is followed by Portugal (31.5 percent), Australia (30 percent), and Mexico (30 percent). The lowest top marginal corporate income tax rate in the OECD is found in Hungary at 9 percent. There are five other countries with rates below 20 percent: Ireland (12.5 percent), and the Czech Republic, Poland, Slovenia, and the United Kingdom (all at 19 percent). The OECD average top corporate income tax rate is 23.9 percent.⁵

Capital Cost Recovery: Machines, Buildings, and Intangibles

Typically, when a business calculates its taxable income, it takes its revenue and subtracts its costs (such as wages and raw materials). However, with capital investments (buildings, machines, and other equipment) the calculation is more complicated. Businesses in most countries are generally not allowed to immediately deduct the cost of their capital investments. Instead, they are required to write off these costs over several years or even decades, depending on the type of asset.

4 OECD, "Tax Policy Reform and Economic Growth," OECD Tax Policy Studies, No. 20, Nov. 3, 2010, <https://www.oecd.org/ctp/tax-policy/tax-policy-reform-and-economic-growth-9789264091085-en.htm>.

5 OECD, "OECD Tax Database, Table II.1 – Statutory corporate income tax rate."

TABLE 3.
Corporate Tax

Country	Overall Rank	Overall Score	Rate Rank	Rate Score	Cost Recovery Rank	Cost Recovery Score	Incentives/Complexity Rank	Incentives/Complexity Score
Australia	27	47.0	32	31.8	16	49.1	12	79.4
Austria	15	57.1	18	48.0	10	52.7	17	73.1
Belgium	23	50.5	29	33.1	3	64.8	25	66.8
Canada	22	51.0	24	42.2	29	41.3	10	81.5
Chile	30	46.3	18	48.0	35	24.3	11	80.2
Czech Republic	8	69.8	3	67.5	18	48.5	14	77.6
Denmark	14	58.4	13	57.8	25	43.8	20	70.8
Estonia	1	100.0	7	64.3	1	100.0	2	97.7
Finland	5	71.4	7	64.3	31	38.3	1	100.0
France	34	35.3	35	17.4	9	53.0	22	69.2
Germany	24	50.4	31	32.3	14	50.5	7	85.4
Greece	25	47.9	28	35.0	24	44.3	9	82.2
Hungary	3	85.4	1	100.0	30	40.3	18	72.4
Iceland	11	66.2	7	64.3	22	46.3	16	76.6
Ireland	4	80.2	2	88.6	23	46.2	19	71.0
Israel	29	46.4	16	54.5	5	56.5	35	29.8
Italy	32	41.6	26	38.9	13	51.2	34	50.6
Japan	35	34.7	30	32.6	33	36.6	29	61.6
Korea	28	46.8	25	39.9	7	54.8	33	57.9
Latvia	2	99.9	7	64.3	1	100.0	3	97.5
Luxembourg	21	51.1	23	44.7	8	54.5	30	61.1
Mexico	31	42.0	32	31.8	21	46.3	21	69.8
Netherlands	19	55.3	18	48.0	11	52.4	23	68.8
New Zealand	18	55.5	27	38.3	27	43.6	4	96.9
Norway	13	63.1	16	54.5	28	42.0	6	90.7
Poland	9	67.7	3	67.5	26	43.7	13	78.2
Portugal	33	35.5	34	26.9	20	46.9	31	60.7
Slovak Republic	10	66.7	11	61.0	12	51.4	15	77.2
Slovenia	12	63.7	3	67.5	19	47.1	28	63.5
Spain	26	47.3	18	48.0	32	38.1	26	65.9
Sweden	7	70.2	13	57.8	15	50.5	5	93.0
Switzerland	6	70.7	12	60.5	6	55.4	8	83.5
Turkey	17	56.1	13	57.8	17	48.5	32	59.0
United Kingdom	16	56.6	3	67.5	34	29.5	24	67.0
United States	20	54.5	22	45.3	4	58.8	27	63.6

Depreciation schedules establish the amounts businesses are legally allowed to write off, as well as how long assets need to be written off. For instance, a government may require a business to deduct an equal percentage of the cost of a machine over a seven-year period. By the end of the depreciation period, the business would have deducted the total initial dollar cost of the asset. However, due to the time value of money (a normal real return plus inflation), write-offs in later years are not as valuable in real terms as write-offs in earlier years. As a result, businesses effectively lose the ability to deduct the full present value of their investment cost. This treatment of capital expenses understates true business costs and overstates taxable income in present value terms.⁶

⁶ Kyle Pomerleau, "Cost Recovery across the OECD," Tax Foundation, Nov. 19, 2013, <https://taxfoundation.org/capital-cost-recovery-across-oecd/>.

A country's cost recovery score is determined by the capital allowances for three asset types: machinery, industrial buildings, and intangibles.⁷ Capital allowances are expressed as a percent of the present value cost that corporations can write off over the life of an asset. A 100 percent capital allowance represents a business's ability to deduct the full cost of an investment over its life. Countries that provide faster write-offs for capital investments receive higher scores in the *ITCI*.

On average, across the OECD, businesses can write off 84.0 percent of the cost of machinery, 46.7 percent of the cost of industrial buildings, and 74.7 percent of the cost of intangibles.⁸ Estonia and Latvia, which have a corporate tax that only applies to distributed profits, are coded as allowing 100 percent of the present value of a capital investment to be written off, because a business's distributed profits are determined by cash flow.

Inventories

In the same vein as capital investments, the costs of inventories are not written off in the year in which the purchases are made. Instead, the costs of inventories are deducted when the inventory is sold. As a result, it is necessary for governments to define the total cost of inventories sold. There are three methods governments allow businesses to use to calculate their inventories: Last In, First Out (LIFO); Average Cost; and First In, First Out (FIFO).

Countries that allow businesses to choose the LIFO method receive the highest score, those that allow the Average Cost method receive an average score, and countries that only allow the FIFO method receive the lowest score. Fourteen countries allow companies to use the LIFO method of accounting.⁹ Sixteen countries use the Average Cost method of accounting, and five countries limit companies to using the FIFO method of accounting.

Loss Offset Rules: Carryforwards and Carrybacks

In most countries, corporations are allowed to either deduct current year losses against future profits, or deduct current year losses against past profits, receiving a tax rebate for overpayments. Loss offset rules dictate the number of years a corporation is allowed to carry forward or carry back net operating losses.

The ability for a corporation to carry forward or carry back operating losses ensures that a corporation is taxed on its average profitability over many years. This more efficiently accounts for a business's true costs and profits, rather than taxing any given year's profits, which are susceptible to the ups and downs of the economy. Restricting the carryforward or carryback of losses places a greater average tax burden on industries that are more susceptible to business cycles.

In 19 of the 35 OECD countries, corporations can carry forward losses indefinitely, though eight of these limit the generosity of the provision by capping the percentage of losses that can be

⁷ Intangible assets are typically amortized, but the write-off is similar to depreciation.

⁸ Oxford University Centre for Business Taxation, "CBT Tax Database 2017," <http://eureka.sbs.ox.ac.uk/4635/>.

⁹ Id.

carried forward.¹⁰ Of the countries with restrictions, the average loss carryforward period is 7.9 years. Hungary and Poland have the most restrictive loss carryforward provisions, at 50 percent of losses for five years (coded as 2.5 years). The *ITCI* ranks countries higher that allow losses to be carried forward indefinitely than countries that restrict the number of years corporations are allowed to carry forward losses.

Countries are much more restrictive with loss carryback provisions than they are with carryforward provisions. Only the Estonian and Latvian systems allow unlimited carrybacks of losses. Of the nine countries that allow limited carrybacks, the average period is 1.27 years. The *ITCI* penalizes the 24 countries that do not allow any loss carrybacks at all.

Tax Incentives and Complexity

Good tax policy treats economic decisions neutrally, neither encouraging nor discouraging one activity over another. A tax incentive is a tax credit, deduction, or preferential tax rate that applies for one type of economic activity but not others. Providing tax incentives or special provisions distorts economic decisions.

For instance, when an industry receives a tax credit for producing a specific product, it may choose to overinvest in that activity, which might otherwise not be profitable. Additionally, the cost of special provisions is often offset by shifting the burden onto other taxpayers in the form of higher tax rates.

In addition, the possibility of receiving incentives invites efforts to secure these tax preferences,¹¹ such as lobbying, which creates additional deadweight economic loss as firms focus resources on influencing the tax code in lieu of producing products. For instance, the deadweight losses in the United States attributed to tax compliance and lobbying were estimated to be between \$215 billion and \$987 billion in 2012. These expenditures for lobbying, along with compliance, have been shown to reduce economic growth by crowding out potential economic activity.¹²

The *ITCI* considers whether countries provide incentives such as research and development (R&D) credits and patent box provisions, which apply lower tax rates on income earned from patented technologies or procedures held within the country. Countries which provide such incentives are scored lower than those that do not.

Research and Development

In the absence of full expensing, an R&D tax credit provides a partially compensating offset for the costs of business investment. Unfortunately, R&D tax credits are rarely neutral—they usually define very specific activities that qualify—and are often complex in their implementation.

10 Deloitte International Tax Source, "Tax guides and highlights," <https://dits.deloitte.com/#TaxGuides>. Countries with unlimited carryforward periods are coded as having periods of 100 years. Some countries restrict the amount of losses that can be deducted each year. For example, Slovenia only allows 50 percent of losses to be carried forward indefinitely. These restrictions are coded as the percentage of losses that can be carried forward or backward times the number of allowable years. Thus, Slovenia is coded as 50.

11 Christopher J. Coyne and Lotta Moberg, "The Political Economy of State-Provided Targeted Benefits," George Mason University, Mercatus Center, Working Paper No. 14-13, May 2014, http://mercatus.org/sites/default/files/Coyne_TargetedBenefits_v2.pdf.

12 Jason J. Fichtner and Jacob M. Feldman, "The Hidden Costs of Tax Compliance," George Mason University, Mercatus Center, May 20, 2013, http://mercatus.org/sites/default/files/Fichtner_TaxCompliance_v3.pdf.

As with other incentives, R&D credits distort investment decisions and lead to the inefficient allocation of resources. Additionally, the desire to secure R&D incentives encourages lobbying activities that consume resources and detract from investment and production. In Italy, for instance, firms can engage in a negotiation process for incentives, such as easy term loans and tax credits, as long as the incentives have EU approval.¹³

Countries could better use the revenue spent on special tax incentives to provide a lower business tax rate across the board or to improve the treatment of capital investment.

In the OECD, 23 countries provide credits for research and development. The remaining 12 countries either do not provide any special treatment for R&D or allow businesses to expense R&D investments. Countries that provide R&D tax credits receive a lower score on the *ITCI*.¹⁴

Patent Boxes

As globalization has increased, countries have searched for ways to prevent corporations from reincorporating or shifting operations or profits elsewhere. One solution has been the creation of patent boxes.

Patent boxes provide corporations a lower rate on income earned from intellectual property. Intellectual property is extremely mobile. Hence, a country can use the lower tax rate of a patent box to entice corporations to hold their intellectual property within its borders. This strategy provides countries with revenue they might not otherwise receive if those companies were to move their patents elsewhere.

Instead of providing patent boxes for intellectual property, countries should recognize that all capital is mobile and lower their corporate tax rates across the board. This would encourage investment of all kinds instead of merely incentivizing corporations to locate their patents in a specific country.

Twelve OECD countries—Belgium, France, Hungary, Ireland, Israel, Italy, Luxembourg, the Netherlands, Portugal, Spain, Turkey, and the United Kingdom—have patent box legislation, with rates and exemptions varying among countries.¹⁵ Countries with patent box regimes score lower than those without patent boxes.

Patent boxes in some countries have become less generous in recent years as the OECD requirements for countering harmful tax practices have been adopted. Countries that follow the OECD standards now require companies to have substantial activity within their borders in order to benefit from tax preferences associated with their intellectual property. Among the 12 countries with patent boxes, only France and Turkey continue to have patent boxes that do not conform to the OECD requirements.¹⁶

¹³ Deloitte International Tax Source, "Tax guides and highlights."

¹⁴ Id.

¹⁵ Id. See also Robert D. Atkinson and Scott Andes, "Patent Boxes: Innovation in Tax Policy and Tax Policy for Innovation," The Information Technology & Innovation Foundation, October 2011, <http://www.itif.org/files/2011-patent-box-final.pdf>.

¹⁶ Bloomberg Law, "BNA BEPS Tracker."

Complexity

Corporate tax code complexity is quantified by measuring the tax compliance burden placed on firms. These burdens are measured by the number of payments made for the corporate income tax as well as the time needed to comply with the tax (measured in hours of compliance time per year). Tax code compliance consumes resources that could otherwise be used for investment and business operations.

Countries that require higher numbers of tax payments and longer periods of time for tax compliance receive lower scores on the *ITCI*. The results are based on data from PwC's *Paying Taxes 2018* component of the "Doing Business" report from the World Bank.¹⁷

The nation with the highest number of required tax payments is Israel with 21. Italy follows with 13, then Japan and Switzerland with 12. Norway imposes the fewest number of payments with three, while Mexico imposes the second fewest with four. The average across the OECD is eight payments; the U.S. requires seven payments.

Complying with corporate income taxes takes the most time in Israel, at 110 hours, followed by 102 hours in Mexico and 87 hours in the United States. Tax compliance takes the least amount of time in Estonia, at 5 hours, followed by 12 hours in Ireland and 15 hours in Switzerland. The average across the OECD is 44 hours.

¹⁷ PwC and the World Bank Group, "Paying Taxes 2018," https://www.pwc.com/gx/en/paying-taxes/pdf/pwc_paying_taxes_2018_full_report.pdf?WT.mc_id=CT13-PL1300-DM2-TR2-LS1-ND30-TTA4-CN_payingtaxes-2018-intro-pdf-button.

INDIVIDUAL TAXES

Individual taxes are one of the most prevalent means of raising revenue to fund government. Individual income taxes are levied on an individual's or household's income (wages and, often, capital gains and dividends) to fund general government operations. These taxes are typically progressive, meaning that the rate at which an individual's income is taxed increases as the individual earns more income.

In addition, countries have payroll taxes. These typically flat-rate taxes are levied on wage income in addition to a country's general individual income tax. However, revenue from these taxes is typically allocated specifically toward social insurance programs such as unemployment insurance, government pension programs, and health insurance.¹⁸

Individual taxes have the benefit of being some of the more transparent taxes. Taxpayers are made aware of their total amount of taxes paid at some point in the process, unlike consumption taxes, which are collected and remitted by a business.

However, most individual taxes have the effect of discouraging work, due to a highly progressive structure, and discouraging saving and investment by applying to capital gains and dividend income, which causes double taxation of personal savings and of corporate income.¹⁹

A country's score for its individual income tax is determined by three subcategories: the rate and progressivity of wage taxation, the extent to which the income tax double taxes corporate income, and complexity. Table 4 shows the ranks and scores for the entire Individual Taxes category as well as the rank and score for each subcategory.

Taxes on Ordinary Income

Individual income taxes are levied on the income of individuals. Many countries, such as the United States, rely on individual income taxes as a significant source of revenue. They are used to raise revenue for both general government operations and for specific programs, such as social insurance and government-provided health insurance.

A country's taxes on ordinary income are measured according to three variables: the top rate at which ordinary income is taxed, the progressivity of the income tax system, and the economic efficiency of labor taxation.

Top Marginal Income Tax Rate

Most income tax systems have a progressive tax structure. This means that, as individuals earn more income, they move into tax brackets with higher tax rates. The top marginal tax rate is the top tax rate on all income over a certain level. For example, the United States has seven tax brackets, with the seventh (top) bracket taxing each additional dollar of income over \$500,000

18 Daniel Bunn and Alec Fornwalt, "A Comparison of the Tax Burden on Labor in the OECD, 2018," Tax Foundation, Sept. 17, 2018, <https://taxfoundation.org/comparison-tax-burden-labor-oecd-2018/>.

19 Kyle Pomerleau, "The High Burden of State and Federal Capital Gains Tax Rates," Tax Foundation, Feb. 11, 2014, <https://taxfoundation.org/high-burden-state-and-federal-capital-gains-tax-rates/>.

TABLE 4.
Individual Taxes

Country	Overall Rank	Overall Score	Capital Gains/ Dividends Rank	Capital Gains/ Dividends Score	Income Tax Rank	Income Tax Score	Complexity Rank	Complexity Score
Australia	19	64.2	23	51.9	24	53.3	9	85.5
Austria	21	60.9	28	47.4	17	58.5	16	77.2
Belgium	7	79.1	9	82.6	21	54.4	8	85.6
Canada	23	58.8	32	38.9	18	57.4	10	82.8
Chile	22	59.7	22	52.8	7	69.8	29	56.2
Czech Republic	4	86.2	8	83.4	4	87.0	25	66.9
Denmark	30	51.0	34	26.2	20	55.8	13	80.1
Estonia	1	100.0	11	73.4	2	99.2	2	98.1
Finland	27	55.2	30	41.7	29	50.9	15	78.0
France	34	42.0	33	37.6	33	33.4	24	69.7
Germany	28	54.3	26	49.0	10	65.0	30	52.6
Greece	14	71.4	14	65.6	25	53.2	5	87.7
Hungary	15	70.3	14	65.6	3	92.1	32	43.4
Iceland	31	48.3	20	56.8	9	65.5	35	28.8
Ireland	33	45.9	35	25.7	32	35.5	4	90.0
Israel	35	36.1	17	62.8	34	27.9	34	33.3
Italy	32	46.0	25	49.5	16	58.9	33	38.7
Japan	25	57.2	19	57.8	30	50.6	26	64.9
Korea	10	73.6	10	74.8	14	62.3	19	72.9
Latvia	2	90.3	11	73.4	1	100.0	17	74.1
Luxembourg	17	69.3	3	89.4	19	57.2	31	51.6
Mexico	13	72.1	7	85.3	31	35.6	7	86.0
Netherlands	8	78.2	5	86.4	23	53.4	12	80.5
New Zealand	3	88.6	1	100.0	12	64.7	14	78.0
Norway	11	73.4	27	48.2	13	64.3	1	100.0
Poland	16	69.8	18	59.7	5	81.0	28	60.5
Portugal	29	51.9	16	64.4	35	27.0	22	70.1
Slovak Republic	6	80.9	13	67.4	6	78.4	11	81.3
Slovenia	12	73.0	5	86.4	27	51.3	22	70.1
Spain	18	65.9	21	53.9	8	67.1	20	72.5
Sweden	20	63.2	29	43.7	22	54.0	3	91.6
Switzerland	9	75.5	4	89.3	15	60.0	27	63.4
Turkey	5	83.4	2	92.0	11	64.8	17	74.1
United Kingdom	24	58.1	31	39.0	26	51.8	6	86.9
United States	26	56.8	24	51.3	28	51.2	21	70.8

(\$600,000 married filing jointly) at a rate of 37 percent. In addition, individuals in the top tax bracket also pay payroll taxes and state and local income taxes, which sum to a combined average top marginal rate of 46 percent.

Individuals consider the marginal tax rate when deciding whether to work an additional hour. High top marginal tax rates make additional work more expensive, which lowers the relative cost of not working. This makes it more likely that an individual will choose leisure over work. When high tax rates increase the cost of labor, this has the effect of decreasing hours worked, which decreases the amount of production in the economy.

Countries with high marginal income tax rates receive a lower score on the *ITCI* than countries with low marginal tax rates. Slovenia and Portugal have the highest top combined marginal income tax rates at roughly 61 percent.²⁰ Estonia has the lowest, at 21.3 percent.

Income Level at Which Top Rate Applies

The level at which the top marginal rate begins to apply is also important. If a country has a top rate of 20 percent, but almost everyone pays that rate because it applies to any income over \$10,000, that country essentially has a flat income tax. In contrast, a tax system that has a top rate that applies to all income over \$1 million requires a much higher marginal tax rate to raise the same amount of revenue, because it targets a small number of people that earn a high level of income.

Countries with top rates that apply at lower levels score better on the *ITCI*. The *ITCI* bases its measure on the income level at which the top rate begins as compared to the country's average income.²¹ According to this measure, Mexico applies its tax at the highest level of income (the top marginal income tax rate applies at 25.4 times the average Mexican income), whereas Hungary applies its top rate on the first dollar, with a flat tax of 33.5 percent.

The Economic Cost of Labor Taxation

The total marginal tax burden faced by a worker in a country or the total tax cost of labor for the average worker in a country is called the tax wedge. The tax wedge includes income taxes and payroll taxes (both the employee-side and employer-side).

One way to examine the efficiency of labor taxation in a country is to control for the level of labor taxation by taking the ratio of the marginal tax wedge to the average tax wedge. This ratio is a rough proxy for the economic cost of a government funding \$1 more of revenue through taxes on labor, at any given level of labor taxation.²²

The *ITCI* gives countries with high costs associated with labor tax revenues a low score due to the higher impact that those systems have on workers' decisions.

Hungary has the lowest ratio of 1 in cost for each additional dollar raised from labor taxes. This is because Hungary has a flat income tax, so the marginal and average tax wedge are the same. In contrast, in Israel, the cost of raising an additional dollar in revenue from taxes on its workforce is 1.8. The average across OECD countries is 1.25.

20 OECD, "OECD Tax Database, Table I.7 - Top statutory personal income tax rate and top marginal tax rates for employees, 2000-2017," updated April 2018, <http://www.oecd.org/tax/tax-policy/tax-database.htm>. This measures the total tax burden on the next dollar of income earned by an individual who is earning enough to be taxed at the top marginal rate. These rates include the impact of subcentral income taxes, social insurance taxes, and any phaseout of benefits. The U.S. rate was calculated by the authors.

21 Id.

22 Daniel Bunn and Alec Fornwalt, "A Comparison of the Tax Burden on Labor in the OECD, 2018."

Capital Gains and Dividends Taxes

In addition to wage income, many countries' individual income tax systems tax investment income. They do this by levying taxes on income from capital gains and dividends.

A capital gain occurs when an individual purchases an asset (usually corporate stock) in one period and sells it in another for a profit. A dividend is a payment made to an individual from after-tax corporate profits.

Capital gains and personal dividend taxes are a form of double taxation of corporate profits that contribute to the tax burden on capital. When a corporation makes a profit, it must pay the corporate income tax. It can then generally do one of two things. The corporation can retain the after-tax profits, which boost the value of the business and thus its stock price. Stockholders then sell the stock and realize a capital gain, which requires them to pay tax on that income. Alternatively, the corporation can distribute the after-tax profits to shareholders in the form of dividends. Stockholders who receive dividends then pay tax on that income.

Dividends taxes and capital gains taxes create a bias against saving and investment, reduce capital formation, and slow economic growth.²³

In the *ITCI*, a country receives a higher score for lower capital gains and dividends taxes.

Capital Gains Tax Rate

Countries generally tax capital gains at a lower rate than ordinary income, provided that specific requirements are met. For example, the United States taxes capital gains at a reduced rate if the taxpayer holds the asset for at least one year before selling it (these are called long-term capital gains). The *ITCI* gives countries with higher capital gains rates a lower score than those with lower rates.

Some countries use additional provisions to help mitigate the double taxation of income due to the capital gains tax. For instance, the United Kingdom provides an annual exemption of £11,100 (\$14,286 USD), and Canada excludes half of all capital gains income from taxation.²⁴

Inflation Indexing

Indexing capital gains for inflation ensures that investors are only taxed on the real return on their investment, as opposed to any returns due simply to inflation.²⁵ Countries that index capital gains taxes for inflation receive a higher score. Twelve countries allow taxpayers to adjust the basis of their taxable capital gains for inflation: Belgium, Czech Republic, Israel, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Portugal, Slovenia, Switzerland, and Turkey.

²³ Kyle Pomerleau, "The Tax Burden on Personal Dividend Income across the OECD 2015," Tax Foundation, June 25, 2015, <https://taxfoundation.org/tax-burden-personal-dividend-income-across-oecd-2015/>.

²⁴ Deloitte International Tax Source, "Tax guides and highlights."

²⁵ John L. Aldridge and Kyle Pomerleau, "Inflation Can Cause an Infinite Effective Tax Rate on Capital Gains," Tax Foundation, Dec. 17, 2013, <http://taxfoundation.org/article/inflation-can-cause-infinite-effective-tax-rate-capital-gains>.

Dividend Tax Rates

Dividend taxes can adversely impact capital formation in a country. High dividend tax rates increase the cost of capital, which deters investment and slows economic growth.

Countries' rates are expressed as the total top marginal personal dividend tax rate after any imputation or credit system.

Countries with lower overall dividend tax rates score higher on the *ITCI* due to the dividend tax rate's effect on the cost of investment (i.e., the cost of capital) and the more neutral treatment between saving and consumption. Ireland has the highest dividend tax rate in the OECD at 51 percent.²⁶ Estonia and Latvia have dividend tax rates of 0 percent, and the OECD average is 24 percent.

Complexity

On top of the direct costs of paying income taxes, there are indirect costs associated with complying with the tax code. These compliance costs are directly related to the complexity of the tax code. The more complex an individual income tax code, the more time and money it requires for individuals and businesses to comply with it.

Complexity is measured as the number of hours it takes a business to comply with wage tax laws in each country. This measure is from the PwC and World Bank "Doing Business" report.²⁷ Italy receives the lowest score with a compliance time of 169 hours. Luxembourg receives the best score with a compliance time of 14 hours.

26 OECD, "OECD Tax Database, Table II.4 - Overall statutory tax rates on dividend income, 2000-2018," updated April 2018, <http://www.oecd.org/tax/tax-policy/tax-database.htm>.

27 PwC and the World Bank Group, "Paying Taxes 2018."

CONSUMPTION TAXES

Consumption taxes are levied on individuals' purchases of goods and services. Consumption taxes can take various forms. In the OECD and most of the world, the value-added tax (VAT) is the most common consumption tax. To properly define the consumption tax base, most consumption taxes either do not tax intermediate business inputs or allow a credit for taxes already paid on them. The exclusion of business inputs makes a consumption tax one of the most economically efficient means of raising tax revenue.

However, many countries fail to define their tax base correctly. Countries often exempt too many goods and services from taxation, which requires them to levy higher rates to raise sufficient revenue. Some countries also fail to properly exempt business inputs. For example, states in the United States often levy sales taxes on machinery and equipment.²⁸

A country's consumption tax score is broken down into three subcategories: the marginal rate, the base, and complexity. Table 5 displays the ranks and scores for the Consumption Taxes category.

Consumption Tax Rate

If levied at the same rate and properly structured, a VAT and a retail sales tax will each raise approximately the same amount of revenue. Ideally, either a VAT or a sales tax should be levied on all final consumption (although they are implemented in slightly different ways). With a sufficiently broad consumption tax base, the rate at which the tax is levied does not need to be high. A VAT or retail sales tax with a low rate and neutral structure limits economic distortions while raising sufficient revenue.

However, many countries have consumption taxes that exempt goods and services that should be taxed. This requires a country (or states, in the case of the United States) to have a higher rate than would otherwise be necessary to raise sufficient revenue. If not neutrally structured, high tax rates create economic distortions by discouraging the purchase of highly taxed goods and services in favor of untaxed or self-provided goods and services.

Countries with lower consumption tax rates score better than those with high tax rates. This is because lower rates do less to discourage economic activity and allow for more future consumption and investment.

The average consumption tax rate in the OECD is 19.1 percent. Hungary has the highest tax rate at 27 percent, while the United States has the lowest tax rate at 7.4 percent.²⁹

28 Justin Ross, "Gross Receipts Taxes: Theory and Recent Evidence," Tax Foundation, Oct. 6, 2016, <https://taxfoundation.org/gross-receipts-taxes-theory-and-recent-evidence/>.

29 See generally, Jared Walczak and Scott Drenkard, "State and Local Sales Tax Rates, Midyear 2018," Tax Foundation, July 16, 2018, <https://taxfoundation.org/state-local-sales-tax-rates-midyear-2018/>.

TABLE 5.
Consumption Taxes

Country	Overall Rank	Overall Score	Rate Rank	Rate Score	Base Rank	Base Score	Complexity Rank	Complexity Score
Australia	7	78.6	4	89.4	26	51.7	21	71.2
Austria	10	70.0	14	49.4	12	64.2	12	81.5
Belgium	25	51.8	19	45.4	21	56.1	27	54.0
Canada	8	77.4	6	79.7	20	60.1	21	71.2
Chile	29	48.7	12	53.4	3	79.6	35	20.4
Czech Republic	33	38.9	19	45.4	27	50.8	34	31.4
Denmark	17	63.0	32	29.3	5	74.0	15	78.1
Estonia	9	75.9	14	49.4	15	61.8	2	95.9
Finland	14	67.9	29	33.3	9	68.5	5	89.0
France	21	59.6	14	49.4	32	34.5	9	84.2
Germany	11	69.8	12	53.4	11	65.7	17	76.0
Greece	30	46.8	29	33.3	25	52.4	25	58.2
Hungary	34	33.6	35	21.3	22	55.6	31	39.6
Iceland	19	60.5	29	33.3	13	63.0	15	78.1
Ireland	23	55.8	26	37.3	31	38.2	7	84.9
Israel	13	68.5	9	61.4	8	71.3	23	60.9
Italy	20	60.1	24	41.3	29	44.4	7	84.9
Japan	3	92.5	3	97.5	24	53.5	3	91.1
Korea	5	88.8	4	89.4	4	75.8	20	72.6
Latvia	27	49.9	19	45.4	30	43.9	24	60.2
Luxembourg	2	94.0	9	61.4	1	100.0	4	90.4
Mexico	26	51.8	8	65.4	23	53.5	33	36.9
Netherlands	12	69.4	19	45.4	10	66.4	11	82.2
New Zealand	6	87.5	7	69.4	2	95.1	19	73.3
Norway	18	61.0	32	29.3	7	72.1	18	75.3
Poland	35	29.4	26	37.3	34	27.9	32	38.3
Portugal	31	45.3	26	37.3	16	61.5	29	43.8
Slovak Republic	32	42.1	14	49.4	33	34.4	28	47.9
Slovenia	28	49.7	24	41.3	28	50.4	25	58.2
Spain	15	66.9	19	45.4	17	61.1	12	81.5
Sweden	16	64.1	32	29.3	6	73.5	14	80.8
Switzerland	1	100.0	2	98.7	18	60.3	1	100.0
Turkey	24	54.4	11	57.4	14	61.9	30	43.1
United Kingdom	22	57.7	14	49.4	35	24.7	6	88.3
United States	4	92.4	1	100.0	19	60.2	10	82.9

Consumption Tax Base

Ideally, either a VAT or a sales tax should be levied on all final consumption. In other words, government collections should be equal to the amount of consumption in the economy times the rate of the sales tax or VAT. However, many countries' consumption tax bases are far from this ideal. They either exempt too many goods and services, requiring a higher rate than would otherwise be necessary, or apply the tax to business inputs, increasing the cost of capital.

Consumption Tax Base as a Percent of Total Consumption

A country's VAT or sales tax base score is measured as a ratio of the revenue collected by the VAT or sales tax compared to the potential tax revenue under a VAT or sales tax levied on all final goods and services.³⁰

For example, if final consumption in a country is \$100 and a country levies a 10 percent VAT on all goods and services, a pure base would raise \$10. Revenue collection below \$10 reflects either a high number of exemptions built in to the tax code or low levels of compliance (or both).³¹ The base is measured as a ratio of the pure base collections to the actual collections. Countries with tax base ratios near 1, signifying a pure tax base, score higher.

Under this measure, very few countries have a perfect or near-perfect VAT or sales tax base. Luxembourg and New Zealand score best under this metric with tax bases covering 100 percent and 97 percent of consumption, respectively. Mexico has the worst VAT base with just 32 percent of consumption covered.³² The OECD average tax base is 55 percent.

The VAT/Sales Tax Threshold

Most OECD countries set thresholds for their VATs/sales taxes. This means that a business's sales of taxable items must reach a certain value before it is required to register and pay a VAT or sales tax on its products. Although it may be the case that exempting very small businesses saves time and money in compliance, unnecessarily large thresholds create a distortion by favoring smaller businesses over larger ones.³³

Countries receive better scores for lower thresholds. The United Kingdom receives the worst threshold score with a VAT threshold of \$121,429. Five countries receive the best scores for having no general VAT/sales tax threshold (Chile, Mexico, Spain, Turkey, and the United States). The average threshold across the OECD countries that have a VAT threshold is approximately \$49,553.

Complexity

Although consumption taxes are generally more neutral than other taxes, they can be complex in their implementation. Complex VATs and sales taxes create significant compliance costs for businesses that need to remit payment to the government. This adds to the total cost of paying taxes by reallocating resources from productive activities to complying with tax laws. The complexity of a country's consumption tax is measured by the number of hours a business uses to comply with the tax, as measured by PwC's "Paying Taxes 2018" component of the "Doing Business" report from the World Bank.³⁴

30 OECD, "Consumption Tax Trends 2016," Nov. 30, 2016, <http://www.oecd.org/tax/consumption-tax-trends-19990979.htm>. Also see the tables here for updated numbers on rates and thresholds: <http://www.oecd.org/tax/tax-policy/tax-database.htm#VATTables>. This paper does not provide the measure for the United States. The U.S. measure was calculated by the authors.

31 It is also possible that the number is biased by VAT/sales tax evasion. If this is caused by a very high rate, it is still appropriate that a lower base score should penalize a country.

32 OECD, "Consumption Tax Trends 2016."

33 OECD, "OECD Tax Database, Taxes on Consumption," updated January 2018.

34 PwC and the World Bank Group, "Paying Taxes 2018."

Countries receive higher scores if compliance with their consumption taxes takes fewer hours. Chile receives the worst score with a 124-hour compliance time in a year. Switzerland receives the best score by requiring only eight hours a year to comply with its consumption tax. The average number of compliance hours across the OECD is 52.9 hours.

PROPERTY TAXES

Property taxes are government levies on the assets of an individual or business. The methods and intervals of collection vary widely among the types of property taxes. Estate and inheritance taxes, for example, are due upon the death of an individual and the passing of his or her estate to an heir. Taxes on real property, on the other hand, are paid at set intervals—often annually—on the value of taxable property such as land and houses.

Many property taxes are highly distortive and add significant complexity to the life of a taxpayer or business. Estate and inheritance taxes create disincentives against additional work and saving, which damages productivity and output. Financial transaction taxes increase the cost of capital, which limits the flow of investment to its most efficient allocations. Taxes on wealth limit the capital available in the economy, which damages long-term economic growth and innovation.

Sound tax policy minimizes economic distortions. With the exception of taxes on land, most property taxes increase economic distortions and have long-term negative effects on an economy and its productivity.

Table 6 shows the ranks and scores for the Property Taxes category and each of its subcategories which are real property taxes, wealth and estate taxes, and capital and transaction taxes.

Real Property Taxes

Real property taxes are levied on a recurrent basis on taxable property, such as real estate or business capital. For example, in most states or municipalities in the United States, businesses and individuals pay a property tax based on the value of their real property.

Structure of Property Taxes

Although taxes on real property are generally an efficient way to raise revenue, some property taxes can become direct taxes on capital. This occurs when a tax applies to more than just the value of the land itself, such as the buildings or structures on the land. This increases the cost of capital, discourages the formation of capital (such as the building of structures), and can negatively impact business location decisions.

Countries that tax the value of capital as well as land receive the lowest score on the *ITCI*. Some countries mitigate this treatment with a deduction for property taxes paid against corporate taxable income. These countries receive a slightly better score. Countries receive the best possible score if they have either no property tax or only have a tax on land.

TABLE 6.
Property Taxes

Country	Overall Rank	Overall Score	Real Property Taxes Rank	Real Property Taxes Score	Wealth/Estate Taxes Rank	Wealth/Estate Taxes Score	Capital/Transaction Taxes Rank	Capital/Transaction Taxes Score
Australia	4	86.5	2	80.2	1	100.0	7	79.6
Austria	9	74.4	16	59.9	1	100.0	14	64.0
Belgium	23	60.0	25	48.7	11	69.4	18	63.9
Canada	20	63.1	27	43.2	1	100.0	28	47.0
Chile	16	67.2	23	50.7	11	69.4	5	84.4
Czech Republic	13	68.8	17	59.5	11	69.4	7	79.6
Denmark	8	77.6	12	66.5	11	69.4	1	100.0
Estonia	1	100.0	1	100.0	1	100.0	1	100.0
Finland	11	69.2	6	74.3	11	69.4	18	63.9
France	35	29.2	34	29.4	32	28.8	33	31.2
Germany	14	67.7	20	56.4	11	69.4	7	79.6
Greece	27	54.1	32	33.3	11	69.4	22	62.5
Hungary	26	56.6	22	52.7	11	69.4	24	48.3
Iceland	22	61.1	31	33.8	11	69.4	5	84.4
Ireland	12	69.2	7	74.2	11	69.4	18	63.9
Israel	15	67.5	35	27.2	1	100.0	7	79.6
Italy	33	41.0	26	48.7	32	28.8	30	46.8
Japan	29	50.1	29	35.8	11	69.4	28	47.0
Korea	25	58.0	18	57.9	11	69.4	30	46.8
Latvia	6	83.9	9	73.0	1	100.0	7	79.6
Luxembourg	18	64.6	14	61.5	11	69.4	14	64.0
Mexico	5	86.3	3	79.6	1	100.0	7	79.6
Netherlands	10	72.6	11	70.1	11	69.4	7	79.6
New Zealand	3	86.7	13	62.8	1	100.0	1	100.0
Norway	24	59.8	19	57.4	31	59.4	14	64.0
Poland	32	43.6	33	31.1	11	69.4	33	31.2
Portugal	19	64.0	8	73.3	11	69.4	24	48.3
Slovak Republic	2	91.4	5	75.9	1	100.0	1	100.0
Slovenia	21	62.5	21	55.5	11	69.4	14	64.0
Spain	31	46.4	24	50.3	32	28.8	22	62.5
Sweden	7	78.9	10	72.5	1	100.0	18	63.9
Switzerland	34	40.4	15	60.5	32	28.8	33	31.2
Turkey	17	64.9	4	77.1	11	69.4	30	46.8
United Kingdom	30	49.9	30	33.9	11	69.4	24	48.3
United States	28	52.9	28	42.5	11	69.4	24	48.3

Every OECD country except Australia, Estonia, and New Zealand applies its property tax to capital.³⁵ These countries only tax the value of land, which excludes the value of any buildings or structures on the land.³⁶ Of the 32 OECD countries with taxes on real property, 13 allow for a deduction against corporate taxable income.

35 PwC, "Worldwide Tax Summaries: Corporate Taxes 2017/18," <https://www.pwc.com/gx/en/tax/corporate-tax/worldwide-tax-summaries/pwc-worldwide-tax-summaries-corporate-taxes-2017-18-europe.pdf>.

36 In New Zealand, local authorities have the option to set their tax base. Most choose to tax land value. See William McCluskey, Arthur Grimes, and Jason Timmins, "Property Taxation in New Zealand," Lincoln Institute of Land Policy Working Paper, 2002, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.195.4348&rep=rep1&type=pdf>. See also PwC, "Worldwide Tax Summaries: Corporate Taxes 2017/18."

Real Property Tax Collections

Property tax collections measure the burden of property taxes as a percent of a country's private capital stock. Higher tax burdens, specifically when on capital, tend to slow investment, which damages productivity and economic growth.

Countries with a high level of collections as a percent of their capital stock place a larger tax burden on taxpayers and receive a lower score on the *ITCI*. Property tax collections in the United Kingdom, New Zealand, the United States, and Canada are all greater than 2 percent of the private capital stock. Luxembourg has a real property tax burden of 0.1 percent of the private capital stock.³⁷

Wealth and Estate Taxes

Many countries also levy property taxes on an individual's wealth. These taxes can take the form of estate or inheritance taxes that are levied either upon an individual's estate at death or upon the assets transferred from the decedent's estate to the heirs. These taxes can also take the form of a recurring tax on an individual's net wealth. The effect of the estate tax is to limit resources available for investment or production and to reduce the incentive to save and invest.³⁸ This reduction in investment adversely affects economic growth. Moreover, these taxes, the estate and inheritance tax especially, can be avoided with certain planning techniques, which makes the tax an inefficient and unnecessarily complex source of revenue.

Estate, Inheritance, and Gift Taxes

Estate taxes are levied on the value of an individual's taxable estate at the time of death and are paid by the estate itself, while inheritance taxes are levied on the value of assets transferred to an individual's heirs upon death and are paid by the heirs (not the estate of the deceased individual). Gift taxes are taxes on the transfer of property (cash, stocks, and other property) that are typically used to prevent individuals from circumventing estate and inheritance taxes by gifting away their assets before death. Rates, exemption levels, and rules vary substantially among countries. For example, the United States levies a top rate of 40 percent on estates but has an exemption level of \$11.18 million. Belgium, on the other hand, has an inheritance tax with an exemption of €15,000 (\$17,667 USD) and a variety of top rates depending on who receives assets from the estate, what the assets are, and in which region they reside.³⁹

37 OECD, "OECD.StatExtracts, Revenue Statistics – OECD Member Countries," <https://stats.oecd.org/viewhtml.aspx?datasetcode=REV&lang=en#>, and International Monetary Fund, "The IMF and Infrastructure Governance-Investment and Capital Stock Dataset," <https://www.imf.org/external/np/fad/publicinvestment/#5>.

38 William McBride, "Twelve Steps toward a Simpler, Pro-Growth Tax Code," Tax Foundation, Oct. 30, 2013, <https://taxfoundation.org/twelve-steps-toward-simpler-pro-growth-tax-code/>.

39 Ernst & Young, "2018 Worldwide Estate and Inheritance Tax Guide," <https://www.ey.com/gl/en/services/tax/worldwide-estate-and-inheritance-tax-guide---country-list>.

Estate, inheritance, and gift taxes create significant compliance costs for taxpayers while raising insignificant amounts of revenue. According to OECD data, estate taxes across the OECD raised an average of 0.2 percent of GDP in tax revenue, with the highest amount raised being only 0.6 percent of GDP in Belgium, despite Belgium's top estate tax rate of up to 80 percent in some cases.⁴⁰

Countries without these taxes score better than countries that have them. Eleven countries in the OECD have no estate or inheritance taxes: Australia, Austria, Canada, Estonia, Israel, Latvia, Mexico, New Zealand, Norway, Slovak Republic, and Sweden. All others levy an estate or inheritance tax.

Net Wealth Taxes

In addition to estate and inheritance taxes, some countries levy net wealth taxes. Net wealth taxes are often low-rate, progressive taxes on an individual's or family's net assets or the net assets of a corporation. Unlike estate taxes, net wealth taxes are levied on an annual basis.

Six countries levy net wealth taxes on individuals. Italy levies three wealth taxes based on the type and location of the asset. Spain taxes residents at progressive rates from 0.2 percent to 2.5 percent on worldwide net wealth. Other countries with net wealth taxes are France, the Netherlands, Norway, and Switzerland (at the canton level).⁴¹

Capital, Wealth, and Property Taxes on Businesses

Countries have a number of taxes they levy on the assets and fixed capital of businesses. These include taxes on the transfer of real property, taxes on the net assets of businesses, taxes on raising capital, and taxes on financial transactions. These taxes contribute directly to the cost of capital for businesses and reduce the after-tax rate of return on investment.

Property Transfer Taxes

Property transfer taxes are taxes on the transfer of real property (real estate, land improvements, machinery) from one person or firm to another. A common example in the United States is the real estate transfer tax, which is commonly levied at the state level on the value of homes that are purchased by individuals.⁴² Property transfer taxes represent a direct tax on capital and increase the cost of purchasing property.

Countries receive a lower score if they have property transfer taxes. Seven OECD countries do not have property transfer taxes, including Chile, Estonia, and New Zealand.

⁴⁰ OECD, "OECD.StatExtracts, Revenue Statistics – OECD Member Countries".

⁴¹ Deloitte International Tax Source, "Tax guides and highlights" and Ernst & Young, "2018 Worldwide Estate and Inheritance Tax Guide."

⁴² National Conference of State Legislatures, "Real Estate Transfer Taxes," <http://www.ncsl.org/research/fiscal-policy/real-estate-transfer-taxes.aspx>.

Corporate Asset Taxes

Similar to a net wealth tax, asset taxes are levied on the wealth, or assets, of a business. For instance, Luxembourg levies a 0.5 percent tax on the worldwide net wealth of Luxembourg-based companies every year.⁴³ Similarly, cantons in Switzerland levy taxes on the net assets of corporations that vary from 0.001 percent to 0.5 percent of corporate net assets. Other countries levy these taxes exclusively on bank assets.

Fifteen countries have some type of corporate wealth or asset tax. Luxembourg and Switzerland have net wealth taxes on corporations. Ten countries have bank taxes of some type.

Capital Duties

Capital duties are taxes on the issuance of shares of stock. Typically, countries either levy these taxes at very low rates or require a small, flat fee. For example, Switzerland requires resident companies to pay a 1 percent tax on the issuance of shares of stock. These types of taxes increase the cost of capital, limit funds available for investment, and make it more difficult to form businesses.⁴⁴

Countries with capital duties score lower than countries without them. Ten countries in the OECD levy some type of capital duty.

Financial Transaction Taxes

A financial transaction tax is a levy on the sale or transfer of a financial asset. Financial transaction taxes take different forms in different countries. Finland levies a tax of 1.6 percent on stock transactions. On the other hand, Portugal levies a stamp duty on the deeds and documents associated with financial transactions.

Financial transaction taxes impose an additional layer of taxation on the purchase or sale of stocks. Markets run on efficiency, and capital needs to flow quickly to its most economically productive use. A financial transaction tax impedes this process.

The *ITCI* ranks countries with financial transaction taxes lower than the countries without them. Thirteen countries in the OECD have financial transaction taxes, including France, Hungary, Portugal, and the United Kingdom, while 22 countries do not impose financial transaction taxes

⁴³ It levies this tax on non-Luxembourg companies as well, but only on wealth held within Luxembourg. See Government of the Grand Duchy of Luxembourg, "Net wealth tax," May 5, 2017, <http://www.guichet.public.lu/entreprises/en/fiscalite/impots-benefices/impots-divers/impot-fortune/index.html>.

⁴⁴ EUR-Lex, "Council Directive 2008/7/EC, concerning indirect taxes on the raising of capital," February 2008, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32008L0007>.

INTERNATIONAL TAX SYSTEM

In an increasingly globalized economy, businesses often expand beyond the borders of their home countries to reach customers around the world. As a result, countries need to define rules determining how, or if, income earned in foreign countries is taxed. International tax rules deal with the systems and regulations that countries apply to those business activities.

Following adoption of the Tax Cuts and Jobs Act, the United States adopted a hybrid international tax system. Foreign-sourced dividends are now exempt, but base erosion rules are now stronger and more complex.⁴⁵

The new U.S. system has three pieces: Global Intangible Low Tax Income (GILTI), Foreign Derived Intangible Income (FDII), and the Base Erosion and Anti-Abuse Tax (BEAT). GILTI liability is effectively a 10.5 percent tax on supra-normal returns derived from certain foreign investments earned by U.S. companies. FDII is designed to be a reduced rate on exports of U.S. companies connected to intellectual property located in the U.S. Effectively, FDII earnings are taxed at 13.125 percent. Paired together, GILTI and FDII create a worldwide tax on intangible income.

The BEAT is designed as a 10 percent minimum tax (initially 5 percent in 2018) on U.S.-based multinationals with gross receipts of \$500 million or more. The tax applies to payments by those large multinationals if payments to controlled foreign corporations (CFCs) exceed 3 percent (2 percent for certain financial firms) of total deductions taken by a corporation.

There has been a growing trend of moving from worldwide taxation toward a system of territorial taxation, in which a country's corporate tax is limited to profits earned within its borders. In a territorial tax system, corporations only pay taxes to the country in which they earn income. Since the 1990s, the number of OECD countries with worldwide tax systems has fallen from 20 to five⁴⁶.

Table 7 displays the overall rank and score for the International Rules category as well as the ranks and scores for the subcategories—which include a category for dividends and capital gains exemptions, withholding taxes, and regulations.

Territoriality

Under a territorial tax system, international businesses pay taxes to the countries in which they earn their income. This means that territorial tax regimes do not generally tax the income companies earn in foreign countries. A worldwide tax system—such as the system previously employed by the United States—requires companies to pay taxes on worldwide income, no matter where it is earned. Many countries, as is now the case in the U.S., operate some sort of hybrid system with varying levels of complexity.

45 Kyle Pomerleau, "A Hybrid Approach: The Treatment of Foreign Profits under the Tax Cuts and Jobs Act," Tax Foundation, May 3, 2018, <https://taxfoundation.org/treatment-foreign-profits-tax-cuts-jobs-act/>.

46 Kyle Pomerleau and Kari Jahnsen, "Designing a Territorial Tax System: A Review of OECD Systems", Tax Foundation, Aug. 1, 2017, <https://taxfoundation.org/territorial-tax-system-oecd-review/>.

TABLE 7.
International Tax System

Country	Overall Rank	Overall Score	Div/Cap Gains Exemption Rank	Div/Cap Gains Exemption Score	Withholding Taxes Rank	Withholding Taxes Score	Regulations Rank	Regulations Score
Australia	17	68.2	1	100.0	33	46.4	18	66.5
Austria	13	74.5	1	100.0	13	73.4	25	52.5
Belgium	12	77.6	1	100.0	30	50.6	2	86.4
Canada	22	64.3	24	84.0	24	59.9	21	57.4
Chile	35	33.1	32	28.1	35	25.7	9	71.5
Czech Republic	9	80.9	1	100.0	11	75.1	10	67.4
Denmark	23	63.0	1	100.0	26	55.4	27	42.5
Estonia	6	83.6	1	100.0	6	86.9	19	61.1
Finland	18	66.9	1	100.0	10	76.7	32	28.9
France	24	62.9	23	94.2	14	68.4	30	33.9
Germany	11	77.7	21	96.4	9	79.6	20	57.8
Greece	29	52.3	26	68.0	19	63.0	28	38.8
Hungary	2	95.0	1	100.0	1	100.0	8	76.4
Iceland	20	65.8	1	100.0	25	57.3	26	47.9
Ireland	21	64.8	31	60.1	22	61.9	4	81.0
Israel	33	45.3	32	28.1	31	46.6	6	80.1
Italy	26	61.1	21	96.4	21	62.0	30	33.9
Japan	25	61.2	30	66.0	23	61.0	13	66.5
Korea	31	49.3	32	28.1	15	67.9	13	66.5
Latvia	5	83.9	1	100.0	3	94.3	23	53.7
Luxembourg	1	100.0	1	100.0	5	90.7	1	100.0
Mexico	34	36.3	32	28.1	32	46.4	22	56.6
Netherlands	3	94.8	1	100.0	2	95.5	4	81.0
New Zealand	15	70.4	1	100.0	29	51.4	13	66.5
Norway	14	70.6	20	98.8	7	86.4	32	28.9
Poland	30	49.4	26	68.0	18	65.3	32	28.9
Portugal	28	57.5	1	100.0	27	54.7	32	28.9
Slovak Republic	27	58.3	26	68.0	28	51.7	10	67.4
Slovenia	16	69.8	25	81.2	16	66.4	10	67.4
Spain	19	65.9	1	100.0	17	65.5	28	38.8
Sweden	7	83.1	1	100.0	8	81.1	13	66.5
Switzerland	8	82.7	1	100.0	20	62.5	2	86.4
Turkey	10	80.0	1	100.0	12	73.9	13	66.5
United Kingdom	4	93.0	1	100.0	4	92.2	6	80.1
United States	32	47.5	26	68.0	34	39.4	24	52.9

Companies based in countries with worldwide tax systems are at a competitive disadvantage, because they face potentially higher levels of taxation than their competitors based in countries with territorial tax systems. Additionally, taxes on repatriated corporate income in a company's home country increase complexity and discourage investment and production.⁴⁷

The territoriality of a tax system is measured by the degree to which a country exempts foreign-sourced income through dividend and capital gain exemptions.

⁴⁷ William McBride, "Twelve Steps toward a Simpler, Pro-Growth Tax Code," Tax Foundation, Oct. 30, 2013, <http://taxfoundation.org/article/twelve-steps-toward-simpler-pro-growth-tax-code>.

Dividends Received Exemption

When a foreign subsidiary of a parent company earns income, it pays income tax to the country in which it does business. After paying the tax, the subsidiary can either reinvest its profits into ongoing activities (by purchasing equipment or hiring more workers, for example) or it can distribute its profits back to the parent company in the form of dividends.

Under a worldwide tax system, the dividends received by a parent company are taxed again by the parent company's home country, minus a tax credit for taxes already paid on that income. Under a pure territorial system, those dividends are exempt from taxation in the parent's country.

Countries receive a score based on the level of dividend exemption they provide. Countries with no dividend exemption (worldwide tax systems) receive the lowest score.

Twenty-four OECD countries exempt all dividends received by parent companies from taxation.⁴⁸ Six countries allow 95 percent or 97 percent of dividends to be exempt from taxation. Five OECD countries have a worldwide tax system that generally does not exempt foreign dividends from taxation.

Branch or Subsidiary Capital Gains Exclusion

Another feature of an international tax system is its treatment of capital gains from foreign investments. When a parent company invests in a foreign subsidiary (i.e., purchases shares in a foreign subsidiary), it can realize a capital gain on that investment if it later divests the asset. A territorial tax system would exempt these gains from taxation, as they are derived from overseas activity.

Taxing foreign-sourced capital gains income at domestic rates results in double taxation and discourages saving and investment.

Countries that exempt foreign-sourced capital gains from taxation receive a higher score on the *ITCI*. Foreign-sourced capital gains are excluded from taxation by 21 OECD countries. Five countries partially exclude foreign-sourced capital gains. Nine countries do not exclude foreign-sourced capital gains income from domestic taxation.⁴⁹

Withholding Taxes and Tax Treaties

When firms pay dividends, interest, and royalties to foreign investors or businesses, governments often require those firms to withhold a certain portion to pay as a tax. For example, the United States requires businesses to withhold a maximum 30 percent tax on payments to foreign individuals.

These taxes make investment more costly both for investors, who will receive a lower return on dividends, and for firms, that must pay a higher amount in interest or royalty payments to

⁴⁸ Deloitte International Tax Source, "Tax guides and highlights." See also PwC, "Evolution of Territorial Tax Systems in the OECD."

⁴⁹ Id.

compensate for the cost of the withholding taxes. These taxes also reduce funds available for investment and production and increase the cost of capital.

Withholding Tax Rates

Countries with higher withholding tax rates on dividends, interest, and royalties score lower in the *ITCI*. Dividends, interest, and royalties from these countries do not always face the same tax rate as when distributed to domestic shareholders. Chile and Switzerland levy the highest dividend and interest withholding rates, requiring firms to withhold 35 percent of a dividend or interest payment paid to foreign entities or persons. Meanwhile, Estonia, Hungary, and Latvia do not levy withholding taxes on dividends or interest payments.

For royalties, Mexico requires firms to retain the highest amount, at 35 percent, followed by France at 33.3 percent. Hungary, Latvia, Luxembourg, the Netherlands, Norway, Sweden, and Switzerland do not require companies to retain any amount of royalties for withholding tax purposes.⁵⁰

Treaty Network

Tax treaties align many tax laws between two countries, particularly with regard to withholding taxes, and attempt to reduce double taxation. Countries with a greater number of partners in their tax treaty network have more attractive tax regimes for foreign investment and receive a higher score than countries with fewer treaties.

The United Kingdom has the broadest network of tax treaties (131 countries) and thus receives the highest score. Chile receives the lowest score, with a treaty network of only 32 countries. Across the OECD, the average size of a tax treaty network is 77 countries.⁵¹

International Tax Regulations

International tax regulations seek to prevent corporations from minimizing their tax liability through aggressive tax planning. These regulations can take several forms, such as rules for controlled foreign corporations (CFC), thin capitalization rules, and diverted profits taxes.

International tax regulations often have the effect of making countries with uncompetitive tax structures even less competitive. These regulations place substantial burdens on companies and require them to shift valuable resources away from production and toward accountants and tax lawyers.

Controlled Foreign Corporation (CFC) Rules

CFC rules are intended to prevent corporations from shifting their pretax profits from a high-tax country to a low-tax country by using highly liquid forms of income. These regulations define what a controlled foreign corporation is for tax purposes. If a foreign entity is deemed “controlled,” these regulations subject the foreign corporation’s passive income (rent, royalties,

⁵⁰ Deloitte International Tax Source, “Tax guides and highlights.”

⁵¹ Id.

interest) and sometimes active income to the tax rate of the home country of the subsidiary's parent corporation. In the United States, these are called Subpart F rules. These rules subject all passive income to taxation in the year in which it is earned.

CFC rules vary widely among countries. The definition of what constitutes "control" is a somewhat arbitrary decision that often increases tax code complexity. For instance, the United States considers a subsidiary with 50 percent U.S. ownership to be controlled, while Australia considers a foreign company that is 50 percent owned by five or fewer Australian residents, or 40 percent owned by one Australian resident, to be controlled.

In 2016, the European Council directed all EU member states to tax certain multinational, non-distributed income of the CFC if the parent company located in that member state owns more than 50 percent of the shares of the CFC, and if the tax paid by the CFC is lower than the difference between the tax paid by the CFC if it had been situated in the member state and the tax it actually paid. EU member states have until December 31, 2018 to adopt these requirements.

Each country's score in this subcomponent is based on three aspects of CFC rules: 1) whether a country has CFC regulations; 2) whether CFC rules apply to passive income or all income; and 3) the breadth of exemptions from the general CFC rules. Countries receive the highest score if they do not have formal CFC rules. Countries with CFC rules that have exemptions or only apply them to passive income receive a reduced score. Countries score the worst if they have CFC rules that apply to all income and have limited or no exemptions.

CFC rules exist in 26 of the 35 OECD countries.⁵² Fourteen of the 26 countries' CFC rules capture both active and passive income, while 12 only apply to passive income. Nine countries do not have CFC rules.

Restrictions on Eligible Countries

An ideal territorial system would only concern itself with the profits earned within the home country's borders. However, many countries have restrictions on their territorial systems that determine when a business's dividends received from overseas subsidiaries are exempt from tax.

Some countries treat foreign corporate income differently depending on the country in which the foreign income was earned. For example, many countries restrict their territorial systems based on the OECD "black list" of countries. The OECD deems these countries as having "harmful tax practices," such as low or no taxes, a lack of transparency characterized by "inadequate regulatory supervision or financial disclosure," and a lack of information exchange with OECD governments.⁵³ For some countries, income earned in restricted countries by domestic corporations is not exempt from domestic taxation.

⁵² Deloitte International Tax Source, "Tax guides and highlights."

⁵³ OECD, "Towards Global Tax Co-operation: Report to the 2000 Ministerial Council Meeting and Recommendations by the Committee on Fiscal Affairs/Progress in Identifying and Eliminating Harmful Tax Practices," 2000, <http://www.oecd.org/tax/harmful/2090192.pdf>.

The eligibility rules create additional complexity for companies and are often established in an arbitrary manner. Portugal, for instance, limits exemptions for dividends and capital gains earned abroad to those earned in countries that have an income tax equal to at least 60 percent of its corporate tax rate. Italy, which normally allows a 95 percent tax exemption for foreign-sourced dividends paid to Italian shareholders, does not allow the exemption if the income was earned in a subsidiary located in a blacklisted country.⁵⁴

In the OECD, 19 of the 35 countries place restrictions on whether they exempt foreign-sourced income from domestic taxation based on the source of the income. Countries that have these restrictions on their territorial tax systems receive a lower score on the *ITCI*.⁵⁵

Interest Deduction Limitations

Many countries limit the amount of interest a multinational corporation, or one of its subsidiaries, can deduct for tax purposes. Low-tax countries create an incentive for companies to finance their investments with equity, while high-tax countries create an incentive for companies to finance investments with debt and use interest deductions to reduce their tax liabilities. As a result, some countries limit the amount companies can deduct in interest.

Interest deduction limitations can vary widely among countries, and there is much discretion available to governments in enforcing these laws.⁵⁶ Some countries limit interest deductions by applying transfer pricing regulations to interest rates. Others apply what are called “thin capitalization rules,” which limit the amount of deductible interest by capping the amount of debt a firm is allowed to bear based on a company’s ratio of debt to assets. More recently, countries have started applying hard caps on the amount of interest companies can deduct in general.

Interest deduction rules such as thin capitalization rules, in particular, have been shown to reduce the value of firms and distort firm decisions about how to invest in capital.⁵⁷

Countries that limit interest deductions with only transfer pricing regulations receive the highest score. Countries with thin capitalization receive an average score, and countries with hard caps on interest deductibility receive the lowest score. Interest deduction limitations are found in 29 of the 35 countries measured in the *ITCI*. For instance, Denmark limits interest deductions if a firm’s debt-to-equity ratio reaches 4 to 1, while Japan limits deductions at a 3 to 1 ratio.⁵⁸ Germany and Spain, among others, limit interest deductions limit interest deductions (regardless of whether they are for cross-border loans) to 30 percent of operating income. Some countries such as Estonia and Ireland have no established limitations on interest deductions and rely on transfer pricing rules.

⁵⁴ Deloitte International Tax Source, “Tax guides and highlights.”

⁵⁵ PwC, “Evolution of Territorial Tax Systems in the OECD.”

⁵⁶ Jennifer Blouin, Harry Huizinga, Luc Laeven, and Gaëtan Nicodème, “Thin Capitalization Rules and Multinational Firm Capital Structure,” International Monetary Fund Working Paper WP/14/12, January 2014, <https://www.imf.org/external/pubs/ft/wp/2014/wp1412.pdf>.

⁵⁷ Id. This paper finds a 10 percent rise results in a 2 percent rise in debt-to-assets ratio.

⁵⁸ Japan has a complex clause that sets the limit at 3 to 1 unless a firm can point to comparable Japanese firms with higher debt-to-equity ratios, at which point Japan will allow the firm to reach the higher ratio before limiting deductions.

General Anti-Avoidance Rules

Many countries apply anti-avoidance rules to tax multinational companies with business structures designed specifically for tax advantages rather than economic reasons. These rules often follow the substance over form principle in determining how profits generated determine how a particular business structure should be taxed.

As mentioned above, the BEAT in the new U.S. tax law is a minimum tax designed to prevent multinationals from shifting profits outside the U.S. to foreign-affiliated corporations.

Australia and the United Kingdom both apply a diverted profits tax. A diverted profits tax is a set of complex rules and penalty rates that apply if a company is found to have minimized its tax burden through a structure without economic substance. Australia applies a rate of 40 percent to diverted profits while the United Kingdom applies a 25 percent rate, though companies in certain industries can face higher rates in the UK.⁵⁹ These complex tax regimes result in high compliance costs for multinational companies as well as double taxation of some corporate profits.

Anti-abuse provisions are not currently accounted for in the *Index*, because we are still determining how to compare these policies on an apples-to-apples basis. However, if they were appropriately accounted for, countries like Australia, the United Kingdom, and the United States would likely receive lower scores on their international rules—potentially also impacting their overall ranking on the *Index*.

⁵⁹ Bloomberg Tax, "Country Guides."

APPENDIX

Methodology

The *ITCI* is a relative ranking of the competitiveness and neutrality of the tax code in each of the 35 OECD countries. It utilizes 42 variables across five categories: corporate income tax, consumption taxes, property taxes, individual taxes, and international tax rules. Each category has multiple subcategories, and each subcategory holds a number of the 42 variables. For example, the consumption tax category contains three subcategories: rate, base, and complexity. The consumption tax base subcategory then has two variables: consumption tax as a percentage of total consumption, and VAT threshold.

The *ITCI* is designed to measure a country's tax code on a relative basis rather than on an absolute measurement. This means that a score of 100 does not signify the absolute best possible tax code but the best tax code among the 35 OECD countries. Each country's score on the *ITCI* represents its relative difference from the best country's score.

The Calculation of the Variable, Subcategory, and Category Scores

First, the standard deviation and average of each variable is calculated. The standard deviation measures the average difference of a country's tax variables from the mean among all 35 countries.⁶⁰ For example, the average corporate income tax rate across the 35 OECD countries is about 23.9 percent, with a standard deviation of 5.3 percentage points. This means that on average, an OECD country's corporate tax rate is 5.3 percentage points off from the mean rate of 23.9 percent.

To compare each variable, it is necessary to standardize them, because each variable has a different mean and standard deviation. To standardize the variables, each observation is given a normalized score. This sets every variable's mean to 0 with a standard deviation of 1. Each country's score for each variable is a measure of its difference from the mean across all countries for that variable. A score of 0 means a country's score is equal to the average, a score of -1 means it is one standard deviation below average, and a score of 1 is one standard deviation above average.

The score for the corporate tax rate demonstrates this process. Of the 35 OECD countries, the average corporate income tax rate is 23.2 percent, and the standard deviation is 5.3 percentage points. The United States' corporate tax rate normalized score is -0.36,⁶¹ or 0.36 standard deviations less competitive than the average OECD country. In contrast, Ireland's tax rate of 12.5 percent is 2.14 standard deviations more competitive than the average OECD country.

The next step is to combine variable scores to calculate subcategory scores. Within subcategories, each individual variable's score is equally weighted and added together. For instance, the subcategory of cost recovery includes six variables: loss carryback, loss carryforward, the present discounted value of depreciation schedules for machines, industrial

⁶⁰ To calculate the standard deviation we find the mean of a data set (corporate tax rates, for example) and the difference of each country's tax rate from the mean tax rate among the 35 countries. We then take each country's difference from the mean and find the average difference for the group.

⁶¹ The true normal score is 0.36. The score is a negative value to reflect the fact that being higher than the OECD average is less ideal.

buildings, and intangibles, and inventory accounting method. The scores for each of these six variables are multiplied by 1/6, or 16.6 percent, to give them equal weight, and then added together. The result is the cost recovery subcategory score.

From here, each category's score is constructed by combining the scores of each contained subcategory. This is computed by multiplying each subcategory by a weight (all weights are equal) and adding the results together. For example, the score for the corporate rate category is calculated by multiplying the scores of the rate, cost recovery, incentives/complexity subcategories by 33.3 percent and adding them together. This is done for all five categories.

The overall normalized score for each country is calculated by taking each category's normalized score, multiplying each by 20 percent (equal weight for the five categories), and adding them together.

Calculating the Final Score

From here, two transformations occur on the category scores and the overall score. First, to eliminate any negative values, the inverse of the lowest z-score plus one in each category is added to each country's z-score. For example, France has the lowest z-score for the corporate income tax rate (-1.96). Thus, 1.96 plus 1 (2.96) is added to each country's z-score. This sets the lowest score in each category to 1.

Second, the adjusted overall and category scores for each country are scaled to 100, relative to the country with the highest scores overall and in each category. This is done by taking each country's adjusted z-score and dividing it by the highest adjusted z-score in each category. For example, Estonia, which has the highest overall adjusted z-score of 2.412, receives a final overall score of 100. The United States, which has an overall adjusted z-score of 1.484, receives a final overall score of 61.5.

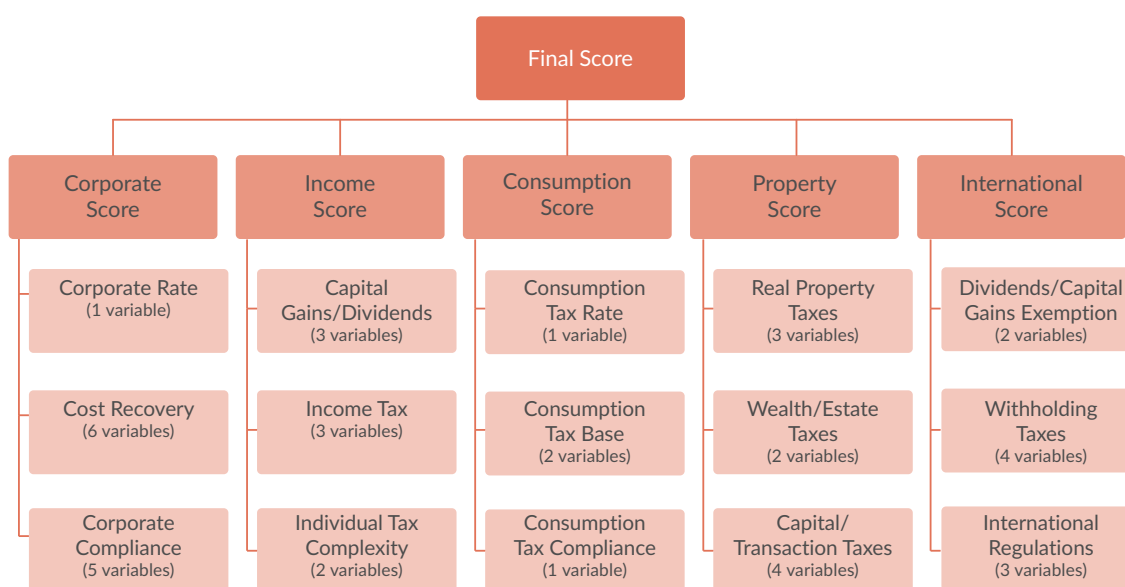
Methodological Changes

To improve the *ITCI* and the way it measures both competitiveness and neutrality, we have made several changes to the *Index*. Each of these changes has been applied to prior years to allow consistent comparison across years.

- This year we are incorporating a measure that is the ratio of the marginal tax wedge to the average tax wedge for each country. Previously, our measure of the tax wedge on labor did not appropriately reflect the structure of income taxes.
- A variable that previously captured variation in VAT exemptions was removed from the *Index* for the current year and in previous years because all countries now allow some exemptions from the VAT tax base.

- In previous versions of the *ITCI*, the property taxes collections variable measured collections as a percent of GDP. This was an imperfect proxy for the share of the economy that is impacted by real property taxes. However, the appropriate measure is the capital costs associated with property taxes. This year we replaced the previous measure with property tax collections (as measured by the OECD) as a percent of the capital stock (as measured by the IMF).⁶²
- We also changed how we score controlled foreign corporation rules to better account for exemptions, in addition to the existing consideration of whether these rules apply to active as well as passive income.

FIGURE A.
Components of the Index



DATA SOURCES

The *ITCI* includes data from numerous sources, including:

- PricewaterhouseCoopers Worldwide Tax Summaries
- Ernst & Young International Tax Guides
- Deloitte International Tax Source
- The Organisation for Economic Co-operation and Development
- The Bloomberg Tax Country Guides
- The Oxford University Centre for Business Taxation Database
- The Tax Foundation
- The *ITCI* uses the most up-to-date data available as of July 2018. See footnotes for specific data citations. Data may not reflect changes in countries making rapid reforms.

⁶² OECD Data and International Monetary Fund, "The IMF and Infrastructure Governance-Investment and Capital Stock Dataset," <https://www.imf.org/external/np/fad/publicinvestment/#5>.

TABLE A.
Corporate Taxes

Country	Corporate Rate	Cost Recovery					
	Top Marginal Corporate Tax Rate	Loss Carryback (Number of Years)	Loss Carryforward (Number of Years)	Machinery	Industrial Buildings	Intangibles	Inventory (Best Available)
Australia	30.0%	0	No Limit	85.1%	47.9%	54.8%	Average Cost
Austria	25.0%	0	No Limit, capped at 75% of taxable income	81.3%	39.1%	73.8%	LIFO
Belgium	29.6%	0	No Limit	88.2%	62.2%	80.3%	LIFO
Canada	26.8%	3	20	96.5%	24.2%	51.9%	Average Cost
Chile	25.0%	0	No Limit	63.3%	33.8%	0.0%	Average Cost
Czech Republic	19.0%	0	5	87.4%	54.3%	84.1%	Average Cost
Denmark	22.0%	0	No Limit, capped at 60% of taxable income	82.7%	47.9%	81.3%	FIFO
Estonia	20.0%	No Limit	No Limit	100.0%	100.0%	100.0%	LIFO
Finland	20.0%	0	10	82.7%	51.9%	73.8%	FIFO
France	34.4%	1	No Limit, capped at 50% of taxable income for companies with revenue above 1 million Euros (\$1.16 million)	85.8%	54.8%	87.0%	Average Cost
Germany	29.8%	1, limited to 50% of taxable income	No Limit, capped at 60% of taxable income	73.8%	39.1%	87.0%	LIFO
Greece	29.0%	0	5	73.8%	47.9%	73.8%	LIFO
Hungary	9.0%	0	5, capped at 50% of taxable income	81.6%	27.9%	87.0%	Average Cost
Iceland	20.0%	0	10	86.0%	47.8%	81.2%	Average Cost
Ireland	12.5%	1	No Limit	78.7%	47.9%	54.8%	Average Cost
Israel	23.0%	0	No Limit	87.0%	54.8%	78.7%	Average Cost
Italy	27.8%	0	No Limit, capped at 80% of taxable income	76.0%	46.3%	96.5%	Average Cost
Japan	29.7%	0	10, capped at 50% of taxable income	77.0%	27.9%	78.7%	Average Cost
Korea	27.5%	1, limited to small and medium-sized enterprises	10, capped at 70% of taxable income for companies other than small and medium-sized enterprises.	92.2%	54.8%	73.8%	LIFO
Latvia	20.0%	No Limit	No Limit	100.0%	100.0%	100.0%	LIFO
Luxembourg	26.0%	0	17	87.1%	47.9%	87.0%	LIFO
Mexico	30.0%	0	10	73.8%	54.8%	73.8%	LIFO
Netherlands	25.0%	1	9	96.5%	33.8%	73.8%	LIFO
New Zealand	28.0%	0	No Limit	73.2%	30.7%	73.8%	Average Cost
Norway	23.0%	2	No Limit	78.2%	37.4%	73.8%	FIFO
Poland	19.0%	0	5, capped at 50% of total loss per year	73.8%	33.8%	87.0%	LIFO
Portugal	31.5%	0	12, capped at 70% of taxable income	88.8%	54.8%	73.8%	Average Cost
Slovak Republic	21.0%	0	4	87.4%	65.3%	87.0%	Average Cost
Slovenia	19.0%	0	No limit, capped at 50% of taxable income	87.0%	39.1%	73.8%	Average Cost
Spain	25.0%	0	No Limit	77.9%	39.1%	27.9%	Average Cost
Sweden	22.0%	1.5	No Limit	86.0%	47.9%	86.0%	FIFO
Switzerland	21.1%	0	7	86.0%	55.5%	90.5%	LIFO
Turkey	22.0%	0	5	87.6%	47.9%	63.2%	LIFO
United Kingdom	19.0%	1	No Limit, only 50% of profits above 5 million pounds can be offset.	75.9%	0.0%	82.7%	FIFO
United States	25.8%	0	No Limit, capped at 80 percent of taxable income.	100.0%	35.0%	63.3%	LIFO

TABLE A.
Corporate Taxes

Country	Tax Incentives and Complexity				
	Patent Box	Research and Development Credit	Corporate Complexity (Time)	Corporate Complexity (Yearly Profit Payments)	Corporate Complexity (Other Yearly Payments)
Australia	No	Yes	37	1	6
Austria	No	Yes	46	1	8
Belgium	Yes	Yes	21	1	8
Canada	No	Yes	45	1	4
Chile	No	Yes	42	1	5
Czech Republic	No	Yes	53	1	5
Denmark	No	Yes, 101.5% deduction for some research investments	25	3	6
Estonia	No	No	5	1	7
Finland	No	No	21	1	4
France	Yes	Yes	28	1	6
Germany	No	No	41	2	6
Greece	No	No	78	1	6
Hungary	Yes	No	35	2	7
Iceland	No	Yes	40	1	7
Ireland	Yes	Yes	12	1	7
Israel	Yes	No	110	2	19
Italy	Yes	Yes	39	2	11
Japan	No	No	38	3	9
Korea	No	Yes	48	5	4
Latvia	No	No	23	1	5
Luxembourg	Yes	No	19	5	6
Mexico	No	Yes	102	1	3
Netherlands	Yes	Yes	21	1	7
New Zealand	No	No	34	1	4
Norway	No	Yes	24	1	2
Poland	No	Yes, 150% deduction of salary costs for research and development employees and 130% deduction for other research and development expenses.	59	1	4
Portugal	Yes	Yes	63	1	6
Slovak Republic	No	Yes	46	1	6
Slovenia	No	Yes, 100% deduction for research and development costs.	86	1	8
Spain	Yes	Yes	33	1	7
Sweden	No	No	50	1	4
Switzerland	No	No	15	2	10
Turkey	Yes	Yes	45	1	9
United Kingdom	Yes	Yes	37	1	6
United States	No	Yes	87	2	5

TABLE B.
Income Taxes

Country	Ordinary Income Taxes and Payroll Taxes			Income Tax Complexity		Capital Gains/Dividends		
	Top Marginal Ordinary Income Rate	Top Income Tax Rate Threshold (a)	Ratio of Marginal to Average Tax Wedge	Income Tax Complexity (Payments)	Income Tax Complexity (Time)	Top Marginal Capital Gains Tax Rate (b)	Capital Gains Inflation Indexing	Top Marginal Dividends Tax Rate (b)
Australia	49.0%	2.2	1.4	4	18	24.5%	No	24.3%
Austria	48.0%	7.9	1.1	3	50	27.5%	No	27.5%
Belgium	60.2%	1.0	1.2	2	40	0.0%	Yes	30.0%
Canada	53.5%	4.3	1.2	3	36	26.8%	No	39.3%
Chile	35.0%	7.7	1.1	1	125	35.0%	No	13.3%
Czech Republic	31.1%	0.3	1.1	2	87	15.0%	Yes	15.0%
Denmark	55.8%	1.3	1.3	1	65	42.0%	No	42.0%
Estonia	21.3%	0.1	1.1	0	31	20.0%	No	0.0%
Finland	58.3%	1.9	1.3	3	48	34.0%	No	28.9%
France	55.1%	14.6	1.3	2	80	34.4%	No	34.0%
Germany	47.5%	5.4	1.1	1	134	26.4%	No	26.4%
Greece	55.0%	3.9	1.2	1	46	15.0%	No	15.0%
Hungary	33.5%	0.0	1.0	2	146	15.0%	No	15.0%
Iceland	44.4%	1.2	1.3	13	60	20.0%	No	22.0%
Ireland	52.0%	1.9	1.7	1	40	33.0%	No	51.0%
Israel	50.0%	4.3	1.8	12	60	25.0%	Yes	33.0%
Italy	52.8%	2.7	1.2	1	169	26.0%	No	26.0%
Japan	56.1%	8.5	1.1	2	92	20.3%	No	20.3%
Korea	43.2%	3.8	1.3	2	72	0.0%	Yes	40.3%
Latvia	21.4%	0.1	1.0	1	80	20.0%	No	0.0%
Luxembourg	42.8%	2.8	1.4	12	14	0.0%	Yes	21.0%
Mexico	35.0%	25.4	1.2	2	39	10.0%	Yes	17.1%
Netherlands	52.3%	1.4	1.4	1	64	0.0%	Yes	25.0%
New Zealand	33.0%	1.2	1.5	2	59	0.0%	Yes	6.9%
Norway	46.7%	1.6	1.2	1	15	23.0%	No	30.6%
Poland	39.9%	2.0	1.0	2	103	19.0%	No	19.0%
Portugal	61.0%	15.6	1.3	1	90	28.0%	Yes	28.0%
Slovak Republic	35.1%	3.5	1.1	1	62	21.0%	No	7.0%
Slovenia	61.1%	5.0	1.2	1	90	0.0%	Yes	25.0%
Spain	43.5%	2.4	1.2	1	84	23.0%	No	23.0%
Sweden	60.1%	1.5	1.2	1	36	30.0%	No	30.0%
Switzerland	41.7%	3.5	1.3	7	40	0.0%	Yes	21.1%
Turkey	45.5%	3.2	1.2	1	80	0.0%	Yes	17.5%
United Kingdom	47.0%	3.9	1.4	1	48	28.0%	No	38.1%
United States	46.0%	9.4	1.3	4	55	23.8%	No	29.2%

Notes:

(a) Multiple of the average income at which the highest tax bracket applies, in U.S. dollars (PPP).

(b) After any imputation, credit, or offset.

TABLE C.

Consumption Taxes

Country	Consumption Tax Base	Consumption Tax Base		VAT Complexity
	VAT/ Sales Tax Rate	VAT Threshold (a)	VAT Base as a Percent of Total Consumption	Complexity (Hours to Comply)
Australia	10.0%	\$50,335.57	49.0%	50
Austria	20.0%	\$37,500.00	59.0%	35
Belgium	21.0%	\$31,250.00	47.0%	75
Canada	12.4% (b)	\$24,000.00	49.0%	50
Chile	19.0%	\$0.00	63.0%	124
Czech Republic	21.0%	\$76,923.08	58.0%	108
Denmark	25.0%	\$6,793.48	59.0%	40
Estonia	20.0%	\$74,074.07	70.0%	14
Finland	24.0%	\$10,989.01	54.0%	24
France	20.0%	\$101,481.48	48.0%	31
Germany	19.0%	\$22,435.90	55.0%	43
Greece	24.0%	\$16,666.67	37.0%	69
Hungary	27.0%	\$59,259.26	57.0%	96
Iceland	24.0%	\$6,944.44	46.0%	40
Ireland	23.0%	\$92,592.59	49.0%	30
Israel	17.0%	\$25,850.13	63.0%	65
Italy	22.0%	\$41,666.67	37.0%	30
Japan	8.0%	\$100,000.00	70.0%	21
Korea	10.0%	\$27,428.57	69.0%	48
Latvia	21.0%	\$80,000.00	51.0%	66
Luxembourg	17.0%	\$33,333.33	100.0%	22
Mexico	16.0%	\$0.00	32.0%	100
Netherlands	21.0%	\$1,640.24	48.0%	34
New Zealand	15.0%	\$40,816.33	97.0%	47
Norway	25.0%	\$4,950.50	56.0%	44
Poland	23.0%	\$111,731.84	44.0%	98
Portugal	23.0%	\$16,949.15	48.0%	90
Slovak Republic	20.0%	\$101,612.24	48.0%	84
Slovenia	22.0%	\$83,333.33	60.0%	69
Spain	21.0%	\$0.00	41.0%	35
Sweden	25.0%	\$3,303.96	57.0%	36
Switzerland	7.7%	\$81,300.81	71.0%	8
Turkey	18.0%	\$0.00	42.0%	91
United Kingdom	20.0%	\$121,428.57	44.0%	25
United States	7.4% (c)	\$0.00	40.0%	33

Notes:

(a) In U.S. dollars (purchasing power parity).

(b) The Canadian rate is the federal VAT plus the average of the provincial rates.

(c) The United States' rate is the combined weighted average state and local sales tax rate.

TABLE D.
Property Taxes.

Country	Real Property Taxes				Wealth/Estate Taxes
	Property Taxes, Real Property/Land Tax	Real Property Taxes Deductible	Real Property Taxes as % of Capital Stock	Net Wealth Tax	Estate/Inheritance Tax
Australia	Land Tax Levied by Individual States (a)	No	1.2%	No	Estate/Inheritance Tax
Austria	Tax on Real Property	No	0.1%	No	None
Belgium	Tax on Real Property (b)	No	0.7%	No	None
Canada	Tax on Real Property	Yes	2.1%	No	Inheritance and Gift Tax
Chile	Tax on Real Property	No	0.6%	No	None
Czech Republic	Tax on Real Property	No	0.2%	No	Inheritance and Gift Tax
Denmark	Tax on Real Property	No	0.9%	No	Inheritances and Gifts are subject to income tax
Estonia	Land Tax	No	0.2%	No	Inheritance and Gift Tax
Finland	Tax on Real Property	Yes	0.5%	No	None
France	Tax on Real Property	No	1.7%	Yes	Inheritance and Gift Tax
Germany	Tax on Real Property	No	0.3%	No	Inheritance and Gift Tax
Greece	Tax on Real Property	No	1.5%	No	Inheritance and Gift Tax
Hungary	Tax on Real Property	No	0.5%	No	Inheritance and Gift Tax
Iceland	Tax on Real Property	No	1.5%	No	Inheritance and Gift Tax
Ireland	Tax on Real Property	Yes	0.5%	No	Inheritance and Gift Tax
Israel	Tax on Sale of Real Property (c)	No	1.8%	No	Inheritance and Gift Tax
Italy	Tax on Real Property	No	0.7%	Yes	None
Japan	Tax on Real Property	No	1.4%	No	Inheritance and Gift Tax
Korea	Tax on Real Property	No	0.2%	No	Inheritance and Gift Tax
Latvia	Tax on Real Property	Yes	0.5%	No	Inheritance and Gift Tax
Luxembourg	Tax on Real Property	No	0.1%	No	None
Mexico	Tax on Real Property	Yes	0.2%	No	Inheritance and Gift Tax
Netherlands	Tax on Real Property	Yes	0.7%	Yes	Income Tax Can Apply, Some Gifts Can be Taxed, Real Estate Transfer Tax Can Apply
New Zealand	Land Value Tax (d)	No	2.1%	No	Inheritance and Gift Tax
Norway	Tax on Real Property	No	0.3%	Yes	None
Poland	Tax on Real Property	No	1.6%	No	None
Portugal	Tax on Real Property	Yes	0.5%	No	Inheritance and Gift Tax
Slovak Republic	Tax on Real Property	Yes	0.4%	No	Stamp Tax Applies to Inheritance and Gifts
Slovenia	Tax on Real Property	No	0.4%	No	None
Spain	Tax on Real Property	No	0.6%	Yes	Inheritance and Gift Tax
Sweden	Tax on Real Property	Yes	0.6%	No	Inheritance and Gift Tax
Switzerland	Tax on Real Property	No	0.1%	Yes	None
Turkey	Tax on Real Property	Yes	0.3%	No	Many Cantons Levy Both Estate and Gift Taxes
United Kingdom	Tax on Real Property	Yes	2.5%	No	Inheritance and Gift Tax
United States	Tax on Real Property	Yes	2.1%	No	Inheritance and Gift Tax

Notes:

(a) Applies to some real estate (vacation homes).

(b) Tax on the imputed rent of properties. Applies to machinery.

(c) The Property Betterment Tax is levied like a capital gains tax on the sale of property.

(d) Levied by local governments. A few cities tax capital improvements.

TABLE D, CONTINUED.

Property Taxes

Country	Wealth/Estate Taxes	Capital/Asset Taxes		
	Transfer Taxes	No	No	No
Australia	Stamp Duty on Transfer of Real Property	Bank Tax	No	No
Austria	Real Estate Transfer Tax	No	No	Yes
Belgium	Real Estate Transfer Tax	Bank Tax in certain provinces	Yes	No
Canada	Real Estate and Real Property Transfer Tax	Yearly Fee on tax equity	No	No
Chile	No	No	No	No
Czech Republic	Real Estate Transfer Tax	No	No	No
Denmark	No	No	No	No
Estonia	No	No	No	Yes
Finland	Real Property Transfer Tax	Bank Tax	Yes	Yes
France	Real Estate Transfer Tax	No	No	No
Germany	Real Estate Transfer Tax	No	Yes	No
Greece	Real Estate Transfer Tax and Stamp Tax	Bank Tax	No	Yes
Hungary	Real Estate Transfer Tax	Bank Tax	No	No
Iceland	No	No	No	Yes
Ireland	Stamp Duty on Transfer of Real Property	No	No	No
Israel	Real Estate Transfer Tax (e)	No	Yes	Yes
Italy	Real Property Transfer Tax	Yes	Yes	No
Japan	Real Property Transfer Tax	No	Yes	Yes
Korea	Real Property Transfer Tax	No	No	No
Latvia	Stamp Duty on Transfer of Real Property	Tax on Corporate Net Assets	No	No
Luxembourg	Real Property Transfer Tax	No	No	No
Mexico	Real Estate Transfer Tax	No	No	No
Netherlands	Real Property Transfer Tax	No	No	No
New Zealand	No	Bank Tax	No	No
Norway	Stamp Duty on Transfer of Real Property	Bank Tax	Yes	Yes
Poland	Real Estate Transfer Tax	Bank Tax	No	Yes
Portugal	Real Estate Transfer Tax	No	No	No
Slovak Republic	No	Bank Tax	No	No
Slovenia	Real Estate Transfer Tax	No	Yes	No
Spain	Real Estate Transfer Tax	No	No	No
Sweden	Stamp Duty on Transfer of Real Property	Yes	Yes	Yes
Switzerland	Real Estate Transfer Tax	No	Yes	Yes
Turkey	Real Property Transfer Tax	Bank Tax	No	Yes
United Kingdom	Stamp Duty on Transfer of Real Property	Intangible Property Taxes	No	Yes
United States	Real Property Transfer Tax	Intangible Property Taxes	No	Yes

Notes:

(e) (The purchaser of real property is subject to a purchase tax.

TABLE E.
International Tax Rules

Country	Participation Exemption		Withholding Taxes				Base Erosion Protections	
	Dividend Exemption	Capital Gains Exemption	Dividend Withholding Tax	Interest Withholding Tax	Royalties Withholding Tax	Number of Tax Treaties	Controlled Foreign Corporation Rules	Controlled Foreign Corporate Rules: Taxable Income
Australia	100.0%	100.0%	30%	10%	30%	45	Yes	Passive
Austria	100.0%	100.0%	28%	0%	20%	91	Yes	Passive
Belgium	100.0%	100.0%	30%	30%	30%	95	No	N/A
Canada	100.0%	50.0%	25%	25%	25%	96	Yes	Passive
Chile	0.0%	0.0%	35%	35%	30%	32	Yes	Passive
Czech Republic	100.0%	100.0%	15%	15%	15%	87	No	N/A
Denmark	100.0%	100.0%	27%	22%	22%	74	Yes	All Income
Estonia	100.0%	100.0%	0%	0%	10%	57	Yes, only applies to individuals	All Income
Finland	100.0%	100.0%	20%	0%	20%	86	Yes	All Income
France	95.0%	88.0%	30%	0%	33%	107	Yes	All Income
Germany	95.0%	95.0%	25%	0%	15%	96	Yes	Passive
Greece	100.0%	0.0%	15%	15%	20%	57	Yes	Passive
Hungary	100.0%	100.0%	0%	0%	0%	80	Yes	Passive
Iceland	100.0%	100.0%	20%	12%	20%	43	Yes	All Income
Ireland	0.0%	100.0%	20%	20%	20%	73	No	N/A
Israel	0.0%	0.0%	30%	23%	23%	55	Yes	Passive
Italy	95.0%	95.0%	26%	26%	23%	102	Yes	All Income
Japan	95.0%	0.0%	20%	20%	20%	70	Yes	All Income
Korea	0.0%	0.0%	20%	20%	20%	93	Yes	All Income
Latvia	100.0%	100.0%	0%	0%	0%	61	No	N/A
Luxembourg	100.0%	100.0%	15%	0%	0%	81	No	N/A
Mexico	0.0%	0.0%	10%	35%	35%	58	Yes	All Income
Netherlands	100.0%	100.0%	15%	0%	0%	97	No	N/A
New Zealand	100.0%	100.0%	30%	15%	15%	40	Yes	Passive
Norway	97.0%	100.0%	25%	0%	0%	88	Yes	All Income
Poland	100.0%	0.0%	19%	20%	20%	82	Yes	All Income
Portugal	100.0%	100.0%	25%	25%	25%	79	Yes	All Income
Slovak Republic	100.0%	0.0%	35%	19%	19%	67	No	N/A
Slovenia	95.0%	47.5%	15%	15%	15%	58	No	N/A
Spain	100.0%	100.0%	19%	19%	24%	89	Yes	Passive
Sweden	100.0%	100.0%	30%	0%	0%	81	Yes	All Income
Switzerland	100.0%	100.0%	35%	35%	0%	93	No	N/A
Turkey	100.0%	100.0%	15%	10%	20%	84	Yes	Passive
United Kingdom	100.0%	100.0%	0%	20%	20%	131	Yes	All Income
United States	100.0%	0.0%	30%	30%	30%	58	Yes	Passive

TABLE E, CONTINUED.

International Tax Rules

Country	Base Erosion Protections		
	Controlled Foreign Corporation Rules, Exemptions	Country Limitations	Interest Deduction Limitations
Australia	None	None	1.5:1 debt-to-equity ratio applies
Austria	CFC exempt if located in EU or EEA and not an artificial arrangement	EU member states and EEA member states	Informal: 4:1 debt-to-equity ratio applies
Belgium	N/A	None	5:1 debt-to-equity ratio applies
Canada	Multiple rules may exempt CFC from taxation	Countries with a tax treaty	1.5:1 debt-to-equity ratio applies
Chile	CFC exempt if located in low-tax OECD country	N/A	3:1 debt-to-equity ratio applies
Czech Republic	N/A	EU member states and EEA member states	4:1 debt-to-equity ratio applies; 6:1 debt-to-equity ratio applies for certain financial services companies
Denmark	CFC exempt if located in EU or EEA and not an artificial arrangement	EU member states and EEA member states	4:1 debt-to-equity ratio applies
Estonia	CFC is exempt if more than 50 percent of its income is related to real economic activity or if Estonia has information sharing with foreign country	EU member states and EEA member states and Switzerland	None
Finland	CFC exempt if located in EU or EEA and not an artificial arrangement	EU member states and EEA member states	Interest deductions limited to 25% of income
France	CFC exempt if located in EU or EEA and not an artificial arrangement or if CFC carries out trading or manufacturing activity	Black-list countries are excluded	Interest deductions limited to 25% of income
Germany	CFC exempt if located in EU or EEA and not an artificial arrangement	None	Interest deductions limited to 30% of income
Greece	CFC exempt if located in EU or EEA and not an artificial arrangement	EU member states	Interest deductions limited to 30% of income
Hungary	CFC exempt if located in EU, OECD, EEA, or treaty countries and not an artificial arrangement	None	3:1 debt-to-equity ratio applies
Iceland	CFC exempt if located in EEA countries, or has a double-tax treaty with Iceland and not an artificial arrangement	None	Interest deductions limited to 30% of income
Ireland	N/A	EU member states and tax treaty countries	None
Israel	None	N/A	None
Italy	CFC exempt if located in EU or EEA and not an artificial arrangement	Black-list countries are excluded	Interest deductions limited to 30% of income
Japan	CFC rules don't apply to active income if CFC has fixed facilities engaged in business in the foreign country	None	3:1 debt-to-equity ratio applies; 2:1 for particular repo transactions
Korea	CFC rules don't apply to active income if CFC has fixed facilities engaged in business in the foreign country	N/A	2:1 debt-to-equity ratio applies
Latvia	N/A	None	4:1
Luxembourg	N/A	None	Informal 85:15 debt-to-equity ratio applies
Mexico	None	None	3:1 debt-to-equity ratio applies
Netherlands	N/A	1	None
New Zealand	CFC may be exempt from rules if operating in Australia and satisfies other criteria	None	Numerous restrictions on debt-to-equity ratio apply
Norway	CFC exempt if located in EEA countries and not an artificial arrangement or located in tax treaty countries	1	Interest deductions limited to 25% of taxable income
Poland	CFC exempt if located in EU or EEA and not an artificial arrangement	EU member states, EEA member states, Switzerland	1:1 debt-to-equity ratio applies or interest deductions limited to 50% of taxable income
Portugal	CFC exempt if located in EU and EEA countries and not an artificial arrangement and carries out agricultural, commercial, industrial, and services activities	Black-list countries are excluded	Interest deductions limited to 30% of income
Slovak Republic	N/A	Tax treaty countries	Interest deductions limited to 25% of taxable income
Slovenia	N/A	EU member states; black-list countries are excluded	4:1 debt-to-equity ratio applies
Spain	CFC exempt if located in EU or EEA and not an artificial arrangement	EU member states	Interest deductions limited to 30% of income
Sweden	CFC exempt if located in EEA countries and not an artificial arrangement or located in white list countries	None	Applies where the arms-length principle is not satisfied and interest is taxed at an effective rate less than 10%
Switzerland	N/A	None	6:1 debt-to-equity ratio applies
Turkey	None	None	3:1 debt-to-equity ratio applies
United Kingdom	None	None	Interest deductions limited to 30% of income
United States	Exemption for returns in excess of 10% on foreign investments	None	Interest deductions limited to 30% of income

ABOUT THE TAX FOUNDATION

The Tax Foundation is the nation's leading independent tax policy research organization. Since 1937, our research, analysis, and experts have informed smarter tax policy at the federal, state, and local levels. Our Center for Federal Tax Policy's research and outreach highlight our tax code's strengths and weaknesses and show how tax policy impacts taxpayers, the government, and the economy at large.



CENTER FOR GLOBAL TAX POLICY

Scott A. Hodge

President

Daniel Bunn

Director of Global Projects

LEARN MORE


 taxfoundation.org

 202-464-6200

 info@taxfoundation.org

 facebook.com/taxfoundation

 twitter.com/taxfoundation

 1325 G Street N.W. Suite 950,
Washington, D.C. 20005

The *International Tax Competitiveness Index* measures how well a country's tax system promotes sustainable economic growth and investment. The report looks at over 40 tax policy variables in five categories: corporate income taxes, individual taxes, consumption taxes, property taxes, and the treatment of foreign earnings. The *ITCI* gives a comprehensive overview of how developed countries' tax codes compare, explains why certain tax codes stand out as good or bad models for reform, and provides important insight into how to think about tax policy.



PRINCIPLED
INSIGHTFUL
ENGAGED

The Tax Foundation is the nation's leading independent tax policy research organization. Since 1937, our research, analysis, and experts have informed smarter tax policy at the federal, state, and local levels. We are a 501(c)(3) nonprofit organization.

©2018 Tax Foundation

Editor, Rachel Shuster
Designer, Dan Carvajal

Tax Foundation
1325 G Street, N.W. Suite 950
Washington, D.C. 20005
202-464-6200

taxfoundation.org