INTERNATIONAL TAX COMPETITIVENESS INDEX 2017

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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. The United States, for example, has not reduced its federal corporate income tax rate from 35 percent since the early 1990s. As a result, its combined federal, state, and local corporate tax rate of about 39 percent is significantly higher than the average rate of 25 percent among OECD nations.[2] In addition, as most OECD nations have moved to a territorial tax system, the United States has continued to tax the worldwide profits of its domestic corporations.

Other nations have moved further from well-structured tax policy. Over the last few decades, France has introduced a number of reforms 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.

1 Norman Gemmell, "Tax Reform in New Zealand: Current Developments" (June 2010), https://web.archive.org/web/20160429192333/http://www.victoria.ac.nz/sacl/about/cpf/publications/pdfs/4GemmellPostHenrypaper.pdf.

2 Organisation for Economic Co-operation and Development, "OECD Tax Database Table II.1 - Corporate income tax rates: basic/non-targeted 2000-2017," updated April 2017, http://www.oecd.org/tax/tax-policy/tax-database.htm.

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.

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.

2017 RANKINGS

For the fourth 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.

TABLE 1.
2017 *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	10	1	7	7
New Zealand	**2**	**88.7**	18	7	3	1	15
Switzerland	**3**	**85.2**	7	1	33	4	9
Latvia	**4**	**85.0**	2	27	7	6	5
Luxembourg	**5**	**82.7**	26	5	18	13	2
Sweden	**6**	**81.8**	6	11	6	22	8
Australia	**7**	**78.9**	25	6	5	11	17
Netherlands	**8**	**77.5**	19	14	24	14	1
Czech Republic	**9**	**74.3**	8	32	10	3	10
Slovak Republic	**10**	**74.1**	10	31	2	5	27
Turkey	**11**	**73.7**	15	25	17	2	11
Korea	**12**	**71.8**	20	3	27	8	31
Austria	**13**	**71.3**	16	12	9	33	6
United Kingdom	**14**	**70.8**	17	17	31	18	3
Norway	**15**	**70.7**	14	23	16	10	14
Ireland	**16**	**70.4**	4	24	12	23	20
Canada	**17**	**69.1**	21	8	23	17	22
Slovenia	**18**	**68.2**	9	26	15	16	16
Finland	**19**	**68.2**	5	16	19	28	21
Hungary	**20**	**67.0**	3	35	26	24	4
Denmark	**21**	**67.0**	13	21	8	30	23
Japan	**22**	**66.8**	34	2	28	26	25
Germany	**23**	**66.6**	23	13	13	32	12
Iceland	**24**	**63.5**	12	22	22	31	19
Mexico	**25**	**62.2**	31	19	4	9	35
Israel	**26**	**61.5**	29	9	11	27	32
Belgium	**27**	**60.3**	30	33	25	12	13
Spain	**28**	**59.8**	27	15	32	21	18
Greece	**29**	**57.2**	24	28	21	15	30
United States	**30**	**55.1**	35	4	29	25	33
Poland	**31**	**54.4**	11	34	30	20	29
Chile	**32**	**53.1**	22	29	14	19	34
Portugal	**33**	**51.9**	32	30	20	29	28
Italy	**34**	**47.7**	28	20	34	34	26
France	**35**	**43.4**	33	18	35	35	24

While Estonia's tax system is unique in the OECD, the other top countries' tax systems receive high scores due to excellence in one or more of the major tax categories. 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. Latvia, which recently joined the OECD, has a relatively low corporate tax rate of 15 percent, speedy cost recovery, and a flat individual income 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 lower-than-average corporate income tax rate of 22 percent, no estate or wealth taxes, and a well-structured value-added tax and individual income tax.

For the fourth 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 YEAR[3]

Austria

Austria substantially reduced the complexity of its VAT as measured by hours spent on compliance, which helped drive an improvement from 16th to 13th.

Chile

Chile continued the implementation of its 2014 Tax Reform Law, increasing the top corporate rate from 24 percent to 25 percent (rising to 27 percent in 2018) and creating two separate corporate tax systems: an attributed income system and a partially integrated system. Net operating loss carrybacks have also been eliminated. As a result: Chile fell three places, from 29th to 32nd.

Czech Republic

The Czech Republic amended its income tax law to allow the deductibility of tax losses from the sale of shares by nonresidents, and compliance hours fell significantly for both corporate and individual income taxes. These changes drove an improvement of four places, from 13th to 9th.

Greece

Greece raised its VAT rate one percentage point, to 24 percent. The top individual income tax rate rose from 50 to 55 percent, while the capital gains tax increased from 15 to 25 percent. The country's dividend withholding rate increased from 10 to 15 percent. The corporate tax rate is scheduled to decline from 29 to 26 percent in 2019. Because other countries with low rankings on the *ITCI* also adopted changes which hurt their scores, Greece did not decline in ranking.

Hungary

Hungary converted its two-rate corporate tax, with a top rate of 19 percent, into a 9 percent flat tax. This rate reduction resulted in an improvement of three places, from 23rd to 20th.

Israel

Israel fell one spot, from 25th to 26th. That was driven by the introduction of a "patent box," which provides a special rate of 6 percent on profits attributable to patents.

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	2015 Rank	2015 Score	2016 Rank	2016 Score	2017 Rank	2017 Score	Change in Rank	Change in Score
Australia	8	78.8	8	78.0	7	78.9	1	0.8
Austria	16	69.8	16	69.9	13	71.3	3	1.4
Belgium	25	63.5	27	61.0	27	60.3	0	-0.7
Canada	19	69.0	19	68.0	17	69.1	2	1.1
Chile	29	59.8	29	55.6	32	53.1	-3	-2.5
Czech Republic	13	70.5	13	70.3	9	74.3	4	4.0
Denmark	23	64.5	22	64.7	21	67.0	1	2.3
Estonia	1	100.0	1	100.0	1	100.0	0	0.0
Finland	18	69.3	18	68.8	19	68.2	-1	-0.6
France	35	43.1	35	43.7	35	43.4	0	-0.3
Germany	20	68.4	20	67.5	23	66.6	-3	-0.9
Greece	28	61.5	31	55.2	29	57.2	2	2.0
Hungary	22	65.6	23	64.6	20	67.0	3	2.4
Iceland	21	66.4	21	66.5	24	63.5	-3	-3.0
Ireland	12	71.6	12	70.3	16	70.4	-4	0.1
Israel	26	62.7	25	62.4	26	61.5	-1	-0.9
Italy	34	47.6	34	46.7	34	47.7	0	1.0
Japan	24	63.7	26	62.4	22	66.8	4	4.4
Korea	10	74.0	11	72.5	12	71.8	-1	-0.7
Latvia	3	86.6	3	86.6	4	85.0	-1	-1.6
Luxembourg	7	81.3	7	81.0	5	82.7	2	1.7
Mexico	27	62.5	24	62.8	25	62.2	-1	-0.6
Netherlands	6	82.1	6	81.8	8	77.5	-2	-4.3
New Zealand	2	88.3	2	89.0	2	88.7	0	-0.2
Norway	17	69.5	15	70.0	15	70.7	0	0.7
Poland	31	55.6	30	55.5	31	54.4	-1	-1.1
Portugal	33	52.1	33	51.1	33	51.9	0	0.8
Slovak Republic	11	73.9	10	73.5	10	74.1	0	0.6
Slovenia	14	70.0	14	70.1	18	68.2	-4	-1.9
Spain	32	55.1	28	59.5	28	59.8	0	0.3
Sweden	5	82.4	5	82.0	6	81.8	-1	-0.3
Switzerland	4	86.0	4	85.4	3	85.2	1	-0.2
Turkey	9	75.8	9	73.7	11	73.7	-2	0.1
United Kingdom	15	69.8	17	69.2	14	70.8	3	1.6
United States	30	56.0	32	55.1	30	55.1	2	0.0

Japan

Japan reduced the amount of losses that can be carried forward to subsequent years, ratcheting the cap down from 80 to 55 percent. However, compliance time declined substantially across all tax categories, and Japan expanded its treaty network, leading to an improvement of four places, from 26th to 22nd.

Latvia

Latvia capped net operating loss carryforwards at 75 percent of losses and its VAT base shrunk, leading the country to slip one place, from 3rd to 4th overall.

Luxembourg

Luxembourg cut its statutory corporate income tax rate from 21 to 19 percent, leading to an overall corporate tax rate of 27.08 percent, down from 29.22 percent (taking surtaxes and municipal business taxes into account). At the same time, however, the minimum net wealth tax increased and net operating loss carryforwards were limited to 17 years. Despite the latter changes, the lower corporate rate drove a two-spot improvement, from 7th to 5th.

Netherlands

In the Netherlands, the implementation of the 2017 Dutch Tax Package brought modest increases in individual income and dividend tax rates, which contributed to a modest slide, from 6th to 8th overall.

Slovak Republic

The Slovak Republic reduced its corporate income tax rate from 22 to 21 percent. However, the country now taxes foreign-earned dividend income at a rate of 35 percent for nontreaty jurisdictions and 7 percent for treaty jurisdictions. These policy changes offset, and the Slovak Republic remains 10th overall.

Slovenia

Slovenia adopted a corporate tax increase, raising the rate from 17 to 19 percent. As a result, Slovenia slipped four places, from 14th to 18th.

United Kingdom

The United Kingdom, which determines its corporation tax rate each year, reduced the rate from 20 to 19 percent, with a larger reduction in capital gains taxation. These changes drove an improvement of three places, from 17th to 14th.

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.

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.

The United States has the highest top marginal corporate income tax rate at 38.9 percent. This is followed by France (34.4 percent), Belgium (34.0 percent), and Germany (30.2 percent). The lowest top marginal corporate income tax rate in the OECD is found in Hungary, which recently cut its rate to 9 percent. There are six other countries with rates below 20 percent: Ireland (12.5 percent), Latvia (15 percent), and the Czech Republic, Poland, Slovenia, and the United Kingdom (all at 19 percent). The OECD average top corporate income tax rate is 24.2 percent.[5]

Cost Recovery

To a business, profits are revenue (what a business makes in sales) minus costs (the cost of doing business). The corporate income tax is meant to be a tax on these profits. Thus, it is important that a tax code properly define what constitutes taxable income. If a tax code does not allow businesses to account for all the costs of doing business, it will inflate a business's taxable income and thus its tax bill. This increases the cost of capital, which reduces the demand for capital, leading to slower investment and economic growth.

4 Organisation for Economic Co-operation and Development, "Tax Policy Reform and Economic Growth," OECD Tax Policy Studies, No. 20, 2010, https://www.oecd.org/ctp/tax-policy/tax-policy-reform-and-economic-growth-9789264091085-en.htm.
5 Organisation for Economic Co-operation and Development, "OECD Tax Database, Table II.1."

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	25	52.6	30	41.9	15	45.9	13	80.0
Austria	16	60.1	19	55.7	12	48.5	19	73.9
Belgium	30	48.2	33	30.8	2	60.5	27	66.7
Canada	21	55.6	23	51.0	28	38.8	10	82.3
Chile	22	54.2	19	55.7	35	21.9	5	93.3
Czech Republic	8	70.4	4	72.3	16	45.7	14	78.5
Denmark	13	64.2	14	64.0	23	41.4	12	81.0
Estonia	1	100.0	8	69.5	1	100.0	3	94.1
Finland	5	71.8	8	69.5	32	36.5	1	100.0
France	33	44.0	34	29.6	9	49.8	20	71.3
Germany	23	54.0	32	41.4	14	46.3	8	84.4
Greece	24	53.0	27	44.6	24	40.8	9	83.3
Hungary	3	80.6	1	100.0	31	37.3	21	71.1
Iceland	12	64.9	8	69.5	30	38.5	17	77.2
Ireland	4	77.4	2	90.3	21	43.1	22	70.8
Israel	29	48.5	16	58.5	3	53.0	35	29.8
Italy	28	48.8	25	47.9	5	52.5	34	49.6
Japan	34	40.2	29	41.9	29	38.6	33	54.2
Korea	20	57.5	18	57.9	7	51.3	31	58.6
Latvia	2	82.9	3	83.4	4	53.0	7	85.1
Luxembourg	26	51.3	24	49.9	8	50.6	32	55.9
Mexico	31	46.7	30	41.9	22	42.8	26	67.3
Netherlands	19	58.4	19	55.7	10	48.8	23	68.8
New Zealand	18	59.1	26	47.4	25	40.1	2	97.1
Norway	14	63.4	16	58.5	27	39.5	6	91.0
Poland	11	67.0	4	72.3	26	39.9	18	76.7
Portugal	32	46.3	28	43.2	18	44.3	29	61.5
Slovak Republic	10	68.3	12	66.8	11	48.6	15	78.0
Slovenia	9	69.2	4	72.3	20	44.0	16	77.4
Spain	27	50.6	19	55.7	33	32.6	24	68.2
Sweden	6	71.5	14	64.0	13	47.4	4	93.6
Switzerland	7	70.9	13	66.4	6	51.6	11	82.0
Turkey	15	61.8	8	69.5	17	45.2	30	59.1
United Kingdom	17	59.7	4	72.3	34	31.4	25	67.3
United States	35	31.2	35	17.2	19	44.1	28	63.9

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.

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]

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 83.3 percent of the cost of machinery, 45.6 percent of the cost of industrial buildings, and 74.0 percent of the cost of intangibles.[8] Estonia, which has a corporate tax only on distributed profits, is 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] Fourteen countries use the Average Cost method of accounting, and six countries limit companies to using the FIFO method of accounting.

6 Kyle Pomerleau, "Cost Recovery across the OECD," Tax Foundation, November 19, 2013, http://taxfoundation.org/article/capital-cost-recovery-across-oecd.
7 Intangible assets are typically amortized, but the write-off is similar to depreciation.
8 Oxford University Centre for Business Taxation, "CBT tax database," http://www.sbs.ox.ac.uk/faculty-research/tax/publications/data. Capital allowances are calculated assuming a fixed interest rate of 5 percent and fixed inflation rate of 2.5 percent.
9 Id.

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 carry forward or carry back of losses places a greater average tax burden on industries that are more susceptible to business cycles.

In 17 of the 35 OECD countries, corporations can carry forward losses indefinitely, though seven of these limit the generosity of the provision by capping the percentage of losses that can be carried forward.[10] Of the countries with restrictions, the average loss carryforward period is 11.3 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 Estonia allows unlimited carrybacks of losses. Of the nine countries that allow limited carrybacks, the average period is 1.4 years. The *ITCI* penalizes the 25 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.

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, Korea only allows 50 percent of losses to be carried back one year. These restrictions are coded as the percentage of losses that can be carried forward or backward times the number of allowable years. Thus, Korea is coded as 0.5.

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.

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.

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

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.

Eleven OECD countries—Belgium, France, Hungary, Ireland, Israel, Italy, 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.

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 larger amounts of time for tax compliance receive lower scores on the *ITCI*. The results are based on data from PwC's *Paying Taxes 2017* component of the "Doing Business" report from the World Bank.[16]

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 Mexico, at 122 hours, followed by 110 hours in Israel and 87 hours in the United States. Tax compliance takes the least amount of time in Ireland, at 12 hours, followed by 15 hours in Switzerland and 19 hours in Luxembourg. The average across the OECD is 46 hours.

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 PwC and the World Bank Group, *Paying Taxes 2017*, www.pwc.com/gx/en/paying-taxes/pdf/pwc-paying-taxes-2017.pdf.

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.[17]

A country's consumption tax score is broken down into three subcategories: the marginal rate, the base, and complexity. Table 4 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.[18]

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

18 See generally, Jared Walczak and Scott Drenkard, "State and Local Sales Tax Rates, Midyear 2017," Tax Foundation, July 5, 2017, https://taxfoundation.org/state-and-local-sales-tax-rates-midyear-2017/.

TABLE 4.
Consumption Taxes

Country	Overall Rank	Overall Score	Rate Rank	Rate Score	Base Rank	Base Score	Complexity Rank	Complexity Score
Australia	6	71.8	4	89.4	26	48.4	20	71.2
Austria	12	62.0	14	49.3	16	59.9	13	81.5
Belgium	33	37.3	19	45.3	24	53.0	33	36.9
Canada	8	69.8	6	79.7	22	56.5	20	71.2
Chile	29	39.4	12	53.3	8	74.1	35	20.4
Czech Republic	32	37.5	19	45.3	27	47.1	30	41.0
Denmark	21	54.1	32	29.3	11	69.1	16	78.0
Estonia	10	65.7	14	49.3	9	70.4	10	82.8
Finland	16	59.5	29	33.3	13	64.2	4	89.0
France	18	55.1	14	49.3	35	32.3	8	84.2
Germany	13	61.6	12	53.3	15	61.4	18	76.0
Greece	28	40.9	29	33.3	25	50.0	25	58.1
Hungary	35	28.6	35	21.2	23	55.9	31	39.6
Iceland	22	53.0	29	33.3	17	59.5	16	78.0
Ireland	24	51.3	26	37.3	30	36.7	7	84.9
Israel	9	68.6	9	61.3	2	96.5	23	60.9
Italy	20	54.3	24	41.3	29	42.8	9	83.5
Japan	2	94.1	2	97.4	7	80.3	2	91.1
Korea	3	86.2	4	89.4	10	70.2	5	88.3
Latvia	27	42.9	19	45.3	32	35.0	24	60.2
Luxembourg	5	81.2	9	61.3	3	92.6	3	90.4
Mexico	19	54.8	8	65.3	6	81.7	33	36.9
Netherlands	14	61.3	19	45.3	14	62.6	12	82.2
New Zealand	7	71.1	7	69.4	4	86.4	22	65.0
Norway	23	52.3	32	29.3	12	67.4	19	75.3
Poland	34	28.9	26	37.3	33	34.6	32	38.3
Portugal	30	38.3	26	37.3	20	57.9	28	43.7
Slovak Republic	31	38.2	14	49.3	34	32.5	27	47.9
Slovenia	26	43.4	24	41.3	28	46.3	25	58.1
Spain	15	59.6	19	45.3	19	58.0	13	81.5
Sweden	11	64.5	32	29.3	1	100.0	15	80.8
Switzerland	1	100.0	2	97.4	5	86.2	1	100.0
Turkey	25	47.3	11	57.3	18	58.7	29	43.1
United Kingdom	17	58.2	14	49.3	31	36.2	5	88.3
United States	4	84.5	1	100.0	21	57.0	10	82.8

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.[19]

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).[20] 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, no country has a perfect VAT or sales tax base. Luxembourg and New Zealand score best under this metric, while Mexico has the worst with a ratio of 0.32.[21] The OECD average tax base ratio is 0.55.

Deduction Limitations

When a business is calculating the VAT it owes, it is able to credit the VAT it previously paid on an input. For example, a woodworking business may purchase lumber from a mill for $110: $100 for the price plus $10 for the VAT. The woodworking business then makes a chair and sells it for $132. It charges $120 plus $12 for the VAT. Before it submits the VAT payment to the government, it deducts the $10 in VAT it paid on the lumber. Thus, it only pays $2 in VAT. Between the mill and the woodworking business, the $12 VAT on the $120 value of the chair is paid. As long as each business is able to deduct the VAT paid on its inputs, the tax base will remain neutral.

However, some countries restrict deductions for VAT paid on certain goods and services purchased by businesses. These restrictions are meant to prevent businesses from sheltering consumption by classifying it as the cost of business inputs. The most common examples are restaurant meals and cars. While these restrictions prevent some hidden consumption, purchases of restricted goods are often actually purchases of business inputs. These restrictions cause tax pyramiding, which creates uneven tax burdens across industries, distorts companies' structures, and harms economic performance.[22]

Countries score higher if they do not restrict the ability of a business to deduct VAT or sales taxes paid.

Deduction limitations are found in 30 countries. The five countries that allow businesses to deduct all VAT costs are Israel, Japan, Mexico, Sweden, and Switzerland.

19 Organisation for Economic Co-operation and Development, Consumption Tax Trends 2016 (Nov. 30, 2016), http://www.oecd.org/tax/consumption-tax-trends-19990979.htm. This paper does not provide the measure for the United States. The U.S. measure was calculated by the authors.
20 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.
21 Organisation for Economic Co-operation and Development, "Consumption Tax Trends 2016."
22 Justin Ross, "Gross Receipts Taxes: Theory and Recent Evidence," Tax Foundation.

Although the United States does not have a VAT, its sales tax suffers from an issue similar to that caused by deduction limitations. A few U.S. states apply retail sales taxes to business inputs,[23] which also creates tax pyramiding.

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.[24]

Countries receive better scores for lower thresholds. France receives the worst threshold score with a VAT threshold of $100,244. Six countries receive the best scores for having no general VAT/sales tax threshold (Chile, Mexico, Spain, Sweden, Turkey, and the United States). The average threshold across the OECD is approximately $38,372.

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 2017* component of the "Doing Business" report from the World Bank.[25]

Countries receive higher scores if compliance with their consumption taxes takes fewer hours. Chile receives the worst score with a 124-hour compliance time. 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 54.2 hours.

23 This is also the case for some Canadian provinces. See Duanjie Chen and Jack Mintz, "2013 Annual Global Tax Competitiveness Ranking: Corporate Tax Policy at a Crossroads," University of Calgary School of Public Policy Research Papers, Vol. 6, Issue 35, November 2013, https://www.policyschool.ca/wp-content/uploads/2016/03/2013-tax-competitiveness-chen-mintz.pdf.

24 Organisation for Economic Co-operation and Development, "Consumption Tax Trends 2016."

25 PwC and the World Bank Group, *Paying Taxes 2017*.

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.[26]

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.[27]

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 5 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 total marginal tax burden on an average laborer.

26 Kyle Pomerleau and Kevin Adams, "A Comparison of the Tax Burden on Labor in the OECD," Tax Foundation, August 9, 2016, http://taxfoundation.org/article/comparison-tax-burden-labor-oecd-2016.

27 Kyle Pomerleau, "The High Burden of Capital Gains Tax Rates," Tax Foundation, February 11, 2014, http://taxfoundation.org/article/high-burden-state-and-federal-capital-gains-tax-rates.

TABLE 5.
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	11	72.5	24	54.0	7	79.6	8	85.5
Austria	33	41.2	28	47.9	35	25.7	15	77.1
Belgium	12	70.7	8	82.0	32	47.9	7	85.6
Canada	17	66.9	21	56.8	19	67.2	9	82.7
Chile	19	65.1	23	54.0	3	90.0	29	55.9
Czech Republic	3	84.1	2	93.7	6	82.0	25	66.7
Denmark	30	51.2	34	27.1	22	65.2	12	80.0
Estonia	7	79.7	11	74.3	23	63.8	2	98.0
Finland	28	53.0	32	42.6	29	55.7	14	77.9
France	35	35.8	33	30.5	33	38.1	23	69.5
Germany	32	45.6	26	49.5	28	55.8	30	52.3
Greece	15	68.1	17	63.2	25	59.2	5	87.6
Hungary	24	58.8	15	65.9	11	76.1	32	43.1
Iceland	31	49.9	19	58.7	10	76.9	35	28.8
Ireland	23	59.5	35	26.0	14	75.2	4	90.0
Israel	27	55.0	13	66.6	12	76.1	34	33.2
Italy	34	37.6	25	50.1	30	50.3	33	38.3
Japan	26	55.8	20	58.2	26	58.1	26	64.7
Korea	8	78.9	10	77.8	5	84.0	23	69.5
Latvia	6	81.2	12	69.8	2	93.0	17	74.0
Luxembourg	13	70.2	4	89.0	18	70.1	31	51.7
Mexico	9	75.1	7	85.5	24	62.5	16	75.9
Netherlands	14	70.1	14	66.2	20	66.8	11	80.4
New Zealand	1	100.0	1	100.0	1	100.0	13	77.9
Norway	10	72.7	27	48.5	16	72.5	1	100.0
Poland	20	64.7	18	60.1	8	79.1	28	60.3
Portugal	29	51.2	16	65.2	34	36.6	21	69.9
Slovak Republic	5	81.6	9	82.0	13	75.4	10	81.2
Slovenia	16	67.1	6	85.9	31	50.2	21	69.9
Spain	21	62.9	22	54.4	17	70.3	19	72.4
Sweden	22	59.6	31	44.3	27	55.9	3	91.6
Switzerland	4	82.5	5	88.9	4	86.3	27	63.4
Turkey	2	84.3	3	91.8	9	77.8	17	74.0
United Kingdom	18	65.9	30	44.6	15	73.5	6	86.8
United States	25	56.7	29	46.5	21	66.2	20	70.7

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 new 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 $418,400 ($470,700 married filing jointly) at a rate of 39.6 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 48.6 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. Portugal has the highest top combined marginal income tax rate at nearly 61.3 percent.[28] Latvia has the lowest, at 19.0 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.[29] According to this measure, Mexico applies its tax at the highest level of income (the top marginal income tax rate applies at 26.6 times the average Mexican income), whereas Hungary applies its top rate on the first dollar, with a flat tax of 33.5 percent.

Tax Burden on Labor

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).

A high tax burden on labor increases the cost of labor relative to leisure. This discourages work and increases the cost to hire labor. Fewer hours worked damages economic growth and leads to lower levels of total output.

The *ITCI* gives countries with high tax wedges a low score due to the higher labor costs associated with high tax burdens on workers. Workers in Belgium face the highest tax burden at 54 percent, while workers in Chile face the lowest tax burden at 7 percent. The average across the OECD is 36 percent.

28 Organisation for Economic Co-operation and Development, "OECD Tax Database, Table I.7 - Top statutory personal income tax rate and top marginal tax rates for employees, 2000-2016," updated April 2017, 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.

29 Id.

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.[30]

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.[31]

The average top marginal capital gains tax rate (given that requirements are met) is 18.2 percent across the OECD. Denmark has the highest top marginal capital gains tax rate at 42 percent. Ten countries exempt capital gains from taxation.

30 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/

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

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.[32] 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.

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.[33] Estonia has a dividend tax rate 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.[34] Italy receives the lowest score with a compliance time of 169 hours. Luxembourg receives the best score with a compliance time of 14 hours.

32 John L. Aldridge and Kyle Pomerleau, "Inflation Can Cause an Infinite Effective Tax Rate on Capital Gains," Tax Foundation, December 17, 2013, http://taxfoundation.org/article/inflation-can-cause-infinite-effective-tax-rate-capital-gains.
33 Organisation for Economic Co-operation and Development, "OECD Tax Database, Table II.4 - Overall statutory tax rates on dividend income, 2000-2017," updated April 2017, http://www.oecd.org/tax/tax-policy/tax-database.htm.
34 PwC and the World Bank Group, *Paying Taxes 2017*.

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.

The United States has a worldwide tax system. This means that a U.S. corporation operating in a foreign country must still pay taxes to the United States up to the rate of 35 percent on foreign-sourced income.

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 six.[35]

Table 6 displays the overall rank and score for the International Rules category as well as the ranks and scores for the subcategories.

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 employed by the United States—requires companies to pay taxes on worldwide income, no matter where it is earned.

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.[36]

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.

35 PwC, "Evolution of Territorial Tax Systems in the OECD," April 2, 2013, http://www.techceocouncil.org/clientuploads/reports/Report%20on%20Territorial%20Tax%20Systems_20130402b.pdf.

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

TABLE 6.
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	68.7	1	100.0	31	46.5	14	66.7
Austria	6	84.5	1	100.0	12	73.5	5	81.0
Belgium	13	76.3	20	97.7	30	50.4	3	85.9
Canada	22	65.0	24	83.5	24	60.3	24	57.4
Chile	34	37.0	31	28.9	35	26.0	9	71.6
Czech Republic	10	80.2	1	100.0	10	75.4	10	66.8
Denmark	23	63.9	1	100.0	26	55.4	26	43.1
Estonia	7	83.0	1	100.0	6	86.9	22	61.8
Finland	21	66.0	1	100.0	13	73.4	33	29.0
France	24	63.7	23	94.1	14	68.7	31	33.5
Germany	12	77.3	21	96.4	9	79.6	23	57.5
Greece	30	53.6	26	67.1	20	63.2	28	38.4
Hungary	4	88.3	1	100.0	1	100.0	21	62.2
Iceland	19	67.2	1	100.0	25	59.3	25	48.0
Ireland	20	66.3	30	61.8	22	61.9	5	81.0
Israel	32	47.9	31	28.9	32	45.1	7	80.9
Italy	26	61.5	21	96.4	23	61.2	31	33.5
Japan	25	63.2	29	65.2	19	63.9	14	66.7
Korea	31	50.5	31	28.9	18	64.4	14	66.7
Latvia	5	87.5	1	100.0	3	93.6	10	66.8
Luxembourg	2	97.9	1	100.0	5	90.3	1	100.0
Mexico	35	30.9	31	28.9	33	40.4	30	38.2
Netherlands	1	100.0	1	100.0	2	95.5	1	100.0
New Zealand	15	70.7	1	100.0	29	51.4	14	66.7
Norway	14	70.7	19	98.9	7	86.3	33	29.0
Poland	29	56.2	26	67.1	17	65.6	26	43.1
Portugal	28	58.6	1	100.0	27	54.8	33	29.0
Slovak Republic	27	59.2	26	67.1	28	51.8	10	66.8
Slovenia	16	69.8	25	80.8	16	66.2	10	66.8
Spain	18	67.4	1	100.0	15	68.5	28	38.4
Sweden	8	82.4	1	100.0	8	81.0	14	66.7
Switzerland	9	81.8	1	100.0	21	62.2	3	85.9
Turkey	11	79.6	1	100.0	11	73.8	14	66.7
United Kingdom	3	92.1	1	100.0	4	92.8	7	80.9
United States	33	40.8	31	28.9	34	39.8	14	66.7

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-two OECD countries exempt all dividends received by parent companies from taxation.[37] Seven countries allow 95 percent or 97 percent of dividends to be exempt from taxation. Six 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 20 OECD countries. Six countries partially exclude foreign-sourced capital gains. Nine countries do not exclude foreign-sourced capital gains income from domestic taxation.[38]

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

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

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. Mexico, 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 40 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.[39]

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 76 countries.[40]

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) and thin capitalization rules.

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.

39 Deloitte International Tax Source, "Tax guides and highlights."
40 Id.

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, 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.[41]

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.

Countries without CFC regulations are given the highest score. Countries with CFC regulations that only apply to passive income receive an average score, and countries with CFC regulations that apply to a subsidiary's active and passive income are given the lowest score. CFC rules exist in 25 of the 35 OECD countries.[42] Fifteen of the 25 countries' CFC rules capture both active and passive income, while 10 only apply to passive income. Ten 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.[43] For some countries, income earned in restricted countries by domestic corporations is not exempt from domestic taxation.

41 U.S.-held corporations are able to defer taxes on active, or reinvested, income until that income is repatriated to the United States.
42 Deloitte International Tax Source, "Tax guides and highlights."
43 Organisation for Economic Co-operation and Development, "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.[44]

In the OECD, 25 of 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*.[45]

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.[46] 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 countries 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.[47]

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 27 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.[48] Germany and Spain limit interest deductions (regardless of whether they are for cross-border loans) to 30 percent of operating income. Countries such as Iceland, Estonia, and Ireland have no established limitations on interest deductions and rely on transfer pricing rules.

44 Deloitte International Tax Source, "Tax guides and highlights."
45 PwC, "Evolution of Territorial Tax Systems in the OECD."
46 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.
47 Id. This paper finds a 10 percent rise results in a 2 percent rise in debt-to-assets ratio.
48 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.

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 7 (next page) shows the ranks and scores for the Property Taxes category and each of its subcategories.

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 7.
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	5	86.8	3	80.4	1	100.0	8	80.6
Austria	9	75.1	17	62.1	1	100.0	17	64.6
Belgium	25	58.6	28	45.2	11	68.5	17	64.6
Canada	23	61.7	31	40.2	1	100.0	29	47.5
Chile	14	68.2	23	55.2	11	68.5	5	84.0
Czech Republic	10	69.8	16	62.2	11	68.5	8	80.6
Denmark	8	76.2	14	63.5	11	68.5	1	100.0
Estonia	1	100.0	1	100.0	1	100.0	1	100.0
Finland	19	64.2	8	73.2	11	68.5	24	48.6
France	35	28.7	35	25.5	31	29.7	34	31.4
Germany	13	68.6	20	58.8	11	68.5	8	80.6
Greece	21	63.4	19	59.0	11	68.5	21	63.5
Hungary	26	57.9	22	56.4	11	68.5	24	48.6
Iceland	22	63.1	30	41.5	11	68.5	5	84.0
Ireland	12	69.4	6	74.1	11	68.5	17	64.6
Israel	11	69.7	34	34.8	1	100.0	8	80.6
Italy	34	39.6	29	41.7	31	29.7	29	47.5
Japan	28	54.5	33	35.2	11	68.5	21	63.5
Korea	27	56.4	24	53.3	11	68.5	29	47.5
Latvia	7	83.8	10	72.6	1	100.0	8	80.6
Luxembourg	18	65.8	13	64.5	11	68.5	17	64.6
Mexico	4	87.2	2	81.6	1	100.0	8	80.6
Netherlands	24	60.5	12	70.6	31	29.7	8	80.6
New Zealand	3	90.2	7	73.9	1	100.0	1	100.0
Norway	16	67.4	18	59.3	30	61.2	5	84.0
Poland	30	53.8	26	46.4	11	68.5	29	47.5
Portugal	20	63.6	11	71.6	11	68.5	24	48.6
Slovak Republic	2	91.9	5	78.4	1	100.0	1	100.0
Slovenia	15	68.1	21	57.6	11	68.5	8	80.6
Spain	32	46.9	25	48.1	31	29.7	21	63.5
Sweden	6	84.0	9	73.0	1	100.0	8	80.6
Switzerland	33	42.7	15	63.0	31	29.7	34	31.4
Turkey	17	66.5	4	80.3	11	68.5	29	47.5
United Kingdom	31	51.0	32	37.8	11	68.5	24	48.6
United States	29	53.9	27	45.7	11	68.5	24	48.6

Every OECD country except Australia, New Zealand, and Estonia applies its property tax to capital.[49] These countries only tax the value of land, which excludes the value of any buildings or structures on the land.[50] Of the 32 OECD countries with taxes on real property, 12 allow for a deduction against corporate taxable income.

49 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.pdf.

50 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 gross domestic product. Higher tax burdens, specifically when on capital, tend to slow investment, which damages productivity and economic growth.

Countries with a high level of collection place a larger tax burden on taxpayers and receive a lower score on the *ITCI*. The United Kingdom relies on property taxes most heavily at 3.1 percent of GDP, with Canada and France both closely behind at 2.9 and 2.6 percent of GDP respectively. Luxembourg has the lowest real property tax burden at less than 0.1 percent of GDP.[51]

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.[52] 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 $5.49 million. Belgium, on the other hand, has an inheritance tax with an exemption of €15,000 ($15,957 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.[53]

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 0.1 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.[54]

51 Organisation for Economic Co-operation and Development, *OECD.StatExtracts*, *Revenue Statistics – OECD Member Countries*, http://stats.oecd.org/.
52 William McBride, "Twelve Steps toward a Simpler, Pro-Growth Tax Code," Tax Foundation.
53 Ernst & Young, *Worldwide Estate and Inheritance Tax Guide, 2016*, http://www.ey.com/Publication/vwLUAssets/ey-worldwide-estate-and-inheritance-tax-guide-june-2016/$FILE/ey-worldwide-estate-and-inheritance-tax-guide-june-2016.pdf.
54 Organisation for Economic Co-operation and Development, *OECD.StatExtracts*, *Revenue Statistics – OECD Member Countries*, http://stats.oecd.org/.

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 include France, the Netherlands, Norway, and Switzerland (at the canton level).[55]

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.[56] 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.

55 Deloitte International Tax Source, "Tax guides and highlights."
56 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.[57] 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.

Thirteen countries have some type of corporate wealth or asset tax. Luxembourg, France, and Switzerland have net wealth taxes on corporations. Eight 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.[58]

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.

57 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.

58 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.

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 three variables: consumption tax as a percentage of total consumption, deduction limitations, 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.[59] For example, the average corporate income tax rate across the 35 OECD countries is about 24.2 percent, with a standard deviation of 6.2 percentage points. This means that on average, an OECD country's corporate tax rate is 6.2 percentage points off from the mean rate of 24.2 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 24.2 percent, and the standard deviation is 6.2 percentage points. The United States' corporate tax rate normalized score is -2.37,[60] or 2.37 standard deviations less competitive than the average OECD country. In contrast, Ireland's tax rate of 12.5 percent is 1.88 standard deviations more competitive than the average OECD country.

59 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.

60 The true normal score is 2.52. The score is a negative value to reflect the fact that being higher than the OECD average is less ideal.

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 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, the United States has the lowest z-score for the corporate income tax rate (-2.52). Thus, 2.52 plus 1 (3.52) 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 2.293, receives a final overall score of 100. The United States, which has an overall adjusted z-score of 1.268, receives a final overall score of 55.1.

Methodological Changes

A change was made to 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. This change is reflected in all years' scores.

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 Oxford University Centre for Business Taxation Database
- The Tax Foundation
- The *ITCI* uses the most up-to-date data available as of July 2017. See footnotes for specific data citations. Data may not reflect changes in countries making rapid reforms.

TABLE A.

Corporate Taxes

	Corporate Rate	Cost Recovery					
Country	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, limited to 75% of taxable income	81.3%	39.1%	73.8%	LIFO
Belgium	34.0%	0	No Limit	88.2%	62.2%	80.3%	LIFO
Canada	26.7%	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, limited to 60% of taxable income	82.7%	47.9%	81.3%	FIFO
Estonia	20.0%	No Limit	No Limit	100.0%	100.0%	100.0%	N/A
Finland	20.0%	0	10	82.7%	51.9%	73.8%	FIFO
France	34.4%	1	50	85.8%	54.8%	87.0%	Average Cost
Germany	30.2%	1, limited to 50% of taxable income	No Limit, limited to 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, limited to 50% of taxable income	81.6%	27.9%	87.0%	Average Cost
Iceland	20.0%	0	10	86.0%	47.8%	81.2%	FIFO
Ireland	12.5%	1	No Limit	78.7%	47.9%	54.8%	Average Cost
Israel	24.0%	0	No Limit	87.0%	54.8%	78.7%	Average Cost
Italy	27.8%	0	No Limit, limited to 80% of taxable income	76.0%	46.3%	96.5%	LIFO
Japan	30.0%	0	9, limited to 55% of taxable income	77.0%	27.9%	78.7%	LIFO
Korea	24.2%	1, limited to 50% of taxable income	8	92.2%	54.8%	73.8%	LIFO
Latvia	15.0%	0	No limit, limited to 75% of taxable income	90.5%	61.4%	73.8%	Average Cost
Luxembourg	27.1%	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	24.0%	2	No Limit	78.2%	37.4%	73.8%	FIFO
Poland	19.0%	0	5, limited to 50% of total loss per year	73.8%	33.8%	87.0%	LIFO
Portugal	29.5%	0	12, limited to 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, limited to 50% of taxable income	87.0%	39.1%	73.8%	Average Cost
Spain	25.0%	0	No Limit, limited to 70% of taxable income	77.9%	39.1%	27.9%	Average Cost
Sweden	22.0%	0	No Limit	86.0%	47.9%	86.0%	FIFO
Switzerland	21.2%	0	7	86.0%	55.5%	90.5%	LIFO
Turkey	20.0%	0	5	87.6%	47.9%	63.2%	LIFO
United Kingdom	19.0%	1	No Limit	75.9%	0.0%	82.7%	FIFO
United States	38.9%	2	20	87.7%	35.0%	63.3%	LIFO

TABLE A.
Corporate Taxes

	Tax Incentives and Complexity				
Country	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	No	42	1	5
Czech Republic	No	Yes	53	1	5
Denmark	No	No	25	3	6
Estonia	No	No	20	1	7
Finland	No	No	21	1	4
France	Yes	Yes	28	1	5
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	Yes	62	3	9
Korea	No	Yes	83	2	8
Latvia	No	Yes	23	1	5
Luxembourg	No	Yes	19	5	6
Mexico	No	Yes	122	1	3
Netherlands	Yes	Yes	21	1	7
New Zealand	No	No	34	1	4
Norway	No	Yes	24	1	2
Poland	No	Yes	70	1	4
Portugal	Yes	Yes	63	1	6
Slovak Republic	No	Yes	46	1	6
Slovenia	No	No	86	1	8
Spain	Yes	Yes	33	1	6
Sweden	No	No	50	1	4
Switzerland	No	No	15	2	10
Turkey	Yes	Yes	46	1	9
United Kingdom	Yes	Yes	37	1	6
United States	No	Yes	87	2	5

TABLE B.

Consumption Taxes

	Consumption Tax Base	VAT Base			VAT Complexity
Country	VAT/Sales Tax Rate	VAT Threshold (a)	VAT Base as a Percent of Total Consumption	Deduction Limitations	Complexity (Hours to Comply)
Australia	10.0%	$50,336.00	49%	Entertainment, meals, certain travel	50
Austria	20.0%	$36,585.00	59%	Restaurants, entertainment, and vehicles	35
Belgium	21.0%	$30,488.00	47%	Entertainment, meals, vehicles	100
Canada	12.4% (b)	$24,000.00	49%	Entertainment, meals, vehicles, home office, some capital inputs (c)	50
Chile	19.0%	$0.00	63%	Vehicles and certain fuels	124
Czech Republic	21.0%	$75,873.00	58%	Entertainment	94
Denmark	25.0%	$6,667.00	59%	Entertainment, Vehicles, some employee fringe benefits	40
Estonia	20.0%	$28,571.00	70%	Entertainment, meals (except on business trips)	33
Finland	24.0%	$10,753.00	54%	Entertainment, Vehicles, some travelling costs	24
France	20.0%	$100,244.00	48%	Vehicles, certain gifts, gas and oil	31
Germany	19.0%	$22,152.00	55%	Entertainment	43
Greece	24.0%	$16,393.00	37%	Entertainment, meals, vehicles, tobacco, alcholic beverages	69
Hungary	27.0%	$44,823.00	57%	Entertainment, meals, vehicles, motor fuels, taxi services	96
Iceland	24.0%	$7,032.00	46%	Entertainment, Vehicles, expenses related to residential property	40
Ireland	23.0%	$88,339.00	49%	Entertainment, food, drink, hire of passenger vehicles, gas	30
Israel	17.0%	$25,517.00	63%	None	65
Italy	22.0%	$40,000.00	37%	Entertainment, Vehicles	32
Japan	8.0%	$94,940.00	70%	None	21
Korea	10.0%	$26,928.00	69%	Entertainment, vehicles	25
Latvia	21.0%	$98,619.00	51%	Entertainment, vehicles	66
Luxembourg	17.0%	$27,778.00	100%	Entertainment, tobacco	22
Mexico	16.0%	$0.00	32%	None	100
Netherlands	21.0%	$1,620.00	48%	Entertainment	34
New Zealand	15.0%	$40,816.00	97%	Entertainment	59
Norway	25.0%	$5,102.00	56%	Entertainment, meals, vehicles, works of art, gifts	44
Poland	23.0%	$83,333.00	44%	Entertainment, meals, fuels	98
Portugal	23.0%	$16,949.00	48%	Entertainment, transport, meals, vehicles, fuel	90
Slovak Republic	20.0%	$99,580.00	48%	Entertainment	84
Slovenia	22.0%	$83,333.00	60%	Entertainment, meals (except for direct business expenses), vehicles, fuels	69
Spain	21.0%	$0.00	41%	Entertainment, jewellery, food, tobacco	35
Sweden	25.0%	$0.00	57%	None	36
Switzerland	8.0%	$78,125.00	71%	None	8
Turkey	18.0%	$0.00	42%	Vehicles	91
United Kingdom	20.0%	$78,125.00	44%	Entertainment, meals, vehicles	25
United States	7.4% (d)	$0.00	40%	N/A. Sales tax levied on certain capital inputs (c)	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) In the U.S. and Canada, some states and provinces levy sales taxes on capital inputs.
(d) The United States' rate is the combined weighted average state and local sales tax rate.

TABLE C.

Property Taxes.

	Real Property Taxes			Wealth/Estate Taxes	
Country	Property Taxes, Real Property/Land Tax	Property Taxes, Deductable	Real Property Tax Collections as % of GDP	Net Wealth Tax	Estate/Inheritance Tax
Australia	Land Tax (a)	No	1.6%	No	None
Austria	Tax on Real Property	No	0.2%	No	None
Belgium	Tax on Real Property (b)	No	1.3%	No	Inheritance and Gift Tax
Canada	Tax on Real Property	Yes	2.9%	No	None, Real Estate Transfer Tax Can Apply
Chile	Tax on Real Property	No	0.7%	No	Inheritance and Gift Tax
Czech Republic	Tax on Real Property	No	0.2%	No	Inheritance and Gift Tax
Denmark	Building Tax	No	1.4%	No	Inheritance and Gift Tax
Estonia	Land Tax	No	0.3%	No	None
Finland	Tax on Real Property	Yes	0.8%	No	Inheritance and Gift Tax
France	Tax on Real Property	No	2.6%	Yes	Inheritance and Gift Tax
Germany	Tax on Real Property	No	0.4%	No	Inheritance and Gift Tax
Greece	Tax on Real Property	No	0.4%	No	Inheritance and Gift Tax
Hungary	Building Tax	No	0.6%	No	Inheritance and Gift Tax
Iceland	Tax on Real Property	No	1.6%	No	Inheritance and Gift Tax
Ireland	Tax on Real Property	Yes	0.7%	No	Inheritance and Gift Tax
Israel	Tax on Sale of Real Property (c)	No	2.0%	No	None
Italy	Tax on Real Property	No	1.6%	Yes	Inheritance and Gift Tax
Japan	Tax on Real Property	No	2.0%	No	Inheritance and Gift Tax
Korea	Tax on Real Property	No	0.8%	No	Inheritance and Gift Tax
Latvia	Tax on Real Property	Yes	0.8%	No	None
Luxembourg	Tax on Real Property	No	0.1%	No	Inheritance and Gift Tax
Mexico	Tax on Real Property	Yes	0.2%	No	Income Tax Can Apply, Some Gifts Can be Taxed, Real Estate Transfer Tax Can Apply
Netherlands	Tax on Real Property	Yes	0.9%	Yes	Inheritance and Gift Tax
New Zealand	Land Value Tax (d)	No	2.0%	No	None
Norway	Tax on Real Property	No	0.4%	Yes	None
Poland	Tax on Real Property	No	1.2%	No	Inheritance and Gift Tax
Portugal	Tax on Real Property	Yes	0.9%	No	Stamp Tax Applies to Inheritance and Gifts
Slovak Republic	Tax on Real Property	Yes	0.4%	No	None
Slovenia	Tax on Real Property	No	0.5%	No	Inheritance and Gift Tax
Spain	Tax on Real Property	No	1.1%	Yes	Inheritance and Gift Tax
Sweden	Tax on Real Property	Yes	0.8%	No	None
Switzerland	Tax on Real Property	No	0.2%	Yes	Many Cantons Levy Both Estate and Gift Taxes
Turkey	Tax on Real Property	Yes	0.3%	No	Inheritance and Gift Tax
United Kingdom	Tax on Real Property	Yes	3.1%	No	Inheritance and Gift Tax
United States	Tax on Real Property	Yes	2.6%	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 C, *CONTINUED.*

Property Taxes

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

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

TABLE D.

Income Taxes

	Ordinary Income Taxes and Payroll Taxes			Income Tax Complexity		Capital Gains/Dividends		
Country	Top Marginal Ordinary Income Tax Rate	Top Income Tax Rate Threshold (a)	Tax Wedge on Average Wage Income	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	45.0%	2.2	28.6%	4	18	24.5%	No	22.3%
Austria	55.0%	24.7	47.1%	3	50	27.5%	No	27.5%
Belgium	59.4%	1.0	54.0%	2	40	0.0%	Yes	30.0%
Canada	53.5%	4.3	31.4%	3	36	0.0%	No	39.3%
Chile	40.0%	10.9	7.0%	1	125	35.0%	No	13.3%
Czech Republic	31.1%	0.4	43.0%	2	87	0.0%	Yes	15.0%
Denmark	55.8%	1.2	36.5%	1	65	42.0%	No	42.0%
Estonia	56.3%	0.4	38.9%	0	31	20.0%	No	0.0%
Finland	58.9%	1.8	43.8%	3	48	34.0%	No	28.9%
France	55.1%	14.8	48.1%	2	80	34.4%	No	44.0%
Germany	47.5%	5.5	49.4%	1	134	26.4%	No	26.4%
Greece	55.0%	3.9	40.2%	1	46	25.0%	No	10.0%
Hungary	33.5%	0.0	48.2%	2	146	15.0%	No	15.0%
Iceland	44.4%	1.2	34.0%	13	60	20.0%	No	20.0%
Ireland	52.0%	2.0	27.1%	1	40	33.0%	No	51.0%
Israel	50.0%	5.6	22.1%	12	60	27.0%	Yes	27.0%
Italy	48.8%	9.8	47.8%	1	169	26.0%	No	26.0%
Japan	56.1%	8.9	32.4%	2	92	20.3%	No	20.3%
Korea	43.2%	4.0	22.2%	2	80	0.0%	Yes	35.4%
Latvia	19.0%	0.1	42.6%	1	80	15.0%	No	10.0%
Luxembourg	45.5%	2.9	38.4%	12	14	0.0%	Yes	21.0%
Mexico	35.0%	26.6	20.1%	2	64	10.0%	Yes	17.1%
Netherlands	52.7%	1.4	37.5%	1	64	30.0%	Yes	25.0%
New Zealand	33.0%	1.2	17.9%	2	59	0.0%	Yes	6.9%
Norway	46.9%	1.6	36.2%	1	15	24.0%	No	29.8%
Poland	38.8%	2.1	35.8%	2	103	19.0%	No	19.0%
Portugal	61.3%	16.0	41.5%	1	90	28.0%	Yes	28.0%
Slovak Republic	35.1%	3.7	41.5%	1	62	0.0%	No	7.0%
Slovenia	61.1%	5.2	42.7%	1	90	0.0%	Yes	25.0%
Spain	45.0%	2.4	39.5%	1	84	23.0%	No	23.0%
Sweden	60.1%	1.5	42.8%	1	36	30.0%	No	30.0%
Switzerland	41.7%	3.5	21.8%	7	40	0.0%	Yes	21.1%
Turkey	35.8%	3.5	38.1%	1	80	0.0%	Yes	17.5%
United Kingdom	47.0%	4.1	30.8%	1	48	20.0%	No	38.1%
United States	48.6%	8.0	31.7%	4	55	28.5%	No	28.5%

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 E.

International Tax Rules

	Participation Exemption		Withholding Taxes			
Country	Dividend Exemption	Capital Gains Exemption	Dividend Withholding Tax	Interest Withholding Tax	Royalties Withholding Tax	Number of Tax Treaties
Australia	100%	100%	30%	10%	30%	45
Austria	100%	100%	27.5%	0%	20%	91
Belgium	95%	98.8% (a)	30%	30%	30%	93
Canada	100%	50%	25%	25%	25%	96
Chile	0%	0%	35%	35%	30%	32
Czech Republic	100%	100%	15%	15%	15%	87
Denmark	100%	100%	27%	22%	22%	73
Estonia	100%	100%	0%	0%	10%	57
Finland	100%	100%	20%	0%	20%	75
France	95%	88%	30%	0%	33%	107
Germany	95%	95%	25%	0%	15%	96
Greece	100%	0%	15%	15%	20%	57
Hungary	100%	100%	0%	0%	0%	80
Iceland	100%	100%	18%	10%	20%	42
Ireland	0%	100%	20%	20%	20%	72
Israel	0%	0%	30%	24%	24%	53
Italy	95%	95%	26%	26%	22.5%	98
Japan	95%	0%	20%	20%	20%	81
Korea	0%	0%	22%	22%	22%	92
Latvia	100%	100%	0%	0%	0%	59
Luxembourg	100%	100%	15%	0%	0%	80
Mexico	0%	0%	10%	40%	40%	55
Netherlands	100%	100%	15%	0%	0%	97
New Zealand	100%	100%	30%	15%	15%	40
Norway	97%	100%	25%	0%	0%	88
Poland	100%	0%	19%	20%	20%	82
Portugal	100%	100%	25%	25%	25%	78
Slovak Republic	100%	0%	35%	19%	19%	67
Slovenia	95%	48%	15%	15%	15%	57
Spain	100%	100%	19%	19%	19%	88
Sweden	100%	100%	30%	0%	0%	81
Switzerland	100%	100%	35%	35%	0%	91
Turkey	100%	100%	15%	10%	20%	83
United Kingdom	100%	100%	0%	20%	20%	131
United States	0%	0%	30%	30%	30%	58

Notes:
(a) Belgium taxes capital gains at a low rate of .042 percent, which is similar to a 98.8 percent exemption.

TABLE E, *CONTINUED.*

International Tax Rules

Country	Participation Exemption			
	Controlled Foreign Corporation Rules	Controlled Foreign Corporation Rules Apply to Active Income	Country Limitations	Interest Deduction Limitations
Australia	Yes	No	None	Thin capitalization rules: multiple restrictions can apply
Austria	No	N/A	15 Percent Minimum Taxation Condition	None. Limits may apply in specific cases.
Belgium	No	N/A	None	Thin capitalization rules: 5:1 ratio can apply
Canada	Yes	No	TIEA and Treaty Countries Only	Thin capitalization rules: debt cannot exceed 1.5 times equity
Chile	Yes	No	N/A	Thin capitalization rules: additional tax applies on interest if debt-to-equity ratio exceeds 3:1
Czech Republic	No	N/A	EU Member States	Thin capitalization rules: 4:1 ratio for most companies
Denmark	Yes	Yes	Taxation Condition	Several limitations apply
Estonia	Yes, only applies to individuals	Yes, only applies to individuals	Taxation Condition	None
Finland	Yes	Yes	10 Percent Ownership Condition and EU Member States	Interest deductions limited to 25% of operating income
France	Yes	Yes	Non-Black List Countries	Interest deductions limited to 25% of operating income
Germany	Yes	No	None	Interest deductions limited to 30% of operating income, excess interest can be carried forward
Greece	Yes	No	EU Member States	Interest deductions limited to 30% of operating income
Hungary	Yes	Yes	None	Thin capitalization rules: 3:1 debt-to-equity ratio applies
Iceland	Yes	Yes	EU Member States	Interest deductions limited to 30% of profits
Ireland	No	N/A	EU Member States	None
Israel	Yes	No	None	None
Italy	Yes	Yes	Non-Black List Countries	Interest deductions limited to 30% of operating income, excess interest can be carried forward
Japan	Yes	Yes	None	Thin capitalization rules: 3:1 debt-to-equity ratio applies
Korea	Yes	Yes	None	Thin capitalization rules: 2:1 debt-to-equity ratio applies
Latvia	No	N/A	N/A	Thin capitalization rules: 4:1 debt-to-equity ratio applies
Luxembourg	No	N/A	None	No, but in practice Luxembourg limits to a 85:15 debt-to-equity ratio
Mexico	Yes	Yes	N/A	Thin capitalization rules: 3:1 debt-to-equity ratio applies
Netherlands	No	N/A	None	None, but anti-abuse rules can apply
New Zealand	Yes	No	None	Thin capitalization rules: multiple restrictions can apply
Norway	Yes	Yes	Taxation Condition or EEA Member Countries	Interest deductions limited to 25% of operating income
Poland	Yes	Yes	EU and EEA Member States and Switzerland	Thin capitalization rules: 1:1 debt-to-equity ratio applies
Portugal	Yes	Yes	Non-Black List Countries and Taxation Condition	Interest deductions limited to 30% of operating income
Slovak Republic	No	N/A	N/A	Interest deductions limited to 25% of operating income
Slovenia	No	N/A	EU Member and White List Countries and Taxation Condition	Thin capitalization rules: 4:1 debt-to-equity ratio applies
Spain	Yes	No	Countries with Similar Tax to Spanish Corporate Income Tax	Interest deductions limited to 30% of operating income
Sweden	Yes	Yes	Non-Black List Countries	No, but there are some restrictions
Switzerland	No	N/A	None	Thin capitalization rules: multiple restrictions can apply
Turkey	Yes	No	Taxation Condition	Thin capitalization rules: 3:1 debt-to-equity ratio applies
United Kingdom	Yes	Yes	None	None
United States	Yes	No	N/A	Thin capitalization rules: multiple restrictions can apply

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