INTERNATIONAL TAX COMPETITIVENESS INDEX 2020

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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 OECD nations raise a significant amount of revenue from broad-based taxes such as payroll taxes and value-added taxes (VAT).[1]

Not all recent changes in tax policy among OECD countries have improved the structure of tax systems; some have made a negative impact. Though some countries like the United States and Belgium have reduced their corporate income tax rates by several percentage points, others, like Korea and Portugal, have increased them. Corporate tax base improvements have been put in place in the United States, United Kingdom, and Canada, while tax bases have been made less competitive in Chile and Korea.

The COVID-19 pandemic has led many countries to adopt temporary changes to their tax systems. Faced with revenue shortfalls from the downturn, countries will need to consider how to best structure their tax systems to foster both an economic recovery and raise revenue.

The variety of approaches to taxation among OECD countries creates a need for a way to evaluate these systems relative to each other. For that purpose, we have developed the *International Tax Competitiveness Index* to compare the ways that countries structure their tax systems.

The *International Tax Competitiveness Index*

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

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

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

Separately, a neutral tax code is simply one that seeks to raise the most revenue with the fewest economic distortions. This means that it doesn't favor consumption over saving, as happens with investment taxes and wealth taxes. This

1 Cristina Enache, "Sources of Government Revenue in the OECD," Tax Foundation, Feb. 19, 2020, https://taxfoundation.org/publications/sources-of-government-revenue-in-the-oecd/.

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

also means few or no targeted tax breaks for specific activities carried out by businesses or individuals.

As tax laws become more complex, they also become less neutral. If, in theory, the same taxes apply to all businesses and individuals, but the rules are such that large businesses or wealthy individuals can change their behavior to gain a tax advantage, this undermines the neutrality of a tax system.

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 tax rates, 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.

Due to some data limitations, recent tax changes in some countries may not be reflected in this year's version of the *International Tax Competitiveness Index*.

2020 Rankings

For the seventh 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 system. 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.

While Estonia's tax system is the most competitive in the OECD, the other top countries' tax systems receive high scores due to excellence in one or more of the major tax categories. **Latvia**, which recently adopted the Estonian system for corporate taxation, also has a relatively efficient system for taxing labor income. **New Zealand** has a relatively flat, low-rate individual income tax that also exempts capital gains (with a combined top rate of 33 percent), a well-structured property tax, and a broad-based value-added tax. **Switzerland** has a relatively low corporate tax rate (21.1 percent), a low, broad-based consumption tax, and a relatively flat individual income tax that exempts capital gains from taxation. **Luxembourg** has a broad-based consumption tax and a competitive international tax system.

Italy has the least competitive tax system in the OECD. It has a wealth tax, a financial transaction tax, and an estate tax. Italy also has a high compliance burden associated with its individual tax system. It takes businesses an estimated 169 hours to comply with the individual income tax. The Italian consumption tax system covers less than 40 percent of final consumption, revealing both policy and enforcement gaps.

TABLE 1.

2020 *International Tax Competitiveness Index* Rankings

Country	Overall Rank	Overall Score	Corporate Tax Rank	Individual Taxes Rank	Consumption Taxes Rank	Property Taxes Rank	International Tax Rules Rank
Estonia	1	100.0	2	1	9	1	16
Latvia	2	84.4	1	5	26	6	9
New Zealand	3	82.4	24	4	6	2	20
Switzerland	4	77.1	14	14	1	34	3
Luxembourg	5	76.0	26	20	3	14	6
Lithuania	6	75.8	3	7	23	7	23
Sweden	7	74.0	8	19	16	5	11
Czech Republic	8	73.1	7	3	34	9	10
Australia	9	71.4	30	17	7	3	25
Slovak Republic	10	69.9	18	2	33	4	31
Turkey	11	69.9	15	6	20	21	12
Austria	12	68.7	21	29	13	13	5
Norway	13	68.1	11	15	18	19	14
Hungary	14	67.9	4	9	35	24	4
Germany	15	67.9	29	25	12	11	7
Finland	16	65.7	6	28	14	16	22
Netherlands	17	65.5	25	21	15	27	2
Canada	18	65.3	23	27	8	22	13
Belgium	19	64.1	13	10	28	20	19
Ireland	20	63.1	5	32	24	17	17
United States	21	62.9	19	23	5	28	32
United Kingdom	22	61.6	17	24	22	33	1
Slovenia	23	61.4	12	12	30	23	18
Korea	24	59.9	33	22	2	30	33
Israel	25	59.2	20	30	10	10	34
Japan	26	59.1	36	18	4	26	29
Spain	27	58.5	28	16	11	35	15
Denmark	28	58.3	16	35	17	15	28
Greece	29	55.9	22	8	31	32	24
Iceland	30	55.4	10	34	19	25	30
Mexico	31	51.5	31	13	25	8	35
France	32	50.7	35	36	21	29	8
Portugal	33	46.9	34	31	32	18	26
Poland	34	46.6	9	11	36	31	27
Chile	35	46.3	32	26	27	12	36
Italy	36	44.3	27	33	29	36	21

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 tax rates, with rates of 20 percent or higher, except for Chile, at 19 percent.

NOTABLE CHANGES FROM LAST YEAR[3]

Belgium

The corporate tax rate in Belgium fell from 29.58 percent to 25 percent, its wealth tax was abolished following a constitutional court decision, and CFC rules were enacted. Belgium's ranking rose from 23rd to 19th.

France

France is in the process of reducing its corporate income tax rate over several years, concluding in 2022. As part of this scheduled reduction, France reduced its combined corporate rate (including a surtax) from 34.43 percent to 32.02 percent. Its withholding tax rates on dividends and royalties levied on individuals from non-treaty countries were also reduced slightly. Its *Index* rank remained unchanged at 32.

Israel

Israel's ranking rose from 31st to 25th due to a reduction in required tax payments as measured by the PwC's "Paying Taxes" data.[4] Labor tax payments fell from 12 to 1 and other tax payments fell from 14 to 3. Israel also concluded two new tax treaties, broadening its tax treaty network.

Japan

After multiple postponements, Japan increased its VAT rate from 8 percent to 10 percent. In addition, stricter interest deduction limitations were introduced. Japan's rank fell from 22nd to 26th.

New Zealand

New Zealand implemented a temporary 1-year loss carryback provision as part of its COVID-19 response. The government is currently discussing making this provision permanent. New Zealand's rank remained unchanged at 3.

Norway

As part of its COVID-19 response, Norway implemented a temporary 2-year loss carryback provision. Norway's rank improved from 14th to 13th.

Slovenia

Slovenia increased the limit on loss carryforward provisions from a 50 percent to a 63 percent limitation, narrowing its tax base and making it slightly more countercyclical. Slovenia's ranking rose from 24th to 23rd.

Switzerland

Switzerland implemented a patent box regime at the cantonal level. Previously, only one canton—Nidwalden—had a patent box. The dividends tax rate was slightly increased from 21.14 percent to 22.29 percent. Switzerland's rank remained unchanged at 4.

3 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.

4 PwC, "Paying Taxes 2020," https://www.pwc.com/gx/en/services/tax/publications/paying-taxes-2020.html#tools.

TABLE 2.

Changes from Last Year

Country	2018 Rank	2018 Score	2019 Rank	2019 Score	2020 Rank	2020 Score	Change in Rank from 2019 to 2020	Change in Score from 2019 to 2020
Australia	11	68.9	9	71.3	9	71.4	0	0.1
Austria	12	67.8	12	69.0	12	68.7	0	-0.4
Belgium	21	60.9	23	61.0	19	64.1	4	3.1
Canada	18	62.6	18	65.4	18	65.3	0	-0.1
Chile	34	45.1	34	46.9	35	46.3	-1	-0.7
Czech Republic	8	71.4	8	72.9	8	73.1	0	0.2
Denmark	26	58.3	26	58.2	28	58.3	-2	0.1
Estonia	1	100.0	1	100.0	1	100.0	0	0.0
Finland	17	64.4	17	65.8	16	65.7	1	0.0
France	36	43.1	32	49.2	32	50.7	0	1.5
Germany	15	65.8	13	68.1	15	67.9	-2	-0.2
Greece	31	48.1	29	53.4	29	55.9	0	2.5
Hungary	16	65.7	15	67.3	14	67.9	1	0.6
Iceland	28	55.3	28	56.7	30	55.4	-2	-1.3
Ireland	19	61.9	19	62.9	20	63.1	-1	0.2
Israel	32	48.0	31	49.9	25	59.2	6	9.3
Italy	35	44.6	36	44.7	36	44.3	0	-0.3
Japan	23	60.7	22	62.3	26	59.1	-4	-3.1
Korea	22	60.7	25	60.1	24	59.9	1	-0.2
Latvia	2	82.1	2	83.9	2	84.4	0	0.6
Lithuania	6	75.8	5	78.0	6	75.8	-1	-2.1
Luxembourg	4	76.7	6	76.1	5	76.0	1	-0.1
Mexico	29	51.7	30	52.9	31	51.5	-1	-1.4
Netherlands	9	69.8	16	67.2	17	65.5	-1	-1.7
New Zealand	3	79.9	3	83.2	3	82.4	0	-0.7
Norway	13	66.2	14	68.1	13	68.1	1	0.0
Poland	30	50.3	35	45.9	34	46.6	1	0.6
Portugal	33	45.2	33	47.0	33	46.9	0	0.0
Slovak Republic	10	69.8	11	69.5	10	69.9	1	0.4
Slovenia	25	59.9	24	60.3	23	61.4	1	1.0
Spain	27	56.3	27	58.1	27	58.5	0	0.4
Sweden	7	73.7	7	74.0	7	74.0	0	0.0
Switzerland	5	76.5	4	78.7	4	77.1	0	-1.7
Turkey	14	66.1	10	70.2	11	69.9	-1	-0.3
United Kingdom	24	60.5	21	62.4	22	61.6	-1	-0.9
United States	20	60.9	20	62.8	21	62.9	-1	0.1

METHODOLOGICAL CHANGES

Each year we review the data and methodology of the *Index* for ways that could improve how it measures both competitiveness and neutrality. This year we have incorporated several changes to the way the *Index* treats corporate taxes, consumption taxes, and international taxes. No changes were made to the individual or property tax categories other than routine updates to incorporate the most recent data.

We have applied each change to prior years to allow consistent comparison across years. Data for all years using the current methodology is accessible in the GitHub repository for the *Index*,[5] and a description of how the *Index* is calculated is provided in the Appendix of this report. Prior editions of the *Index*, however, are not comparable to the results in this 2020 edition due to these methodological changes.

Corporate Tax

The two changes in the corporate tax data were adding a new variable (Allowances for Corporate Equity) and changing the data source for R&D tax credits.

Allowances for Corporate Equity (ACEs) contribute to the neutrality of corporate tax systems by providing a deduction for equity comparable to deductions for interest costs. This reduces the debt bias in corporate tax systems by lowering the cost of capital for equity-financed investments relative to debt-financed investments.

The ACE variable is now included in the Cost Recovery subcategory. This change improves the rank of countries that have an ACE relative to those countries that do not.

We also changed the data source for **R&D tax credits**. Previously we treated countries as having an R&D tax credit as a binary option: either a country had an R&D tax credit, or it did not. However, we are now using OECD data on the implied tax subsidy of R&D credits and similar expenditure-based R&D tax incentives.[6] This measure captures the full extent of each country's expenditure-based R&D tax incentives, and thus more accurately captures how distortive a country's R&D tax subsidies are. The larger the implied tax subsidy, the lower a country will score on the Incentives/Complexity subcategory.

This change improves the rank of countries that have an R&D tax credit but a low implied tax subsidy rate and worsens the rank of countries that have a large implied tax subsidy rate.

Consumption Tax

While most countries in the OECD administer a value-added tax (VAT) at the national level, the U.S. is an exception as it instead levies retail sales taxes at the state level. For the *Index* this requires several calculations to compare the U.S. state retail sales taxes to national VATs. This year we are calculating the **U.S. consumption tax base** using the concept of the VAT revenue ratio (VRR) used by the OECD combined with a population-weighted average sales tax rate. The U.S. consumption tax revenue ratio was calculated using the following formula: VRR(US) = Sales Tax Revenue/[(Consumption - Sales Tax Revenue) x Average Sales Tax Rate Weighted by Population].

5 Tax Foundation, "International Tax Competitiveness Index," https://github.com/TaxFoundation/international-tax-competitiveness-index.

6 OECD, "R&D Tax Incentive Indicators: Implied tax subsidy rates on R&D expenditures," https://stats.oecd.org/Index.aspx?DataSetCode=RDSUB.

This change slightly worsens the U.S. rank on the Consumption Tax Base category relative to previous editions of the *Index*.

International Taxes

Prior editions of the *Index* included withholding tax rates and a country's **tax treaty network** in the same subcategory. This year we are separating the tax treaties variable from the withholding taxes variables, effectively giving the tax treaties variable more importance in the *Index* calculation.

This change reflects that most OECD countries' tax treaty networks include the other OECD countries while the withholding taxes more commonly apply to non-OECD countries. Splitting the variables into two categories provides an in-network rank (the new Tax Treaties subcategory) and an out-of-network rank (the Withholding Taxes subcategory) for a country's international tax policies.

This change benefits countries with large tax treaty networks.

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 tax rates and bases vary significantly across countries. 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 OECD average was 9.5 percent of total revenues in 2018.[7]

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, namely, the corporate rate, cost recovery, and incentives and complexity.

Combined Top Marginal Corporate Income Tax Rate

The top marginal corporate income 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 thus slow economic growth.[8] Countries with higher top marginal corporate income tax rates than the OECD average receive lower scores than those with lower, more competitive rates.

France levies the highest top combined corporate income tax rate, at 32 percent, followed by Portugal (31.5 percent) and Australia and Mexico (both at 30 percent). The lowest top marginal corporate income tax rate in the OECD is found in Hungary, at 9 percent. Six additional countries levy corporate tax rates below 20 percent: Ireland (12.5 percent), Lithuania (15 percent), and the Czech Republic, Poland, Slovenia, and the United Kingdom (all at 19 percent). The OECD average combined corporate income tax rate is 23.3 percent in 2020.[9]

Cost Recovery

Business profits are generally determined as revenue (what a business makes in sales) minus costs (the cost of doing business). The corporate income tax is intended to be a tax on these profits. Thus, it is important that a tax code properly defines 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' 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.

7 Cristina Enache, "Sources of Government Revenue in the OECD."

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

9 OECD, "OECD Tax Database, Table II.1 – Statutory corporate income tax rate," updated April 2020, https://stats.oecd.org/index.aspx?DataSetCode=Table_II1.

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	30	49.1	33	25.5	20	46.4	8	78.4
Austria	21	57.2	21	43.3	15	48.4	16	66.8
Belgium	13	65.9	21	43.3	3	71.2	20	60.8
Canada	23	55.4	27	38.0	24	43.9	9	78.0
Chile	32	46.4	21	43.3	36	24.2	14	67.8
Czech Republic	7	71.3	4	64.5	21	46.2	11	74.3
Denmark	16	62.7	15	53.9	27	42.4	12	73.0
Estonia	2	99.5	8	61.0	1	100.0	3	93.3
Finland	6	72.8	8	61.0	31	37.4	1	100.0
France	35	38.2	36	18.4	11	51.1	30	49.2
Germany	29	49.9	32	25.9	17	47.8	7	78.5
Greece	22	55.4	19	46.8	32	37.4	13	70.5
Hungary	4	80.6	1	100.0	33	36.3	31	48.7
Iceland	10	67.4	8	61.0	18	46.7	15	67.5
Ireland	5	78.6	2	87.6	29	41.1	22	59.8
Israel	20	57.9	18	50.3	13	50.0	28	52.1
Italy	27	50.6	29	33.3	5	62.1	32	43.5
Japan	36	33.3	31	26.4	34	35.6	35	39.9
Korea	33	44.4	28	34.4	9	51.2	36	37.4
Latvia	1	100.0	8	61.0	1	100.0	2	95.1
Lithuania	3	82.7	3	78.7	4	65.9	27	53.4
Luxembourg	26	51.7	20	43.5	10	51.1	33	43.3
Mexico	31	46.8	33	25.5	23	44.0	10	74.5
Netherlands	25	52.4	21	43.3	26	42.6	23	59.4
New Zealand	24	52.8	30	32.6	28	41.9	6	83.4
Norway	11	66.2	15	53.9	30	40.6	4	87.2
Poland	9	68.9	4	64.5	12	50.3	21	59.9
Portugal	34	38.3	35	20.2	7	53.4	34	42.3
Slovak Republic	18	61.2	12	57.4	19	46.6	26	54.1
Slovenia	12	66.1	4	64.5	22	45.9	25	57.2
Spain	28	50.1	21	43.3	25	42.8	29	51.3
Sweden	8	70.8	14	56.0	16	48.2	5	86.9
Switzerland	14	64.3	13	56.9	8	52.0	24	57.3
Turkey	15	63.9	15	53.9	14	49.3	17	66.0
United Kingdom	17	62.5	4	64.5	35	35.1	18	61.8
United States	19	58.1	26	40.5	6	57.0	19	61.7

Loss Offset Rules: Carryforwards and Carrybacks

Loss carryover provisions allow businesses to either deduct current year losses against future profits (carryforwards) or deduct current year losses against past profits (carrybacks). Many companies have investment projects with different risk profiles and operate in industries that fluctuate greatly with the business cycle. Carryover provisions help businesses "smooth" their risk and income, making the tax code more neutral across investments and over time.[10]

Ideally, a tax code allows businesses to carry over their losses for an unlimited number of years, ensuring that a business is taxed on its average profitability over time. While some countries do allow for indefinite loss carryovers, others have time—and deductibility—limits.

In 20 of the 36 OECD countries, corporations can carry forward losses indefinitely, though half of these limit the generosity of the provision by capping the percentage of losses that can be carried forward.[11] Of the countries with time limits, the average loss carryforward period is 8.4 years. Hungary, Poland, and Slovakia have the most restrictive loss carryforward provisions, at 50 percent of losses for five years (coded as 2.5 years).[12] The *ITCI* ranks countries better that allow losses to be carried forward indefinitely without limits than countries that impose time or deductibility restrictions on carryforwards.

Countries tend to be significantly more restrictive with loss carryback provisions than with carryforward provisions. Only the Estonian and Latvian systems allow unlimited carrybacks of losses.[13] Of the 11 countries that allow limited carrybacks, the average period is 1.7 years.[14] The *ITCI* penalizes the 23 countries that do not allow any loss carrybacks.

Capital Cost Recovery: Machines, Buildings, and Intangibles

Businesses determine their profits by subtracting costs—such as wages and raw materials—from revenue. However, in most jurisdictions, capital investments—such as in buildings, machinery, and intangibles—are not treated like other regular costs that can be subtracted from revenue in the year the money is spent. Instead, businesses are required to write off these costs over several years or even decades, depending on the type of asset.

Depreciation schedules specify 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.[15]

10 Tibor Hanappi, "Loss carryover provisions: Measuring effects on tax symmetry and automatic stabilisation," OECD Taxation Working Papers No. 35, Feb. 22, 2018, https://www.oecd-ilibrary.org/taxation/loss-carryover-provisions_bfbcd0db-en.

11 Countries with unlimited carryforward periods are coded as having periods of 100 years. Some countries restrict the amount of losses that can be deducted each year. For example, Slovenia only allows 63 percent of losses to be carried forward indefinitely. These restrictions are coded as the percentage of losses that can be carried forward or backward times the number of allowable years. Thus, Slovenia is coded as 63.

12 PwC, "Worldwide Tax Summaries: Corporate - Deductions," https://taxsummaries.pwc.com/australia/corporate/deductions.

13 Estonia and Latvia do not have explicit loss carryover provisions. However, their cash-flow tax system implicitly allows for unlimited loss carryforwards and carrybacks.

14 PwC, "Worldwide Tax Summaries: Corporate – Deductions."

15 Elke Asen, "Capital Cost Recovery across the OECD," Tax Foundation, Apr. 8, 2020, https://taxfoundation.org/publications/capital-cost-recovery-across-the-oecd/.

The *ITCI* measures a country's capital allowances for three asset types, namely, machinery, industrial buildings, and intangibles.[16] 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' ability to deduct the full cost of an investment over its life. Countries that provide faster write-offs for capital investments receive better scores in the *ITCI*.

On average, across the OECD, in real terms, businesses can write off 83.8 percent of the cost of machinery, 48.3 percent of the cost of industrial buildings, and 77.4 percent of the cost of intangibles. Estonia and Latvia are coded as allowing 100 percent of the present value of a capital investment to be written off, as their corporate tax only applies to distributed profits and is thus determined by cash flow.[17]

Inventories

Similar to capital investments, the costs of inventories are not written off in the year of purchase. Instead, the costs of inventories are deducted at sale. As a result, governments need to define the total cost of inventories sold. There are generally three methods used to calculate inventories: Last In, First Out (LIFO); Average Cost; and First In, First Out (FIFO).

The method by which a country allows businesses to account for inventories can significantly impact a business' taxable income. When prices are rising, as is usually the case, LIFO is the preferred method because it allows inventory costs to be closer to true costs at the time of sale. This results in the lowest taxable income for businesses. In contrast, FIFO is the least preferred method because it results in the highest taxable income. The Average Cost method is between FIFO and LIFO.[18]

Countries that allow businesses to choose the LIFO method receive the best scores, those that allow the Average Cost method receive an average score, and countries that only allow the FIFO method receive the worst scores. Fourteen OECD countries allow companies to use the LIFO method of accounting, 16 countries use the Average Cost method of accounting, and six countries limit companies to the FIFO method of accounting.[19]

Allowance for Corporate Equity

Businesses can finance their operations through debt or equity. However, the return on these two types of finance is taxed differently. Traditional corporate income tax systems allow tax deductions of interest payments but not of equity costs, effectively providing a tax advantage of debt over equity finance—the so-called "debt bias." This debt bias can be considered a real risk to economic stability.[20]

There are two broad ways to address this debt bias, namely, limiting the tax deductibility of interest and providing a deduction for equity costs. Limiting the tax deductibility of interest

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

17 Christoph Spengel, Frank Schmidt, Jost Heckemeyer, and Katharina Nicolay, "Effective Tax Levels Using the Devereux/Griffith Methodology," European Commission, November 2019, https://ec.europa.eu/taxation_customs/sites/taxation/files/final_report_2019_effective_tax_levels_revised_en.pdf; EY, "Worldwide Capital and Fixed Assets Guide," 2019, https://www.ey.com/Publication/vwLUAssets/ey-2019-worldwide-capital-fixed-assets-guide/$FILE/ey-2019-worldwide-capital-fixed-assets-guide.pdf; EY, "Worldwide Corporate Tax Guide," 2019, https://www.ey.com/Publication/vwLUAssets/ey-worldwide-corporate-tax-guide-2019/$FILE/ey-worldwide-corporate-tax-guide-2019.pdf; PwC, "Worldwide Tax Summaries," https://taxsummaries.pwc.com/; PKF, "International Worldwide Tax Guide 2019-20," July 2019, https://www.pkf.com/publications/tax-guides/pkf-international-worldwide-tax-guide-2019-20/. Years prior to 2018 are based on Oxford University Centre for Business Taxation, "CBT Tax Database 2017," http://eureka.sbs.ox.ac.uk/id/eprint/4635. Calculations are based on Asen, "Capital Cost Recovery across the OECD."

18 Kyle Pomerleau, "The Tax Treatment of Inventories and the Economic and Budgetary Impact of LIFO Repeal," Tax Foundation, Feb. 9, 2016, https://taxfoundation.org/tax-treatment-inventories-and-economic-and-budgetary-impact-lifo-repeal/.

19 PwC, "Worldwide Tax Summaries: Corporate - Income Determination," https://taxsummaries.pwc.com/australia/corporate/income-determination; and EY, "Worldwide Corporate Tax Guide 2019," https://www.ey.com/en_gl/tax-guides/worldwide-corporate-tax-guide-2019. Years prior to 2018 are based on Oxford University Centre for Business Taxation, "CBT Tax Database 2017."

20 IMF, "Tax Policy, Leverage and Macroeconomic Stability," Policy Papers, Oct. 12, 2016, https://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Tax-Policy-Leverage-and-Macroeconomic-Stability-PP5073.

expenses creates new distortions, as interest income usually continues to be fully taxed. An allowance for corporate equity—or sometimes also referred to as notional interest deduction—retains the deduction for interest expenses but adds a similar deduction for the normal return on equity, neutralizing the debt bias while eliminating tax distortions to investment.

Five OECD countries—Belgium, Italy, Poland, Portugal, and Turkey—have introduced an allowance for corporate equity.[21] All countries except Poland apply the allowance only to new equity instead of all equity, limiting the tax revenue costs while preserving the efficiency gains. The allowance rate is frequently based on the corporate or government bond rate and in some cases is adjusted by a risk premium.[22]

Countries that have implemented an allowance for corporate equity receive a better score in the *Index*.

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 exclusively applies for a specific type of economic activity and can thus distort economic decisions.

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

In addition, the possibility of receiving incentives invites efforts to secure these tax preferences,[23] 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.[24]

The *ITCI* considers whether countries provide incentives such as patent box provisions and research and development (R&D) tax subsidies. Countries which provide such incentives are scored worse than those that do not.

Patent Boxes

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

Patent boxes—also referred to as intellectual property, or IP, regimes—provide tax rates on income derived from IP that are below statutory corporate tax rates. Eligible types of IP are most commonly patents and software copyrights. Patent boxes are an income-based rather than

21 The European Commission also included an allowance for corporate equity in its proposal for a common corporate tax base in the European Union. See European Commission, "Common Consolidated Corporate Tax Base (CCCTB)," https://ec.europa.eu/taxation_customs/business/company-tax/common-consolidated-corporate-tax-base-ccctb_en. Switzerland has an optional allowance for corporate equity at the cantonal level, which is currently only in effect in the canton of Zurich. See PwC, "Worldwide Tax Summaries: Corporate – Deductions."

22 PwC, "Worldwide Tax Summaries: Corporate – Deductions;" Spengel, Schmidt, Heckemeyer, and Nicolay, "Effective Tax Levels Using the Devereux/Griffith Methodology;" and OECD, "Tax Policy Reforms 2019," Sept. 5, 2019, https://www.oecd.org/tax/tax-policy-reforms-26173433.htm.

23 Christopher J. Coyne and Lotta Moberg, "The Political Economy of State-Provided Targeted Benefits," *The Review of Austrian Economics* 28:3 (June 2014), 337.

24 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.

an expenditure-based tax incentive, limiting its benefits to successful R&D projects that have produced IP rights rather than decreasing the ex ante risks of R&D through cost reductions.

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. Research suggests that patent boxes are likely to attract new income derived from patents, implying that businesses reduce their corporate tax liability by shifting IP-related income. Tax revenues, however, are likely to decline, as the negative revenue effects of the lower statutory rate on patent income can be only partially offset by revenues from newly attracted patent income.[25]

In recent years, patent box rules have become more stringent in some countries as the OECD requirements for countering harmful tax practices have been adopted. Countries that follow the OECD standards now require companies to have substantial R&D activity within their borders to benefit from tax preferences associated with their intellectual property.[26]

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, rather than merely incentivizing corporations to locate their patents in a specific country.

Seventeen OECD countries–Belgium, France, Hungary, Ireland, Israel, Italy, Korea, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, Slovakia, Spain, Switzerland, Turkey, and the United Kingdom–have patent box legislation, with rates and exemptions varying among countries.[27] Countries with patent box regimes receive a lower score.

Research and Development

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

As with other incentives, R&D incentives distort investment decisions and lead to an inefficient allocation of resources.[28] 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.[29]

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.

25 Rachel Griffith, Helen Miller, and Martin O'Connell, "Ownership of Intellectual Property and Corporate Taxation," *Journal of Public Economics* 112 (April 2014): 12–23, https://www.sciencedirect.com/science/article/pii/S0047272714000103.

26 OECD, "Action 5: Agreement on Modified Nexus Approach for IP Regimes," 2015, https://www.oecd.org/ctp/beps-action-5-agreement-on-modified-nexus-approach-for-ip-regimes.pdf; and OECD, "Harmful Tax Practices – Peer Review Results," July 2019, http://www.oecd.org/tax/beps/harmful-tax-practices-peer-review-results-on-preferential-regimes.pdf.

27 OECD, "Intellectual Property Regimes," https://qdd.oecd.org/data/IP_Regimes; and PwC, "Worldwide Tax Summaries: Corporate - Tax credits and incentives," https://taxsummaries.pwc.com/australia/corporate/tax-credits-and-incentives.

28 This does not imply that R&D credits do not meet their policy goal of fostering innovation through R&D activity, technology transfer, and entrepreneurship. See IMF, "Acting Now, Acting Together," April 2016, https://www.imf.org/en/Publications/FM/Issues/2016/12/31/Acting-Now-Acting-Together. However, R&D credits benefit certain firms and industries more than others, creating distortions in the economy. See Gary Guenther, "Research Tax Credit: Current Law and Policy Issues for the 114th Congress," Congressional Research Service, Mar. 13, 2015, https://fas.org/sgp/crs/misc/RL31181.pdf, and Fulvio Castellacci and Christine Mee Lie, "Do the effects of R&D tax credits vary across industries? A meta-regression analysis," *Research Policy* 44:4 (May 2015), 819-832, https://www.sciencedirect.com/science/article/abs/pii/S0048733315000128.

29 Deloitte, "International Tax– Italy Highlights 2020," https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-italyhighlights-2020.pdf?nc=1.

The implied tax subsidy rate on R&D expenditures, developed by the OECD, measures the extent of expenditure-based R&D tax relief across countries. Implied tax subsidy rates are measured as the difference between one unit of investment in R&D and the pretax income required to break even on that investment unit, assuming a representative firm. In other words, it measures the extent of the preferential treatment of R&D in a given tax system. The more generous the tax provisions for R&D, the higher the implied subsidy rates for R&D. An implied subsidy rate of zero means R&D does not receive preferential tax treatment.

Among OECD countries, France has the highest implied tax subsidy rate on R&D expenditures, at 0.40. Portugal and Chile provide the second and third most generous relief, with implied tax subsidy rates of 0.35 and 0.30, respectively.

Of the countries that grant notable relief, Italy (0.04), Sweden (0.05), and the United States (0.05) are the least generous. The implied tax subsidy rates of Denmark, Estonia, Finland, Israel, Latvia, Luxembourg, and Switzerland do not show any significant expenditure-based R&D tax relief.[30] Germany introduced an R&D tax credit in 2020 (not reflected in data).

Countries that provide more generous expenditure-based R&D tax incentives receive a lower score on the *ITCI*.

Complexity

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

Countries that require higher numbers of tax payments and longer periods of time for tax compliance receive worse scores on the *ITCI*. The results are based on data from PwC's "Paying Taxes 2020" component of the "Doing Business" report from the World Bank.[31]

The nation with the highest number of required tax payments is Japan, with 16. Italy follows with 13, then Switzerland with 12. Mexico and Norway impose the fewest number of payments, with four. The average across the OECD is eight payments; the U.S. requires seven payments.[32]

Complying with corporate income taxes takes the most time in Israel, at 110 hours, followed by 102 hours in Mexico and 87 hours in the United States. Tax compliance takes the least amount of time in Estonia, at five hours, followed by 12 hours in Ireland and 15 hours in Switzerland. The average across the OECD is 42 hours.[33]

30 OECD, "R&D Tax Incentive Indicators: Implied tax subsidy rates on R&D expenditures," https://stats.oecd.org/Index.aspx?DataSetCode=RDSUB. The measure used in the *Index* is the average implied tax subsidy rate of loss-making and profitable SMEs and large firms.

31 PwC, "Paying Taxes 2020," https://www.pwc.com/gx/en/services/tax/publications/paying-taxes-2020.html#tools.

32 Ibid.

33 Ibid.

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—also referred to as social security contributions. 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.

Individual taxes can 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, and an individual may not be aware of their total consumption tax burden.

Most countries tax individuals on their income using two approaches. First, countries tax earnings from work with ordinary income taxes and payroll taxes (social security contributions). The structure of these taxes can influence individuals' decisions to work, take an additional part-time job, or whether a second earner in the household will work. Second, individuals are taxed on their savings through taxes on capital gains and dividends. In most cases, these taxes are a second layer of tax on corporate profits and can reduce individual decisions on how much to save and invest. High taxes on capital gains and dividends can reduce the aggregate savings and investment in a country.

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

Taxes on Ordinary Income

Individual income taxes are levied on the income of individuals. Many countries, such as the United States, rely on individual income taxes as a significant source of revenue.[34] 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 top income tax threshold, and the economic efficiency of labor taxation.

Top Marginal Income Tax Rate

Most income tax systems have a progressive tax structure. This means that, as individuals earn more income, they move into tax brackets with higher tax rates. The top marginal tax rate is the top tax rate on all income over a certain level. For example, the United States has seven tax brackets, with the seventh (top) bracket taxing each additional dollar of income over $518,400 ($622,050 for married filing jointly) at a rate of

34 Enache, "Sources of Government Revenue in the OECD, 2020."

TABLE 4.

Individual Taxes

Country	Overall Rank	Overall Score	Income Tax Rank	Income Tax Score	Complexity Rank	Complexity Score	Capital Gains/ Dividends Rank	Capital Gains/ Dividends Score
Australia	17	60.5	24	48.7	9	84.7	20	60.7
Austria	29	45.1	34	32.9	19	77.5	26	52.6
Belgium	10	69.9	23	49.0	8	86.0	13	76.6
Canada	27	49.7	25	48.3	11	82.7	34	42.8
Chile	26	50.1	11	60.9	31	59.4	24	53.0
Czech Republic	3	88.7	1	100.0	22	73.0	11	77.3
Denmark	35	39.5	20	49.7	14	81.4	35	23.9
Estonia	1	100.0	3	86.1	2	98.8	3	87.8
Finland	28	47.9	28	46.6	18	78.3	31	44.9
France	36	38.0	33	34.7	26	71.1	33	43.6
Germany	25	51.0	9	64.1	32	55.8	22	54.8
Greece	8	71.7	31	38.1	6	88.5	5	87.5
Hungary	9	70.8	2	89.0	34	46.7	11	77.3
Iceland	34	39.9	12	60.8	36	26.4	18	63.5
Ireland	32	40.6	29	43.5	5	90.5	36	23.4
Israel	30	42.9	36	26.2	10	83.3	28	49.4
Italy	33	40.6	16	54.7	35	42.9	21	55.6
Japan	18	57.8	18	50.9	28	69.9	16	66.7
Korea	22	53.5	30	41.6	26	71.1	17	66.1
Latvia	5	81.5	6	70.6	20	75.9	3	87.8
Lithuania	7	78.7	7	64.8	3	93.0	14	72.5
Luxembourg	20	56.8	22	49.2	33	48.2	7	85.7
Mexico	13	65.8	32	36.2	7	86.5	9	80.0
Netherlands	21	53.8	27	46.7	13	81.8	25	52.7
New Zealand	4	84.1	14	59.2	17	78.9	1	100.0
Norway	15	64.6	13	60.4	1	100.0	32	44.3
Poland	11	69.5	4	79.4	29	62.6	15	69.4
Portugal	31	41.3	35	31.5	24	72.2	27	51.6
Slovak Republic	2	94.3	5	76.9	12	82.6	2	99.9
Slovenia	12	66.0	17	51.9	24	72.2	10	79.1
Spain	16	63.4	10	64.0	21	74.4	19	61.5
Sweden	19	57.4	21	49.5	4	92.2	30	47.6
Switzerland	14	65.7	15	55.2	30	62.3	8	84.4
Turkey	6	79.5	8	64.2	16	79.2	6	86.7
United Kingdom	24	51.2	26	47.5	15	79.7	29	49.0
United States	23	52.4	19	50.7	23	72.8	23	54.4

37 percent.[35] In addition, individuals in the top tax bracket also pay payroll taxes and state and local income taxes, which sum to a combined top marginal rate of 46 percent.[36]

35 Amir El-Sibaie, "2020 Tax Brackets," Tax Foundation, Nov. 14, 2019, https://taxfoundation.org/publications/federal-tax-rates-and-tax-brackets/.

36 OECD, "OECD Tax Database, Table I.7 - Top statutory personal income tax rates and top marginal tax rates for employees, 2000-2019," updated April 2020, https://stats.oecd.org/index.aspx?DataSetCode=TABLE_I7.

Individuals consider the marginal tax rate when deciding whether to work an additional hour. In many cases the decision will be about taking a second, part-time job or whether households with two adults will have one or two earners. If an individual faces a marginal tax rate of 30 percent on their current earnings, taking additional work or another shift would mean that only 70 percent of those earnings could be brought home.

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, maintaining current hours rather than moving to full-time work or taking an additional shift. 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 worse score on the *ITCI* than countries with low marginal tax rates. Slovenia has the highest top combined marginal income tax rates at 61.1 percent. The Czech Republic has the lowest, at 11 percent.[37]

Income Level at Which Top Statutory Personal Income Tax Rate Applies

The level at which the top statutory personal income tax 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 top 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. According to this measure, Mexico applies its tax at the highest level of income (the top personal 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.[38]

The Economic Cost of Labor Taxation

All taxes create some economic losses; however, tax systems should be designed to minimize those losses while supporting revenue needs.

One way to examine the efficiency of labor taxation in a country is to control for the level of labor taxation using the ratio of the marginal tax wedge to the average tax wedge.[39] The marginal tax wedge influences the choice to earn another dollar of income while the average tax wedge measures the tax burden at one's current income level.[40] A higher ratio means that as one earns more income, the influence of the tax system on those decisions and the related economic losses grows. A lower ratio means that an individual can decide to work more without the tax system changing their decisions.

For example, one individual faces an average tax wedge on their earnings of 20 percent and their marginal tax wedge is also 20 percent. That individual could work more hours without the

37 Ibid. 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.

38 Ibid.

39 The total marginal tax burden faced by a worker in a country and the total tax cost of labor for the average worker in a country are called the marginal and average tax wedge, respectively. The tax wedge includes income taxes and social security contributions (both the employee-side and employer-side). The ratio of marginal to average tax wedges is calculated using the OECD data of marginal and average total tax wedges at four levels of income for single individuals without dependents. It is the average of marginal total tax wedges at 67 percent, 100 percent, 133 percent, and 167 percent of average earnings divided by the average of average total tax wedges at 67 percent, 100 percent, 133 percent, and 167 percent of average earnings.

40 Cristina Enache, "A Comparison of the Tax Burden on Labor in the OECD," Tax Foundation, May 11, 2020, https://taxfoundation.org/publications/comparison-tax-burden-labor-oecd/.

tax burden on their decision to work growing. The ratio of that worker's marginal tax wedge to their average tax wedge is 1. Another individual who faces an average tax wedge of 20 percent on their earnings and a marginal tax wedge of 30 percent, however, would have their decision of whether to work more hours influenced by the tax system. The ratio of that worker's marginal tax wedge to their average tax wedge is 1.5.

The *ITCI* gives countries with high ratios a worse score due to the larger impact that those systems have on workers' decisions.

Hungary has the lowest ratio of 1, meaning the next dollar earned faces the same tax burden as current earnings. This is because Hungary has a flat income tax, so the marginal and average tax wedge are the same. In contrast, in Israel, the ratio is 1.68. The average across OECD countries is 1.25.[41]

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. Italy receives the worst score with a compliance time of 169 hours. Luxembourg receives the best score with a compliance time of 14 hours.[42]

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.

A company that makes a taxable profit of $1 million and pays 20 percent in corporate income taxes would have $800,000 left to either reinvest in the company, which would boost the value of the stock, or pay a dividend. A shareholder might face an additional 20 percent tax on the sale of shares or on a dividend from the company. Effectively, the system taxes the business profits at 36 percent. An individual hoping that an investment provides a 10 percent real rate of return might see only a 6.4 percent after-tax rate return.

Some tax designs account for this potential double taxation either through credits against

41 OECD, "OECD Tax Database, Table I.4. Marginal personal income tax and social security contribution rates on gross labour income," updated April 2020, https://stats.oecd.org/index.aspx?DataSetCode=TABLE_I4; and "OECD Tax Database, Table I.5. Average personal income tax and social security contribution rates on gross labour income," updated April 2020, https://stats.oecd.org/index.aspx?DataSetCode=TABLE_I5.

42 PwC and the World Bank Group, "Paying Taxes 2020."

capital gains taxes for corporate taxes paid or other deductions. Such a tax system reflects integrated taxation of corporate profits, or "corporate integration."[43]

Apart from double taxation, taxes on dividends and capital gains can change the incentives for businesses when they are looking to finance new projects. If a business can either fund a new project through selling new shares of stock or through reinvesting its profits, the taxes on investors can influence which approach results in higher after-tax returns. Norway uses a rate of return allowance on capital gains taxes to neutralize the decision between reinvesting profits or selling new shares.[44]

Generally, higher dividends and capital gains taxes create a bias against saving and investment, reduce capital formation, and slow economic growth.[45]

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

Capital Gains Tax Rates

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).[46] The *ITCI* gives countries with higher capital gains rates a worse 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 £12,000 ($15,300 USD[47]), and Canada excludes half of all capital gains income from taxation.[48]

Denmark has the highest capital gains tax rate in the OECD at 42 percent. Belgium, Korea, Luxembourg, New Zealand, Slovakia, Slovenia, Switzerland, and Turkey do not tax capital gains.[49]

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 better 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. Estonia and Latvia have dividend tax rates of 0 percent due to their cash-flow corporate tax system, and the OECD average is 24 percent.[50]

43 Kyle Pomerleau, "Eliminating Double Taxation through Corporate Integration," Tax Foundation, Feb. 23, 2015, https://taxfoundation.org/eliminating-double-taxation-through-corporate-integration/.

44 Jan Södersten, "Why the Norwegian Shareholder Income Tax is Neutral," *International Tax and Public Finance*, Apr. 26, 2019, https://link.springer.com/content/pdf/10.1007/s10797-019-09544-x.pdf.

45 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/.

46 York, "An Overview of Capital Gains Taxes."

47 The average 2019 GBP-USD exchange rate was used. See IRS, "Yearly Average Currency Exchange Rates," https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates.

48 Deloitte, "Tax Guides and Highlights."

49 EY, "Worldwide Personal Tax and Immigration Guide 2019-20," https://www.ey.com/en_gl/tax-guides/worldwide-personal-tax-and-immigration-guide-2019-20. Includes surtaxes if applicable.

50 OECD, "OECD Tax Database, Table II.4 - Overall statutory tax rates on dividend income," updated April 2020, https://stats.oecd.org/Index.aspx?DataSetCode=TABLE_II4.

CONSUMPTION TAXES

Consumption taxes are levied on individuals' purchases of goods and services. In the OECD and most of the world, the value-added tax (VAT) is the most common general consumption tax.[51] Most general consumption taxes either do not tax intermediate business inputs or allow a credit for taxes already paid on them, making them one of the most economically efficient means of raising tax revenue.

However, many countries define their tax base inefficiently. Most countries levy reduced rates and exempt certain goods and services from VAT, requiring them to levy higher rates to raise sufficient revenue. Some countries fail to properly exempt business inputs. For example, states in the United States often levy sales taxes on machinery and equipment.[52]

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

Consumption Tax Rate

If levied at the same rate and properly structured, a VAT and a retail sales tax will each raise approximately the same amount of revenue. Ideally, either a VAT or a sales tax should be levied at the standard rate on all final consumption (although they are implemented in slightly different ways). With a sufficiently broad consumption tax base, the tax rate can be relatively low. 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 certain goods and services from VAT or tax them at a reduced rate, requiring higher tax rates 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, lower taxed, or self-provided goods and services.

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

The average general consumption tax rate in the OECD is 19.2 percent. Hungary has the highest tax rate at 27 percent, while the United States has the lowest tax rate at 7.4 percent.[53]

Consumption Tax Base

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

51 There are other types of consumption taxes, such as excise taxes. However, these are generally narrowly based, as they are levied on specific goods, services, and activities, rather than all final consumption. The *Index* only considers general consumption taxes (VAT and retail sales tax).

52 Jared Walczak, *2020 State Business Tax Climate Index*, Tax Foundation, Oct. 22, 2019, https://taxfoundation.org/publications/state-business-tax-climate-index/.

53 PwC, "Quick Charts: Value-added tax (VAT) rates," https://taxsummaries.pwc.com/quick-charts/value-added-tax-vat-rates. The U.S. sales tax rate is the average of all U.S. state sales tax rates (weighted by population). See Janelle Cammenga, "State and Local Sales Tax Rates, 2020," Tax Foundation, Jan. 15, 2020, https://taxfoundation.org/2020-sales-taxes/. The Canadian consumption tax rate is the average of all Canadian province tax rates (weighted by population). See Retail Council of Canada, "Sales Tax Rates by Province," https://www.retailcouncil.org/resources/quick-facts/sales-tax-rates-by-province/.

TABLE 5.

Consumption Taxes

Country	Overall Rank	Overall Score	Rate Rank	Rate Score	Base Rank	Base Score	Complexity Rank	Complexity Score
Australia	7	83.0	3	89.5	27	50.7	22	78.9
Austria	13	74.2	14	49.1	15	62.9	14	86.4
Belgium	28	60.2	19	45.0	22	55.6	28	66.3
Canada	8	82.0	6	79.8	17	59.4	22	78.9
Chile	27	60.4	12	53.1	3	81.3	35	41.9
Czech Republic	34	52.8	19	45.0	24	53.6	34	52.7
Denmark	17	69.5	33	28.8	4	77.2	16	83.9
Estonia	9	80.9	14	49.1	10	67.5	2	97.0
Finland	14	73.0	30	32.9	9	71.2	6	92.0
France	21	65.5	14	49.1	33	34.6	11	88.4
Germany	12	74.7	12	53.1	12	65.4	19	82.4
Greece	31	56.6	30	32.9	23	55.4	26	69.3
Hungary	35	45.6	36	20.8	21	57.5	32	55.7
Iceland	19	67.3	30	32.9	11	66.1	16	83.9
Ireland	24	61.9	27	36.9	32	37.3	9	89.4
Israel	10	75.1	9	61.2	8	71.9	24	71.8
Italy	29	59.9	25	41.0	35	27.4	10	88.9
Japan	4	92.9	3	89.5	20	58.0	4	94.0
Korea	2	98.5	3	89.5	7	73.8	3	94.5
Latvia	26	60.6	19	45.0	28	50.5	25	70.8
Lithuania	23	62.4	19	45.0	31	39.3	19	82.4
Luxembourg	3	93.2	9	61.2	2	94.6	5	93.0
Mexico	25	61.6	8	65.2	26	53.5	33	53.7
Netherlands	15	72.7	19	45.0	16	62.7	13	86.9
New Zealand	6	92.3	7	69.3	1	100.0	21	80.4
Norway	18	68.5	33	28.8	6	74.2	16	83.9
Poland	36	25.7	27	36.9	34	34.6	36	17.5
Portugal	32	55.8	27	36.9	14	63.5	31	58.8
Slovak Republic	33	54.0	14	49.1	30	39.4	30	61.8
Slovenia	30	58.1	25	41.0	29	50.3	26	69.3
Spain	11	74.9	19	45.0	13	63.6	8	90.9
Sweden	16	69.9	33	28.8	5	75.4	15	85.9
Switzerland	1	100.0	2	98.8	19	58.9	1	100.0
Turkey	20	66.3	11	57.1	18	59.0	28	66.3
United Kingdom	22	63.6	14	49.1	36	25.0	7	91.5
United States	5	92.5	1	100.0	25	53.5	12	87.4

VAT/Sales Tax Exemption Threshold

Most OECD countries set exemption thresholds for their VATs/sales taxes. If a business is below a certain annual revenue threshold, it is not required to participate in the VAT system. This means that small businesses—unlike businesses above that threshold—do not collect VAT on their outputs sold to customers but also cannot receive a refund for VAT paid on business

inputs.[54] Although exempting very small businesses saves administrative and compliance costs, unnecessarily large thresholds create a distortion by favoring smaller businesses over larger ones.

Countries receive better scores for lower thresholds. The United Kingdom receives the worst threshold score with a VAT threshold of $123,367.[55] Five countries receive the best scores for having no general VAT/sales tax exemption threshold (Chile, Mexico, Spain, Turkey, and the United States). The average across the OECD countries that have a VAT threshold is approximately $55,600.[56]

Consumption Tax Base as a Percent of Total Consumption

One way to measure a country's VAT base is the VAT revenue ratio. This ratio looks at the difference between the VAT revenue actually collected and collectable VAT revenue under a VAT that was applied at the standard rate on all final consumption. The difference in actual and potential VAT revenues is due to 1) policy choices to exempt certain goods and services from VAT or tax them at a reduced rate, and 2) lacking VAT compliance.[57]

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 or reduced rates built into the tax code or low levels of compliance (or both). 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 better.

Under this measure, no country has a perfect VAT or sales tax base. New Zealand and Luxembourg score best, with ratios of 0.99 and 0.91, respectively. Mexico has the worst ratio, with 0.34. The OECD average tax base ratio is 0.56.[58]

Complexity

Although consumption taxes are generally more neutral than other taxes, they can be complex in their implementation. Complex VATs and sales taxes can create significant compliance costs for businesses. 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 every year, as measured by PwC's "Paying Taxes 2020" component of the "Doing Business" report from the World Bank.[59]

Countries receive better scores if compliance with their consumption taxes takes fewer hours. Poland receives the worst score with a 172-hour compliance time in a year. Switzerland receives the best score by requiring only eight hours a year to comply with its consumption tax. The average number of compliance hours across the OECD is 53.5 hours.[60]

54 The VAT exemption thresholds listed in the *Index* generally apply to resident businesses. Nonresident businesses might face different thresholds.

55 Measured in U.S. dollars (purchasing power parity, PPP).

56 Avalara, "EU VAT registration thresholds 2020," https://www.avalara.com/vatlive/en/eu-vat-rules/eu-vat-number-registration/vat-registration-threshold.html; European Commission, "Taxes in Europe Database," https://ec.europa.eu/taxation_customs/tedb/splSearchForm.html; and EY, "Worldwide VAT, GST and Sales Tax Guide 2020," Apr. 24, 2020, https://www.ey.com/en_gl/tax-guides/worldwide-vat--gst-and-sales-tax-guide-2020.

57 The same concept can be applied to retail sales taxes.

58 For years up to 2016 the source for the VAT Revenue Ratio is OECD, "Consumption Tax Trends 2018," Dec. 5, 2018, https://read.oecd-ilibrary.org/taxation/consumption-tax-trends-2018_ctt-2018-en#page92. For the years 2017 and 2018, the VAT Revenue Ratio was calculated using the following formula in line with the OECD's calculations: VRR = VAT Revenue/[(Consumption - VAT revenue) x standard VAT rate]. The U.S. sales tax revenue ratio was calculated using the following formula: VRR(US) = Sales Tax Revenue/[(Consumption - Sales Tax Revenue) x Average Sales Tax Rate Weighted by Population].

59 PwC and the World Bank Group, "Paying Taxes 2020."

60 Ibid.

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, respectively. 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 capital to its most efficient allocations.[61] Taxes on wealth limit the capital available in the economy, which damages long-term economic growth and innovation.[62]

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

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

Real Property Taxes

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

Structure of Property Taxes

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

When a business wants to improve its property through renovations or expanding a factory, a property tax that applies to both the land and those improvements directly increases the costs of those improvements. However, a tax that just applies to the value of the land would not create an incentive against property improvements.

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

Every OECD country except Australia, Estonia, and New Zealand applies its property tax to all capital (land and buildings/structures). These three countries only tax the value of land, which

61 Colin Miller and Anna Tyger, "The Impact of a Financial Transaction Tax," Tax Foundation, Jan. 23, 2020, https://taxfoundation.org/financial-transaction-tax/.

62 Huaqun Li and Karl Smith, "Analysis of Sen. Warren and Sen. Sanders' Wealth Tax Plans," Tax Foundation, Jan. 27, 2020, https://taxfoundation.org/wealth-tax/.

TABLE 6.

Property Taxes

Country	Overall Rank	Overall Score	Real Property Taxes Rank	Real Property Taxes Score	Wealth/ Estate Taxes Rank	Wealth/ Estate Taxes Score	Capital/ Transaction Taxes Rank	Capital/ Transaction Taxes Score
Australia	3	84.3	3	77.8	1	100.0	7	79.8
Austria	13	69.1	24	52.7	1	100.0	16	64.7
Belgium	20	61.9	20	64.7	10	68.8	23	63.0
Canada	22	57.7	32	38.8	1	100.0	30	47.3
Chile	12	70.6	17	67.9	10	68.8	4	84.9
Czech Republic	9	72.4	6	76.8	10	68.8	7	79.8
Denmark	15	65.9	21	60.4	10	68.8	7	79.8
Estonia	1	100.0	1	100.0	1	100.0	1	100.0
Finland	16	63.8	14	69.5	10	68.8	23	63.0
France	29	49.4	28	46.1	10	68.8	28	47.9
Germany	11	71.2	9	73.8	10	68.8	7	79.8
Greece	32	46.4	36	26.2	10	68.8	26	62.4
Hungary	24	55.6	26	47.4	10	68.8	16	64.7
Iceland	25	54.7	35	28.0	10	68.8	4	84.9
Ireland	17	63.8	15	69.5	10	68.8	23	63.0
Israel	10	72.0	27	47.0	1	100.0	7	79.8
Italy	36	31.2	31	39.8	33	28.4	32	45.7
Japan	26	53.7	22	57.7	10	68.8	30	47.3
Korea	30	48.2	29	45.1	10	68.8	32	45.7
Latvia	6	80.5	16	68.3	1	100.0	7	79.8
Lithuania	7	78.1	8	73.8	10	68.8	1	100.0
Luxembourg	14	67.7	2	77.9	10	68.8	16	64.7
Mexico	8	72.5	5	76.8	10	68.8	7	79.8
Netherlands	27	53.0	19	65.2	33	28.4	7	79.8
New Zealand	2	88.2	12	70.2	1	100.0	1	100.0
Norway	19	62.5	11	73.2	32	59.6	16	64.7
Poland	31	47.0	23	55.2	10	68.8	35	30.5
Portugal	18	63.7	18	67.8	10	68.8	16	64.7
Slovak Republic	4	84.3	10	73.5	1	100.0	4	84.9
Slovenia	23	55.9	25	48.3	10	68.8	16	64.7
Spain	35	37.5	30	41.3	33	28.4	26	62.4
Sweden	5	81.2	13	70.0	1	100.0	7	79.8
Switzerland	34	40.9	4	77.1	33	28.4	35	30.5
Turkey	21	60.4	7	75.7	10	68.8	32	45.7
United Kingdom	33	42.1	34	28.0	10	68.8	28	47.9
United States	28	51.1	33	36.2	10	68.8	16	64.7

excludes the value of any buildings or structures on the land.[63] Of the 33 OECD countries with taxes on real property, 25 allow for a deduction against corporate taxable income.[64]

Real Property Tax Collections

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

Countries with a high level of collections as a percent of their capital stock place a larger tax burden on taxpayers and receive a worse score on the *ITCI*. Nine countries in the OECD have property tax collections that are greater than 1 percent of the private capital stock. Leading this group are the United Kingdom (1.93 percent), the United States (1.62 percent), and Canada (1.52 percent). Austria, Czech Republic, Luxembourg, Mexico, and Switzerland have a real property tax burden of approximately 0.1 percent of the private capital stock.[65]

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. Estate taxes limit resources available for investment or production and reduce the incentive to save and invest.[66] 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.

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.

Five 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. The other countries with net wealth taxes are the Netherlands, Norway, and Switzerland (at the canton level).[67]

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

63 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."

64 PwC, "Worldwide Tax Summaries: Corporate Taxes".

65 OECD, "OECD Revenue Statistics - OECD Countries: Comparative tables," updated December 2019, https://stats.oecd.org/index.aspx?DataSetCode=rev; IMF, "Investment and Capital Stock Dataset," https://www.imf.org/external/np/fad/publicinvestment/#5; and IMF, "International Financial Statistics (IFS), Gross Domestic Product and Components selected indicators," https://data.imf.org/regular.aspx?key=61545852. The IMF dataset "Investment and Capital Stock" ends in 2017. Thus, the variable "Capital Formation" in IMF's IFS database was used to construct the years 2017 and 2018 (2018 is the year with the most recent property tax revenue data from the OECD).

66 Jared Walczak, "State Inheritance and Estate Taxes: Rates, Economic Implications, and the Return of Interstate Competition," Tax Foundation, July 17, 2017, https://taxfoundation.org/state-inheritance-estate-taxes-economic-implications/#_ftn84.

67 Deloitte, "Tax Guides and Highlights," https://dits.deloitte.com/#TaxGuides; EY, "Worldwide Estate and Inheritance Tax Guide 2019," https://www.ey.com/en_gl/tax-guides/worldwide-estate-and-inheritance-tax-guide-2019.

inheritance taxes by gifting away their assets before death.

Rates, exemption levels, and rules vary substantially among countries. For example, the United States levies a top rate of 40 percent on estates but has an exemption level of $11.6 million. Belgium's Brussels capital region, on the other hand, has an inheritance tax with an exemption of €15,000 ($16,797 USD[68]) and a variety of top rates depending on who receives assets from the estate and what the assets are.[69]

Estate, inheritance, and gift taxes create significant compliance costs for taxpayers while raising insignificant amounts of revenue. According to OECD data for 2017, estate, inheritance, and gift taxes across the OECD raised an average of 0.1 percent of GDP in tax revenue, with the highest amount raised being only 0.7 percent of GDP in Belgium, despite Belgium's top estate tax rate of up to 80 percent in some cases.[70]

Countries without these taxes score better than countries that have them. Ten countries in the OECD have no estate, inheritance, or gift taxes: Australia, Austria, Canada, Estonia, Israel, Latvia, New Zealand, Norway, Slovak Republic, and Sweden. All others levy an estate, inheritance, or gift tax.[71]

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.[72] Property transfer taxes represent a direct tax on capital and increase the cost of purchasing property.

Countries receive a worse score if they have property transfer taxes. Six OECD countries do not have property transfer taxes, including Chile, Estonia, and New Zealand.[73]

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 nontransparent Luxembourg-based companies every year.[74] Similarly, cantons in Switzerland levy taxes on the net assets of corporations, varying from 0.001 percent to 0.508 percent of corporate net assets.[75] Other countries levy these taxes exclusively on bank assets.

68 The average 2019 EUR-USD exchange rate was used. See IRS, "Yearly Average Currency Exchange Rates."

69 EY, "Worldwide Estate and Inheritance Tax Guide 2019."

70 OECD, "OECD Revenue Statistics - OECD Countries: Comparative tables."

71 EY, "Worldwide Estate and Inheritance Tax Guide 2019."

72 Walczak, *2020 State Business Tax Climate Index*.

73 Deloitte, "Tax Guides and Highlights"; and Bloomberg Tax, "Country Guides."

74 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," July 16, 2020, http://www.guichet.public.lu/entreprises/en/fiscalite/impots-benefices/impots-divers/impot-fortune/index.html.

75 PwC, "Worldwide Tax Summaries: Corporate Taxes."

Sixteen countries have some type of corporate wealth or asset tax. Luxembourg and Switzerland have net wealth taxes on corporations. Eleven countries have bank taxes of some type.[76]

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.[77] These types of taxes increase the cost of capital, limit funds available for investment, and make it more difficult to form businesses.[78]

Countries with capital duties score worse than countries without them. Nine countries in the OECD levy some type of capital duty.[79]

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 the transfer of Finnish securities. On the other hand, Poland levies a 1 percent stamp duty on exchanges of property rights based on the transaction value. For transactions on a stock exchange, the tax is the responsibility of the buyer.[80]

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.[81]

The *ITCI* ranks countries with financial transaction taxes worse than the countries without them. Ten countries in the OECD have financial transaction taxes, including France and the United Kingdom, while 26 countries do not impose financial transaction taxes.[82]

76 Bloomberg Tax, "Country Guides - Other Taxes" and "Country Guides - Special Industries," https://www.bloomberglaw.com/product/tax/toc_view_menu/3380.

77 PwC, "Worldwide Tax Summaries: Corporate Taxes."

78 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.

79 Deloitte, "Tax Guides and Highlights"; Bloomberg Tax, "Country Guides"; and BNY Mellon, "Financial Transaction Taxes (FTT): A Global Perspective," January 2018, https://www.bnymellon.com/emea/en/_locale-assets/pdf/our-thinking/ftt-globalperspective-brochure-03-2018.pdf.

80 Ibid.

81 Colin Miller and Anna Tyger, "The Impact of a Financial Transaction Tax."

82 Ibid.

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 have defined rules that determine how, or if, corporate income earned in foreign countries is taxed domestically. International tax rules comprise the systems and regulations that countries apply to those business activities.

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 dropped from 20 to four.[83]

As part of the Tax Cuts and Jobs Act in December 2017, the United States adopted a hybrid international tax system. Foreign-sourced dividends are now exempt from domestic taxation, but base erosion rules are now stronger and more complex.[84]

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

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

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

Territoriality

Under a territorial tax system, international businesses pay taxes to the countries in which they earn their income. This means that territorial tax regimes do not generally tax the corporate income companies earn in foreign countries. A worldwide tax system—such as the system previously employed by the United States—requires companies to pay taxes on worldwide income, regardless of where it is earned. Many countries–as is now the case in the U.S.–operate some sort of hybrid system.

Countries enact territorial tax systems through so-called "participation exemptions," which include full or partial exemptions for foreign-earned dividend or capital gains income (or both). Participation exemptions eliminate the additional domestic tax on foreign income by allowing companies to ignore—some or all—foreign income when calculating their taxable income. A pure territorial system

83 Kyle Pomerleau, "Worldwide Taxation is Very Rare," Tax Foundation, Feb. 5, 2015, https://taxfoundation.org/worldwide-taxation-very-rare/.

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

TABLE 7.

International Tax System

Country	Overall Rank	Overall Score	Div/Cap Gains Exemption Rank	Div/Cap Gains Exemption Score	Withholding Taxes Rank	Withholding Taxes Score	Tax Treaties Rank	Tax Treaties Score	Regulations Rank	Regulations Score
Australia	25	72.1	1	100.0	27	45.5	33	28.3	4	79.8
Austria	5	94.9	1	100.0	16	62.4	11	65.4	4	79.8
Belgium	19	73.2	1	100.0	34	31.7	7	70.5	22	41.6
Canada	13	82.0	29	68.7	30	43.1	4	71.3	4	79.8
Chile	36	33.4	33	29.0	36	24.3	36	18.2	9	61.8
Czech Republic	10	83.4	14	80.7	13	65.9	11	65.4	10	59.7
Denmark	28	64.8	14	80.7	26	46.0	21	53.6	22	41.6
Estonia	16	80.4	14	80.7	3	92.0	29	39.3	10	59.7
Finland	22	72.9	14	80.7	11	68.3	20	54.5	22	41.6
France	8	85.1	26	76.4	18	55.6	2	93.3	22	41.6
Germany	7	91.2	13	97.4	12	66.6	4	71.3	10	59.7
Greece	24	72.4	14	80.7	10	69.8	31	38.4	10	59.7
Hungary	4	97.6	1	100.0	1	100.0	17	58.7	10	59.7
Iceland	30	63.6	1	100.0	17	60.0	33	28.3	22	41.6
Ireland	17	78.2	32	53.0	23	50.5	22	51.9	1	100.0
Israel	34	56.3	33	29.0	32	42.1	29	39.3	3	82.0
Italy	21	72.9	25	78.1	29	43.6	3	74.7	22	41.6
Japan	29	64.1	28	74.6	20	54.5	23	49.4	22	41.6
Korea	33	58.2	33	29.0	24	49.9	8	68.8	22	41.6
Latvia	9	84.7	14	80.7	1	100.0	26	42.6	10	59.7
Lithuania	23	72.4	14	80.7	8	73.3	32	35.9	10	59.7
Luxembourg	6	94.3	1	100.0	4	88.2	16	60.4	10	59.7
Mexico	35	35.3	33	29.0	33	40.1	27	40.1	36	23.6
Netherlands	2	99.4	1	100.0	4	88.2	4	71.3	10	59.7
New Zealand	20	73.1	1	100.0	21	54.0	35	24.1	4	79.8
Norway	14	81.0	24	79.9	6	80.3	13	63.7	22	41.6
Poland	27	65.0	31	56.7	19	55.3	15	62.0	22	41.6
Portugal	26	65.0	14	80.7	30	43.1	19	56.1	22	41.6
Slovak Republic	31	62.3	14	80.7	28	44.1	23	49.4	22	41.6
Slovenia	18	74.9	30	66.7	13	65.9	27	40.1	4	79.8
Spain	15	80.5	14	80.7	22	52.8	8	68.8	10	59.7
Sweden	11	83.1	1	100.0	7	76.3	17	58.7	22	41.6
Switzerland	3	98.0	1	100.0	25	48.2	8	68.8	2	97.9
Turkey	12	82.0	1	100.0	15	65.3	14	62.9	21	43.8
United Kingdom	1	100.0	1	100.0	9	70.3	1	100.0	22	41.6
United States	32	61.5	27	76.0	34	31.7	25	46.0	10	59.7

fully exempts foreign-sourced dividend and capital gains income.

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.[85]

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

Dividends Received Exemption

When a foreign subsidiary of a parent company earns income, it pays corporate 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 worst score.

Twenty-five OECD countries exempt all foreign-sourced dividends received by parent companies from domestic taxation. Six countries allow 95 percent or 97 percent of foreign-sourced dividends to be exempt from domestic taxation. Five OECD countries have a worldwide or hybrid tax system that generally does not exempt foreign-sourced dividends from domestic taxation.[86]

Branch or Subsidiary Capital Gains Exclusion

Another feature of an international tax system is its treatment of capital gains earned through 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 domestic taxation, as they are derived from overseas activity.

Taxing foreign-sourced capital gains income at domestic tax rates can discourage saving and investment.

Countries that exempt foreign-sourced capital gains from domestic taxation receive a better score on the *ITCI*. Foreign-sourced capital gains are fully excluded from domestic taxation by 24 OECD countries. Five countries partially exclude foreign-sourced capital gains. Seven countries do not exclude foreign-sourced capital gains income from domestic taxation.[87]

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' dividends or

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

86 Deloitte, "Tax Guides and Highlights"; and Bloomberg Tax, "Country Guide: Corporate Tax Computation and Administration," https://www.bloomberglaw.com/product/tax/bbna/chart/3/10077/21525eb9dc338759f0fa06be8c529e10.

87 Ibid.

capital gains received from foreign subsidiaries are exempt from domestic 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 a "black list" of countries that do not follow certain requirements. Among EU countries, it is common to restrict the participation exemption to member states of the European Economic Area.

The eligibility rules create additional complexity for companies and are often established in an arbitrary manner. Portugal, for instance, limits exemptions for foreign-sourced dividends and capital gains to those earned in countries that are not listed as a tax haven and that impose an income tax listed in the EU parent-subsidiary directive or have an income tax equal to at least 60 percent of the Portuguese corporate tax rate.[88] 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, unless evidence that an adequate level of taxation was borne by the foreign entity can be provided.[89]

In the OECD, 17 of 32 countries that provide participation exemptions place restrictions on whether they exempt foreign-sourced income from domestic taxation based on the source country of the income.[90] Countries that have these restrictions on their territorial tax systems receive a worse score on the *ITCI*.

Withholding Taxes

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 tax. For example, the United States requires businesses to withhold a maximum 30 percent tax on dividends, interest, and royalty 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.

Countries with higher withholding tax rates on dividends, interest, and royalties score worse in the *ITCI*. Dividends, interest, and royalties from these countries do not always face the same tax rate as when distributed to domestic shareholders. Tax treaties between countries either reduce or eliminate withholding taxes.

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.

88 Deloitte, "Tax Guides and Highlights – Portugal Highlights 2019," https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-tax-portugalhighlights-2019.pdf?nc=1.

89 Deloitte, "Tax Guides and Highlights – Italy Highlights 2020."

90 Deloitte, "Tax Guides and Highlights"; and Bloomberg Tax, "Country Guide: Corporate Tax Computation and Administration."

For royalties, Mexico requires firms to retain the highest amount, at 35 percent, followed by Australia, Belgium, Chile, and the United States, at 30 percent. Hungary, Latvia, Luxembourg, the Netherlands, Norway, Sweden, and Switzerland do not require companies to retain any amount of royalties for withholding tax purposes.[91]

Tax Treaty Network

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

The United Kingdom has the broadest network of tax treaties (130 countries) and thus receives the best score. Chile receives the worst score, with a treaty network of only 33 countries. Across the OECD, the average size of a tax treaty network is 77 countries.[92]

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 rules), thin capitalization rules, and diverted profits taxes.

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

Controlled Foreign Corporation (CFC) Rules

CFC rules are intended to prevent corporations from shifting their pretax profits from a high-tax country to a low-tax country by using highly mobile forms of income. CFC rules are generally applied in multiple steps. First, they determine whether a foreign subsidiary is deemed a "controlled foreign corporation" for tax purposes. Second, if a foreign entity is deemed "controlled," there is an applicability test to determine whether the CFC rules apply—generally through an income test, a predefined minimum tax rate, or a black/white list for countries. Third, if both tests are passed, the CFC rules 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, CFC rules are called Subpart F rules, and the recently adopted GILTI regime is an additional type of CFC rule. These rules subject all passive income (defined differently for Subpart F and GILTI) to taxation in the year in which it is earned.

CFC rules vary widely among countries. The definition of what constitutes "control" is a somewhat arbitrary decision that often increases tax code complexity. For instance, the United States considers a subsidiary with 50 percent U.S. ownership to be controlled, while Australia considers a foreign company that is 50 percent owned by five or fewer Australian residents, or 40 percent owned by one Australian resident, to be controlled.[93]

91 Deloitte, "Domestic rates: Withholding tax," https://dits.deloitte.com/#DomesticRatesSubMenu.

92 EY, "Worldwide Corporate Tax Guide: 2020." The source may not include all active tax treaties, potentially underestimating the scope of tax treaty networks. Tax treaties with former countries, such as the USSR, Yugoslavia, and Czechoslovakia, are not counted as one. Every country the treaty applies to is counted individually.

93 Daniel Bunn, Kyle Pomerleau, and Sebastian Dueñas, "Anti-Base Erosion Provisions and Territorial Tax Systems in OECD Countries," Tax Foundation, May 2, 2019, https://taxfoundation.org/anti-base-erosion-provisions-territorial-tax-systems-oecd-countries/.

In 2016, an EU directive established that all EU member states tax certain multinational, non-distributed income of CFCs if the parent company located in that member state owns more than 50 percent of the shares of the CFC, and if the tax paid by the CFC is lower than the difference between the tax paid by the CFC if it had been situated in the member state and the tax it actually paid.[94] All EU member states have adopted CFC rules.[95]

Each country's score in this subcomponent is based on three aspects of CFC rules: 1) whether there are CFC rules; 2) whether CFC rules apply to passive income or all income; and 3) whether there are exemptions from the general CFC rules. Countries receive the best score if they do not have CFC rules. Countries with CFC rules that have exemptions or only apply to passive income or income associated with non-genuine arrangements receive a better score. Countries score the worst if they have CFC rules that apply to all income and have no exemptions.

CFC rules exist in 35 of the 36 OECD countries, with Switzerland being the sole exception. In 14 of the 35 countries with CFC rules the rules capture both active and passive income, while in the remaining 21 countries they only apply to passive income or income associated with non-genuine arrangements.[96]

Interest Deduction Limitations

Many countries limit the amount of interest expenses 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. To prevent businesses from lending money internally from entities in low-tax jurisdictions to entities in high-tax jurisdictions for tax purposes, most 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.[97] 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. The two most common types used in practice are "safe harbor rules" and "earnings stripping rules." Safe harbor rules restrict the amount of debt for which interest is tax-deductible by defining a debt-to-equity ratio. Interest paid on debt exceeding this set ratio is not tax-deductible. Earnings stripping rules limit the tax-deductible share of debt interest to pretax earnings.

Interest deduction rules, particularly thin capitalization rules, have been shown to reduce the value of firms and distort firm decisions about how to invest in capital.[98] While interest deduction limitations can be seen as a way to address the debt bias inherent to most corporate tax systems, limiting the tax deductibility of interest expenses creates new distortions if interest income continues to be fully taxed.[99]

94 EUR-Lex, "Council Directive (EU) 2016/1164, laying down rules against tax avoidance practices that directly affect the functioning of the internal market," July 12, 2016, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.193.01.0001.01.ENG.

95 Sebastian Dueñas and Daniel Bunn, "Tax Avoidance Rules Increase the Compliance Burden in EU Member Countries," Tax Foundation, Mar. 28, 2019, https://taxfoundation.org/eu-tax-avoidance-rules-increase-tax-compliance-burden/.

96 Bloomberg Tax, "Country Guides: Anti-Avoidance Provisions - Controlled Foreign Company (CFC) Rules," https://www.bloomberglaw.com/product/tax/bbna/chart/3/10077/347a743114754ceca09f7ec4b7015426; and PwC, "Worldwide Tax Summaries: Corporate - Group taxation," https://taxsummaries.pwc.com/australia/corporate/group-taxation.

97 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.

98 Ibid.

99 For more details, see section "Allowance for Corporate Equity" in the chapter "Corporate Income Tax."

Countries that limit interest deductions with only transfer pricing regulations receive the best score. Countries with debt-to-equity ratios receive an average score, and countries with interest-to-pretax-earning limits receive the worst score.

Interest deduction limitations are found in 34 of the 36 countries measured in the *ITCI*. For instance, Canada limits interest deductions if a firm's debt-to-equity ratio reaches 1.5 to 1, while Slovenia limits deductions at a 4 to 1 ratio. Germany and Spain limit interest deductions (regardless of whether they are for cross-border loans) to 30 percent of operating income. Ireland and Israel have no established limitations on interest deductions and rely on transfer pricing rules.[100]

General Anti-Avoidance Rules

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

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

Australia and the United Kingdom both apply a diverted profits tax. A diverted profits tax is a set of complex rules and penalty rates that apply if a company is found to have minimized its tax burden through a structure without economic substance. Australia applies a rate of 40 percent to diverted profits while the United Kingdom applies a 25 percent rate, though companies in certain industries can face higher rates in the UK.[101] These complex tax regimes result in high compliance costs for multinational companies as well as double taxation of some corporate profits.

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

100 Bloomberg Tax, "Country Guides: Anti-Avoidance Provisions - Thin Capitalization/Other Interest Deductibility Rules," https://www.bloomberglaw.com/product/tax/bbna/chart/3/10077/a8a08d05c9450b676b4d835dbb64348c; and PwC, "Worldwide Tax Summaries: Corporate - Group taxation," https://taxsummaries.pwc.com/australia/corporate/group-taxation.

101 Bunn, Pomerleau, and Dueñas, "Anti-Base Erosion Provisions and Territorial Tax Systems in OECD Countries."

Australia

Australia ranks 9th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Australian tax system:

- Property taxes in Australia are assessed on the value of the land rather than real estate or other improvements to land.
- Australia's corporate and individual taxes have an integrated treatment of dividends, alleviating the burden of double taxation on distributed earnings.
- Australia ranks well on consumption taxes due to its low goods and services tax (GST) rate but applies it to a relatively narrow base.

Some weaknesses of the Australian tax system:

- Australia's treaty network consists of just 45 countries, when the average among OECD countries is 77.
- The corporate tax rate in Australia is 30 percent, above the OECD average (23.3 percent).
- Corporations are limited in their ability to write off investments.

Austria

Austria ranks 12th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Austrian tax system:

- Austria's international tax system is very competitive with a broad tax treaty network of 89 countries, Controlled Foreign Corporation rules that only apply to subsidiaries that do not have substantial economic activity, and thin capitalization rules that are less complex than in most countries.
- The VAT in Austria applies to a broad base and has better-than-average complexity for compliance and reporting.
- There are no estate, inheritance, or wealth taxes.

Some weaknesses of the Austrian tax system:

- The headline corporate rate of 25 percent is above the OECD average (23.3 percent).
- Corporations are limited in their ability to write off investments, particularly buildings.
- The tax wedge on labor is the 4th highest among OECD countries.

Belgium

Belgium ranks 19th overall on the 2020 *International Tax Competitiveness Index*, four spots better than in 2019.

Some strengths of the Belgium tax system:

- Belgium has a broad tax treaty network, with 95 countries, and a territorial tax system as it fully exempts foreign-sourced dividends and capital gains without any country limitations.
- Capital gains resulting from normal management of private wealth are exempt from tax.
- Belgium allows for Last-In-First-Out treatment of the cost of inventory and for businesses to write off a larger share of their investments than most other OECD countries.

Some weaknesses of the Belgium tax system:

- The corporate rate of 25 percent is above average among OECD countries (23.3 percent).
- Belgium levies an estate tax and a financial transaction tax.
- The Belgian tax wedge on labor is the highest among the OECD countries, with the average single worker facing a tax burden of 52.2 percent.

Canada

Canada ranks 18th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Canadian tax system:

- Consumption taxes are low, and the associated compliance burden is near the average for OECD countries.
- Canada allows businesses to immediately write off investments in machinery.
- Canada does not levy wealth, estate, or inheritance taxes.

Some weaknesses of the Canadian tax system:

- The personal tax on dividends is 39.3 percent, well above the OECD average of 23.9 percent.
- Canada taxes capital gains at a rate of 25.2 percent, while the OECD average is 19.2 percent.
- The corporate rate of 26.5 percent is above average among OECD countries (23.3 percent).

Chile

Chile ranks 35th overall on the 2020 *International Tax Competitiveness Index*, one spot worse than in 2019.

Some strengths of the Chilean tax system:

- The VAT rate is at the average for OECD countries, and applies to a relatively broad base.
- Chile provides for net operating losses to be carried forward indefinitely, allowing for corporations to be taxed on their average profitability.
- Chile has the lowest tax wedge on labor among OECD countries, at 7 percent, compared to the average of 36 percent.

Some weaknesses of the Chilean tax system:

- Labor and consumption taxes are complex, creating a serious compliance burden.
- Chile has poor treatment of corporate investments in machinery and buildings and does not allow companies to write off investment in intangibles.
- Chile has a worldwide tax system, while most countries have territorial provisions.

Czech Republic

The Czech Republic ranks 8th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Czech tax system:

- The corporate rate of 19 percent is below the OECD average (23.3 percent), with above-average cost recovery provisions.
- Taxes on labor are minimally distortive.
- The Czech Republic has a territorial tax system, exempting both foreign dividend and capital gains income from other European countries.

Some weaknesses of the Czech tax system:

- Consumption taxes have a high compliance burden.
- Net operating losses cannot be carried back and can only be carried forward for five years.
- The Czech Republic levies an estate tax and transfer taxes on real estate.

Denmark

Denmark ranks 28th overall on the 2020 *International Tax Competitiveness Index*, two places worse than in 2019.

Some strengths of the Danish tax system:

- Compliance times associated with corporate, consumption, and individual taxes are all below the OECD averages.
- Denmark has a territorial tax system, exempting both foreign dividend and capital gains income for its treaty partners and other European countries.
- Property taxes are modest, and Denmark allows property taxes to be deducted against corporate income tax.

Some weaknesses of the Danish tax system:

- In addition to a top marginal tax rate of 55.6 percent, the personal income tax rates on dividends and capital gains are both at 42 percent, well above the OECD averages of 23.9 percent and 19.2 percent, respectively.
- Net operating losses can be carried forward indefinitely but are limited to 60 percent of taxable income.
- Denmark uses First-In-First-Out for assessing the cost of inventory for tax purposes.

Estonia

Estonia ranks 1st overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019, and for the seventh consecutive year.

Some strengths of the Estonian tax system:

- Estonia's corporate income tax system only taxes distributed earnings, allowing companies to reinvest their profits tax-free.
- The VAT applies to a broad base and has a low compliance burden.
- Property taxes only apply to the value of land.

Some weaknesses of the Estonian tax system:

- Estonia has tax treaties with just 58 countries, below the OECD average (77 countries).
- Estonia's territorial tax system is limited to European countries.
- Estonia's thin capitalization rules are more stringent than the average OECD country.

Finland

Finland ranks 16th overall on the 2020 *International Tax Competitiveness Index*, one place better than in 2019.

Some strengths of the Finnish tax system:

- Finland has a relatively low corporate tax rate of 20 percent.
- The compliance burdens of corporate, consumption, and labor taxes are all below the OECD averages.
- Finland has a territorial tax system and a broad tax treaty network with 76 countries.

Some weaknesses of the Finnish tax system:

- Finland levies both an estate and a financial transactions tax.
- Companies are limited in their ability to carry forward net operating losses and are restricted to using First-In-First-Out as the cost accounting method for inventory.
- Finland has a progressive tax system with a combined top rate on personal income of 58.5 percent (the OECD average is 46.1 percent).

France

France ranks 32nd overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the French tax system:

- France has above-average cost recovery provisions for investments in machinery, buildings, and intangibles.
- Corporate and consumption taxes have a relatively low compliance burden.
- France has a broad tax treaty network, with 122 countries.

Some weaknesses of the French tax system:

- France has multiple distortionary property taxes with separate levies on estates, bank assets, and financial transactions.
- The tax burden on labor of 46.7 percent is among the highest for OECD countries.
- At 32.02 percent, France has the highest corporate income tax rate among OECD countries.

Germany

Germany ranks 15th overall on the 2020 *International Tax Competitiveness Index*, two places worse than in 2019.

Some strengths of the German tax system:

- Inventory can receive Last-In-First-Out treatment, the most neutral treatment of inventory costs.
- Germany has a broad tax treaty network, with 96 countries.
- The VAT rate of 19 percent is near the OECD average (19.2 percent) and the VAT compliance burden is relatively low.

Some weaknesses of the German tax system:

- Germany has the fifth highest corporate income tax rate among OECD countries, at 29.9 percent.
- The personal income tax is complex with an associated compliance burden of 134 hours—the third highest among OECD countries.
- Companies are limited in the amount of net operating losses they can use to offset income on future or previous tax returns.

Greece

Greece ranks 29th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Greek tax system:

- The net personal tax rate of 5 percent on dividends is below the OECD average of 23.9 percent.
- Labor tax complexity is below the OECD average.
- Controlled Foreign Corporation rules in Greece are modest and only apply to passive income.

Some weaknesses of the Greek tax system:

- Greece has an above-average corporate tax rate of 24 percent (OECD average is 23.3 percent).
- Companies are severely limited in the amount of net operating losses they can use to offset future profits, and companies cannot use losses to reduce past taxable income.
- At 24 percent, Greece has one of the highest VAT rates in the OECD on one of the narrowest bases.

Hungary

Hungary ranks 14th overall on the 2020 *International Tax Competitiveness Index*, one spot better than in 2019.

Some strengths of the Hungarian tax system:

- Hungary has the lowest corporate tax rate in the OECD, at 9 percent.
- Hungary has a flat personal income tax system.
- Controlled Foreign Corporation rules are better-than-average.

Some weaknesses of the Hungarian tax system:

- Companies are severely limited in the amount of net operating losses they can use to offset future profits, and companies cannot use losses to reduce past taxable income.
- Hungary has the highest VAT rate among OECD countries, at 27 percent.
- Hungary levies estate, asset, and property transfer taxes.

Iceland

Iceland ranks 30th overall on the 2020 *International Tax Competitiveness Index*, two spots worse than in 2019.

Some strengths of the Icelandic tax system:

- Iceland's corporate tax rate of 20 percent is below the OECD average of 23.3 percent.
- Corporate, consumption, and labor taxes are less complex than they are on average in the OECD.
- Iceland has a territorial tax system that fully exempts foreign dividends and capital gains with no country limitations.

Some weaknesses of the Icelandic tax system:

- Companies are limited in the amount of net operating losses they can use to offset future profits, and companies cannot use losses to reduce past taxable income.
- The VAT of 24 percent applies to a relatively narrow tax base.
- Iceland's Controlled Foreign Corporation rules apply to both passive and active income.

Ireland

Ireland ranks 20th overall on the 2020 *International Tax Competitiveness Index*, one spot worse than in 2019.

Some strengths of the Irish tax system:

- Ireland has a low corporate tax rate of 12.5 percent.
- Net operating losses can be carried back one year and carried forward indefinitely, allowing companies to be taxed on their average profitability.
- Ireland has no thin capitalization rules.

Some weaknesses of the Irish tax system:

- Ireland's personal tax rate on dividend income of 51 percent is the highest among OECD countries.
- The VAT rate of 23 percent is one of the highest in the OECD and applies to a relatively narrow tax base.
- Corporations are limited in their ability to write off investments.

Israel

Israel ranks 25th overall on the 2020 *International Tax Competitiveness Index*, six spots better than in 2019.

Some strengths of the Israeli tax system:

- Israel has a slightly below-average corporate tax rate of 23 percent (OECD average is 23.3 percent) and allows net operating losses to be carried forward indefinitely.
- The VAT rate is relatively low at 17 percent and applies to a relatively broad base.
- Israel does not levy net wealth or estate taxes.

Some weaknesses of the Israeli tax system:

- On average, compliance with the corporate code takes 110 hours (compared to an OECD average of 42 hours).
- The steep progressivity of Israel's taxes on labor leads to efficiency costs.
- Israel has a worldwide tax system and a relatively narrow tax treaty network, with 58 countries (the OECD average is 77).

Italy

Italy ranks 36th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Italian tax system:

- Italy has above-average cost recovery provisions for investments in intangibles.
- Last-In-First-Out treatment of the cost of inventory is allowed.
- Italy has a broad tax treaty network, with 100 countries.

Some weaknesses of the Italian tax system:

- Italy has multiple distortionary property taxes with separate levies on real estate, net wealth, estates, and financial transactions.
- The VAT rate of 22 percent applies to the third narrowest consumption tax base in the OECD.
- Compliance with the personal income tax system takes 169 hours on average, highest by far in the OECD (the OECD average is 66 hours).

Japan

Japan ranks 26th overall on the 2020 *International Tax Competitiveness Index*, four places worse than in 2019.

Some strengths of the Japanese tax system:

- Japan has a low VAT rate of 10 percent applied to a broad base.
- Corporate and consumption taxes are less complex than they are on average in the OECD.
- Japan's personal income tax rate on dividends is 20.3 percent, below the OECD average of 23.9 percent.

Some weaknesses of the Japanese tax system:

- Japan has poor cost recovery provisions for business investments in machinery and buildings.
- Japan has a hybrid international tax system with a 95 percent exemption for foreign dividends and no exemption for foreign capital gains.
- Companies are severely limited in the amount of net operating losses they can use to offset future profits, and companies cannot use losses to reduce past taxable income.

Korea

Korea ranks 24th overall on the 2020 *International Tax Competitiveness Index*, one spot better than in 2019.

Some strengths of the Korean tax system:

- Korea has a low VAT of 10 percent that is applied to a relatively broad base.
- Korea has a broad tax treaty network, with 93 countries.
- Business investments in machinery receive better-than-average treatment for corporate write-offs.

Some weaknesses of the Korean tax system:

- Korea has multiple distortionary property taxes with separate levies on real estate, estates, and financial transactions.
- The personal income tax rate on dividends is 40.3 percent (compared to an OECD average of 23.9 percent).
- Companies are severely limited in the amount of net operating losses they can use to offset future profits or reduce past taxable income.

Latvia

Latvia ranks 2nd overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Latvian tax system:

- Latvia's corporate income tax system only taxes distributed earnings, allowing companies to reinvest their profits tax-free.
- Corporations can deduct property taxes when calculating taxable income.
- Latvia's taxes on labor are relatively flat, allowing the government to raise revenue from taxes on workers with very few distortions.

Some weaknesses of the Latvian tax system:

- Latvia's network of tax treaties includes 62 countries, a relatively low number.
- The VAT of 21 percent applies to approximately half of the potential tax base.
- The threshold at which the VAT applies is nearly twice as high as the average VAT threshold for OECD countries.

Lithuania

Lithuania ranks 6th overall on the 2020 *International Tax Competitiveness Index*, one place worse than in 2019.

Some strengths of the Lithuanian tax system:

- Business investments in machinery, buildings, and intangibles receive better-than-average tax treatment.
- Lithuania's corporate tax rate is 15 percent, well below the OECD average of 23.3 percent.
- Lithuania's taxes on labor are relatively flatter than average, allowing the government to raise revenue from taxes on workers with very few distortions.

Some weaknesses of the Lithuanian tax system:

- Lithuania has tax treaties with just 54 countries, below the OECD average (77 countries).
- Lithuania has both a patent box and a super deduction for Research and Development expenditures.
- Multinational businesses face strict thin capitalization rules.

Luxembourg

Luxembourg ranks 5th overall on the 2020 *International Tax Competitiveness Index*, one position better than in 2019.

Some strengths of the Luxembourg tax system:

- Business investments in machinery and intangibles receive better-than-average tax treatment.
- Luxembourg has a territorial tax system exempting both foreign dividends and capital gains, with no country limitations.
- The tax treaty network extends to 83 countries.

Some weaknesses of the Luxembourg tax system:

- Companies are limited in the time period in which they can use net operating losses to offset future profits and are unable to use losses to offset past taxable income.
- Luxembourg has several distortionary property taxes with separate levies on real estate, estates, and assets.
- The income tax is relatively progressive with a combined top rate on personal income of 47.2 percent.

Mexico

Mexico ranks 31st overall on the 2020 *International Tax Competitiveness Index*, one place worse than in 2019.

Some strengths of the Mexican tax system:

- The personal income tax rate on dividends is 17.1 percent, below the OECD average of 23.9 percent.
- Corporations can deduct property taxes when calculating taxable income.
- Mexico allows for Last-In-First-Out treatment of the cost of inventory.

Some weaknesses of the Mexican tax system:

- Average compliance time associated with corporate and consumption taxes is estimated to be around 100 hours for each tax.
- Companies are limited in the time period in which they can use net operating losses to offset future profits and are unable to use losses to offset past taxable income.
- Mexico has a higher-than-average corporate tax rate of 30 percent (the OECD average is 23.3 percent).

Netherlands

The Netherlands ranks 17th overall on the 2020 *International Tax Competitiveness Index*, one place worse than in 2019.

Some strengths of the Dutch tax system:

- The Netherlands has above-average provisions for corporations to write off investments in machinery.
- The Netherlands has a territorial tax system exempting both foreign dividends and capital gains and a broad tax treaty network, with 96 countries.
- Corporations can deduct property taxes when calculating taxable income.

Some weaknesses of the Dutch tax system:

- The Netherlands has a progressive tax system with a combined top rate on personal income of 54.4 percent.
- The VAT of 21 percent applies to approximately half of the potential consumption tax base.
- Companies are severely limited in the time period in which they can use net operating losses to offset future profits or reduce past taxable income.

New Zealand

New Zealand ranks 3rd overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the New Zealand tax system:

- New Zealand allows corporate losses to be carried forward indefinitely and has introduced a temporary one-year carryback provision, allowing businesses to be taxed on their average profitability.
- The VAT of 15 percent applies to nearly the entire potential consumption tax base.
- New Zealand property taxes apply just to the value of land rather than real estate or other improvements to the land.

Some weaknesses of the New Zealand tax system:

- New Zealand has an above-average corporate tax rate of 28 percent (the OECD average is 23.3 percent) and relatively poor cost recovery provisions for business investments.
- New Zealand has a narrow tax treaty network, with 40 countries.
- The cost of inventory can be accounted for using First-In-First-Out method or the average cost method (Last-In-First-Out is not permitted).

Norway

Norway ranks 13th overall on the 2020 *International Tax Competitiveness Index*, one place better than in 2019.

Some strengths of the Norwegian tax system:

- Norway allows corporate losses to be carried forward indefinitely and has introduced a temporary two-year carryback provision, allowing businesses to be taxed on their average profitability.
- Compliance time associated with corporate and individual taxes is below average.
- Norway has a territorial tax system, with a network of 87 tax treaties.

Some weaknesses of the Norwegian tax system:

- Corporations are limited in their ability to write off investments.
- Norway has a progressive tax system with a combined top rate on personal income of 46.6 percent.
- Norway applies its Controlled Foreign Corporation rules to both passive and active income.

Poland

Poland ranks 34th overall on the 2020 *International Tax Competitiveness Index*, one place better than in 2019.

Some strengths of the Polish tax system:

- Poland has a below-average corporate tax rate of 19 percent (OECD average is 23.3 percent).
- Poland's taxes on labor are generally flat, allowing the government to raise revenue from taxes on workers with relative low efficiency costs.
- Poland has a territorial tax system with a network of 85 tax treaties.

Some weaknesses of the Polish tax system:

- Poland has multiple distortionary property taxes with separate levies on real estate, estates, assets, and financial transactions.
- Companies are severely limited in the amount of net operating losses they can use to offset future profits and are unable to use losses to reduce past taxable income.
- Companies can only write off 33.8 percent of the cost of industrial buildings (in present value) (the OECD average is 48.3 percent).

Portugal

Portugal ranks 33rd overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Portuguese tax system:

- Corporations can deduct their property taxes from their taxable income.
- Portugal has a territorial tax system, exempting foreign dividend and capital gains income for most countries.
- Portugal provides above-average capital cost write-offs for investments in machinery.

Some weaknesses of the Portuguese tax system:

- Portugal has a high corporate tax rate of 31.5 percent (the OECD average is 23.3 percent).
- Companies are severely limited in the amount of net operating losses they can use to offset future profits and are unable to use losses to reduce past taxable income.
- The VAT of 23 percent applies to just half of the potential consumption tax base.

Slovak Republic

The Slovak Republic ranks 10th overall on the 2020 *International Tax Competitiveness Index*, one spot better than in 2019.

Some strengths of the Slovakian tax system:

- The personal income rate on dividends is very low at 7 percent (compared to an OECD average of 23.9 percent).
- The Slovak Republic has better-than-average tax treatment of business investment in machinery, buildings, and intangibles.
- Corporations can deduct property taxes when calculating taxable income.

Some weaknesses of the Slovakian tax system:

- Companies are severely limited in the amount of net operating losses they can use to offset future profits and are unable to use losses to reduce past taxable income.
- The VAT of 20 percent applies to approximately half of the potential consumption tax base.
- The Slovak Republic has both a patent box and a super deduction for Research and Development expenditures.

Slovenia

Slovenia ranks 23rd overall on the 2020 *International Tax Competitiveness Index*, one place better than in 2019.

Some strengths of the Slovenian tax system:

- Slovenia has a 19 percent corporate tax rate, below the OECD average (23.3 percent).
- Slovenia's 22 percent VAT applies to a relatively broad base.
- Slovenia has better-than-average tax treatment of business investment in machinery.

Some weaknesses of the Slovenian tax system:

- Slovenia's progressive personal income tax system has a combined top rate of 61.1 percent (the OECD average is 46.1 percent).
- Slovenia has a relatively narrow tax treaty network, with 59 countries, and only a partial territorial tax system.
- Slovenia has multiple distortionary property taxes with separate levies on real estate, estates, and assets.

Spain

Spain ranks 27th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Spanish tax system:

- Spain provides for net operating losses to be carried forward indefinitely (with some limits), allowing for corporations to be taxed on their average profitability.
- Spain has a territorial tax system that exempts both foreign dividends and capital gains income from taxation.
- The Spanish tax treaty network is made up of 93 countries.

Some weaknesses of the Spanish tax system:

- The VAT of 21 percent applies to less than half of the potential consumption tax base.
- Spain has multiple distortionary property taxes with separate levies on real estate, net wealth, and estates.
- Spain has both a patent box and a credit for Research and Development.

Sweden

Sweden ranks 7th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Swedish tax system:

- Sweden provides for net operating losses to be carried forward indefinitely, allowing for corporations to be taxed on their average profitability.
- Sweden has a territorial tax system that exempts both foreign dividends and capital gains income from taxation without any country limitations.
- Sweden has a broad tax treaty network, with 81 countries.

Some weaknesses of the Swedish tax system:

- Sweden's personal dividend tax rate is 30 percent, above the OECD average (23.9 percent).
- Sweden has a progressive personal income tax and a combined top rate of 60.2 percent.
- Sweden has Controlled Foreign Corporation rules that apply to both passive and active income.

Switzerland

Switzerland ranks 4th overall on the 2020 *International Tax Competitiveness Index*, the same as in 2019.

Some strengths of the Swiss tax system:

- Switzerland has above-average cost recovery provisions for investments in machinery, buildings, and intangibles.
- Switzerland has a broad tax treaty network, with 93 countries.
- The Swiss VAT of 7.7 percent applies to a broad base and has very low compliance costs.

Some weaknesses of the Swiss tax system:

- Switzerland has multiple distortionary property taxes with separate levies on real estate, net wealth, estates, assets, and financial transactions.
- Companies are limited in the time period in which they can use net operating losses to offset future profits and are unable to use losses to reduce past taxable income.
- Switzerland has a progressive income tax with a top rate of 41.7 percent, including payroll and personal income taxes.

Turkey 

Turkey ranks 11th overall on the 2020 *International Tax Competitiveness Index*, one place worse than in 2019.

Some strengths of the Turkish tax system:

- Turkey has a territorial tax system exempting foreign dividends and capital gains income without any country limitations.
- The personal income tax on dividends is 20 percent, below the OECD average (23.9 percent).
- Turkey has better-than-average tax treatment of business investment in machinery.

Some weaknesses of the Turkish tax system:

- Companies are severely limited in the time period in which they can use net operating losses to offset future profits and are unable to use losses to reduce past taxable income.
- Turkey's VAT rate of 18 percent applies to just 40 percent of the potential tax base.
- Turkey has multiple distortionary property taxes with separate levies on real estate, estates, and financial transactions.

United Kingdom 

The United Kingdom ranks 22nd overall on the 2020 *International Tax Competitiveness Index*, one place worse than in 2019.

Some strengths of the UK tax system:

- The corporate income tax rate is 19 percent, below the OECD average (23.3 percent).
- The UK has a territorial tax system exempting both foreign dividend and capital gains income without any country limitations.
- The UK tax treaty network with 130 countries is the broadest in the OECD.

Some weaknesses of the UK tax system:

- The personal income tax rate on dividends is 38.1 percent, well above the OECD average (23.9 percent).
- Corporations are severely limited in the investment costs they are able to write off, particularly for industrial buildings.
- The VAT of 20 percent applies to less than half of the potential consumption tax base.

United States 

The United States ranks 21st overall on the 2020 *International Tax Competitiveness Index*, one place worse than in 2019.

Some strengths of the U.S. tax system:

- The U.S. provides full expensing for business investments in machinery.
- The U.S. allows for Last-In-First-Out treatment of the cost of inventory.
- Corporations can deduct property taxes when calculating taxable income.

Some weaknesses of the U.S. tax system:

- The U.S. has a progressive income tax with a top rate of 46 percent, including payroll and personal income taxes.
- The U.S. has a partial territorial system and does not exempt foreign capital gains income.
- The real property tax burden is among the highest in the OECD.

METHODOLOGY

The *ITCI* is a relative ranking of the competitiveness and neutrality of the tax code in each of the 36 OECD countries. It utilizes 41 variables across five categories: corporate income tax, individual taxes, consumption taxes, property taxes, and international tax rules. Each category has multiple subcategories, and each subcategory holds several of the 41 variables. For example, the consumption tax category contains three subcategories: rate, base, and complexity. The consumption tax base subcategory then includes two variables: VAT/sales tax threshold and VAT/sales tax base as a percentage of total consumption.

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 36 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, Category, and Final Score

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 36 countries.[104] For example, the average corporate income tax rate across the 36 OECD countries is about 23.3 percent, with a standard deviation of 5.1 percentage points. This means that on average, an OECD country's corporate tax rate is 5.1 percentage points off from the mean rate of 23.3 percent.

To compare variables with each other, 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.

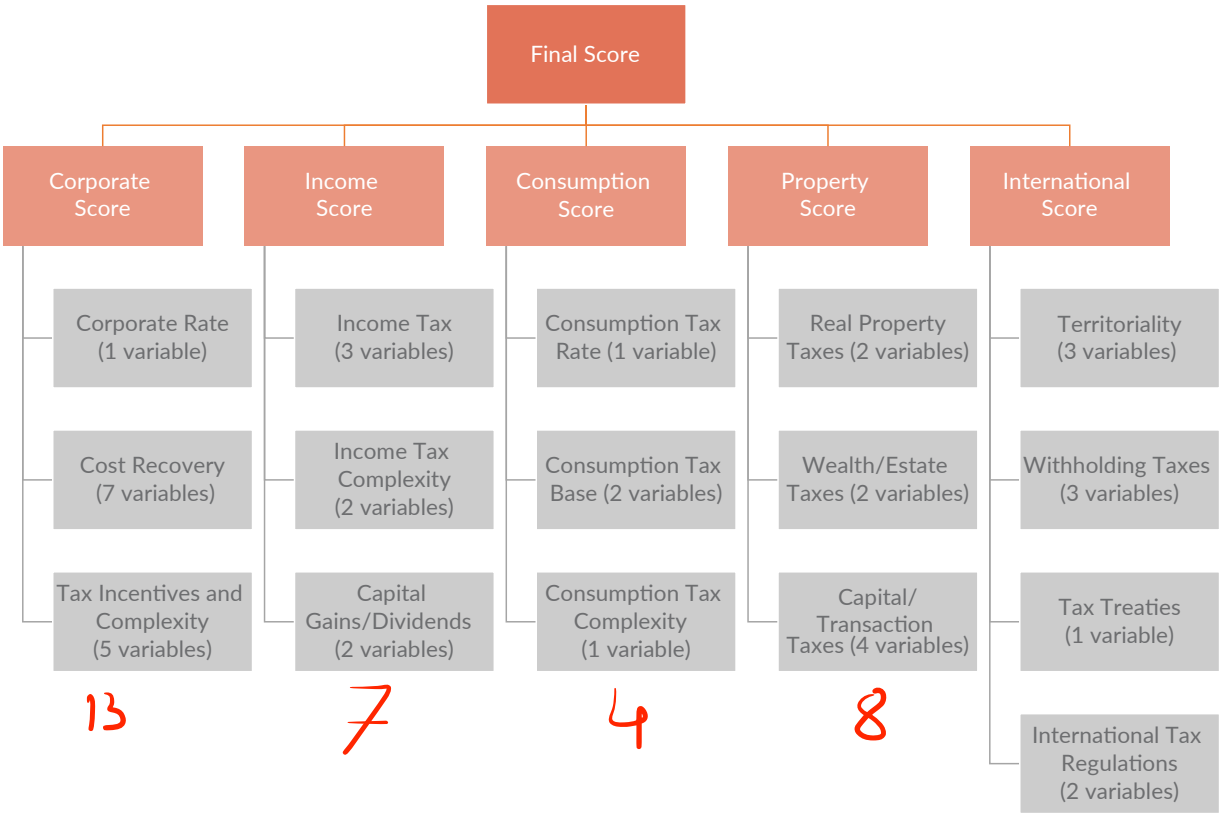
The score for the corporate tax rate demonstrates this process. As mentioned previously, the average corporate income tax rate among the 36 OECD countries is 23.3 percent, and the standard deviation is 5.1 percentage points. The United States' corporate tax rate normalized score is -0.48,[105] or 0.48 standard deviations less competitive than the average OECD country. In contrast, Ireland's tax rate of 12.5 percent is 2.08 standard deviations more competitive than the average OECD country.

The next step is to combine variable scores to calculate subcategory scores. Within subcategories, each individual variable's score is equally weighted and added together. For instance, the subcategory of cost recovery includes seven variables: loss carryback, loss carryforward, the present discounted value of depreciation schedules for machines, industrial buildings, and intangibles, inventory accounting method, and allowance for corporate equity. The scores for each of these seven variables are multiplied by 1/7, or 14.3 percent, to give them equal weight, and then added together. The result is the cost recovery subcategory score.

104 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 36 countries. We then take each country's difference from the mean and find the average difference for the group.

105 The true normal score is 0.48. The score is a negative value to reflect the fact that being higher than the OECD average is less ideal.

Components of the *Index*



Calculating Subcategory Scores

From here, two transformations occur. First, to eliminate any negative values, the inverse of the lowest z-score plus one in each subcategory is added to each country's z-score. For example, France has the worst z-score for the corporate income tax rate subcategory (-1.69). Thus, 1.69 plus 1 (2.69) is added to each country's z-score (the adjusted z-score). This sets the worst score in each subcategory to 1.

Second, the adjusted subcategory scores for each country are scaled to 100, relative to the country with the best score in each subcategory. This is done by taking each country's adjusted z-score and dividing it by the best adjusted z-score in each category. For example, Hungary, which has the lowest corporate tax rate, has the best adjusted corporate rate subcategory z-score of 5.45, and receives a final subcategory score of 100.

Calculating Category Scores

The same method is used to create the category scores. First, the z-score for subcategories are averaged to create the initial category score. Then, the inverse of the worst z-score plus one in each category is added to each country's z-score. For example, Japan has the worst initial corporate category score of -0.83. Thus, 0.83 plus 1 (1.83) is added to each country's initial category score (the adjusted initial category score). This sets the worst score in each category to 1.

Second, the adjusted initial category scores for each country are scaled to 100, relative to the country with the best score in each category. This is done by taking each country's adjusted initial category score and dividing it by the best adjusted initial category score in each category. For example, Latvia, which has the best corporate category score, has the best adjusted category score of 3, and receives a final category score of 100.

Calculating the Final Scores

The same method is used to create the final score. First, the initial category scores are averaged to create the initial final score. Then, the inverse of the worst initial final score plus one is added to each country's initial final score. For example, Italy has the worst initial final score of -0.46. Thus, 0.46 plus 1 (1.46) is added to each country's initial final score (the adjusted initial final score). This sets the worst score in each category to 1.

Second, the adjusted initial final scores for each country are scaled to 100, relative to the country with the best score in each category. This is done by taking each country's adjusted initial final score and dividing it by the best adjusted initial final score in each category. For example, Estonia, which has the best final score, has the best adjusted final score of 2.26, and receives a final category score of 100.

Distribution of the Final Scores

Many of the countries shown in the *Index* have final scores that are grouped closely together. Though the scores range from 100 (Estonia) to 44.3 (Italy), there are six countries with scores in the 70s and 14 countries with scores in the 60s. The closeness of some of the scores means that small differences in variable values (such as a percentage-point difference in the corporate income tax rate or the number of hours for compliance time) can mean the difference of several rank positions.

The distribution of the scores also shows the distance between first and second place, again showing how significantly different the Estonian system is even relative to countries with relatively similar tax systems.

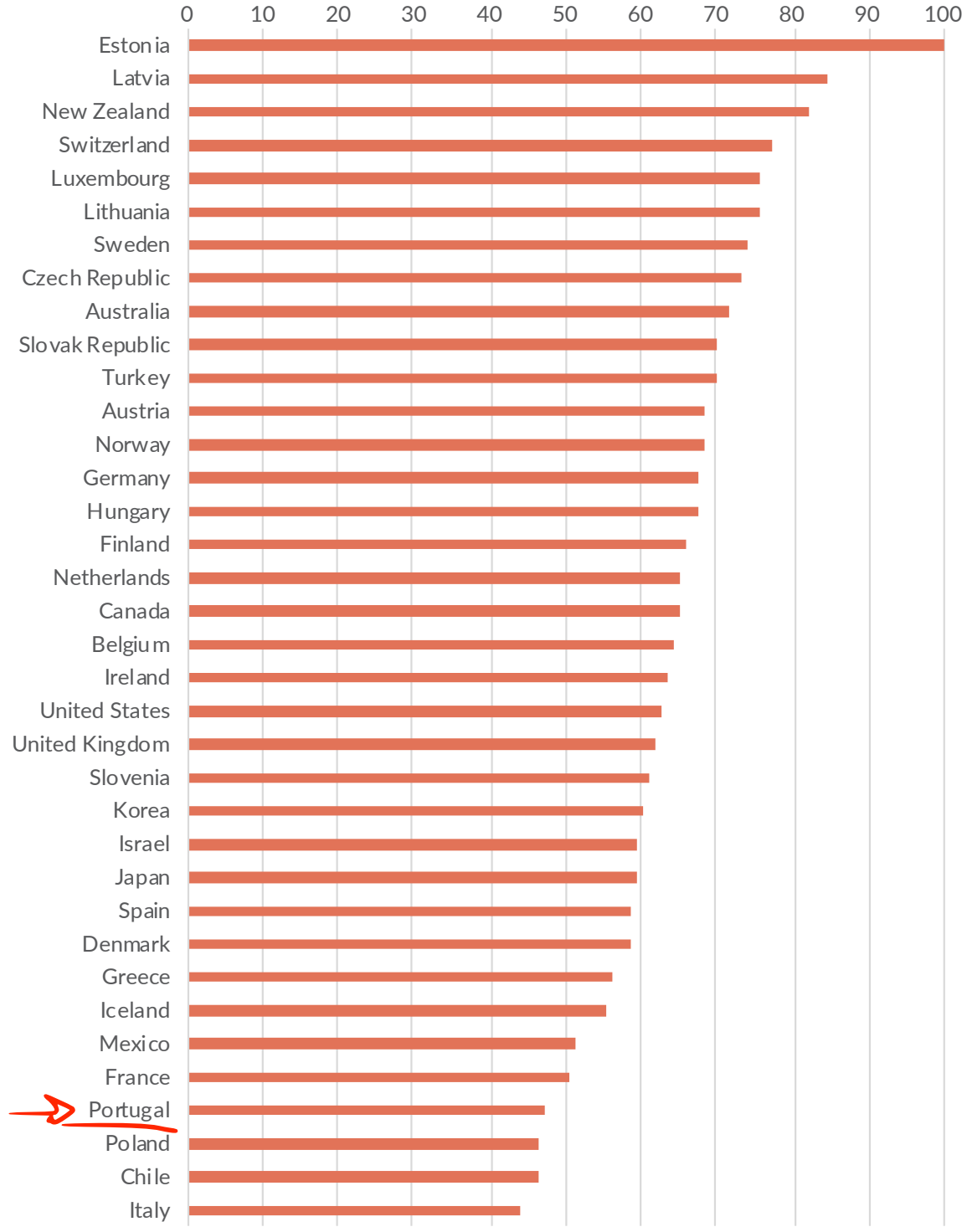
Data Sources

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

- Bloomberg Tax Country Guides
- Deloitte International Tax Source
- Ernst & Young International Tax Guides
- European Commission: Christoph Spengel, Frank Schmidt, Jost Heckemeyer, and Katharina Nicolay, "Effective Tax Levels Using the Devereux/Griffith Methodology."
- International Monetary Fund (IMF)
- Organisation for Economic Co-operation and Development (OECD)
- Oxford University Centre for Business Taxation Database
- PricewaterhouseCoopers Worldwide Tax Summaries

The *ITCI* uses the most up-to-date data available as of July 2020. See footnotes for specific data citations. Data may not reflect changes in countries making rapid reforms.

Distribution of Final Scores



APPENDIX 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
Australia	30.0%	0	No Limit	85.1%	47.9%	54.8%
Austria	25.0%	0	No Limit, capped at 75% of taxable income	81.3%	33.8%	73.8%
Belgium	25.0%	0	No Limit, capped at 70% of taxable income exceeding EUR 1 million	87.6%	62.2%	107.0%
Canada	26.5%	3	20	100.0%	42.6%	49.0%
Chile	25.0%	0	No Limit	63.3%	33.8%	0.0%
Czech Republic	19.0%	0	5	87.4%	54.3%	84.1%
Denmark	22.0%	0	No Limit, capped at 60% of taxable income exceeding DKK 8,572,500 for 2020	82.7%	47.9%	81.3%
Estonia	20.0%	No Limit (Cash-flow Tax)	No Limit (Cash-flow Tax)	100.0%	100.0%	100.0%
Finland	20.0%	0	10	82.7%	51.9%	73.8%
France	32.0%	1, limited to EUR 1 million	No Limit, capped at 50% of taxable income exceeding EUR 1 million	88.0%	54.8%	87.0%
Germany	29.9%	1, limited to EUR 1 million	No Limit, capped at 60% of taxable income exceeding EUR 1 million	73.8%	39.1%	87.0%
Greece	24.0%	0	5	73.8%	47.9%	73.8%
Hungary	9.0%	0	5, capped at 50% of taxable income	81.6%	27.9%	73.8%
Iceland	20.0%	0	10	86.0%	60.2%	81.2%
Ireland	12.5%	1	No Limit	78.7%	47.9%	64.6%
Israel	23.0%	0	No Limit	87.0%	39.1%	78.7%
Italy	27.8%	0	No Limit, capped at 80% of taxable income	76.0%	46.3%	96.5%
Japan	29.7%	0	10, capped at 50% of taxable income	77.0%	27.9%	78.7%
Korea	27.5%	1, limited to small and medium-sized enterprises	10, capped at 60% of taxable income for companies other than small and medium-sized enterprises	92.2%	54.8%	73.8%
Latvia	20.0%	No Limit (Cash-flow Tax)	No Limit (Cash-flow Tax)	100.0%	100.0%	100.0%
Lithuania	15.0%	0	No Limit, capped at 70% of taxable income	90.5%	82.7%	96.6%
Luxembourg	24.9%	0	17	87.1%	47.9%	87.0%
Mexico	30.0%	0	10	73.8%	54.8%	73.8%
Netherlands	25.0%	1	6	81.3%	33.8%	73.8%
New Zealand	28.0%	1	No Limit	73.2%	30.7%	73.8%
Norway	22.0%	2	No Limit	78.2%	37.4%	73.8%
Poland	19.0%	0	5, capped at 50% of total loss per year	73.8%	33.8%	87.0%
Portugal	31.5%	0	5, capped at 70% of taxable income	88.8%	54.8%	73.8%
Slovak Republic	21.0%	0	5, capped at 50% of taxable income	87.4%	54.8%	87.0%
Slovenia	19.0%	0	No Limit, capped at 63% of taxable income	87.0%	39.1%	73.8%
Spain	25.0%	0	No Limit, capped at 70% of taxable income exceeding EUR 1 million (additional revenue-based restrictions apply)	77.9%	39.1%	73.8%
Sweden	21.4%	1.5 (Tax allocation reserve)	No Limit	86.0%	47.9%	86.0%
Switzerland	21.1%	0	7	86.0%	55.5%	90.5%
Turkey	22.0%	0	5	86.4%	43.1%	69.4%
United Kingdom	19.0%	1	No Limit, capped at 50% of taxable income exceeding GBP 5 million	75.9%	27.9%	82.7%
United States	25.8%	5	No Limit	100.0%	35.0%	63.3%

APPENDIX TABLE A, *CONTINUED*.

Corporate Taxes

	Cost Recovery *Continued*		Tax Incentives and Complexity				
Country	Inventory (Best Available)	Allowance for Corporate Equity (Rate and Base)	Patent Box	Implied Tax Subsidy Rates on R&D Expenditures	Corporate Complexity (Time)	Corporate Complexity (Yearly Profit Payments)	Corporate Complexity (Other Yearly Payments)
Australia	Average Cost	No	No	0.14	37	1	6
Austria	LIFO	No	No	0.17	46	1	8
Belgium	LIFO	Yes (0.726% and 1.226% for SMEs, New Equity)	Yes	0.15	21	1	8
Canada	Average Cost	No	No	0.21	45	1	4
Chile	Average Cost	No	No	0.30	48	1	5
Czech Republic	Average Cost	No	No	0.18	53	1	5
Denmark	FIFO	No	No	0	27	3	6
Estonia	LIFO	No (Cash-flow Tax)	No	0	5	1	7
Finland	FIFO	No	No	0	18	1	4
France	Average Cost	No	Yes	0.40	28	1	6
Germany	LIFO	No	No	-0.02	41	2	6
Greece	Average Cost	No	No	0.07	78	1	6
Hungary	Average Cost	No	Yes	0.19	35	2	7
Iceland	Average Cost	No	No	0.24	40	1	7
Ireland	FIFO	No	Yes	0.26	12	1	7
Israel	Average Cost	No	Yes	0	110	2	3
Italy	LIFO	Yes (1.3%, New Equity)	Yes	0.04	39	2	11
Japan	Average Cost	No	No	0.09	38	3	13
Korea	LIFO	No	Yes	0.13	75	2	8
Latvia	LIFO	No (Cash-flow Tax)	No	0	22	1	5
Lithuania	LIFO	No	Yes	0.28	18	1	8
Luxembourg	LIFO	No	Yes	-0.01	19	5	6
Mexico	LIFO	No	No	0.06	102	1	3
Netherlands	LIFO	No	Yes	0.22	21	1	7
New Zealand	Average Cost	No	No	0.18	34	1	4
Norway	FIFO	No	No	0.22	24	1	3
Poland	LIFO	Yes (2.5%, All Equity)	Yes	0.20	59	1	4
Portugal	Average Cost	Yes (7%, New Equity)	Yes	0.35	63	1	6
Slovak Republic	Average Cost	No	Yes	0.24	46	1	6
Slovenia	Average Cost	No	No	0.19	74	1	8
Spain	Average Cost	No	Yes	0.30	33	1	7
Sweden	FIFO	No	No	0.05	50	1	4
Switzerland	LIFO	No	Yes	-0.01	15	2	10
Turkey	Average Cost	Yes (27.04% in 2018, New Equity)	Yes	0.06	24	1	8
United Kingdom	FIFO	No	Yes	0.19	32	1	6
United States	LIFO	No	No	0.05	87	2	5

APPENDIX TABLE B.

Income Taxes

	Ordinary Income Taxes and Payroll Taxes			Income Tax Complexity		Capital Gains/Dividends	
Country	Top Marginal Income Tax Rate	Top Income Tax Rate Threshold (a)	Ratio of Marginal to Average Tax Wedge	Income Tax Complexity (Payments)	Income Tax Complexity (Time)	Top Marginal Capital Gains Tax Rate (b)	Top Marginal Dividends Tax Rate (b)
Australia	47.0%	2	1.4	4	18	22.5%	24.3%
Austria	55.0%	22.7	1.1	3	50	27.5%	27.5%
Belgium	60.2%	1.1	1.3	2	40	0.0%	30.0%
Canada	53.5%	4	1.3	3	36	25.2%	39.3%
Chile	35.0%	7.6	1.2	1	124	35.0%	20.0%
Czech Republic	11.0%	0	1.1	2	75	15.0%	15.0%
Denmark	55.6%	1.3	1.3	1	65	42.0%	42.0%
Estonia	20.4%	0.4	1.2	0	31	20.0%	0.0%
Finland	58.5%	1.9	1.3	3	48	34.0%	28.9%
France	55.6%	16.1	1.2	2	80	30.0%	34.0%
Germany	47.5%	5.3	1.1	1	134	26.4%	26.4%
Greece	55.0%	11	1.3	1	46	15.0%	5.0%
Hungary	33.5%	0	1	2	146	15.0%	15.0%
Iceland	44.4%	1.2	1.3	13	60	22.0%	22.0%
Ireland	52.0%	1.4	1.4	1	40	33.0%	51.0%
Israel	50.0%	4.1	1.7	1	60	25.0%	33.0%
Italy	52.8%	2.6	1.2	1	169	26.0%	26.0%
Japan	56.1%	8.5	1.1	3	70	20.4%	20.3%
Korea	47.5%	11.1	1.3	2	80	0.0%	40.3%
Latvia	40.2%	4.8	1.1	1	80	20.0%	0.0%
Lithuania	34.0%	9.5	1.2	1	34	20.0%	15.0%
Luxembourg	47.2%	3.5	1.4	12	14	0.0%	21.0%
Mexico	35.0%	26.6	1.2	2	38	10.0%	17.1%
Netherlands	54.4%	1.4	1.4	1	64	30.0%	25.0%
New Zealand	33.0%	1.1	1.4	2	59	0.0%	6.9%
Norway	46.4%	1.6	1.3	1	15	31.7%	31.7%
Poland	39.9%	1.7	1	2	103	19.0%	19.0%
Portugal	58.2%	15	1.3	1	90	28.0%	28.0%
Slovak Republic	35.0%	3.2	1.1	1	62	0.0%	7.0%
Slovenia	61.1%	4.6	1.1	1	90	0.0%	27.5%
Spain	43.5%	2.4	1.2	1	84	23.0%	23.0%
Sweden	60.2%	1.5	1.3	1	36	30.0%	30.0%
Switzerland	41.7%	3.3	1.4	7	40	0.0%	22.3%
Turkey	45.5%	3	1.2	1	71	0.0%	20.0%
United Kingdom	47.0%	3.7	1.4	2	57	20.0%	38.1%
United States	46.0%	9.2	1.2	4	55	23.8%	29.2%

Notes:
(a) Multiple of the average income at which the highest tax bracket applies, in U.S. dollars in Purchasing Power Parity (PPP).
(b) After any imputation, credit, or offset.

APPENDIX TABLE C.

Consumption Taxes

	Consumption Tax Rate	Consumption Tax Base		Consumption Tax Complexity
Country	VAT/Sales Tax Rate	VAT/Sales Tax Threshold (a)	VAT/Sales Tax Base as a Percent of Total Consumption	Complexity (Hours to Comply)
Australia	10.0%	$51,020	48.3%	50
Austria	20.0%	$45,692	59.9%	35
Belgium	21.0%	$32,552	47.4%	75
Canada	12.4% (b)	$25,000	48.9%	50
Chile	19.0%	$0	64.2%	124
Czech Republic	21.0%	$79,365	61.2%	102
Denmark	25.0%	$7,407	62.3%	40
Estonia	20.0%	$72,727	74.2%	14
Finland	24.0%	$11,628	57.1%	24
France	20.0%	$109,814	51.0%	31
Germany	19.0%	$29,650	57.0%	43
Greece	24.0%	$17,825	42.1%	69
Hungary	27.0%	$56,338	57.6%	96
Iceland	24.0%	$14,184	52.5%	40
Ireland	23.0%	$95,908	49.2%	29
Israel	17.0%	$26,941	63.2%	64
Italy	22.0%	$96,296	38.4%	30
Japan	10.0%	$97,087	72.2%	20
Korea	10.0%	$35,294	68.2%	19
Latvia	21.0%	$80,645	58.3%	66
Lithuania	21.0%	$99,338	52.5%	43
Luxembourg	17.0%	$35,088	90.8%	22
Mexico	16.0%	$0	33.8%	100
Netherlands	21.0%	$25,381	52.6%	34
New Zealand	15.0%	$41,379	98.9%	47
Norway	25.0%	$5,208	58.2%	40
Poland	23.0%	$112,994	52.1%	172
Portugal	23.0%	$21,777	52.2%	90
Slovak Republic	20.0%	$97,819	52.1%	84
Slovenia	22.0%	$87,108	60.3%	69
Spain	21.0%	$0	44.8%	26
Sweden	25.0%	$3,363	59.0%	36
Switzerland	7.7%	$86,207	69.5%	8
Turkey	18.0%	$0	39.9%	75
United Kingdom	20.0%	$123,367	45.2%	25
United States	7.4% (c)	$0	33.9%	33

Notes:
(a) In U.S. dollars (PPP).
(b) The Canadian rate is the average of the total sales tax rate for the provinces and includes Goods and Services Tax, Provincial Sales Tax, and Retail Sales Tax where applicable.
(c) The United States' rate is the combined weighted average state and local sales tax rate.

APPENDIX TABLE D.

Property Taxes

	Real Property Taxes			Wealth/Estate Taxes	
Country	Real Property or Land Tax	Real Property Taxes Deductible	Real Property Taxes as % of Capital Stock	Net Wealth Tax	Estate/Inheritance Tax
Australia	Land Tax Levied by Individual States (a)	No	1.0%	No	None
Austria	Tax on Real Property	No	0.1%	No	None
Belgium	Tax on Real Property (b)	Yes	0.5%	No	Inheritance and Gift Tax
Canada	Tax on Real Property	Yes	1.5%	No	None
Chile	Tax on Real Property	Yes	0.4%	No	Inheritance and Gift Tax
Czech Republic	Tax on Real Property	Yes	0.1%	No	Inheritances and gifts are subject to Income Tax
Denmark	Tax on Real Property	Yes	0.7%	No	Inheritance and Gift Tax
Estonia	Land Tax	No	0.1%	No	None
Finland	Tax on Real Property	Yes	0.4%	No	Inheritance and Gift Tax
France	Tax on Real Property	Yes	1.2%	No	Inheritance and Gift Tax
Germany	Tax on Real Property	Yes	0.2%	No	Inheritance and Gift Tax
Greece	Tax on Real Property	No	1.1%	No	Inheritance and Gift Tax
Hungary	Tax on Real Property	No	0.3%	No	Inheritance and Gift Tax
Iceland	Tax on Real Property	No	1.0%	No	Inheritance Tax
Ireland	Tax on Real Property	Yes	0.4%	No	Inheritance and Gift Tax
Israel	Tax on Sale of Real Property (c)	Yes	1.2%	No	None
Italy	Tax on Real Property	No	0.6%	Yes	Inheritance and Gift Tax
Japan	Tax on Real Property	Yes	0.8%	No	Inheritance and Gift Tax
Korea	Tax on Real Property	No	0.4%	No	Inheritance and Gift Tax
Latvia	Tax on Real Property	Yes	0.4%	No	None
Lithuania	Tax on Real Property	Yes	0.2%	No	Inheritance Tax
Luxembourg	Tax on Real Property	Yes	0.0%	No	Inheritance and Gift Tax
Mexico	Tax on Real Property	Yes	0.1%	No	Income Tax can apply to estates, some gifts are subject to Income Tax, and Real Estate Transfer Tax can apply
Netherlands	Tax on Real Property	Yes	0.5%	Yes	Inheritance and Gift Tax
New Zealand	Land Value Tax (d)	No	1.2%	No	None
Norway	Tax on Real Property	Yes	0.2%	Yes	None
Poland	Tax on Real Property	Yes	0.9%	No	Inheritance and Gift Tax
Portugal	Tax on Real Property	Yes	0.4%	No	Stamp Duty applies to Inheritance and Gifts
Slovak Republic	Tax on Real Property	Yes	0.2%	No	None
Slovenia	Tax on Real Property	No	0.3%	No	Inheritance and Gift Tax
Spain	Tax on Real Property	No	0.5%	Yes	Inheritance and Gift Tax
Sweden	Tax on Real Property	Yes	0.3%	No	None
Switzerland	Tax on Real Property	Yes	0.1%	Yes	Many cantons levy both Estate and Gift Taxes
Turkey	Tax on Real Property	Yes	0.1%	No	Inheritance and Gift Tax
United Kingdom	Tax on Real Property	Yes	1.9%	No	Inheritance and Gift Tax
United States	Tax on Real Property	Yes	1.6%	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 Land Appreciation Tax is levied like a capital gains tax on the sale of property.
(d) Levied by local governments. A few cities tax capital improvements.

APPENDIX TABLE D, *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 Transfer Tax	Bank Tax in certain provinces	Yes	No
Chile	No	Yearly fee on tax-adjusted equity	No	No
Czech Republic	Real Estate Transfer Tax	No	No	No
Denmark	Real Estate Transfer Tax	No	No	No
Estonia	No	No	No	No
Finland	Real Estate Transfer Tax	No	No	Yes
France	Real Estate Transfer Tax	Bank Tax	No	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	No
Iceland	No	Bank Tax	No	No
Ireland	Stamp Duty on Transfer of Real Property	No	No	Yes
Israel	Real Estate Transfer Tax (e)	No	No	No
Italy	Real Estate Transfer Tax	No	Yes	Yes
Japan	Real Estate Transfer Tax	Fixed assets tax	Yes	No
Korea	Real Estate Transfer Tax	No	Yes	Yes
Latvia	Stamp Duty on Transfer of Real Property	No	No	No
Lithuania	No	No	No	No
Luxembourg	Real Estate 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	Stamp Duty on Transfer of Real Property	Bank Tax	No	No
Poland	Real Estate Transfer Tax	Bank Tax	Yes	Yes
Portugal	Real Estate Transfer Tax	Bank Tax	No	No
Slovak Republic	No	Bank Tax	No	No
Slovenia	Real Estate Transfer Tax	Bank Tax	No	No
Spain	Real Estate Transfer Tax	No	Yes	No
Sweden	Stamp Duty on Transfer of Real Property	No	No	No
Switzerland	Real Estate Transfer Tax	Cantonal/Community Equity Tax	Yes	Yes
Turkey	Real Estate Transfer Tax	No	Yes	Yes
United Kingdom	Stamp Duty on Transfer of Real Property	Bank Tax	No	Yes
United States	Real Estate Transfer Tax	Tangible Property Taxes and Capital Stock Taxes	No	No

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

APPENDIX TABLE E.

International Tax Rules

	Participation Exemption			Withholding Taxes			Tax Treaties
Country	Dividend Exemption	Capital Gains Exemption	Country Limitations	Dividend Withholding Tax	Interest Withholding Tax	Royalties Withholding Tax	Number of Tax Treaties
Australia	100%	100%	None	30.0%	10.0%	30.0%	45
Austria	100%	100%	None	27.5%	0.0%	20.0%	89
Belgium	100%	100%	None	30.0%	30.0%	30.0%	95
Canada	100%	50%	Countries with a tax treaty or Tax Information Exchange Agreement	25.0%	25.0%	25.0%	96
Chile	0%	0%	N/A	35.0%	35.0%	30.0%	33
Czech Republic	100%	100%	EU member states and EEA member states or double tax treaty	15.0%	15.0%	15.0%	89
Denmark	100%	100%	EU member states and EEA member states or double tax treaty	27.0%	22.0%	22.0%	75
Estonia	100%	100%	EU member states and EEA member states and Switzerland	0.0%	0.0%	10.0%	58
Finland	100%	100%	EU member states and EEA member states or double tax treaty	20.0%	0.0%	20.0%	76
France	95%	88%	Black-list countries are excluded	28.0%	0.0%	28.0%	122
Germany	95%	95%	None	26.4%	0.0%	15.8%	96
Greece	100%	100%	EU member states	5.0%	15.0%	20.0%	57
Hungary	100%	100%	None	0.0%	0.0%	0.0%	81
Iceland	100%	100%	None	20.0%	12.0%	20.0%	45
Ireland	0%	100%	EU member states and tax treaty countries	25.0%	20.0%	20.0%	73
Israel	0%	0%	N/A	30.0%	23.0%	23.0%	58
Italy	95%	95%	Black-list countries are excluded	26.0%	26.0%	22.5%	100
Japan	95%	0%	None	20.0%	20.0%	20.0%	70
Korea	0%	0%	N/A	22.0%	22.0%	22.0%	93
Latvia	100%	100%	Black-list countries are excluded	0.0%	0.0%	0.0%	62
Lithuania	100%	100%	Black-list countries are excluded	15.0%	10.0%	10.0%	54
Luxembourg	100%	100%	None	15.0%	0.0%	0.0%	83
Mexico	0%	0%	N/A	10.0%	35.0%	35.0%	59
Netherlands	100%	100%	None	15.0%	0.0%	0.0%	96
New Zealand	100%	100%	None	30.0%	15.0%	15.0%	40
Norway	97%	100%	Black-list countries are excluded	25.0%	0.0%	0.0%	87
Poland	100%	0%	EU member states and EEA member states and Switzerland	19.0%	20.0%	20.0%	85
Portugal	100%	100%	Black-list countries are excluded	25.0%	25.0%	25.0%	78
Slovak Republic	100%	100%	Countries with a tax treaty or Tax Information Exchange Agreement	35.0%	19.0%	19.0%	70
Slovenia	95%	47.5%	Black-list countries are excluded	15.0%	15.0%	15.0%	59
Spain	100%	100%	Black-list countries are excluded	19.0%	19.0%	24.0%	93
Sweden	100%	100%	None	30.0%	0.0%	0.0%	81
Switzerland	100%	100%	None	35.0%	35.0%	0.0%	93
Turkey	100%	100%	None	15.0%	10.0%	20.0%	86
United Kingdom	100%	100%	None	0.0%	20.0%	20.0%	130
United States	100%	0%	None	30.0%	30.0%	30.0%	66

APPENDIX TABLE E, *CONTINUED.*

International Tax Rules

	International Tax Regulations		
Country	Controlled Foreign Corporation Rules	Controlled Foreign Corporation Rules: Income	Controlled Foreign Corporation Rules: Exemptions
Australia	Yes	Passive	CFC-exempt if passes the active income test and narrower rules apply if located in a "listed" country
Austria	Yes	Passive	CFC with substantive economic activities exempted
Belgium	Yes	All income associated with non-genuine arrangements	None
Canada	Yes	Passive	Multiple rules may exempt CFC from taxation
Chile	Yes	Passive	None
Czech Republic	Yes	Passive	CFC with substantive economic activities exempted
Denmark	Yes	All Income	Foreign subsidiaries are exempt if less than 1/3 of their income is financial income
Estonia	Yes	All income associated with non-genuine arrangements	CFC-exempt if profits below €750,000 or passive income below €75,000
Finland	Yes	All Income	CFC-exempt if i) located in EU or EEA and not an artificial arrangement; ii) industrial, manufacturing, and shipping business; or iii) Finland has a double-tax treaty with the foreign country (excluding tax treaty countries mentioned in a "black list")
France	Yes	All Income	CFC-exempt if located in EU and not an artificial arrangement, or if CFC carries out trading or manufacturing activity
Germany	Yes	Passive	CFC-exempt if located in EU or EEA and not an artificial arrangement
Greece	Yes	Passive	CFC-exempt if located in EU or EEA country with exchange of information agreement and not an artificial arrangement
Hungary	Yes	All income associated with non-genuine arrangements	CFC-exempt if i) real economic activity; ii) below certain profit threshold and ratio; or iii) located in country with treaty allowing for an exemption
Iceland	Yes	All Income	CFC-exempt if located in EEA countries or has a double-tax treaty with Iceland and not an artificial arrangement
Ireland	Yes	All income associated with non-genuine arrangements	CFC-exempt if i) below certain profit and income thresholds; ii) transfer pricing rules apply; or iii) passes the essential purpose test
Israel	Yes	Passive	None
Italy	Yes	All Income	CFC with substantive economic activities exempted
Japan	Yes	All Income	Various exemptions can apply
Korea	Yes	All Income	CFC rules don't apply to active income if CFC has fixed facilities engaged in business in the foreign country
Latvia	Yes	All income associated with non-genuine arrangements	CFC-exempt if profits below €750,000 or passive income below €75,000 and CFC is not based or incorporated in a tax haven
Lithuania	Yes	Passive	CFC-exempt if country included in white list and not receiving special tax treatment
Luxembourg	Yes	All income associated with non-genuine arrangements	CFC-exempt if i) not an artificial arrangement or ii) accounting profits below €750,000 or less than 10% of operating costs
Mexico	Yes	All Income	None
Netherlands	Yes	Passive	CFC-exempt if not an artificial arrangement
New Zealand	Yes	Passive	Limited exemption for certain Australian CFCs
Norway	Yes	All Income	CFC-exempt if located in EEA country and not an artificial arrangement or located in tax treaty country and not mainly passive income
Poland	Yes	All Income	CFC-exempt if not an artificial arrangement
Portugal	Yes	All Income	CFC-exempt if located in EU and EEA countries and not an artificial arrangement Other exemptions can apply
Slovak Republic	Yes	All income associated with non-genuine arrangements	None
Slovenia	Yes	Passive	Substantial economic activities exemption
Spain	Yes	Passive	CFC-exempt if located in EU and not an artificial arrangement
Sweden	Yes	All Income	CFC-exempt if located in EEA and not an artificial arrangement or located in white list countries
Switzerland	No	N/A	N/A
Turkey	Yes	All Income	None
United Kingdom	Yes	All Income	Various exemptions can apply
United States	Yes	Passive	Exemptions for foreign high-taxed income can apply

APPENDIX TABLE E, *CONTINUED.*

International Tax Rules

	International Tax Regulations *Continued*
Country	Interest Deduction Limitations
Australia	1.5:1 debt-to-equity ratio (15:1 for financial institutions) applies
Austria	Informal 4:1 debt-to-equity ratio applies
Belgium	Interest deductions limited to the higher of €3 million or 30% of EBITDA 5:1 debt-to-equity ratio applies to intragroup loans 1:1 debt-to-equity ratio applies to receivables from shareholders or directors, managers, and liquidators
Canada	1.5:1 debt-to-equity ratio applies
Chile	3:1 debt-to-equity ratio applies A surtax for excessive-indebtedness can apply
Czech Republic	Interest deductions limited to the higher of CZK 80 million or 30% of EBITDA 4:1 debt-to-equity ratio (6:1 debt-to-equity ratio for certain financial services companies) applies
Denmark	4:1 debt-to-equity ratio applies Interest deductions are limited to 2.7% of assets Interest deduction limited to 30% of EBITDA Other rules can apply
Estonia	Interest deductions limited to the higher of €3 million or 30% of EBITDA
Finland	Interest deductions limited to 25% of EBITDA Net interest expenses between non-related parties limited to €3 million
France	Interest deductions limited to the higher of €3 million or 30% of EBITDA Different limits apply to related-party debt
Germany	Interest deductions limited to 30% of EBITDA if deduction exceeds €3 million
Greece	Interest deductions limited to 30% of EBITDA if deduction exceeds €3 million
Hungary	Interest deductions limited to the higher of €3 million or 30% of EBITDA
Iceland	Interest deductions limited to 30% of EBITDA Rule does not apply if total interest paid does not exceed ISK 100 million Other exemptions can apply
Ireland	None However, in specific cases, interest can be reclassified as a dividend
Israel	None
Italy	Interest deductions limited to 30% of EBITDA
Japan	3:1 debt-to-equity ratio (2:1 for particular repo transactions) applies Interest deductions limited to 20% of adjusted income
Korea	2:1 debt-to-equity ratio (6:1 for financial institutions) applies Interest deductions limited to 30% of EBITDA (financial institutions exempt)
Latvia	4:1 debt-to-equity ratio applies for deduction up to €3 million (certain financial institutions exempt) Interest deductions limited to 30% of EBITDA for deduction exceeding €3 million (certain financial institutions exempt)
Lithuania	4:1 debt-to-equity ratio applies Interest deductions limited to €3 million or 30% of EBITDA Rule does not apply if entity's debt-to-equity ratio is not (or at most 2 percentage-points) lower than the group-consolidated ratio
Luxembourg	Informal 85:15 debt-to-equity ratio applies Interest deductions limited to 30% of EBITDA if deduction exceeds €3 million (financial institutions exempt)
Mexico	Interest deductions limited to 30% of EBITDA if deduction exceeds MXN 20 million
Netherlands	Interest deductions limited to the higher of €1 million or 30% of EBITDA
New Zealand	Numerous restrictions on debt-to-equity ratio apply
Norway	Interest deductions limited to 25% of EBITDA if deduction exceeds NOK 25 million
Poland	Interest deductions limited to 30% of EBITDA if deduction exceeds PLN 3 million
Portugal	Interest deductions limited to the higher of €1 million or 30% of EBITDA
Slovak Republic	Interest deductions limited to 25% of EBITDA (financial institutions exempted)
Slovenia	4:1 debt-to-equity ratio applies
Spain	Interest deductions limited to 30% of EBITDA if deduction exceeds €1 million
Sweden	Interest deductions limited to 30% of EBITDA if deduction exceeds SEK 5 million
Switzerland	Debt-to-equity ratios apply and vary by asset class
Turkey	3:1 debt-to-equity ratio (6:1 for financial institutions) applies
United Kingdom	Interest deductions limited to 30% of EBITDA if deduction exceeds GBP 2 million
United States	Interest deductions limited to the sum of business interest income, 30% of adjusted taxable income, and floor plan financing interest

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

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