

# INTERNATIONAL TAX COMPETITIVENESS INDEX 2022

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## Introduction

The structure of a country's tax code is a determining factor 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 Cooperation 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).<sup>1</sup>

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 France have reduced their corporate income tax rates by several percentage points, others, like Turkey, have increased them. Corporate tax base improvements have occurred in Chile and the United Kingdom, while the corporate tax base has been made less competitive in Belgium.

The COVID-19 pandemic 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 economic recovery and to raise revenue.

The variety of approaches to taxation among OECD countries creates a need to evaluate these systems relative to each other. For that purpose, we have developed the *International*  *Tax Competitiveness Index*—a relative comparison of OECD countries' tax systems with respect to competitiveness and neutrality.

## 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 impede domestic investment and 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.<sup>2</sup>

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

<sup>1</sup> Daniel Bunn, "Sources of Government Revenue in the OECD," Tax Foundation, Feb. 10, 2022, https://www.taxfoundation.org/publications/ sources-of-government-revenue-in-the-oecd/.

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

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*.

## 2022 Rankings

For the ninth 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 largely exempts capital gains (with a combined top rate of 39 percent), a well-structured property tax, and a broad-based VAT. Switzerland has a relatively low corporate tax rate (19.7 percent), a low, broad-based consumption tax, and an individual income tax that partially exempts capital gains from taxation. Luxembourg has a broad-based consumption tax and a competitive international tax system.

**France** has the least competitive tax system in the OECD. It has a wealth tax on real estate, a financial transaction tax, and an inheritance tax. The French VAT covers less than 50 percent of final consumption, revealing both policy and enforcement gaps.

Countries that rank poorly on the *ITCI* often levy relatively high marginal tax rates on corporate income or have multiple layers of tax rules that contribute to complexity. Four of the five countries at the bottom of the rankings have higher than average corporate tax rates. Ireland ranks poorly on the *ITCI* despite its low corporate tax rate. This is due to high personal income and dividend taxes and a relatively narrow VAT base. In addition, the five lowestranking countries have high consumption tax rates, with rates of 20 percent or higher.

## TABLE 1. 2022 International Tax Competitiveness Index Rankings

Country	Overall Rank	Overall Score	Corporate Tax Rank	Individual Taxes Rank	Consumption Taxes Rank	Property Taxes Rank	Cross-Border Tax Rules Rank
Estonia	1	100.0	2	1	14	1	14
Latvia	2	89.9	1	4	26	5	9
New Zealand	3	89.7	32	7	1	2	21
Switzerland	4	82.9	11	9	4	36	2
Czech Republic	5	81.9	6	5	25	6	11
Luxembourg	6	80.6	26	14	6	14	5
Hungary	7	77.9	5	6	38	18	3
Lithuania	8	76.9	3	11	31	7	24
Turkey	9	76.6	20	8	13	23	8
Israel	10	76.0	17	30	10	10	10
Australia	11	75.5	29	20	9	4	23
Sweden	12	74.2	8	18	22	8	12
Slovak Republic	13	74.1	21	3	29	3	34
Netherlands	14	71.3	25	22	16	22	4
Germany	15	70.2	30	26	15	11	6
Canada	16	69.3	27	31	8	25	16
Norway	17	69.0	15	23	23	16	13
Austria	18	68.6	23	32	17	15	7
Costa Rica	19	67.5	36	33	7	12	17
Finland	20	67.4	9	28	21	20	22
Japan	21	67.3	33	16	5	27	26
United States	22	66.8	22	21	3	29	35
Slovenia	23	66.1	7	12	32	26	20
Belgium	24	65.1	14	13	24	31	19
Korea	25	64.1	34	27	2	33	33
United Kingdom	26	62.9	10	24	34	34	1
Chile	27	61.9	13	34	11	13	38
Poland	28	59.3	12	10	35	32	29
Greece	29	59.2	19	17	30	30	25
Mexico	30	58.4	28	29	12	9	37
Iceland	31	57.9	16	19	28	28	31
Colombia	32	57.8	38	2	18	24	36
Denmark	33	57.3	18	36	20	19	30
Spain	34	56.9	31	25	19	37	18
Ireland	35	55.6	4	37	36	17	32
Portugal	36	51.4	37	35	27	21	28
Italy	37	49.1	24	15	37	38	27
France	38	45.3	35	38	33	35	15

## Notable Changes from Last Year<sup>3</sup>

## **Czech Republic**

The Czech Republic increased the top tax rate on personal income from 15 percent to 27 percent. The Czech Republic's ranking fell from  $4^{\text{th}}$  to  $5^{\text{th}}$ .

## France

France has been reducing its corporate income tax rate over several years, a process which concludes in 2022. As part of this scheduled reduction, France dropped its combined corporate rate (including a surtax) from 28.41 percent in 2021 to 25.83 percent in 2022. Its *Index* rank remained unchanged at 38.

## Ireland

Prior to 2022, Ireland did not have a limit on interest deductions. Now interest is limited to 30 percent of earnings before interest, depreciation, and amortization. There is an exemption for borrowing costs below €3 million. Ireland's rank fell from 28 to 35.

## Italy

Italy repealed its patent box and replaced it with a 110 percent super deduction for research and development spending. Italy's rank remained at 37.

## **New Zealand**

New Zealand increased its top personal income tax rate from 33 percent to 39 percent. New Zealand's ranking remained unchanged at 3.

## Turkey

Turkey reduced its corporate income tax rate from 25 percent in 2021 to 23 percent in 2022. Turkey's rank rose from 9<sup>th</sup> to 4<sup>th</sup>.

## **United Kingdom**

The UK introduced a temporary 130 percent super-deduction for plant and equipment. The UK's ranking increased from 27 to 26.

## 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, individual taxes, consumption taxes, and crossborder tax rules.

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*,<sup>4</sup> 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 2022 edition due to these methodological changes.

## General

**Costa Rica** was added to this year's *Index* as it became the 38<sup>th</sup> member of the OECD in 2021.

The *Index* previously relied on some measures of tax complexity that were developed by PwC in conjunction with the World Bank's *Doing Business* report. In September 2021, that report

<sup>3</sup> 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.

<sup>4</sup> Tax Foundation, "International Tax Competitiveness Index," https://github.com/TaxFoundation/international-tax-competitiveness-index.

## TABLE 2. Changes from Last Year

Country2020 RAustralia10Austria17Belgium20Canada16Chile35Colombia29Costa Rica21Czech Republic4Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland20Israel11Italy37Japan19Korea25Latvia33Lithuania8Luxembourg6Mexico33Netherlands15New Zealand21Slovak Republic12Slovenia23	ank 202	20 Score 77.1 70.7 69.6 71.7 58.3 61.2	2021 Rank 9 16 25 18 26	2021 Score 76.2 70.6 65.4 69.7	2022 Rank 11 18	2022 Score 75.5 68.6	2022 -2	-0.6
Austria17Belgium20Canada16Chile35Colombia29Costa Rica21Czech Republic4Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Slovak Republic12Slovenia23		70.7 69.6 71.7 58.3	16 25 18	70.6 65.4			-2	-0.6
Belgium20Canada16Chile35Colombia29Costa Rica21Czech Republic4Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovenia23		69.6 71.7 58.3	25 18	65.4	18	68.6	-	
Canada16Chile35Colombia29Costa Rica21Czech Republic4Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovenia23		71.7 58.3	18				-2	-1.9
Chile35Colombia29Costa Rica21Czech Republic4Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovenia23		58.3		69.7	24	65.1	1	-0.3
Colombia29Costa Rica21Czech Republic4Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovenia23			26		16	69.3	2	-0.4
Costa Rica21Czech Republic4Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		61.2		62.5	27	61.9	-1	-0.5
Czech Republic4Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23			35	56.3	32	57.8	3	1.5
Denmark32Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		69.0	20	67.9	19	67.5	1	-0.4
Estonia1Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		85.5	4	84.3	5	81.9	-1	-2.4
Finland24France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		60.1	34	57.0	33	57.3	1	0.3
France38Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		100.0	1	100.0	1	100.0	0	0
Germany14Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		68.4	21	67.8	20	67.4	1	-0.4
Greece34Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		43.3	38	45.0	38	45.3	0	0.3
Hungary7Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		72.4	15	71.5	15	70.2	0	-1.3
Iceland28Ireland30Israel11Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		58.8	33	58.6	29	59.2	4	0.6
Ireland 30 Israel 11 Italy 37 Japan 19 Korea 25 Latvia 3 Lithuania 8 Luxembourg 6 Mexico 33 Netherlands 15 New Zealand 2 Norway 18 Poland 31 Portugal 36 Slovak Republic 12		78.6	7	78.3	7	77.9	0	-0.3
Israel 11 Italy 37 Japan 19 Korea 25 Latvia 3 Lithuania 8 Luxembourg 6 Mexico 33 Netherlands 15 New Zealand 2 Norway 18 Poland 31 Portugal 36 Slovak Republic 12		61.6	31	59.0	31	57.9	0	-1
Italy37Japan19Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		61.1	28	60.5	35	55.6	-7	-4.8
Japan 19 Korea 25 Latvia 3 Lithuania 8 Luxembourg 6 Mexico 33 Netherlands 15 New Zealand 2 Norway 18 Poland 31 Portugal 36 Slovak Republic 12		75.6	10	75.2	10	76.0	0	0.8
Korea25Latvia3Lithuania8Luxembourg6Mexico33Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		50.6	37	49.0	37	49.1	0	0.1
Latvia 3 Lithuania 8 Luxembourg 6 Mexico 33 Netherlands 15 New Zealand 2 Norway 18 Poland 31 Portugal 36 Slovak Republic 12 Slovenia 23		70.0	17	69.7	21	67.3	-4	-2.4
Lithuania 8 Luxembourg 6 Mexico 33 Netherlands 15 New Zealand 2 Norway 18 Poland 31 Portugal 36 Slovak Republic 12 Slovenia 23		67.9	24	67.1	25	64.1	-1	-3
Luxembourg6Mexico33Metherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		89.9	2	90.2	2	89.9	0	-0.3
Mexico 33 Netherlands 15 New Zealand 2 Norway 18 Poland 31 Portugal 36 Slovak Republic 12 Slovenia 23		77.5	8	77.3	8	76.9	0	-0.4
Netherlands15New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		81.1	6	80.9	6	80.6	0	-0.3
New Zealand2Norway18Poland31Portugal36Slovak Republic12Slovenia23		59.2	29	59.6	30	58.4	-1	-1.2
Norway 18 Poland 31 Portugal 36 Slovak Republic 12 Slovenia 23		72.0	14	72.0	14	71.3	0	-0.7
Norway 18 Poland 31 Portugal 36 Slovak Republic 12 Slovenia 23		90.8	3	88.9	3	89.7	0	0.8
Poland 31 Portugal 36 Slovak Republic 12 Slovenia 23		70.3	19	69.3	17	69.0	2	-0.3
Portugal 36 Slovak Republic 12 Slovenia 23		60.6	30	59.5	28	59.3	2	-0.2
Slovak Republic 12 Slovenia 23		54.0	36	53.3	36	51.4	0	-1.8
Slovenia 23		74.4	11	74.8	13	74.1	-2	-0.7
		68.4	23	67.3	23	66.1	0	-1.2
Spain 26		64.4	32	58.9	34	56.9	-2	-1.9
Sweden 13		73.9	12	74.2	12	74.2	0	0.1
Switzerland 5		83.6	5	83.7	4	82.9	1	-0.8
		77.4	13	74.0	9	76.6	4	
								2.7
United Kingdom 27 United States 22		61.7 68.5	27 22	61.1 67.7	26 22	62.9 66.8	1	1.8 -0.9

was discontinued. The *Index* no longer uses any variables from that report or PwC's "Paying Taxes" study. Instead, new measures of tax complexity have been included as described below.

## **Corporate Tax**

The prior tax complexity measures have been replaced with three new measures for complexity. The first is a tally of tax rates that apply to corporate income. These rates could arise because corporate income is taxed at different rates due to business size or the size of business profits, or because there is an alternative minimum tax that sits alongside normal corporate tax rules. The second measure is the rate of a corporate surtax if any exists. The third is the amount of revenue collected on corporate or personal income from taxes apart from standard taxes on those lines of income.

## **Individual Taxes**

The prior tax complexity measures for individual taxes have also been replaced with two new measures for complexity. The first is the rate of a personal income surtax if any exists. The second is the amount of revenue collected for social security or through payroll taxes other than standard taxes of that form.

## **Consumption Taxes**

The complexity measure for consumption taxes has been removed as no suitable replacement for the prior measure was found to be compatible.

## **Cross-Border Tax Rules**

In 2017, the United States adopted a unique approach to taxing foreign earnings of U.S. businesses. That approach has been partially incorporated into the design of a global minimum tax proposal. Starting this year, the *Index* is including another layer to the CFC rules variable which identifies whether a jurisdiction has a form of the minimum tax, which is currently only true of the U.S.

## 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 9.2 percent of total revenues in 2020.<sup>5</sup>

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.

<sup>5</sup> Daniel Bunn, "Sources of Government Revenue in the OECD."

### 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	29	53.1	34	33.1	21	44.4	9	90.3
Austria	23	61.0	21	49.0	7	54.3	23	70.6
Belgium	14	68.2	21	49.0	5	64.9	18	78.9
Canada	27	57.0	27	45.2	29	40.4	14	83.9
Chile	13	68.6	28	42.6	3	69.1	11	87.1
Colombia	38	32.5	38	17.1	35	35.4	25	69.5
Costa Rica	36	37.8	34	33.1	38	25.6	28	67.6
Czech Republic	6	75.7	4	68.1	25	43.9	6	92.3
Denmark	18	64.8	15	58.6	30	39.9	15	82.4
Estonia	2	98.9	9	64.9	1	100.0	3	96.6
Finland	9	73.8	9	64.9	32	38.2	1	100.0
France	35	45.1	26	46.4	16	48.9	37	33.6
Germany	30	52.0	33	33.6	11	51.0	19	77.0
Greece	19	64.2	15	58.6	34	35.5	12	86.5
Hungary	5	82.5	1	100.0	37	34.1	30	63.8
Iceland	16	66.4	9	64.9	23	44.2	26	69.4
Ireland	4	83.4	2	88.8	22	44.3	20	75.0
Israel	17	66.2	18	55.4	17	48.2	16	82.1
Italy	24	58.6	30	40.1	4	68.4	34	62.0
Japan	33	51.0	32	33.9	33	36.9	7	92.1
Korea	34	49.1	29	41.0	15	49.1	36	56.1
Latvia	1	100.0	9	64.9	1	100.0	1	100.0
Lithuania	3	85.3	3	80.9	6	64.3	24	70.1
Luxembourg	26	57.8	20	49.2	14	49.5	29	66.4
Mexico	28	53.1	34	33.1	27	42.7	5	92.5
Netherlands	25	57.8	24	46.5	18	47.8	21	74.1
New Zealand	32	51.5	31	39.5	36	35.4	13	84.7
Norway	15	66.8	15	58.6	31	38.4	8	90.6
Poland	12	68.9	4	68.1	13	49.9	32	63.4
Portugal	37	34.9	37	28.3	10	51.8	38	33.5
Slovak Republic	21	62.0	14	61.8	24	44.1	33	62.0
Slovenia	7	74.4	4	68.1	26	43.8	10	88.4
Spain	31	51.8	21	49.0	28	41.2	35	59.3
Sweden	8	74.4	13	63.0	20	46.0	4	95.5
Switzerland	11	69.4	8	65.9	12	50.3	27	68.7
Turkey	20	62.9	18	55.4	19	47.4	22	73.0
United Kingdom	10	70.8	4	68.1	8	54.2	31	63.6
United States	22	61.4	25	46.4	9	52.4	17	79.2

## **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.<sup>6</sup> Countries with higher top marginal corporate income tax rates than the OECD average receive lower scores than those with lower, more competitive rates.

Colombia levies the highest top combined corporate income tax rate, at 35 percent, followed by Portugal (31.5 percent) and Australia, Costa Rica, and Mexico (all at 30 percent). The lowest top marginal corporate income tax rate in the OECD is found in Hungary, at 9 percent, followed by Ireland (12.5 percent) and Lithuania (15 percent). The OECD average combined corporate income tax rate is 23.6 percent for 2021.<sup>7</sup>

### **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, leading to slower investment and economic growth.

## 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.<sup>8</sup>

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 21 of the 38 OECD countries, corporations can carry forward losses indefinitely in 2022, though 12 of these limit the amount of taxable income that can be offset by losses from previous years.<sup>9</sup> Of the 17 countries with time limits, the average loss carryforward period is 7.9 years. Hungary, Poland, and Slovakia have the most restrictive loss carryover provisions in the OECD: Carrybacks are not allowed, and carryforwards are not only limited to five years but also capped at 50 percent of taxable income (coded as 2.5 years).<sup>10</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> OECD, "OECD Tax Database, Table II.1 – Statutory corporate income tax rate," updated February 2022, https://stats.oecd.org/index. aspx?DataSetCode=Table\_II1.

<sup>8</sup> 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; and Michael P. Devereux and Clemens Fuest, "Is the Corporation Tax an Effective Automatic Stabilizer?" *National Tax Journal* 62:3 (September 2009): 429-437, http://www.ntanet.org/NTJ/62/3/ntjv62n03p429-37-corporation-tax-effective-automatic.html.

<sup>9</sup> Countries with unlimited carryforwards are coded as having periods of 100 years. Some countries restrict the amount of taxable income that can be offset by losses each year. For example, Slovenia allows for indefinite carryforwards but only 63 percent of taxable income can be offset by losses in any given year. These restrictions are coded as the percentage of taxable income that can be offset by losses times the number of allowable years. Thus, Slovenia is coded as 63.

<sup>10</sup> Bloomberg Tax, "Country Guides," https://www.bloomberglaw.com/product/tax/toc/source/511920/147664382; PwC, "Worldwide Tax Summaries," https://www.pwc.com/gx/en/services/tax/worldwide-tax-summaries.html; and individual government websites.

Countries tend to be significantly more restrictive with loss carryback provisions than with carryforward provisions. In 2022, only the Estonian and Latvian systems allow, by design, unlimited carrybacks of losses.<sup>11</sup> Of the 11 countries that allow time-limited carrybacks, the average period is 1.2 years.<sup>12</sup> The *ITCI* penalizes the 25 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 the time period over which 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 tax treatment of capital expenses understates true business costs and overstates taxable income in present value terms.<sup>13</sup>

The *ITCI* measures a country's capital allowances for three asset types, namely, machinery, industrial buildings, and intangibles.<sup>14</sup> 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 in real terms. 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 87.2 percent of investment costs in machinery, 50.7 percent of the cost of industrial buildings, and 77.5 percent of the cost of intangibles. Chile implemented temporary full expensing for all three asset categories as a response to the COVID-19 pandemic. The United Kingdom temporarily has a 130 percent deduction for machinery. 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.<sup>15</sup>

### 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,

<sup>11</sup> Estonia and Latvia do not have explicit loss carryover provisions. However, their cash-flow corporate tax system implicitly allows for unlimited loss carryforwards and carrybacks.

<sup>12</sup> Bloomberg Tax, "Country Guides;" PwC, "Worldwide Tax Summaries"; and individual government websites.

<sup>13</sup> Lisa Hogreve and Daniel Bunn, "Capital Cost Recovery across the OECD," Tax Foundation, Apr. 26, 2022, https://www.taxfoundation.org/publications/ capital-cost-recovery-across-the-oecd/.

<sup>14</sup> Intangible assets are typically amortized, but the write-off is similar to depreciation.

<sup>15</sup> Data and calculations are based on Hogreve and Bunn, "Capital Cost Recovery across the OECD."

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.<sup>16</sup>

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, nineteen countries use the Average Cost method of accounting, and five countries limit companies to the FIFO method of accounting.<sup>17</sup>

#### 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. Standard corporate income tax systems allow tax deductions of interest payments but not of equity costs, effectively providing a tax advantage to debt over equity finance—the so-called "debt bias." This debt bias can be considered a real risk to economic stability.<sup>18</sup>

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 expenses creates new distortions, as interest income usually continues to be fully taxed. An allowance for corporate equity—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.<sup>19</sup> 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.<sup>20</sup>

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 taxes.

<sup>16</sup> Kyle Pomerleau, "The Tax Treatment of Inventories and the Economic and Budgetary Impact of LIFO Repeal," Tax Foundation, Feb. 9, 2016, https://www. taxfoundation.org/tax-treatment-inventories-and-budgetary-impact-lifo-repeal/.

<sup>17</sup> Christoph Spengel, Frank Schmidt, Jost Heckemeyer, and Katharina Nicolay, "Effective Tax Levels Using the Devereux/Griffith Methodology." European Commission, Oct. 2021, https://taxation-customs.ec.europa.eu/system/files/2022-03/final\_report\_2021\_effective\_tax\_levels\_revised\_en.pdf; PwC, "Worldwide Tax Summaries: Corporate - Income Determination," https://taxsummaries.pwc.com/australia/corporate/income-determination; and EY, "Worldwide Corporate Tax Guide 2021."

<sup>18</sup> 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.

<sup>19</sup> 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/commonconsolidated-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," https://taxsummaries.pwc.com/switzerland/corporate/ deductions.

<sup>20</sup> Bloomberg Tax, "Country Guides;" PwC, "Worldwide Tax Summaries: Corporate – Deductions"; and Spengel, Schmidt, Heckemeyer, and Nicolay, "Effective Tax Levels Using the Devereux/Griffith Methodology."

In addition, the possibility of receiving incentives invites efforts to secure these tax preferences,<sup>21</sup> 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.<sup>22</sup>

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

Due to an increasingly globalized and mobile economy, 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 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.<sup>23</sup>

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.<sup>24</sup>

Instead of providing patent boxes for intellectual property, countries should recognize that all capital is mobile to some degree 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.

Sixteen OECD countries—Belgium, France, Hungary, Ireland, Israel, 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.<sup>25</sup> The United States has a reduced

<sup>21</sup> Christopher J. Coyne and Lotta Moberg, "The Political Economy of State-Provided Targeted Benefits," *The Review of Austrian Economics* 28:3 (June 2014), 337.

<sup>22</sup> 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.

<sup>23</sup> 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.

<sup>24</sup> OECD, "Action 5: Agreement on Modified Nexus Approach for IP Regimes," 2015, https://www.oecd.org/ctp/beps-action-5-agreement-on-modifiednexus-approach-for-ip-regimes.pdf; and OECD, "Harmful Tax Practices – Peer Review Results," January 2022, http://www.oecd.org/tax/beps/harmful-taxpractices-peer-review-results-on-preferential-regimes.pdf.

<sup>25</sup> Bloomberg Tax, "Country Guides;" PwC, "Worldwide Tax Summaries: Corporate - Tax credits and incentives," https://taxsummaries.pwc.com/australia/ corporate/tax-credits-and-incentives; and OECD, "Intellectual Property Regimes," https://qdd.oecd.org/data/IP\_Regimes.

tax rate for profits from exports related to intellectual property held in the U.S. which is treated as a patent box in the *Index*. Countries with patent box regimes receive a lower score.

#### Research and Development

In the absence of full expensing, expenditurebased R&D tax incentives (partially) offset the tax 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.<sup>26</sup> 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.<sup>27</sup>

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 tax treatment of capital investment.

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 tax subsidy rates for R&D. An implied subsidy rate of zero means R&D does not receive preferential tax treatment.

Among OECD countries, Slovakia has the highest implied tax subsidy rate on R&D expenditures, at 0.49. Colombia and France provide the second and third most generous relief, with implied tax subsidy rates of 0.44 and 0.36, respectively.

Of the countries that grant notable relief, Mexico (0.06), Turkey (0.06), Denmark (0.07), and the United States (0.07) are the least generous. The implied tax subsidy rates of Costa Rica, Estonia, Finland, Israel, Latvia, Luxembourg, and Switzerland do not show any significant expenditure-based R&D tax relief.<sup>28</sup>

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

### Digital Services Taxes

Over the last few years, several OECD countries have implemented so-called digital services taxes (DSTs). DSTs are taxes on selected gross revenue streams of large digital businesses. Their tax base typically includes revenues either derived from a specific set of digital goods or services (for example, targeted online advertising) or based on the number of digital users within a country. Relatively high domestic and global revenue thresholds limit the tax to large multinationals.

DSTs effectively ring-fence the digital economy

<sup>26</sup> 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.

<sup>27</sup> Deloitte, "International Tax- Italy Highlights 2022," January 2022, https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-taxitalyhighlights-2022.pdf.

<sup>28</sup> 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.

by limiting the tax to certain revenue streams of large digital businesses, creating distortions based on firm size and business model. In addition, because DSTs are levied on revenues rather than profits, they do not take into account profitability, and thus disproportionally affect firms with lower profit margins.

As of 2022, eight OECD countries have implemented a DST: Austria, France, Hungary, Italy, Poland, Spain, Turkey, and the United Kingdom.<sup>29</sup>

Countries that have implemented a DST receive a lower score on the *ITCI*.

### Complexity

Corporate tax code complexity can be quantified by measuring the number of separate taxes (and rates) that apply to business income, the level of surtax rates on business income, and the amount of revenue countries collect from business profits taxes other than the corporate income tax. These burdens are measured by tallying up the separate rates that apply to business income, identifying the highest and most broadly applicable surtax rate, and relying on OECD revenue data to identify the share of revenue from taxes on business income other than the corporate income tax.

Countries that have separate rates that apply to corporate income, higher surtaxes, and collect revenue on income and profits outside of normal income taxes receive worse scores on the *ITCI*.

The nation with the highest number of separate tax rates (and bases) is Korea, with eight. Costa Rica follows with five, then France and Portugal with four. There are 13 OECD countries that do not have multiple tax rates or bases for their corporate income tax.<sup>30</sup>

Corporate surtaxes are relatively uncommon in OECD countries with just four applying a surtax to business income. Portugal (9 percent), Luxembourg (7 percent), Germany (5.5 percent), and France (3.3 percent) all apply a surtax to corporate income.<sup>31</sup>

The OECD data on tax revenues has a category for revenues that are unallocable to normal personal or business income taxes.<sup>32</sup> The data show that Switzerland (6.2 percent), Costa Rica (4.9 percent), and Denmark (4.5 percent) collect non-negligible shares of revenue from income (including personal income) from taxes other than corporate or personal income taxes. Eighteen OECD countries collect no revenue in that category.

<sup>29</sup> KPMG, "Taxation of the digitalized economy: Developments summary," updated June 27, 2022, https://tax.kpmg.us/content/dam/tax/en/pdfs/2022/ digitalized-economy-taxation-developments-summary.pdf.

<sup>30</sup> EY, "Worldwide Corporate Tax Guide 2021."

<sup>31</sup> Ibid.

<sup>32</sup> OECD, "Revenue Statistics - OECD countries: Comparative tables," https://stats.oecd.org/Index.aspx?DataSetCode=REV. The measure used in the Index is tax revenue as a percent of total taxation, code 1300: Unallocable between 1100 and 1200.

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

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, for example, 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. 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 impact 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 or households. Many countries, such as the United States, rely on individual income taxes as a significant source of tax revenue.<sup>33</sup> 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 Statutory Personal Income Tax Rate

Most countries' 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 statutory personal income 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 \$539,900 (\$647,850 for married filing jointly) at a rate of 37 percent.<sup>34</sup> In addition, individuals in the

<sup>33</sup> Daniel Bunn, "Sources of Government Revenue in the OECD."

<sup>34</sup> Erica York, "2022 Tax Brackets," Tax Foundation, Nov. 10, 2021, https://www.taxfoundation.org/publications/federal-tax-rates-and-tax-brackets/.

## 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	20	64.3	25	49.0	26	90.9	21	60.3
Austria	32	56.0	37	29.1	2	99.9	25	53.2
Belgium	13	74.9	28	45.6	2	99.9	15	76.7
Canada	31	57.0	30	44.0	2	99.9	33	42.0
Chile	34	52.9	33	42.1	2	99.9	36	35.5
Colombia	2	99.2	1	100.0	30	76.8	2	97.6
Costa Rica	33	54.0	8	70.7	38	27.0	13	77.7
Czech Republic	5	92.0	4	76.0	2	99.9	10	83.8
Denmark	36	37.6	17	55.7	34	64.0	37	24.8
Estonia	1	100.0	2	89.2	2	99.9	4	88.2
Finland	28	58.9	29	44.1	2	99.9	32	45.7
France	38	36.2	31	42.5	36	56.4	35	40.5
Germany	26	61.2	10	63.3	31	75.2	24	55.4
Greece	17	64.7	18	55.1	37	55.1	6	87.8
Hungary	6	91.7	3	82.5	24	99.5	13	77.7
Iceland	19	64.5	16	57.0	29	79.2	19	64.0
Ireland	37	37.0	19	54.9	34	64.0	38	24.3
Israel	30	57.2	34	38.7	2	99.9	31	47.2
Italy	15	66.8	23	50.3	2	99.9	22	56.2
Japan	16	66.6	26	46.8	27	90.5	18	67.3
Korea	27	59.8	38	27.1	2	99.9	20	62.6
Latvia	4	93.3	5	74.2	2	99.9	4	88.2
Lithuania	11	82.0	9	65.5	2	99.9	16	73.0
Luxembourg	14	71.8	12	59.7	32	68.5	8	85.8
Mexico	29	57.8	35	35.4	33	67.6	11	80.3
Netherlands	22	64.0	24	50.1	2	99.9	27	50.5
New Zealand	7	88.3	14	59.0	2	99.9	3	91.6
Norway	23	63.5	13	59.2	2	99.9	34	41.5
Poland	10	83.9	6	73.3	2	99.9	17	69.9
Portugal	35	52.9	36	34.5	28	88.7	26	52.3
Slovak Republic	3	98.8	7	73.2	2	99.9	1	100.0
Slovenia	12	76.3	27	46.1	23	99.6	12	79.3
Spain	25	63.3	32	42.3	2	99.9	22	56.2
Sweden	18	64.6	20	53.8	1	100.0	29	48.3
Switzerland	9	84.5	15	58.3	2	99.9	9	84.5
Turkey	8	85.0	11	60.3	25	96.5	7	86.8
United Kingdom	24	63.4	21	51.4	2	99.9	30	48.3
United States	21	64.2	22	50.7	2	99.9	28	50.4

top tax bracket also pay state and local income taxes, which sum to a combined top combined personal income tax rate of 43.7 percent.<sup>35</sup>

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 personal 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. High tax rates increase the cost of labor, which can decrease hours worked, and, in turn, can reduce the amount of production in the economy.

Countries with high top statutory personal income tax rates receive a worse score on the *ITCI* than countries with lower top rates. Slovenia has the highest all-in top statutory personal income tax rate (including employee social security contributions) at 61.1 percent. Estonia has the lowest, at 20 percent.<sup>36</sup>

## Income Level at Which Top Statutory Personal Income Tax Rate Applies

The level at which the top statutory personal income tax rate first applies 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 statutory personal income tax 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 first applies as compared to the country's average income. According to this measure, Mexico applies its top tax rate at the highest level of income (the top personal income tax rate applies at 28.7 times the average Mexican income), whereas Hungary applies its top rate on the first dollar, with a flat personal income tax of 15 percent.<sup>37</sup>

## 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.<sup>38</sup> The marginal tax wedge influences the choice to earn another dollar of income while the average tax wedge measures the tax burden at the current income level.<sup>39</sup> 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

<sup>35</sup> OECD, "OECD Tax Database: Table I.7 - Top statutory personal income tax rates," updated May 2022, https://stats.oecd.org/index.

aspx?DataSetCode=TABLE\_I7. The top statutory rate is used except in cases where the all-in rate is higher than the statutory rate.

<sup>36</sup> Ibid.

<sup>37</sup> Ibid.

<sup>38</sup> The marginal tax burden faced by an average worker in a country and the total tax cost of labor for an 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 total tax wedges at 67 percent, 100 percent, 133 percent of average earnings.

<sup>39</sup> Cristina Enache, "A Comparison of the Tax Burden on Labor in the OECD," Tax Foundation, May 19, 2021, https://www.taxfoundation.org/publications/ comparison-tax-burden-labor-oecd/.

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 relative tax burden 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.<sup>40</sup> 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 1.6. The average across OECD countries is 1.2.<sup>41</sup>

## Complexity

Complexity is measured by the rate of any surtax on personal income and the amount of revenue raised through social security contributions other than those collected through employer or employee payroll taxes. These measures indicate non-standard approaches to taxation of labor income and, in the case of surtaxes, a less transparent personal income tax system. The *Index* penalizes countries with high surtax rates and significant revenues from non-standard employer and employee payroll taxes. Ten OECD countries levy a surtax on personal income: Australia, Denmark, France, Germany, Greece, Ireland, Japan, Luxembourg, Portugal, and Turkey. Greece has the highest rate at 10 percent while Turkey has the lowest at 0.8 percent.

Four OECD countries raise some meaningful share of revenue through non-standard social security contributions. In Costa Rica, these revenues make up 31.4 percent of total tax revenues. Mexico (13.9 percent), Colombia (9.9 percent), and Iceland (8.9 percent) make up the others in this group.

## **Capital Gains and Dividends Taxes**

In addition to wage income, many countries' individual income tax systems tax investment income by levying taxes on 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 taxes 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 pays 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 dividends tax on that income.

41 OECD, "OECD Tax Database, Table I.4. Marginal personal income tax and social security contribution rates on gross labour income," updated May 2022, https://stats.oecd.org/index.aspx?DataSetCode=TABLE\_I4; and OECD, "OECD Tax Database, Table I.5. Average personal income tax and social security contribution rates on gross labour income," updated May 2022, https://stats.oecd.org/index.aspx?DataSetCode=TABLE\_I5.

<sup>40</sup> Colombia's ratio is 0. However, this is because a single worker earning the nation's average wage does not pay personal income tax.

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 gains from selling the 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 of return.

Some tax systems account for this potential double taxation either through credits against capital gains taxes for corporate taxes paid or other deductions. Such a tax system provides integrated taxation of corporate profits, or "corporate integration."<sup>42</sup>

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.<sup>43</sup>

Generally, higher dividends and capital gains taxes create a bias against saving and investment, reduce capital formation, and slow economic growth.<sup>44</sup> 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 (so-called long-term capital gains).<sup>45</sup> The *ITCI* gives countries with higher capital gains tax 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 £12,300 (\$16,900 USD<sup>46</sup>), and Canada excludes half of all capital gains income from taxation.<sup>47</sup>

Denmark has the highest capital gains tax rate in the OECD, at 42 percent. Belgium, the Czech Republic, Korea, Luxembourg, New Zealand, Slovakia, Slovenia, Switzerland, and Turkey do not tax long-term capital gains.<sup>48</sup>

#### **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.

<sup>42</sup> Taylor LaJoie and Elke Asen, "Double Taxation of Corporate Income in the United States and the OECD," Tax Foundation, Jan. 13, 2021, https://www. taxfoundation.org/double-taxation-of-corporate-income/.

<sup>43</sup> 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.

<sup>44</sup> Daniel Bunn and Elke Asen, "Savings and Investment: The Tax Treatment of Stock and Retirement Accounts in the OECD," Tax Foundation, May 26, 2021, https://www.taxfoundation.org/savings-and-investment-oecd/.

<sup>45</sup> Erica York, "An Overview of Capital Gains Taxes," Tax Foundation, Apr. 16, 2019, https://www.taxfoundation.org/capital-gains-taxes/.

<sup>46</sup> The average 2021 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.

<sup>47</sup> Deloitte, "Tax Guides and Highlights."

<sup>48</sup> Bloomberg Tax, "Country Guide"; PwC, "Quick Charts: Capital gains tax (CGT) rates," https://www.taxsummaries.pwc.com/quick-charts/capital-gains-tax-cgt-rates; and PwC, "Worldwide Tax Summaries: Individual - Income determination," https://www.taxsummaries.pwc.com/. When the capital gains tax rate varies by type of asset sold, the tax rate applying to the sale of listed shares after an extended period of time is used. Includes surtaxes if applicable.

Countries' rates are expressed as the 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 Colombia's top dividend tax rate is 0. The OECD average is 24.2 percent.<sup>49</sup>

## **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.<sup>50</sup> 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 tax rates and exempt certain goods and services from VAT, requiring them to levy higher standard tax 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.<sup>51</sup> down into three subcategories: the tax rate, the tax 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 standard 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 higher 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 19.0 percent. Hungary has the highest tax rate at 27 percent, while the United States has the lowest tax rate at 7.4 percent.<sup>52</sup>

#### A country's consumption tax score is broken

<sup>49</sup> OECD, "OECD Tax Database, Table II.4 - Overall statutory tax rates on dividend income," updated May 2022, https://stats.oecd.org/Index. aspx?DataSetCode=TABLE\_II4.

<sup>50</sup> 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).

<sup>51</sup> Janelle Fritts and Jared Walczak, 2022 State Business Tax Climate Index, Tax Foundation, Dec. 16, 2021, https://www.taxfoundation.org/2022-state-business-tax-climate-index/.

<sup>52</sup> OECD, "Taxes on Consumption: Value Added Tax/Goods and Services Tax (VAT/GST) (1976-2021): VAT/GST: standard and any reduced rates (2021)," http://www.oecd.org/tax/tax-policy/tax-database/. The U.S. sales tax rate is the average of all U.S. state sales tax rates (weighted by population). See Janelle Fritts, "State and Local Sales Tax Rates, 2022," Tax Foundation, Feb. 3, 2022, https://www.taxfoundation.org/2022-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**

consumption	Палез					
Country	Overall Rank	Overall Score	Rate Rank	Rate Score	Base Rank	Base Score
Australia	9	79.3	3	89.5	30	45.0
Austria	17	58.2	16	49.0	14	58.8
Belgium	24	49.9	21	44.9	25	50.5
Canada	8	79.5	6	79.8	20	56.4
Chile	11	72.5	13	53.0	3	76.2
Colombia	18	56.5	13	53.0	22	51.4
Costa Rica	7	80.3	7	77.3	12	60.4
Czech Republic	25	49.7	21	44.9	26	50.2
Denmark	20	53.6	35	28.7	4	74.8
Estonia	14	61.4	16	49.0	11	63.7
Finland	21	52.8	32	32.8	9	69.0
France	33	39.6	16	49.0	36	30.1
Germany	15	60.9	13	53.0	15	58.3
Greece	30	44.8	32	32.8	19	56.7
Hungary	38	30.6	38	20.6	29	48.7
Iceland	28	45.6	32	32.8	16	57.9
Ireland	36	31.8	29	36.8	35	31.9
Israel	10	74.0	10	61.1	8	69.2
Italy	37	30.7	27	40.9	37	25.6
Japan	5	82.6	3	89.5	28	50.1
Korea	2	97.2	3	89.5	6	72.5
Latvia	26	49.7	21	44.9	27	50.2
Lithuania	31	42.5	21	44.9	32	39.2
Luxembourg	6	81.0	10	61.1	2	80.0
Mexico	12	66.9	9	65.2	21	53.6
Netherlands	16	58.6	21	44.9	10	64.1
New Zealand	1	100.0	8	69.2	1	100.0
Norway	23	51.7	35	28.7	7	71.9
Poland	35	32.9	29	36.8	34	33.6
Portugal	27	48.4	29	36.8	18	57.5
Slovak Republic	29	45.3	16	49.0	33	38.8
Slovenia	32	42.1	27	40.9	31	43.2
Spain	19	54.6	21	44.9	17	57.9
Sweden	22	52.2	35	28.7	5	72.6
Switzerland	4	90.1	2	98.8	24	50.9
Turkey	13	65.0	12	57.1	13	60.0
United Kingdom	34	35.4	16	49.0	38	23.6
United States	3	91.3	1	100.0	23	51.3

### **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 standard rate than would otherwise be necessary, or apply the tax to business inputs, increasing the cost of capital.

#### 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.<sup>53</sup> 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 \$118,671<sup>54</sup>. Seven countries receive the best scores for having no general VAT/sales tax exemption threshold (Chile, Colombia, Costa Rica, Mexico, Spain, Turkey, and the United States). The average across the OECD countries that have a VAT threshold is approximately \$56,300.<sup>55</sup>

## *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.<sup>56</sup>

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, New Zealand has the broadest tax base covering approximately 100 percent of total consumption. Luxembourg and Estonia follow with ratios of 0.78 and 0.73, respectively. Mexico (0.37), Colombia (0.35), and the United States (0.34) have the worst ratios. The OECD average tax base ratio is 0.54.<sup>57</sup>

<sup>53</sup> The VAT exemption thresholds listed in the Index generally apply to resident businesses. Nonresident businesses might face different thresholds.

<sup>54</sup> Measured in U.S. dollars (purchasing power parity, PPP).

<sup>55</sup> OECD, "Taxes on Consumption: Value Added Tax/Goods and Services Tax (VAT/GST) (1976-2019): VAT/GST: Registration/Collection Thresholds (2021)."

<sup>56</sup> The same concept can be applied to retail sales taxes.

<sup>57</sup> The VAT Revenue Ratio was calculated using the following formula in line with the OECD's VRR calculations: VRR = VAT Revenue/[(Consumption - VAT revenue) x standard VAT rate]. The calculations are based on OECD, "Consumption Tax Trends 2018," Dec. 5, 2018, https://read.oecd-ilibrary.org/taxation/ consumption-tax-trends-2018\_ctt-2018-en#page92.

## **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 real estate.

Many types of property taxes are highly distortive and add significant complexity for taxpayers. 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.<sup>58</sup> Taxes on wealth limit the capital available in the economy, which damages long-term economic growth and innovation.<sup>59</sup>

Sound tax policy minimizes economic distortions. Except for taxes on land, most property taxes increase economic distortions and have long-term negative effects on the 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. 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 real 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 structures and buildings 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 tax 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 excludes the value of any buildings or structures

<sup>58</sup> Colin Miller and Anna Tyger, "The Impact of a Financial Transaction Tax," Tax Foundation, Jan. 23, 2020, https://www.taxfoundation.org/ financial-transaction-tax/.

<sup>59</sup> Huaqun Li and Karl Smith, "Analysis of Sen. Warren and Sen. Sanders' Wealth Tax Plans," Tax Foundation, Jan. 27, 2020, https://www.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	4	79.4	2	82	1	100.0	14	64.8
Austria	15	64.4	30	49.4	1	100.0	14	64.8
Belgium	31	45.1	24	62.8	34	49.1	26	48.6
Canada	25	53.3	34	38.6	1	100.0	29	47.4
Chile	13	67.6	20	66.4	11	70.4	6	84.6
Colombia	24	54.2	21	64	32	57.4	23	64.0
Costa Rica	12	68.3	12	71.7	1	100.0	32	46.5
Czech Republic	6	76.9	6	75	11	70.4	1	100.0
Denmark	19	62.6	25	58.8	11	70.4	8	80.2
Estonia	1	100.0	1	100	1	100.0	1	100.0
Finland	20	61.2	17	68	11	70.4	23	64.0
France	35	39.3	28	50.1	34	49.1	26	48.6
Germany	11	68.7	11	72.1	11	70.4	8	80.2
Greece	30	46.4	31	48.6	11	70.4	29	47.4
Hungary	18	62.7	14	70.7	11	70.4	14	64.8
Iceland	28	47.9	38	23.6	11	70.4	6	84.6
Ireland	17	63.6	8	73.2	11	70.4	23	64.0
Israel	10	70.1	29	50.1	1	100.0	8	80.2
Italy	38	32.6	35	37.2	34	49.1	32	46.5
Japan	27	50.1	26	56.5	11	70.4	29	47.4
Korea	33	42.6	33	40.8	11	70.4	32	46.5
Latvia	5	77.9	18	67.1	1	100.0	8	80.2
Lithuania	7	75.6	10	72.1	11	70.4	1	100.0
Luxembourg	14	65.2	3	76.2	11	70.4	14	64.8
Mexico	9	70.1	5	75.2	11	70.4	8	80.2
Netherlands	22	59.5	22	63.8	11	70.4	14	64.8
New Zealand	2	86.9	13	71.5	1	100.0	1	100.0
Norway	16	63.7	9	72.4	32	57.4	8	80.2
Poland	32	43.8	27	55.2	11	70.4	37	31.2
Portugal	21	60.9	19	66.8	11	70.4	14	64.8
Slovak Republic	3	86.5	15	70.7	1	100.0	1	100.0
Slovenia	26	50.9	32	45.1	11	70.4	14	64.8
Spain	37	36.4	23	63.5	37	27.8	32	46.5
Sweden	8	73.4	16	68.9	1	100.0	14	64.8
Switzerland	36	36.5	4	75.4	37	27.8	37	31.2
Turkey	23	58.0	7	74.3	11	70.4	32	46.5
United Kingdom	34	39.8	37	33.3	11	70.4	26	48.6
United States	29	46.8	36	36.2	11	70.4	14	64.8

on the land.<sup>60</sup> Of the 35 OECD countries with taxes on all capital, 30 allow for a deduction against corporate taxable income.<sup>61</sup>

#### Real Property Tax Collections

The variable "property tax collections" measures 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*. Seven 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 (1.7 percent), the United States (1.6 percent), and Canada (1.5 percent). Austria, the Czech Republic, Luxembourg, Mexico, and Switzerland have a real property tax burden of below 0.1 percent of the private capital stock.<sup>62</sup>

### 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 wealth. Estate and inheritance taxes limit resources available for investment or production and reduce the incentive to save and invest.<sup>63</sup> 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.

#### Wealth Taxes

In addition to estate and inheritance taxes, some countries levy wealth taxes. Wealth taxes are often low-rate, progressive taxes on an individual's or family's assets or the assets of a corporation. Unlike estate taxes, wealth taxes are levied on an annual basis. While some countries levy a comprehensive tax on net wealth, others limit their wealth taxes to selected assets, such as security accounts, financial assets held abroad, or real estate.

Four countries levy net wealth taxes, namely Colombia, Norway, Spain, and Switzerland. Belgium, France, and Italy impose wealth taxes on selected assets. Countries with no type of wealth tax receive the best score, countries with wealth taxes on selected assets receive an average score, and countries with net wealth taxes receive the lowest score.<sup>64</sup>

#### 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

<sup>60</sup> 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=10.1.1195.4348&rep=rep1&type=pdf. See also PwC, "Worldwide Tax Summaries: Corporate Taxes."

<sup>61</sup> Deloitte, "Tax Guides and Highlights," https://www.dits.deloitte.com/#TaxGuides; Bloomberg Tax, "Country Guides"; and PwC, "Worldwide Tax Summaries: Corporate - Income Determination."

<sup>62</sup> Author's calculations using OECD, "OECD Revenue Statistics - OECD Countries: Comparative tables," updated December 2021, https://stats.oecd.org/ index.aspx?DataSetCode=rev; and IMF, "IMF Investment and Capital Stock Dataset, 1960-2019," May 2021, https://infrastructuregovern.imf.org/content/ dam/PIMA/Knowledge-Hub/dataset/IMFInvestmentandCapitalStockDataset2021.xlsx.

<sup>63</sup> Jared Walczak, "State Inheritance and Estate Taxes: Rates, Economic Implications, and the Return of Interstate Competition," Tax Foundation, July 17, 2017, https://www.taxfoundation.org/state-inheritance-estate-taxes-economic-implications/#\_ftn84.

<sup>64</sup> Bloomberg Tax, "Country Guides"; and EY, "Worldwide Estate and Inheritance Tax Guide 2021," https://www.ey.com/en\_gl/tax-guides/ worldwide-estate-and-inheritance-tax-guide.

the transfer of property (cash, stocks, and other property) that are typically used to prevent individuals from circumventing estate and inheritance taxes by gifting away their assets before death.

Rates, exemption levels, and rules vary substantially among countries. For example, the United States levies a top rate of 40 percent on estates but has an exemption level of \$12.1 million. Belgium's Brussels capital region, on the other hand, has an inheritance tax with an exemption of €15,000 (\$17,730 USD<sup>65</sup>) and a variety of tax rates depending on who receives assets from the estate and what the assets are.<sup>66</sup>

Estate, inheritance, and gift taxes create significant compliance costs for taxpayers while raising insignificant amounts of revenue. According to OECD data for 2019, 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 0.6 percent of GDP in Belgium, despite Belgium's top inheritance tax rate of up to 80 percent in some cases.<sup>67</sup>

Countries without these taxes score better than countries that have them. Twelve countries in the OECD have no estate, inheritance, or gift taxes: Australia, Austria, Canada, Colombia, Costa Rica, Estonia, Israel, Latvia, New Zealand, Norway, Slovak Republic, and Sweden. All others levy an estate, inheritance, or gift tax.<sup>68</sup>

## Capital, Wealth, and Property Taxes on Businesses

There are various taxes countries 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.<sup>69</sup> 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. Seven OECD countries do not have property transfer taxes: Chile, the Czech Republic, Estonia, Iceland, Lithuania, New Zealand, and Slovakia.<sup>70</sup>

### Corporate Asset Taxes

Similar to wealth taxes, 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.<sup>71</sup> Similarly, cantons in Switzerland levy taxes on the net assets of corporations, varying from 0.001 percent to 0.5 percent of corporate

<sup>65</sup> The average 2021 EUR-USD exchange rate was used. See IRS, "Yearly Average Currency Exchange Rates."

<sup>66</sup> EY, "Worldwide Estate and Inheritance Tax Guide 2021."

<sup>67</sup> OECD, "OECD Revenue Statistics - OECD Countries: Comparative tables."

<sup>68</sup> Bloomberg Tax, "Country Guides"; and EY, "Worldwide Estate and Inheritance Tax Guide 2021."

<sup>69</sup> Janelle Fritts and Jared Walczak, 2022 State Business Tax Climate Index.

<sup>70</sup> Deloitte, "Tax Guides and Highlights;" and Bloomberg Tax, "Country Guides."

<sup>71</sup> Luxembourg 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," Mar. 22, 2017, http://www.guichet.public.lu/entreprises/en/fiscalite/impots-benefices/impots-divers/impot-fortune/index. html.

net assets.<sup>72</sup> Other countries levy these taxes exclusively on bank assets.

Nineteen OECD countries have some type of corporate wealth or asset tax. Fourteen of these countries have bank taxes of some type.<sup>73</sup>

### **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.<sup>74</sup> These types of taxes increase the cost of capital, limit funds available for investment, and make it more difficult to form businesses.<sup>75</sup>

Countries with capital duties score worse than countries without them. Ten countries in the OECD levy some type of capital duty.<sup>76</sup>

### 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.<sup>77</sup> 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.<sup>78</sup>

The *ITCI* ranks countries with financial transaction taxes worse than countries without them. Thirteen countries in the OECD have financial transaction taxes, including France and the United Kingdom, while 25 countries do not impose financial transaction taxes.<sup>79</sup>

## Cross-Border Tax Rules

In an increasingly globalized economy, businesses often expand beyond the borders of their home countries to reach customers and build supply chains around the world. Countries have defined rules that determine how, or if, corporate income earned in foreign countries is taxed domestically. Cross-border 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.<sup>80</sup> In a pure territorial tax system, corporations only pay taxes to the country in which they earn income.

<sup>72</sup> PwC, "Worldwide Tax Summaries: Corporate Taxes - Other taxes."

<sup>73</sup> Bloomberg Tax, "Country Guides - Other Taxes," and "Country Guides - Special Industries," https://www.bloomberglaw.com/product/tax/ toc\_view\_menu/3380.

<sup>74</sup> PwC, "Worldwide Tax Summaries: Corporate Taxes."

<sup>75</sup> 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.

<sup>76</sup> Bloomberg Tax, "Country Guides;" and PwC, "Worldwide Tax Summaries: Corporate Taxes."

<sup>77</sup> Ibid.

<sup>78</sup> Colin Miller and Anna Tyger, "The Impact of a Financial Transaction Tax."

<sup>79</sup> Ibid.

<sup>80</sup> Narine Nersesyan, "Chapter 3: The Current International Tax Architecture: A Short Primer," in Corporate Income Taxes under Pressure Why Reform Is Needed and How It Could Be Designed (Washington, D.C.: International Monetary Fund, 2021), https://www.imf.org/en/Publications/Books/Issues/2021/03/01/ Corporate-Income-Taxes-under-Pressure-Why-Reform-Is-Needed-and-How-It-Could-Be-Designed-48604.

## TABLE 7.

## **Cross-Border Tax Rules**

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	Anti-Tax Avoidance Rank	Anti-Tax Avoidance Score
Australia	23	73.9	1	100.0	28	40.7	33	44.6	4	64.5
Austria	7	87.3	1	100.0	16	59.1	12	73.3	8	47.0
Belgium	19	77.8	1	100.0	37	25.7	6	77.2	8	47.0
Canada	16	80.5	32	69.8	32	38.1	4	77.8	4	64.5
Chile	38	35.6	36	27.9	36	30.9	36	36.8	22	46.6
Colombia	36	46.5	29	76.4	29	40.3	37	21.8	22	46.6
Costa Rica	17	80.0	1	100.0	19	54.1	38	17.2	1	100.0
Czech Republic	11	84.1	16	81.6	13	62.9	10	75.9	8	47.0
Denmark	30	64.1	16	81.6	25	45.5	21	64.2	31	29.1
Estonia	14	83.1	16	81.6	3	91.2	27	55.0	8	47.0
Finland	22	75.3	16	81.6	11	65.5	20	64.8	25	38.1
France	15	81.5	28	77.3	18	54.2	2	94.8	31	29.1
Germany	6	90.4	15	97.3	12	63.7	4	77.8	8	47.0
Greece	25	73.4	16	81.6	10	66.9	31	52.4	8	47.0
Hungary	3	99.1	1	100.0	1	100.0	18	68.7	8	47.0
Iceland	31	63.7	1	100.0	17	56.5	33	44.6	31	29.1
Ireland	32	62.0	35	51.5	24	46.2	22	62.9	8	47.0
Israel	10	84.8	1	100.0	34	37.1	30	53.1	3	82.1
Italy	27	69.3	26	78.9	31	38.7	3	80.4	31	29.1
Japan	26	69.9	31	74.9	22	49.4	23	61.5	8	47.0
Korea	33	57.3	36	27.9	25	45.5	8	76.5	25	38.1
Latvia	9	86.5	16	81.6	1	100.0	26	55.7	8	47.0
Lithuania	24	73.8	16	81.6	8	71.0	32	50.5	8	47.0
Luxembourg	5	95.0	1	100.0	4	87.3	17	69.4	8	47.0
Mexico	37	37.8	36	27.9	35	34.5	28	53.7	31	29.1
Netherlands	4	98.1	1	100.0	4	87.3	11	75.2	8	47.0
New Zealand	21	75.5	1	100.0	21	50.1	35	41.3	4	64.5
Norway	13	83.3	25	80.7	6	78.8	13	72.0	25	38.1
Poland	29	66.3	34	58.0	20	51.3	14	71.3	25	38.1
Portugal	28	66.5	16	81.6	32	38.1	19	66.1	25	38.1
Slovak Republic	34	56.4	16	81.6	30	39.4	24	60.9	38	20.1
Slovenia	20	76.0	33	67.7	13	62.9	28	53.7	4	64.5
Spain	18	79.0	26	78.9	23	48.6	6	77.2	8	47.0
Sweden	12	83.4	1	100.0	7	74.6	16	70.7	31	29.1
Switzerland	2	99.5	1	100.0	27	44.1	8	76.5	2	82.5
Turkey	8	87.2	1	100.0	15	62.2	14	71.3	22	46.6
United Kingdom	1	100.0	1	100.0	9	67.4	1	100.0	25	38.1
United States	35	52.6	29	76.4	37	25.7	25	58.3	31	29.1

Since the 1990s, the number of OECD countries with worldwide tax systems has dropped from more than 20 to a handful.<sup>81</sup>

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.<sup>82</sup>

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 minimum tax on super-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.

The proposal for a global minimum tax will dramatically change the landscape for crossborder tax rules. However, those rules will not be in place until the end of 2023 at the earliest.<sup>83</sup>

Table 7 displays the overall rank and score for the Cross-Border Tax 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 anti-tax avoidance rules.

## Territoriality

Under a territorial tax system, multinational businesses pay taxes to the countries in which they earn their income. This means that territorial tax regimes do not generally tax 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. Several 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 foreignearned 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 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.<sup>84</sup>

<sup>81</sup> Ibid.

<sup>82</sup> Kyle Pomerleau, "A Hybrid Approach: The Treatment of Foreign Profits under the Tax Cuts and Jobs Act," Tax Foundation, May 3, 2018, https://www. taxfoundation.org/treatment-foreign-profits-tax-cuts-jobs-act/.

<sup>83</sup> Daniel Bunn and Sean Bray, "What's in the New Global Tax Agreement?" Tax Foundation, Apr. 7, 2022, https://www.taxfoundation.org/ global-tax-agreement/.

<sup>84</sup> Kyle Pomerleau, Daniel Bunn, and Thomas Locher, "Anti-Base Erosion Provisions and Territorial Tax Systems in OECD Countries," Tax Foundation, July 7, 2021, https://www.taxfoundation.org/anti-base-erosion-territorial-tax-systems.

The territoriality of a tax system is measured by the degree to which a country exempts foreignsourced 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-seven OECD countries exempt all foreign-sourced dividends received by parent companies from domestic taxation. Seven countries allow 95 percent or 97 percent of foreign-sourced dividends to be exempt from domestic taxation. Four OECD countries have a worldwide or hybrid tax system that generally does not exempt foreign-sourced dividends from domestic taxation.<sup>85</sup>

## 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 in 25 OECD countries. Six countries partially exclude foreign-sourced capital gains. Seven countries do not exclude foreign-sourced capital gains income from domestic taxation.<sup>86</sup>

## **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 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, several countries restrict their territorial systems based on a "blacklist" of countries that do not follow certain requirements. Among European Union (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

<sup>85</sup> Deloitte, "Tax Guides and Highlights 2022"; Bloomberg Tax, "Country Guide"; EY, "Worldwide Corporate Tax Guide 2021"; and PwC, "Worldwide Tax Summaries."

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.<sup>87</sup> 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.<sup>88</sup>

In the OECD, 20 of 35 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.<sup>89</sup> 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 unless a tax treaty provides otherwise.

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.

For royalties, Mexico requires firms to retain the highest amount, at 35 percent, followed by Australia, Belgium, 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.<sup>90</sup>

### **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. Costa Rica receives the worst

<sup>87</sup> Deloitte, "Tax Guides and Highlights – Portugal Highlights 2021," https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-taxportugalhighlights-2021.pdf.

<sup>88</sup> Deloitte, "Tax Guides and Highlights – Italy Highlights 2022," https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Tax/dttl-taxitalyhighlights-2022.pdf.

<sup>89</sup> Deloitte, "Tax Guides and Highlights 2022"; Bloomberg Tax, "Country Guide"; EY, "Worldwide Corporate Tax Guide 2021"; and PwC, "Worldwide Tax Summaries."

<sup>90</sup> Deloitte, "Domestic rates: Withholding tax," https://www.dits.deloitte.com/#DomesticRatesSubMenu.

score, with a treaty network of only nine countries. Across the OECD, the average size of a tax treaty network is 74 countries.<sup>91</sup>

## **Anti-Avoidance Rules**

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

Anti-avoidance rules can have the effect of making countries with uncompetitive tax structures even less competitive, as these rules can add significant complexity.<sup>92</sup>

## Controlled Foreign Corporation (CFC) Rules

CFC rules are intended to prevent corporations from shifting their pretax profits from a hightax 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 applygenerally 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. GILTI is treated separately by the *Index* because it operates as a minimum tax on foreign earnings that uses a formula to assess tax liability rather than standard distinctions of active or passive income.

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.<sup>93</sup>

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.<sup>94</sup> All EU member states have adopted CFC rules.<sup>95</sup>

Each country's score in this subcomponent is based on three aspects of CFC rules: 1) whether there are CFC rules; and 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

<sup>91</sup> EY, "Worldwide Corporate Tax Guide: 2021." 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.

<sup>92</sup> Thomas Hoppe, Deborah Schanz, Susann Sturm, and Caren Sureth-Sloane, "The Tax Complexity Index – A Survey-Based Country Measure of Tax Code and Framework Complexity," TRR 266 Accounting for Transparency Working Paper Series No. 5, WU International Taxation Research Paper Series No. 2019-06, Sept. 16, 2020, https://papers.srn.com/sol3/papers.cfm?abstract\_id=3469663.

<sup>93</sup> Kyle Pomerleau, Daniel Bunn, and Thomas Locher, "Anti-Base Erosion Provisions and Territorial Tax Systems in OECD Countries."

<sup>94</sup> European Commission, "The Anti Tax Avoidance Directive," Jan. 28, 2016, https://ec.europa.eu/taxation\_customs/anti-tax-avoidance-directive\_en.

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

worst if they have CFC rules that apply to all income and have no exemptions.

CFC rules exist in 36 of the 38 OECD countries, with Costa Rica and Switzerland being the only exceptions. In four of the 36 countries with CFC rules the rules capture both active and passive income, while in 12 countries the rules have a threshold for treating all income as passive income. In the remaining 20 countries with CFC rules, they only apply to passive income or income associated with non-genuine arrangements.<sup>96</sup>

#### 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.<sup>97</sup> 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.<sup>98</sup> 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.<sup>99</sup>

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 36 of the 38 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. Costa Rica and Israel have no established limitations on interest deductions and rely on transfer pricing rules.<sup>100</sup>

<sup>96</sup> 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://www. taxsummaries.pwc.com/australia/corporate/group-taxation.

<sup>97</sup> 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.

<sup>98</sup> Ibid.

<sup>99</sup> For more details, see "Allowance for Corporate Equity" in the ITCI section "Corporate Income Tax."

<sup>100</sup> 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."

### General Anti-Tax Avoidance Rules

Many countries apply general anti-tax 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.<sup>101</sup> These complex tax regimes result in high compliance costs for multinational companies as well as double taxation of some corporate profits.

Anti-abuse provisions of this nature are not currently accounted for in the *Index*. However, if they were appropriately accounted for, countries like Australia, the United Kingdom, and the United States would likely receive worse scores on their cross-border tax rules potentially also impacting their overall ranking on the *Index*.

<sup>101</sup> Kyle Pomerleau, Daniel Bunn, and Thomas Locher, "Anti-Base Erosion Provisions and Territorial Tax Systems in OECD Countries."

## Australia 🗱

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
11	75.5	29	20	9	4	23

Australia ranks 11<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, two places worse than in 2021.

#### 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 74.
- The corporate tax rate in Australia is 30 percent, above the OECD average (23.6 percent).
- Corporations are limited in their ability to write off investments.

## Austria 💳

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
18	68.6	23	32	17	15	7

Austria ranks 18<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, two places worse than in 2021.

#### Some strengths of the Austrian tax system:

- Austria's international tax system is relatively competitive as it is fully territorial without any country limitations, has a broad tax treaty network of 89 countries, and Controlled Foreign Corporation rules that only apply to subsidiaries that do not have substantial economic activity.
- The value-added tax (VAT) in Austria applies to a broad base.
- There are no estate, inheritance, or wealth taxes.

#### Some weaknesses of the Austrian tax system:

- The headline corporate rate of 25 percent is slightly above the OECD average (23.6 percent).
- Austria implemented a digital services tax (DST) in 2020.
- The tax wedge on labor is the 3rd highest among OECD countries.

**7∆**th

6<sup>th</sup>

## Belgium

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
24	65.1	14	13	24	31	19

Belgium ranks 24<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, one spot better than in 2021.

#### 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 provides an allowance for corporate equity (ACE) to address the debt bias that is inherent to the standard corporate income tax.

#### Some weaknesses of the Belgium tax system:

- The corporate rate of 25 percent is slightly above average among OECD countries (23.6 percent).
- Belgium levies an estate tax and a financial transaction tax and introduced a new annual tax on securities accounts.
- The Belgian tax wedge on labor is the highest among the OECD countries, with the average wage single worker facing a tax burden of 52.6 percent.

## Canada 时

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
16	69.3	27	31	8	25	16

Canada ranks 16<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, two spots better than in 2021.

#### Some strengths of the Canadian tax system:

- Consumption taxes are low, though the consumption tax base is relatively narrow.
- 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 24.2 percent.
- Canada taxes capital gains at a rate of 26.75 percent, while the OECD average is 19 percent.
- The corporate rate of 26.2 percent is above average among OECD countries (23.6 percent).



Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
27	61.9	13	34	11	13	38

Chile ranks 27<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, one spot worse than in 2021.

#### Some strengths of the Chilean tax system:

- As a response to the COVID-19 pandemic, Chile temporarily allows businesses to immediately write off investments in buildings and machinery and to immediately amortize intangibles.
- Chile temporarily reduced its corporate income tax rate to 10 percent for smaller businesses.
- Chile has the second lowest tax wedge on labor among OECD countries at 7 percent, compared to the OECD average of 34.6 percent.

#### Some weaknesses of the Chilean tax system:

- Chile has a relatively small tax treaty network with just 33 treaties.
- The tax rate on capital gains is 40 percent, well above the OECD average of 19 percent.
- Chile has a worldwide tax system, while most OECD countries have territorial provisions.

### Colombia 🗕

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
32	57.8	38	2	18	24	36

Colombia ranks 32<sup>nd</sup> overall on the 2022 *International Tax Competitiveness Index*, three places better than in 2021.

#### Some strengths of the Colombian tax system:

- A worker earning the nation's average wage faces the lowest tax burden in the OECD.
- Colombia taxes dividends and capital gains at very low rates.
- While capital gains resulting from inheritance and gifts received are subject to a 10 percent tax, there is no comprehensive estate or inheritance tax.

#### Some weaknesses of the Colombian tax system:

- The VAT base is very narrow, covering less than 40 percent of Colombian consumption.
- Colombia levies a net wealth tax and a financial transactions tax.
- At 35 percent, Colombia's corporate income tax rate is significantly above the OECD average (23.6 percent).

### 32<sup>nd</sup>



Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
19	67.5	36	33	7	12	17

Costa Rica ranks 19<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, one place better than in 2021.

#### Some strengths of the Costa Rican tax system:

- Costa Rica has neither a net wealth nor an estate tax.
- The VAT rate is just 13 percent, below the OECD average of 19 percent.
- Capital gains and dividends are both taxed at rates below the OECD average.

#### Some weaknesses of the Costa Rican tax system:

- Costa Rica has just three tax treaties while the average in the OECD is 74.
- Costa Rica has five separate tax brackets for corporate income.
- At 30 percent, Costa Rica's corporate income tax rate is significantly above the OECD average (23.6 percent).

### Czech Republic 🛏

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
5	81.9	6	5	25	6	11

The Czech Republic ranks 5<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, one place worse than in 2021.

#### Some strengths of the Czech tax system:

- The corporate rate of 19 percent is below the OECD average (23.6 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, combined with a broad tax treaty network.

#### Some weaknesses of the Czech tax system:

- The VAT threshold is relatively high, contributing to a distortionary VAT design.
- Net operating losses can only be carried forward for five years (they can, however, also be carried back for two years).
- The Czech Republic's thin capitalization rules are among the stricter ones in the OECD.

## Denmark

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Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
33	57.3	18	36	20	19	30

Denmark ranks 33<sup>rd</sup> overall on the 2022 *International Tax Competitiveness Index*, one place better than in 2021.

#### Some strengths of the Danish tax system:

- Corporate income taxes are relatively less complex than in other countries.
- 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 statutory personal income tax rate of 55.9 percent (including the surtax), the personal income tax rates on dividends and capital gains are both at 42 percent, well above the OECD averages of 24.2 percent and 19 percent, respectively.
- Net operating losses can be carried forward indefinitely but are limited to 60 percent of taxable income if they exceed a certain amount.
- Denmark uses First-In-First-Out for assessing the cost of inventory for tax purposes.

## Estonia 💻

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
1	100	2	1	14	1	14

Estonia ranks 1<sup>st</sup> overall on the 2022 *International Tax Competitiveness Index*, the same as in 2021, and for the ninth 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 61 countries, below the OECD average (74 countries).
- Estonia's territorial tax system is limited to European countries.
- Estonia's thin capitalization rules are among the more stringent ones in the OECD.

20<sup>th</sup>

## Finland 🛨

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
20	67.4	9	28	21	20	22

Finland ranks 20<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, one place better than in 2021.

#### Some strengths of the Finnish tax system:

- Finland has a relatively low corporate tax rate of 20 percent.
- The design of corporate and personal income taxes makes them relatively less complex than in other countries.
- 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's top statutory rate on personal income is relatively high at 51.3 percent (the OECD average is 42.5 percent).

### France

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
38	45.3	35	38	33	35	15

France ranks 38<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the French tax system:

- France has above-average cost recovery provisions for investments in machinery, buildings, and intangibles.
- After several years of reductions, France's corporate tax rate (25.8 percent) is much closer to the OECD average of 23.6 percent.
- 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, financial transactions, and a wealth tax on real estate.
- The tax burden on labor of 47 percent is among the highest for OECD countries.
- A reduced 10 percent tax rate applies to income derived from IP rights through a so-called patent box.

## 38<sup>th</sup>

## Germany **—**

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
15	70.2	30	26	15	11	6

Germany ranks 15<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the German tax system:

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

#### Some weaknesses of the German tax system:

- Germany has the sixth highest corporate income tax rate among OECD countries, at 29.9 percent.
- The corporate tax burden includes a 5.5 percent surtax.
- Companies are limited in the amount of net operating losses they can use to offset income on future or previous tax returns.

### Greece 🔚

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
29	59.2	19	17	30	30	25

Greece ranks 29<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, four places better than in 2021.

#### Some strengths of the Greek tax system:

- The net personal tax rate of 5 percent on dividends is significantly below the OECD average of 24.2 percent.
- The corporate income tax rate of 22 percent is below the OECD average of 23.6 percent.
- Controlled Foreign Corporation rules in Greece are modest and only apply to passive income.

#### Some weaknesses of the Greek 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.
- Greece has a relatively narrow tax treaty network (57 treaties compared to an OECD average of 74 treaties).
- At 24 percent, Greece has one of the highest VAT rates in the OECD on one of the narrowest bases.

## Hungary

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
7	77.9	5	6	38	18	3

Hungary ranks 7<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### 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 taxes on estates, real estate transfers, and bank assets.

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
31	57.9	16	19	28	28	31

Iceland ranks 31st overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the Icelandic tax system:

- Iceland's corporate tax rate of 20 percent is below the OECD average of 23.6 percent, and the tax treatment of investments is one of the best in the OECD.
- Corporate 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.

### Iceland 🔚





Nth

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
35	55.6	4	37	36	17	32

Ireland ranks 35th overall on the 2022 *International Tax Competitiveness Index*, seven spots worse than in 2021.

#### 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.
- The tax treaty network (73 treaties) is just below the average of 74 countries.

#### 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 📼

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
10	76	17	30	10	10	10

Israel ranks 10<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the Israeli tax system:

- Net operating losses can be carried forward indefinitely.
- The VAT rate is relatively low at 17 percent and applies to a relatively broad base.
- Israel does not levy wealth or estate taxes.

#### Some weaknesses of the Israeli tax system:

- Israel has complex incentives that reduce the corporate tax rate to as low as 7.5 percent on certain technology companies.
- The steep progressivity of Israel's taxes on labor leads to efficiency costs.
- Israel has a relatively narrow tax treaty network, with 58 countries (the OECD average is 74).

## Italy

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
37	49.1	24	15	37	38	27

Italy ranks 37<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the Italian tax system:

- Italy has above-average cost recovery provisions for investments in intangibles, as well as an allowance • for corporate equity (ACE).
- 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 transfers, estates, and financial transactions, as well as a wealth tax on selected assets.
- The VAT rate of 22 percent applies to the fourth narrowest consumption tax base in the OECD.
- The corporate tax rate of 27.8 percent is above the OECD average of 23.6 percent.

Japar						<b>21</b> <sup>st</sup>	
Overall Rank	Overall Score	Corporate Tax Rank	Individual Taxes Rank	Consumption Taxes Rank	Property Taxes Rank	Cross-Border Tax Rules Rank	
21	67.3	33	16	5	27	26	

Japan ranks 21<sup>st</sup> overall on the 2022 International Tax Competitiveness Index, four places worse than in 2021.

#### Some strengths of the Japanese tax system:

- Japan has a low VAT rate of 10 percent. •
- The consumption tax base is relatively broad, covering 65 percent of consumption.
- Japan's personal income tax rate on dividends is 20.3 percent, below the OECD average of 24.2 • 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, while many OECD countries have moved to a fully territorial system.
- Companies are severely limited in the amount of net operating losses they can use to offset future profits.





Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
25	64.1	34	27	2	33	33

Korea ranks 25<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, one spot worse than in 2021.

#### 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 transfers, estates, and financial transactions.
- The personal income tax rate on dividends is 44.0 percent (compared to an OECD average of 24.2 percent).
- Korea is one of the few OECD countries that operates a worldwide corporate tax system (rather than a territorial system).

## Latvia 〓

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
2	89.9	1	4	26	5	9

Latvia ranks 2<sup>nd</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### 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.
- 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.
- Latvia's thin-capitalization rules are among the stricter ones in the OECD.
- The threshold at which the VAT applies is significantly higher than the average VAT threshold for OECD countries.

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## Lithuania

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
8	76.9	3	11	31	7	24

Lithuania ranks 8<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### 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 23.6 percent.
- Lithuania's taxes on labor are 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 (74 countries). •
- Lithuania has both a patent box and a super deduction for Research and Development expenditures.
- Multinational businesses face strict thin capitalization rules. ۲

Luxer	Luxembourg <b></b>								
Overall Rank	Overall Score	Corporate Tax Rank	Individual Taxes Rank	Consumption Taxes Rank	Property Taxes Rank	Cross-Border Tax Rules Rank			
6	80.6	26	14	6	14	5			

Luxembourg ranks 6<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the Luxembourg tax system:

- Business investments in machinery and intangibles receive better-than-average tax treatment.
- Luxembourg applies its relatively low VAT rate of 17 percent to nearly 80 percent of final consumption.
- Capital gains are tax-exempt if a movable asset such as shares was held for at least six months, encouraging long-term savings.

#### 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 transfers, estates, and corporate net assets.
- Luxembourg has a solidarity tax which acts as a 7 percent surtax on personal income.





Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
30	58.4	28	29	12	9	37

Mexico ranks 30<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, one place worse than in 2021.

#### Some strengths of the Mexican tax system:

- The personal income tax rate on dividends is 17.1 percent, below the OECD average of 24.1 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:

- Business losses are severely restricted in the amount of profits that can be offset over time.
- The VAT base is the narrowest in the OECD, with only 37 percent of final consumption being taxed.
- Mexico has a higher-than-average corporate tax rate of 30 percent (the OECD average is 23.6 percent).

### Netherlands 🚍

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
14	71.3	25	22	16	22	4

The Netherlands ranks 14<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the Dutch tax system:

- The Netherlands allows net operating losses to be carried back one year, and the Last-In-First-Out treatment of the cost of inventory is allowed.
- The Netherlands has a territorial tax system exempting both foreign dividends and capital gains and a broad tax treaty network, with 92 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 49.5 percent.
- The VAT of 21 percent applies to approximately half of the potential consumption tax base.
- Companies are limited in the time period in which they can use net operating losses to offset future profits.

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## New Zealand

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
3	89.7	32	7	1	2	21

New Zealand ranks 3<sup>rd</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### 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 23.6 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 📒

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
17	69	15	23	23	16	13

Norway ranks 17<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, two places better than in 2021.

#### Some strengths of the Norwegian tax system:

- Norway allows corporate losses to be carried forward indefinitely.
- Norway's corporate income tax rate of 22 percent is close to the OECD average (23.6 percent).
- 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 is one of the few OECD countries that levies a net wealth tax.
- Controlled Foreign Corporation rules are applied to both passive and active income.

### 17<sup>th</sup>

#### 48 | COUNTRY PROFILES



**36**<sup>th</sup>

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
28	59.3	12	10	35	32	29

Poland ranks 28<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, two places better than in 2021.

#### Some strengths of the Polish tax system:

- Poland has a below-average corporate tax rate of 19 percent (OECD average is 23.6 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 broad tax treaty network including 86 countries.

#### Some weaknesses of the Polish tax system:

- Poland has multiple distortionary property taxes with separate levies on real estate transfers, estates, bank 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 write off just 33.8 percent of the cost of industrial buildings in real terms (the OECD average is 50.7 percent).

### Portugal 🗖

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
36	51.4	37	35	27	21	28

Portugal ranks 36<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the Portuguese tax system:

- Corporations can deduct their property taxes from their taxable income, and there is an allowance for corporate equity (ACE).
- 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 23.6 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 at a rate of 23 percent applies to just half of the potential consumption tax base.

## Slovak Republic 👛

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
13	74.1	21	3	29	3	34

The Slovak Republic ranks 13<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, two spots worse than in 2021.

#### 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 24.1 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, adding to the complexity of the system.

## Slovenia 🖮

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
23	66.1	7	12	32	26	20

Slovenia ranks 23rd overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### Some strengths of the Slovenian tax system:

- Slovenia has a 19 percent corporate tax rate, below the OECD average (23.6 percent).
- Slovenia's 22 percent VAT applies to a tax base of roughly the OECD average.
- Capital gains taxes are reduced the longer assets are held (a zero percent rate applies after holding an asset for at least 20 years), encouraging long-term savings.

#### Some weaknesses of the Slovenian tax system:

- Slovenia's tax treatment of investments in buildings and intangibles is below the OECD average.
- 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 transfers, estates, and bank assets.







Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
34	56.9	31	25	19	37	18

Spain ranks 34<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, two places worse than in 2021.

#### Some strengths of the Spanish tax system:

- Spain has a territorial tax system that exempts 95 percent of foreign dividends and capital gains income from taxation.
- The Spanish tax treaty network is made up of 95 countries.
- Property taxes can be deducted against corporate income taxes.

#### 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 transfers, net wealth, estates, and financial transactions.
- Spain has both a patent box and a credit for Research and Development.

### Sweden 🔚

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
12	74.2	8	18	22	8	12

Sweden ranks 12<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, the same as in 2021.

#### 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 85 countries.

#### Some weaknesses of the Swedish tax system:

- Sweden's personal dividend tax rate and capital gains tax rate are both 30 percent, above the OECD average (24.2 percent for dividends and 19 percent for capital gains).
- Sweden has a top statutory personal income tax rate of 52.3 percent.
- Sweden has Controlled Foreign Corporation rules that apply to both passive and active income.

### 12<sup>th</sup>

**A**th

## Switzerland 日

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
4	82.9	11	9	4	36	2

Switzerland ranks 4<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, one place better than in 2021.

#### Some strengths of the Swiss tax system:

- Switzerland has above-average cost recovery provisions for investments in buildings and intangibles.
- Switzerland has a broad tax treaty network, with 94 countries.
- The Swiss VAT of 7.7 percent applies to a broad base.

#### Some weaknesses of the Swiss tax system:

- Switzerland has multiple distortionary property taxes with separate levies on real estate transfers, 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.
- The VAT exemption threshold is almost twice as high as the OECD average.

### Turkey 🖸

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
9	76.6	20	8	13	23	8

Turkey ranks 9<sup>th</sup> overall on the 2022 International Tax Competitiveness Index, four places better than in 2021.

#### 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 (24.1 percent).
- Turkey provides an allowance for equity (ACE), addressing the debt bias inherent to the standard corporate income tax.

#### 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 less than half of the potential tax base.
- Turkey has multiple distortionary property taxes with separate levies on real estate transfers, estates, and financial transactions.



## United Kingdom **米**

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
26	62.9	10	24	34	34	1

The United Kingdom ranks 26<sup>th</sup> overall on the 2022 *International Tax Competitiveness Index*, one place better than in 2021.

#### Some strengths of the UK tax system:

- The corporate income tax rate is 19 percent, below the OECD average (23.6 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 top personal income tax rate on dividends is 39.35 percent, well above the OECD average (24.2 percent).
- The real property tax burden is among the highest in the OECD.
- The VAT at a rate of 20 percent applies to less than half of the potential consumption tax base.

### United States

Overall	Overall	Corporate	Individual	Consumption	Property	Cross-Border Tax
Rank	Score	Tax Rank	Taxes Rank	Taxes Rank	Taxes Rank	Rules Rank
22	66.8	22	21	3	29	35

The United States ranks 22<sup>nd</sup> overall on the 2022 *International Tax Competitiveness Index*, the same as in 2021.

#### 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:

- U.S. states' sales taxes apply, on average, to less than a third of the potential tax base.
- 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 38 OECD countries. It utilizes 41 variables across five categories: corporate income tax, individual taxes, consumption taxes, property taxes, and cross-border tax rules. Each category has multiple subcategories, and each subcategory can hold several of the 41 variables. For example, the consumption tax category contains two subcategories: rate and base. The consumption tax base subcategory then includes two variables: "VAT/sales tax threshold" and "VAT/sales tax base as a percent 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 38 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 38 countries.<sup>102</sup> For example, the average corporate income tax rate across the 38 OECD countries is about 23.6 percent, with a standard deviation of 5.3 percentage points. This means that on average, an OECD country's corporate tax rate is 5.3 percentage points off from the mean rate of 23.6 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 (z-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, the average corporate income tax rate among the 38 OECD countries is 23.6 percent, and the standard deviation is 5.3 percentage points. The United States' corporate tax rate normalized score is -0.4,<sup>103</sup> or 0.4 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.

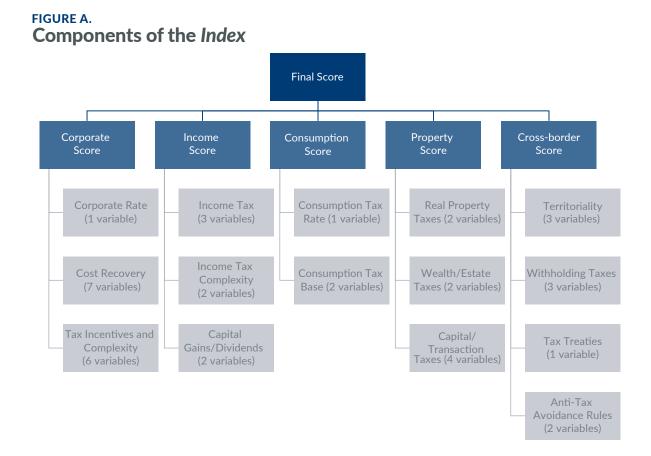
The next step is to combine variable scores to calculate subcategory scores. Within subcategories, each individual variable's score is equally weighted and added together. For instance, the subcategory of cost recovery includes seven variables: loss carryback, loss carryforward, the present discounted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

### **Calculating Subcategory Scores**

From here, two transformations occur. First, to eliminate any negative values, the lowest z-score is multiplied by -1. Then one is added to that value. For example, Colombia has the worst z-score for the corporate income tax rate

<sup>102</sup> To calculate the standard deviation, we find the mean of a variable (corporate tax rates, for example) and the difference of each country's tax rate from the mean tax rate among the 38 countries. We then take each country's difference from the mean and find the average difference for the group.

<sup>103</sup> The true normal score is 0.5. The score is a negative value to reflect the fact that being higher than the OECD average is less ideal.



subcategory (-2.15). Thus, -2.1549 multiplied by negative one is 2.159. Adding one to that product gives 3.159. Then 3.15 is added to each country's z-score giving the adjusted z-score. This sets the worst score in each subcategory to 1. For Colombia, -2.15 plus 3.15 equals 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 2.74, 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 is averaged to create the initial category score. Then, the worst z-score is multiplied by minus one and one is added to that product That resulting amount is added to each country's z-score. For example, Colombia has the worst initial corporate category score of -0.95. Thus, -0.95 multiplied by negative one is 0.95. Adding one to that product gives 1.95. Then 1.95 is added to each country's initial category score to give the adjusted initial category score. This sets the worst score in each category to 1. For Colombia, -0.95 plus 1.95 equals 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, Chile, which has the best corporate category score, has the best adjusted category score of 1.12, and receives a final category score of 100.

100

### **Calculating 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 lowest value of the initial final score is multiplied by negative one and one is added to that product. That resulting amount is added to each country's initial final score. For example, France has the worst initial final score of -0.51. Thus, -0.51 multiplied by negative one is 0.51. Adding one to that product gives 1.51. Then 1.51 is added to each country's initial final score (the adjusted initial final score). This sets the worst score in each category to 1.

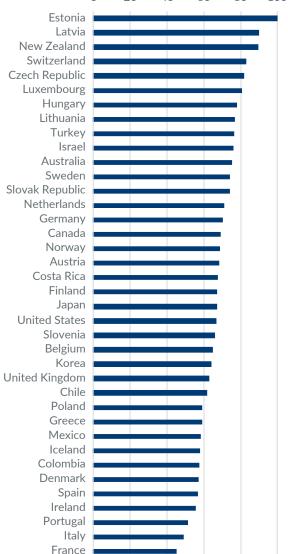
Second, the adjusted initial final scores for each country are scaled to 100, relative to the country with the best score in each category. This is done by taking each country's adjusted initial final score and dividing it by the best adjusted initial final score in each category. For example, Estonia, which has the best final score, has the best adjusted final score of 2.21, 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 45.3 (France), there are nine countries with scores in the 70s and 12 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 size of the VAT base) can mean the difference of several rank positions.

The distribution of the scores also shows the distance between first and second place, again demonstrating how significantly different the Estonian tax system is even relative to the OECD country with the second most competitive and neutral tax system, Latvia (with a final score of 89.9).

## FIGURE B. Distribution of Final Scores



### **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
- PwC Worldwide Tax Summaries

The *ITCI* uses the most up-to-date data available as of July 2022. Data may not reflect changes in countries making rapid reforms. See footnotes for specific data citations. A detailed source documentation can be found at www.github.com/TaxFoundation/international-tax-competitiveness-index.

### APPENDIX TABLE A.

### **Corporate Taxes**

	Corporate Rate		Cost Recovery			
	Top Marginal					
Country	Corporate Tax Rate	Loss Carryback (Number of Years)	Loss Carryforward (Number of Years)	Machinery	Industrial Buildings	Intangibles
Australia	30.00%	0	No Limit	85.10%	47.90%	54.80%
Austria	25.00%	0	No Limit, capped at 75% of taxable income	88.40%	56.70%	73.80%
Belgium	25.00%	0	No Limit, capped at 70% of taxable income exceeding EUR 1 million	87.00%	54.80%	87.00%
Canada	26.20%	3	20	100.00%	42.60%	49.00%
Chile	27.00%	0	No Limit	100.00%	100.00%	100.00%
Colombia	35.00%	0	12	73.80%	30.60%	87.00%
Costa Rica	30.00%	0	3	82.20%	60.20%	0.00%
Czech Republic	19.00%	2, limited to CZK 30 million	5	87.40%	54.30%	84.10%
Denmark	22.00%	0	No Limit, capped at 60% of taxable income exceeding DKK 8,767,500 for 2021	82.70%	47.90%	81.30%
Estonia	20.00%	No Limit (Cash-flow Tax)	No Limit (Cash-flow Tax)	100.00%	100.00%	100.00%
Finland	20.00%	0	10	93.50%	51.90%	73.80%
France	25.80%	1, limited to EUR 1 million	No Limit, capped at 50% of taxable income exceeding EUR 1 million	88.00%	54.80%	87.00%
Germany	29.80%	1, limited to EUR 10 million	No Limit, capped at 60% of taxable income exceeding EUR 1 million	84.70%	39.10%	87.00%
Greece	22.00%	0	5	73.80%	47.90%	73.80%
Hungary	9.00%	0	5, capped at 50% of taxable income	81.60%	27.90%	73.80%
Iceland	20.00%	0	10	86.00%	60.20%	81.20%
Ireland	12.50%	1	No Limit	78.70%	47.90%	64.60%
Israel	23.00%	0	No Limit	87.00%	39.10%	78.70%
Italy	27.80%	0	No Limit, capped at 80% of taxable income	87.00%	57.70%	96.50%
Japan	29.70%	1, limited to small and medium-sized enterprises	10, capped at 50% of taxable income	85.90%	27.90%	78.70%
Korea	27.50%	1, limited to small and medium-sized enterprises	15, capped at 60% of taxable income for companies other than small and medium- sized enterprises	92.20%	54.80%	73.80%
Latvia	20.00%	No Limit (Cash-flow Tax)	No Limit (Cash-flow Tax)	100.00%	100.00%	100.00%
Lithuania	15.00%	0	No Limit, capped at 70% of taxable income	90.50%	82.70%	96.60%
Luxembourg	24.90%	0	17	87.30%	47.90%	87.00%
Mexico	30.00%	0	10	73.80%	54.80%	73.80%
Netherlands	25.80%	1	6	81.30%	33.80%	87.00%
New Zealand	28.00%	1	No Limit	73.20%	22.60%	54.80%
Norway	22.00%	0	No Limit	78.20%	37.40%	73.80%
Poland	19.00%	0	5, capped at 50% of total loss per year	73.80%	33.80%	87.00%
Portugal	31.50%	0	12, capped at 80% of taxable income	88.80%	54.80%	73.80%
Slovak Republic	21.00%	0	5, capped at 50% of taxable income	87.40%	54.80%	87.00%
Slovenia	19.00%	0	No Limit, capped at 63% of taxable income	87.00%	39.10%	73.80%
Spain	25.00%	0	No Limit, capped at 70% of taxable income exceeding EUR 1 million (additional revenue-based restrictions apply)	77.90%	39.10%	73.80%
Sweden	20.60%	1.5 (Tax allocation reserve)	No Limit	86.00%	47.90%	86.00%
Switzerland	19.70%	0	7	86.00%	55.50%	90.50%
Turkey	23.00%	0	5	86.40%	43.10%	69.40%
United Kingdom	19.00%	1	No Limit, capped at 50% of taxable income exceeding GBP 5 million	130.00%	39.10%	82.70%
United States	25.80%	0	No Limit, capped at 80% of taxable income	100.00%	35.00%	63.30%

### 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	Digital Services Tax	Number of separate rates or alternative minimum taxes	Surtax rate on corporate income	Share of revenue collected on income from non-standard income taxes	
Australia	Average Cost	No	No	0.15	No	1	0%	0.00%	
Austria	LIFO	No	No	0.17	Yes	2	0%	0.50%	
Belgium	LIFO	Yes (0% generally and 0.34% for SMEs, New Equity)	Yes	0.15	No	1	0%	0.00%	
Canada	Average Cost	No	No	0.21	No	1	0%	1.10%	
Chile	Average Cost	No	No	0.32	No	2	0%	-2.20%	
Colombia	Average Cost	No	No	0.44	No	2	0%	1.50%	
Costa Rica	LIFO	No	No	-0.02	No	5	0%	4.90%	
Czech Republic	Average Cost	No	No	0.18	No	0	0%	0.00%	
Denmark	FIFO	No	No	0.06	No	0	0%	4.50%	
Estonia	LIFO	No (Cash-flow Tax)	No	0	No	1	0%	0.00%	
Finland	FIFO	No	No	0	No	0	0%	0.00%	
France	Average Cost	No	Yes	0.35	Yes	4	3%	1.20%	
Germany	LIFO	No	No	0.18	No	0	6%	0.00%	
Greece	Average Cost	No	No	0.26	No	0	0%	0.80%	
Hungary	Average Cost	No	Yes	0.18	Yes	1	0%	0.10%	
lceland	Average Cost	No	No	0.36	No	1	0%	3.50%	
Ireland	Average Cost	No	Yes	0.24	No	1	0%	0.00%	
Israel	Average Cost	No	Yes	0	No	0	0%	2.10%	
Italy	LIFO	Yes (15% on first EUR 5 million and then 1.3%, New Equity)	No	0.17	Yes	1	0%	4.10%	
Japan	Average Cost	No	No	0.09	No	1	0%	0.20%	
Korea	LIFO	No	Yes	0.13	No	8	0%	0.00%	
Latvia	LIFO	No (Cash-flow Tax)	No	0	No	0	0%	0.00%	
Lithuania	LIFO	No	Yes	0.28	No	2	0%	0.00%	
Luxembourg	LIFO	No	Yes	-0.01	No	1	7%	0.10%	
Mexico	LIFO	No	No	0.06	No	0	0%	1.50%	
Netherlands	LIFO	No	Yes	0.26	No	1	0%	0.00%	
New Zealand	Average Cost	No	No	0.18	No	0	0%	2.30%	
Norway	FIFO	No	No	0.22	No	0	0%	0.00%	
Poland	LIFO	Yes (1.1% in 2021, All Equity)	Yes	0.2	Yes	1	0%	0.00%	
Portugal	Average Cost	Yes (7%, New Equity, Limited to EUR 1 Million or 25% of EBITDA)	Yes	0.35	No	4	9%	0.60%	
Slovak Republic	Average Cost	No	Yes	0.49	No	1	0%	0.70%	
Slovenia	Average Cost	No	No	0.19	No	1	0%	0.00%	
Spain	Average Cost	No	Yes	0.3	Yes	1	0%	0.00%	
Sweden	FIFO	No	No	0.1	No	0	0%	0.00%	
Switzerland	LIFO	No	Yes	-0.01	No	0	0%	6.20%	
Turkey	Average Cost	Yes (19.62% in 2020, New Equity)	Yes	0.06	Yes	0	0%	0.00%	
United Kingdom	FIFO	No	Yes	0.2	Yes	1	0%	0.00%	
United States	LIFO	No	Yes	0.07	No	2	0%	0.00%	

#### APPENDIX TABLE B.

### **Income Taxes**

	Ordinary Inc	Ordinary Income Taxes and Payroll Taxes			e Tax Complexity	Capital Gains/Dividends	
Country	Top Marginal Income Tax Rate	Top Income Tax Rate Threshold (a)	Ratio of Marginal to Average Tax Wedge	Surtax rate on personal income	Share of revenue collected through non-standard social security and payroll taxes)	Top Marginal Capital Gains Tax Rate (b)	Top Marginal Dividends Tax Rate (b)
Australia	45.00%	1.9	1.5	2%	0%	23.50%	24.30%
Austria	55.00%	21.7	1.1	0%	0%	27.50%	27.50%
Belgium	60.20%	1	1.3	0%	0%	0.00%	30.00%
Canada	53.50%	3	1.4	0%	0%	26.80%	39.30%
Chile	40.00%	19.2	1.3	0%	0%	40.00%	33.30%
Colombia	39.00%	11.5	0	0%	10%	10.00%	0.00%
Costa Rica	33.40%	6.5	1.1	0%	31%	15.00%	15.00%
Czech Republic	27.50%	3.9	1.2	0%	0%	0.00%	23.00%
Denmark	47.90%	1.3	1.3	8%	0%	42.00%	42.00%
Estonia	20.00%	0.3	1.2	0%	0%	20.00%	0.00%
Finland	59.50%	1.9	1.3	0%	0%	34.00%	28.90%
France	45.90%	14.7	1.2	10%	0%	34.00%	34.00%
Germany	42.00%	5.5	1.1	6%	0%	26.40%	26.40%
Greece	43.60%	2.5	1.4	10%	0%	15.00%	5.00%
Hungary	33.50%	0	1	0%	0%	15.00%	15.00%
Iceland	46.20%	1.2	1.3	0%	9%	22.00%	22.00%
Ireland	44.00%	1.4	1.4	8%	0%	33.00%	51.00%
Israel	50.00%	3.7	1.6	0%	0%	28.00%	33.00%
Italy	52.80%	2.4	1.3	0%	0%	26.00%	26.00%
Japan	54.00%	8.5	1.1	2%	0%	20.30%	20.30%
Korea	51.80%	22.8	1.2	0%	0%	0.00%	44.00%
Latvia	31.40%	4.1	1.1	0%	0%	20.00%	0.00%
Lithuania	39.00%	4.3	1.2	0%	0%	20.00%	15.00%
Luxembourg	40.20%	3.2	1.3	7%	0%	0.00%	21.00%
Mexico	35.00%	28.7	1.2	0%	14%	10.00%	17.10%
Netherlands	51.40%	1.3	1.4	0%	0%	31.00%	26.90%
New Zealand	39.00%	2.7	1.4	0%	0%	0.00%	15.30%
Norway	46.40%	1.5	1.2	0%	0%	31.70%	35.20%
Poland	39.80%	1.6	1	0%	0%	19.00%	19.00%
Portugal	55.70%	13.6	1.2	2%	0%	28.00%	28.00%
Slovak Republic	35.00%	3.1	1.1	0%	0%	0.00%	7.00%
Slovenia	61.10%	4.3	1.1	0%	0%	0.00%	27.50%
Spain	45.50%	11.4	1.4	0%	0%	26.00%	26.00%
Sweden	52.30%	1.1	1.2	0%	0%	30.00%	30.00%
Switzerland	41.70%	3.2	1.3	0%	0%	0.00%	22.30%
Turkey	40.00%	8	1.2	1%	0%	0.00%	20.00%
United Kingdom	47.00%	3.4	1.4	0%	0%	20.00%	39.40%
United States	46.00%	8.5	1.2	0%	0%	28.90%	28.90%

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				
Country	VAT/Sales Tax Rate	VAT/Sales Tax Threshold (a)	VAT/Sales Tax Base as a Percent of Total Consumption			
Australia	10.00%	\$51,314	44.30%			
Austria	20.00%	\$46,055	58.20%			
Belgium	21.00%	\$33,155	44.50%			
Canada	12.4% (b)	\$25,040	48.50%			
Chile	19.00%	\$O	62.60%			
Colombia	19.00%	\$0	34.50%			
Costa Rica	13.00%	\$0	44.80%			
Czech Republic	21.00%	\$77,860	59.10%			
Denmark	25.00%	\$7,507	63.60%			
Estonia	20.00%	\$75,061	73.40%			
Finland	24.00%	\$11,702	58.30%			
France	20.00%	\$115,864	48.80%			
Germany	19.00%	\$29,543	52.10%			
Greece	24.00%	\$18,330	46.60%			
Hungary	27.00%	\$82,384	58.80%			
Iceland	24.00%	\$13,878	46.50%			
Ireland	23.00%	\$91,910	42.90%			
Israel	17.00%	\$27,263	63.80%			
Italy	22.00%	\$97,158	37.60%			
Japan	10.00%	\$96,701	65.10%			
Korea	10.00%	\$34,520	69.90%			
Latvia	21.00%	\$81,312	60.20%			
Lithuania	21.00%	\$99,946	53.90%			
Luxembourg	17.00%	\$34,715	78.50%			
Mexico	16.00%	\$O	37.00%			
Netherlands	21.00%	\$25,161	57.20%			
New Zealand	15.00%	\$41,121	103.20%			
Norway	25.00%	\$5,375	59.50%			
Poland	23.00%	\$110,427	51.00%			
Portugal	23.00%	\$21,769	48.70%			
Slovak Republic	20.00%	\$93,374	51.30%			
Slovenia	22.00%	\$87,962	54.40%			
Spain	21.00%	\$0	41.90%			
Sweden	25.00%	\$3,370	59.70%			
Switzerland	7.70%	\$87,425	62.90%			
Turkey	18.00%	\$0	44.20%			
United Kingdom	20.00%	\$118,671	42.40%			
United States	7.4% (c)	\$0	34.40%			

Notes: (a) In U.S. dollars (PPP).

(a) In O.S. donars (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 Prop	erty 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	0.80%	No	None	
Austria	Tax on Real Property	No	0.10%	No	None	
Belgium	Tax on Real Property (b)	Yes	0.60%	Wealth Tax on Selected Assets	Inheritance and Gift Tax	
Canada	Tax on Real Property	Yes	1.50%	No	None	
Chile	Tax on Real Property	Yes	0.40%	No	Inheritance and Gift Tax	
Colombia	Tax on Real Property	Yes	0.50%	Net Wealth Tax	None	
Costa Rica	Tax on Real Property	Yes	0.20%	None	None	
Czech Republic	Tax on Real Property	Yes	0.10%	No	Inheritances and gifts are subject to Income Tax	
Denmark	Tax on Real Property	Yes	0.70%	No	Inheritance and Gift Tax	
Estonia	Land Tax	No	0.10%	No	None	
Finland	Tax on Real Property	Yes	0.40%	No	Inheritance and Gift Tax	
France	Tax on Real Property	Yes	1.10%	Wealth Tax on Selected Assets	Inheritance and Gift Tax	
Germany	Tax on Real Property	Yes	0.20%	No	Inheritance and Gift Tax	
Greece	Tax on Real Property	Yes	1.10%	No	Inheritance and Gift Tax	
Hungary	Tax on Real Property	Yes	0.30%	No	Inheritance and Gift Tax	
Iceland	Tax on Real Property	No	1.10%	No	Inheritance Tax	
Ireland	Tax on Real Property	Yes	0.20%	No	Inheritance and Gift Tax	
Israel	Tax on Sale of Real Property (c)	Yes	1.10%	No	None	
Italy	Tax on Real Property	No	0.60%	Wealth Tax on Selected Assets	Inheritance and Gift Tax	
Japan	Tax on Real Property	Yes	0.80%	No	Inheritance and Gift Tax	
Korea	Tax on Real Property	No	0.40%	No	Inheritance and Gift Tax	
Latvia	Tax on Real Property	Yes	0.40%	No	None	
Lithuania	Tax on Real Property	Yes	0.20%	No	Inheritance Tax	
Luxembourg	Tax on Real Property	Yes	0.00%	No	Inheritance and Gift Tax	
Mexico	Tax on Real Property	Yes	0.10%	No	Income Tax can apply	
Netherlands	Tax on Real Property	Yes	0.50%	No	Inheritance and Gift Tax	
New Zealand	Land Value Tax (d)	No	1.20%	No	None	
Norway	Tax on Real Property	Yes	0.20%	Net Wealth Tax	None	
Poland	Tax on Real Property	Yes	0.90%	No	Inheritance and Gift Tax	
Portugal	Tax on Real Property	Yes	0.40%	No	Stamp Duty applies to Inheritance and Gifts	
Slovak Republic	Tax on Real Property	Yes	0.30%	No	None	
Slovenia	Tax on Real Property	No	0.30%	No	Inheritance and Gift Tax	
Spain	Tax on Real Property	Yes	0.50%	Net Wealth Tax	Inheritance and Gift Tax	
Sweden	Tax on Real Property	Yes	0.30%	No	None	
Switzerland	Tax on Real Property	Yes	0.10%	Net Wealth Tax	Many cantons levy both Estate and Gift Taxes	
Turkey	Tax on Real Property	Yes	0.10%	No	Inheritance and Gift Tax	
United Kingdom	Tax on Real Property	Yes	1.70%	No	Inheritance and Gift Tax	
United States	Tax on Real Property	Yes	1.60%	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	Bank Tax	No	No				
Austria	Real Estate Transfer Tax	Bank Tax	No	No				
Belgium	Real Estate Transfer Tax	Bank Tax	No	Yes				
Canada	Real Estate Transfer Tax	Bank Tax in certain provinces	Yes	No				
Chile	No	Yearly fee on tax-adjusted equity	No	No				
Colombia	Real Estate Registration Tax	No	No	Yes				
Costa Rica	Real Estate Transfer Tax	No	Yes	Yes				
Czech Republic	No	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	Bank Tax	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	Bank Tax	No	No				
New Zealand	No	No	No	No				
Norway	Stamp Duty on Transfer of Real Property	No	No	No				
Poland	Real Estate Transfer Tax	Bank Tax	Yes	Yes				
Portugal	Real Estate Transfer Tax	Bank Tax	No	No				
Slovak Republic	No	No	No	No				
Slovenia	Real Estate Transfer Tax	Bank Tax	No	No				
Spain	Real Estate Transfer Tax	No	Yes	Yes				
Sweden	Stamp Duty on Transfer of Real Property	Bank Tax	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. Cross-Border Tax Rules

	Participation Exemption			W	Withholding Taxes			Anti-Tax Avoidance Rules
Country	Dividend Exemption	Capital Gains Exemption	Country Limitations	Dividend Withholding Tax	Interest Withholding Tax	Royalties Withholding Tax	Number of Tax Treaties	Controlled Foreign Corporation Rules
Australia	100.00%	100.00%	None	30.00%	10.00%	30.00%	45	Yes
Austria	100.00%	100.00%	None	27.50%	0.00%	20.00%	89	Yes
Belgium	100.00%	100.00%	None	30.00%	30.00%	30.00%	95	Yes
Canada	100.00%	50.00%	Countries with a tax treaty or Tax Information Exchange Agreement	25.00%	25.00%	25.00%	96	Yes
Chile	0.00%	0.00%	N/A	35.00%	35.00%	15.00%	33	Yes
Colombia	100.00%	0.00%	Applicable to holding companies, no country restrictions	32.00%	20.00%	20.00%	10	Yes
Costa Rica	100.00%	100.00%	None	15.00%	15.00%	25.00%	3	No
Czech Republic	100.00%	100.00%	EU member states and EEA member states or double tax treaty	15.00%	15.00%	15.00%	93	Yes
Denmark	100.00%	100.00%	EU member states and EEA member states or double tax treaty	22.00%	22.00%	22.00%	75	Yes
Estonia	100.00%	100.00%	EU member states and EEA member states and Switzerland	0.00%	0.00%	10.00%	61	Yes
Finland	100.00%	100.00%	EU member states and EEA member states or double tax treaty	20.00%	0.00%	20.00%	76	Yes
France	95.00%	88.00%	Black-list countries are excluded	26.50%	0.00%	26.50%	122	Yes
Germany	95.00%	95.00%	None	26.40%	0.00%	15.80%	96	Yes
Greece	100.00%	100.00%	EU member states	5.00%	15.00%	20.00%	57	Yes
Hungary	100.00%	100.00%	None	0.00%	0.00%	0.00%	82	Yes
lceland	100.00%	100.00%	None	20.00%	12.00%	20.00%	45	Yes
Ireland	0.00%	100.00%	EU member states and tax treaty countries	25.00%	20.00%	20.00%	73	Yes
Israel	100.00%	100.00%	None	30.00%	23.00%	23.00%	58	Yes
Italy	95.00%	95.00%	Blacklist countries are excluded	26.00%	26.00%	22.50%	100	Yes
Japan	95.00%	0.00%	None	20.40%	20.40%	20.40%	71	Yes
Korea	0.00%	0.00%	N/A	22.00%	22.00%	22.00%	94	Yes
Latvia	100.00%	100.00%	Black-list countries are excluded	0.00%	0.00%	0.00%	62	Yes
Lithuania	100.00%	100.00%	Black-list countries are excluded	15.00%	10.00%	10.00%	54	Yes
Luxembourg	100.00%	100.00%	None	15.00%	0.00%	0.00%	83	Yes
Mexico	0.00%	0.00%	N/A	10.00%	35.00%	35.00%	59	Yes
Netherlands	100.00%	100.00%	None	15.00%	0.00%	0.00%	92	Yes
New Zealand	100.00%	100.00%	None	30.00%	15.00%	15.00%	40	Yes
Norway	97.00%	100.00%	Black-list countries are excluded	25.00%	0.00%	0.00%	87	Yes
Poland	100.00%	0.00%	EU member states and EEA member states and Switzerland	19.00%	20.00%	20.00%	86	Yes
Portugal	100.00%	100.00%	Black-list countries are excluded	25.00%	25.00%	25.00%	78	Yes
Slovak Republic	100.00%	100.00%	Countries with a tax treaty or Tax Information Exchange Agreement	35.00%	19.00%	19.00%	70	Yes
Slovenia	95.00%	47.50%	Blacklist countries are excluded	15.00%	15.00%	15.00%	59	Yes
Spain	95.00%	95.00%	Blacklist countries are excluded	19.00%	19.00%	24.00%	95	Yes
Sweden	100.00%	100.00%	None	30.00%	0.00%	0.00%	85	Yes
Switzerland	100.00%	100.00%	None	35.00%	35.00%	0.00%	94	No
Turkey	100.00%	100.00%	None	15.00%	10.00%	20.00%	86	Yes
United Kingdom	100.00%	100.00%	None	0.00%	20.00%	20.00%	130	Yes
0								Yes
United States	100.00%	0.00%	None	30.00%	30.00%	30.00%	66	(Subpart F)

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		Anti-Tax Avoidance Rules Continued
Country	Controlled Foreign Corporation Rules: Income	Controlled Foreign Corporation Rules: Exemptions
Australia	Passive	CFC exempt if it passes the active income test and narrower rules apply if located in a listedù country.
Austria	Passive	CFC with substantive economic activities exempted.
Belgium	Passive (related to non-genuine arrangements)	Effective tax rate exemption.
Canada	Passive	Multiple rules may exempt CFC from taxation.
Chile	Generally proportional to passive income	Exemptions based on share of passive income.
Colombia	Generally proportional to passive income	If less than 80% of total income is passive, then all income is exempt.
Costa Rica	N/A	N/A
Czech Republic	Passive	CFC with substantive economic activities exempted and an effective tax rate exemption.
Denmark	Passive	Foreign subsidiaries are exempt if less than $1/3$ of their income is financial income.
Estonia	All income from fictitious transactions	CFCs in countries that are Estonian tax treaty partners are exempt. A CFC is exempt if the entity has accounting profits of no more than EUR 750,000 and non-trading income of no more than EUR 75,000.
Finland	All Income	No exemption if CFC is in a blacklist jurisdiction. Exemption applies if CFC is in white- list jurisdiction (based on exchange of information agreements). Other exemptions apply based on activities and substance.
France	All Income	CFC exempt if located in EU or EEA and not an artificial arrangement or if CFC carries out trading or manufacturing (commercial or industrial) activity.
Germany	Passive	CFC exempt if located in EU or EEA and not an artificial arrangement.
Greece	Passive	CFC exempt if located in EU or EEA and not an artificial arrangement.
Hungary	All income associated with non-genuine arrangements	CFC exempt if located in EU, OECD, EEA, and treaty countries and not an artificial arrangement. Accounting profits not to exceed HUF 243,952,500 and non-trading income does not exceed HUF 24,395,250. Accounting profits not more than 10% of its operating costs.
lceland	All Income	CFC exempt if located in EEA countries, or has a double-tax treaty with Iceland and not an artificial arrangement.
Ireland	All income associated with non-genuine arrangements	Exclusions include: CFC with accounting profits of EUR 750,000 or less and non- trading income of EUR 75,000 or less or accounting profits of EUR 75,000 or less. Transfer pricing exemption. Essential purpose test, income that comes from arrangements that do not have the purpose to secure a tax advantage. Several exemptions do not apply if the CFC is in jurisdiction on the EU list of non-cooperative jurisdictions.
Israel	Passive	CFC exempt if at least 15% effective tax rate and if CFC is publicly traded.
Italy	All Income	CFC with substantive economic activities exempted.
Japan	Primarily passive (all income of paper, cash box, or blacklisted companies)	Exemptions exist for economic substance and certain control/location criteria.
Korea	All Income	The CFC rule does not apply in cases where a foreign subsidiary has fixed facilities (e.g. office, factory) in a low-tax jurisdiction for the conduct of business, it manages or controls the business by itself, and the business is mainly performed in the jurisdiction. Even in this case, where passive income is more than 50% of gross income, the CFC rule applies. In cases where the passive income is between 50% and 5% of the foreign subsidiary's gross income, the CFC rule will apply in a limited manner. If annual income is KRW 200 million or less, then CFC rules do not apply.
Latvia	All income associated with non-genuine arrangements	CFC exempt if profits below EUR 750,000 or passive income below EUR 75,000 and CFC is not based or incorporated in a tax haven.
Lithuania	Passive	CFC exempt if country included in white list and not receiving special tax treatment (less than 50 percent of Lithuanian effective tax rate).
Luxembourg	All income associated with non-genuine arrangements	CFC exempt if i) not an artificial arrangement or ii) accounting profits below EUR 750,000 or less than 10% of operating costs.
Mexico	All income once a 20% passive threshold is met	None.
Netherlands	Passive	CFC exempt if not an artificial arrangement.
New Zealand	Passive	Limited exemption for certain Australian CFCs or if CFC passes an active business test.
Norway	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	All Income	CFC exempt if not an artificial arrangement.
Portugal	All Income	CFC exempt if located in EU and EEA countries and not an artificial arrangement. Other exemptions can apply.
Slovak Republic	All income associated with non-genuine arrangements	None.
Slovenia	Passive	Substantial economic activities exemption.
Spain Sweden	Passive All Income	CFC exempt if located in EU and not an artificial arrangement. CFC exempt if located in EEA and not an artificial arrangement or located in white list
		countries.
Switzerland	N/A	N/A
Turkey	All Income	None.
United Kingdom		Various exemptions can apply.
United States	Passive, except for active income captured by GILTI	Exemptions for foreign high-taxed income can apply.

### APPENDIX TABLE E, CONTINUED.

### Cross-Border Tax Rules

	Anti-Tax Avoidance Rules Continued					
Country	Interest Deduction Limitations					
Australia	1.5:1 debt-to-equity ratio (15:1 for financial institutions) applies					
Austria	Interest limitation rule applies for "excessive borrowing costs," i.e., costs greater than EUR 3 million and greater than 30% of adjusted EBITDA; arm's length standard applicable					
Belgium	Interest deductions limited to the higher of EUR 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					
Costa Rica	Interest deductions are limited to 30% of EBITDA					
Colombia	2:1 debt-to-equity ratio applies. Certain exemptions 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 2.3% of assets and to 30% of EBITDA. Other rules can apply					
Estonia	Interest deductions limited to the higher of EUR 3 million or 30% of EBITDA					
Finland	Interest deductions limited to 25% of EBITDA. Net interest expenses between non-related parties limited to EUR 3 million					
France	Interest deductions limited to the higher of EUR 3 million or 30% of EBITDA Different limits apply to related-party debt					
Germany	Interest deductions limited to 30% of EBITDA if deduction exceeds EUR 3 million					
Greece	Interest deductions limited to 30% of EBITDA if deduction exceeds EUR 3 million					
Hungary	Interest deductions limited to the higher of HUF 939,810,000 (~ EUR 2.5 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	Deductions limited to 30% of EBITDA, exemption for borrowing costs of less than EUR 3 million.					
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 EUR 3 million (certain financial institutions exempt)Interest deductions limited to 30% of EBITDA for deduction exceeding EUR 3 million (certain financial institutions exempt)					
Lithuania	4:1 debt-to-equity ratio applies. Interest deductions limited to EUR 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	Interest deductions limited to the higher of EUR 3 million or 30% of EBITDA					
Mexico	3:1 debt to equity ratio for interest payments between related parties. Limits of 30% of adjusted taxable income and MXN 20 million in total interest expense apply					
Netherlands	Interest deductions limited to the higher of EUR 1 million or 20% 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 EUR 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 EUR 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 cross-border tax rules. 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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