

Corporate Taxation and Tax Avoidance

Jiaming Mao

Xiamen University

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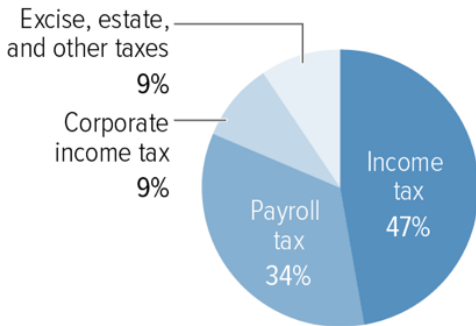
Contact: jmao@xmu.edu.cn

Course homepage: jiamingmao.github.io/principles-of-economics



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Sources of Federal Tax Revenue, 2016



Note: "Other Taxes" category includes profits on assets held by the Federal Reserve. Figures do not total 100% due to rounding.

Source: Office of Management and Budget

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

Corporate Income Tax

Taxable Income		Tax Rate
\$	0– 50,000	15%
	50,001– 75,000	25
	75,001– 100,000	34
	100,001– 335,000	39
	335,001–10,000,000	34
	10,000,001–15,000,000	35
	15,000,001–18,333,333	38
	18,333,334+	35

U.S. federal corporate income tax rates before TCJA. The table reports marginal rates. For a history of U.S. federal corporate income tax rates, see [here](#).

Corporate Income Tax

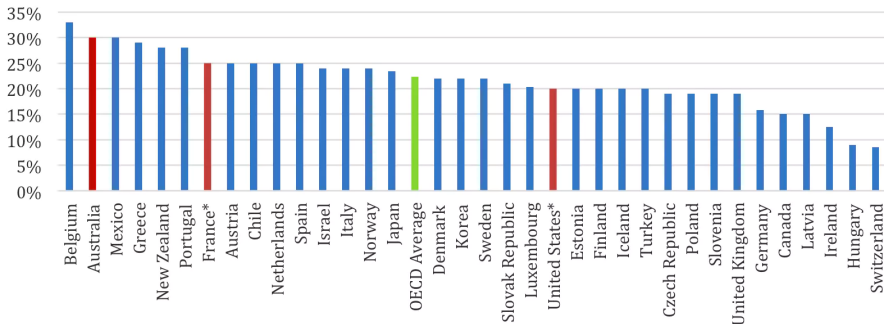
(1) Taxable Income	(2) Marginal Tax Rate	(3) Total Tax	(3)/(1) Average Tax Rate
\$ 45,000	15%	\$ 6,750	15.00%
70,000	25	12,500	17.86
95,000	34	20,550	21.63
250,000	39	80,750	32.30
1,000,000	34	340,000	34.00
17,500,000	38	6,100,000	34.86
50,000,000	35	17,500,000	35.00
100,000,000	35	35,000,000	35.00

Marginal and average tax rates before TCJA. For large U.S. corporations (taxable income > 18.3mil), both the average and marginal tax rates are 35%.

Corporate Income Tax

After TCJA, the U.S. federal corporate income tax rate is a flat 21%

Corporate income tax rate in the OECD



Corporate Income Tax

- The corporate income tax is one of the primary ways of taxing capital.
- Without the corporate income tax, the personal income tax can be dodged or postponed by individuals incorporating themselves and keeping their income within firms.
- When corporate profits are paid out, they are typically taxed at a lower rate than earned income, as tax authorities recognize **double taxation**.

Corporate Income Tax

Corporate tax raison d'être:

- A prepayment for the personal income tax
- A way to tax rents (such as extractive industries) and business activities that generate negative externalities
 - ▶ Tax credits can then be used as subsidies for business activities that generate positive externalities.
- A tax on foreign shareholders who benefit from the public goods provided by the country

Corporate Income Tax

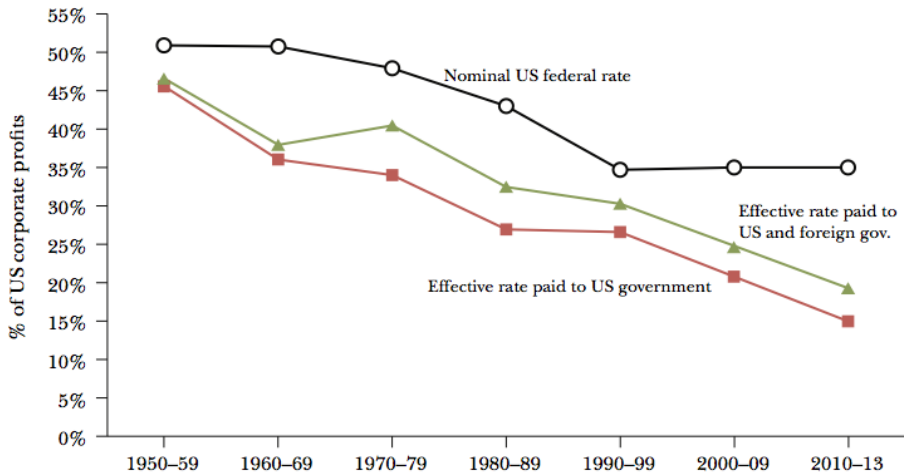
Because of various tax deductions and loopholes, the **effective** tax rates paid by U.S. corporations are significantly lower than the **statutory** rates.

Industry	Number of Companies	Average Tax Rate
Electric utilities (Eastern U.S.)	24	33.8%
Trucking	33	32.7
Railroad	15	27.4
Securities brokerage	30	20.5
Banking	481	17.5
Medical supplies	264	11.2
Internet	239	5.9
Pharmaceutical	337	5.6
Biotechnology	121	4.5

Effective Rates Paid by U.S. Corporations by Industry

Source: Ross, Westerfield, and Jaffe (2011)

Nominal and Effective Corporate Tax Rates on US Corporate Profits



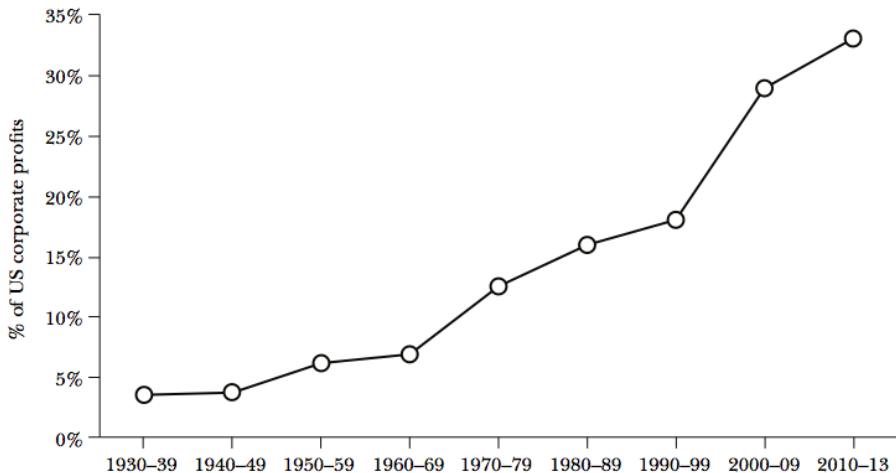
Source: Zucman (2014)

Multinationals, Profit-Shifting, and Tax Avoidance

- The practicality and enforceability of the corporate income tax is increasingly challenged by globalization today.
- Corporations can avoid paying corporate taxes by shifting their profits from high-tax jurisdictions to low-tax jurisdictions.
- About two-thirds of the decline in the U.S. effective corporate tax rates over the last 15 years could be attributed to increased profit-shifting to tax havens such as Bermuda, Luxembourg and the Cayman Islands¹.
 - ▶ An estimated 20 percent of all U.S. corporate profits prior to TCJA were parked in these tax havens¹.

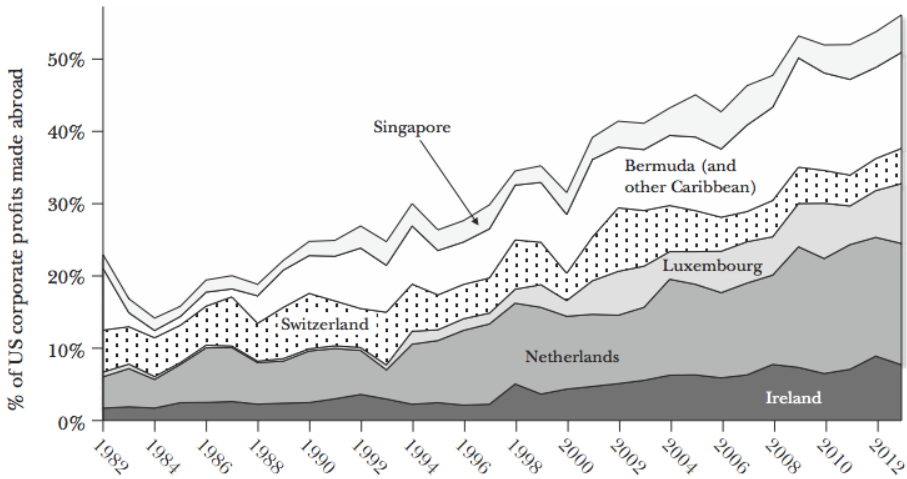
¹see Zucman (2014)

The Share of Profits Made Abroad in US Corporate Profits



Source: Zucman (2014)

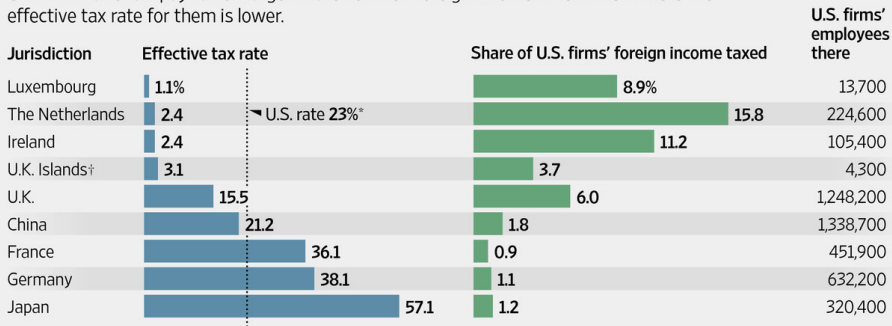
The Share of Tax Havens in US Corporate Profits Made Abroad



Source: Zucman (2014)

Tax Relief

U.S. multinationals pay tax on larger shares of their foreign income in countries where the effective tax rate for them is lower.



Note: Data for jurisdictions are for 2012. *Global effective tax rate for U.S. companies in 2010, according to GAO. †Includes Cayman Islands, British Virgin Islands, Turks and Caicos Islands and Montserrat

Sources: Bureau of Economic Analysis Government; Accountability Office (U.S. rate)

The Wall Street Journal

Caribbean/West Indies	Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, ^{d,e} British Virgin Islands, Cayman Islands, Dominica, Grenada, Montserrat, ^a Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, Turks and Caicos, U.S. Virgin Islands ^{a,e}
Central America	Belize, Costa Rica, ^{b,c} Panama
Coast of East Asia	Hong Kong, ^{b,e} Macau, ^{a,b,e} Singapore ^b
Europe/Mediterranean	Andorra, ^a Channel Islands (Guernsey and Jersey), ^e Cyprus, ^e Gibraltar, Isle of Man, ^e Ireland, ^{a,b,e} Liechtenstein, Luxembourg, ^{a,b,e} Malta, ^e Monaco, ^a San Marino, ^{a,e} Switzerland ^{a,b}
Indian Ocean	Maldives, ^{a,d} Mauritius, ^{a,c,e} Seychelles ^{a,e}
Middle East	Bahrain, Jordan, ^{a,b} Lebanon ^{a,b}
North Atlantic	Bermuda ^e
Pacific, South Pacific	Cook Islands, Marshall Islands, ^a Samoa, Nauru, ^c Niue, ^{a,c} Tonga, ^{a,c,d} Vanuatu
West Africa	Liberia

Countries Listed on Various Tax Haven Lists. Source: Gravelle (2015)

Basic corporate income tax rate in low tax countries, 2020

Jurisdiction	Corporate income rate
Andorra	10.0
Anguilla	0.0
Bahamas	0.0
Bahrain	0.0
Barbados	5.5
Bermuda	0.0
Bosnia and Herzegovina	10.0
British Virgin Islands	0.0
Bulgaria	10.0
Cayman Islands	0.0
Cyprus	12.5
Gibraltar	10.0
Guernsey	0.0
Hungary	9.0
Ireland	12.5
Isle of Man	0.0
Jersey	0.0
Kosovo	10.0
Kyrgyz Republic	10.0
Liechtenstein	12.5
Macao, China SAR	12.0
Moldova	12.0
Montenegro	9.0
Northern Macedonia	10.0
Paraguay	10.0
Qatar	10.0
Saint Barthelemy	0.0
Timor-Leste	10.0
Tokelau	0.0
Turkmenistan	8.0
Turks and Caicos Islands	0.0
United Arab Emirates	0.0
Uzbekistan	7.5
Vanuatu	0.0
Wallis and Futuna Islands	0.0

Source: Tax Foundation data, last accessed June 14, 2021.

Multinationals, Profit-Shifting, and Tax Avoidance

- A popular method of profit-shifting is through the manipulation of **transfer pricing**, the setting of prices at which companies exchange goods and services internally.
 - ▶ Consider a corporation, USCo, that grows coffee beans in Brazil at a cost of \$1/lb and sells them for \$12/lb in the U.S. The company has a subsidiary, BrazilCo, in Brazil.
 - ▶ To avoid paying taxes in either the U.S. or Brazil, USCo could set up another subsidiary, BermudaCo, in Bermuda and have BrazilCo sell beans to BermudaCo for \$1/lb, who would in turn sell them to USCo for \$12/lb.
 - ▶ Both USCo and BrazilCo would record zero profits, while BermudaCo earns \$11/lb in profits but is subject to zero corporate income tax.

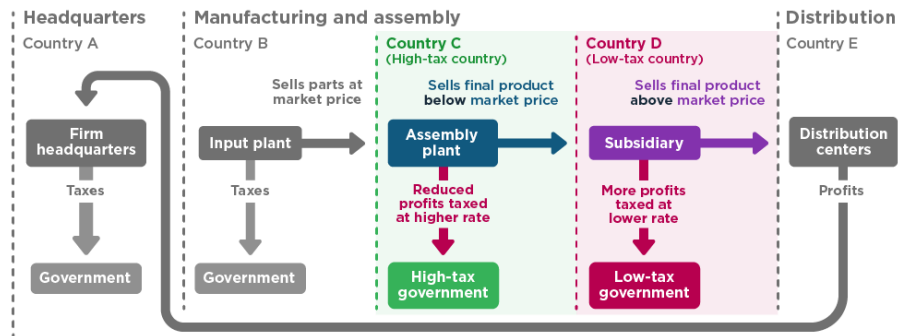
Multinationals, Profit-Shifting, and Tax Avoidance

- In practice, to prevent profit-shifting, transfer pricing is required to obey the **arm's length principle**: prices of goods and services traded by related companies must be based on market prices.
- **Intangibles**, such as patents and licenses, however, are hard to value as relevant market prices may not exist.
 - ▶ USCo could transfer its patent on coffee growing technology to BermudaCo and have BrazilCo pay royalties to BermudaCo for its usage.

Multinationals, Profit-Shifting, and Tax Avoidance

a. Manipulating prices

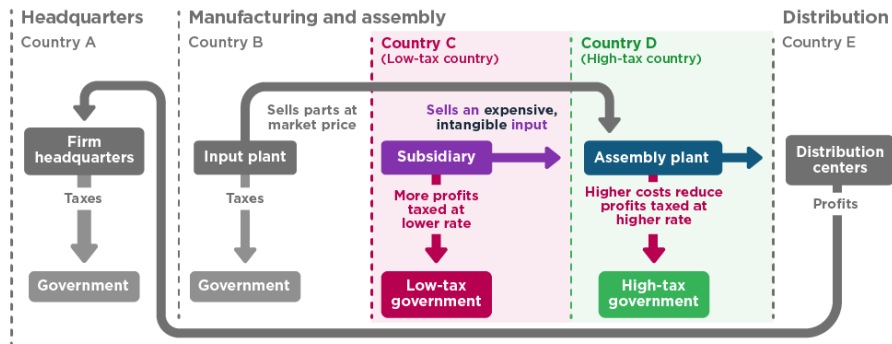
The company makes costs look bigger in high-tax countries and smaller in low-tax countries, and revenues look bigger in low-tax countries and smaller in high-tax countries.



Multinationals, Profit-Shifting, and Tax Avoidance

b. Selling intangibles

The firm sells expensive, intangible assets like intellectual property rights from a subsidiary in a low-tax country, increasing costs for the subsidiary in a high-tax country, and moving more profits to the low-tax country.



Multinationals, Profit-Shifting, and Tax Avoidance

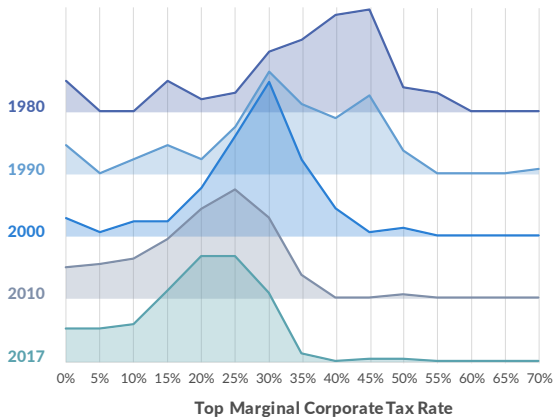
- Profit-shifting could also be achieved via **debt reallocation**, through which a corporation would hold the majority of its debt in high-tax jurisdictions to lower its taxable income in those jurisdictions through deductible interest expenses.
- Another popular method of profit-shifting is through intragroup loans, whereby subsidiaries in low-tax jurisdictions grant loans to subsidiaries in high-tax jurisdictions, a practice known as **earnings stripping**.
- The existence of thousands of bilateral tax treaties between countries has also created a web of inconsistent rules that corporations can exploit by choosing the location of their affiliates, a practice known as **treaty shopping**.

The Race to the Bottom: The Decline of Worldwide Corporate Tax Rates

- The ability of multinationals to shift profits from high-tax jurisdictions to low-tax jurisdictions exerts pressure on national governments to lower their corporate tax rates in order to remain competitive, creating a “race to the bottom.”
- Over the past 37 years, the average worldwide statutory corporate tax rate has declined by over 40%. In 2000, 42% of the countries in the world imposed a statutory rate below 30%. In 2010, the number increased to 77%.

The Race to the Bottom: The Decline of Worldwide Corporate Tax Rates

The Worldwide Distribution of Statutory Corporate Income Tax Rates, 1980-2017

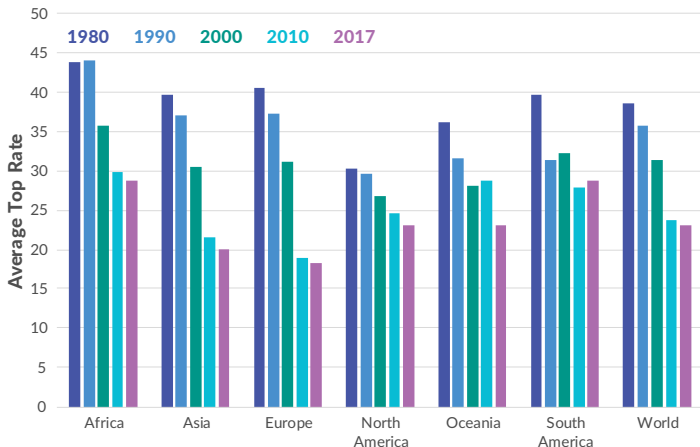


Source: Tax Foundation. Data compiled from numerous sources including: PwC, KPMG, Deloitte, and the U.S. Department of Agriculture.

Source: Jahnsen and Pomerleau (2017)

The Race to the Bottom: The Decline of Worldwide Corporate Tax Rates

Average Top Corporate Income Tax Rate by Region and Decade



Source: Tax Foundation. Data compiled from numerous sources including: PwC, KPMG, Deloitte, and the U.S. Department of Agriculture.

Source: Jahnsen and Pomerleau (2017)

Going Forward: A Global Minimum Corporate Tax Rate

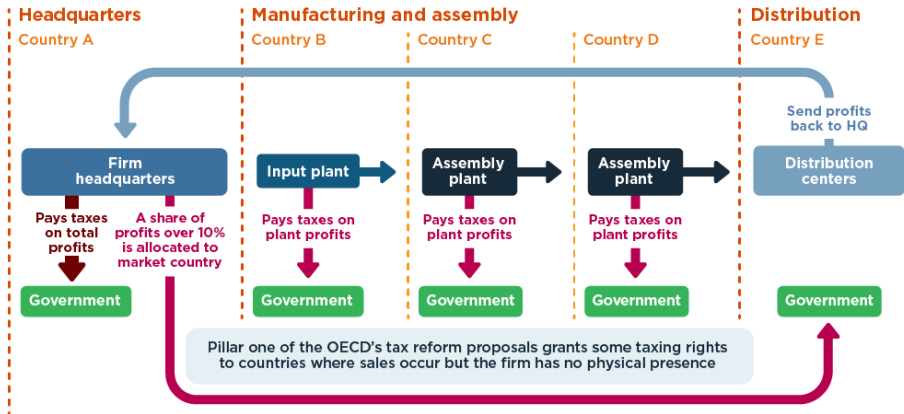
On Oct. 8, 2021, OECD **announced** that 136 countries and jurisdictions have agreed to a two-pillar plan to reform international taxation rules.

- 1 Allocate taxing rights to market jurisdictions where final sales are made or users are based².
- 2 A global minimum corporate tax of 15 percent.

²A partial redistribution of tax revenue from jurisdictions where firms are headquartered to jurisdictions where firms make their sales or have their user base.

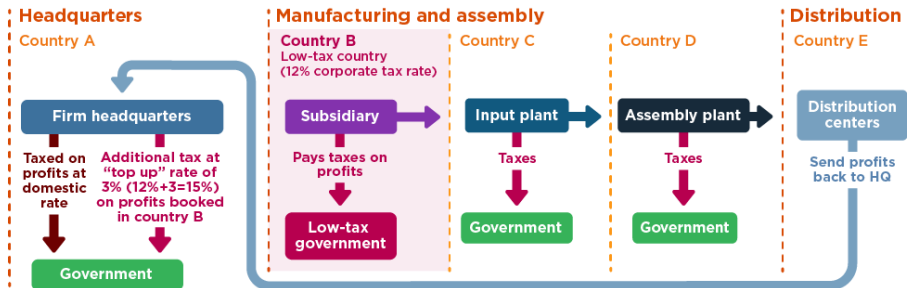
Going Forward: A Global Minimum Corporate Tax Rate

A large multinational company is headquartered in country A, builds products inputs in country B, assembles its product in countries C and D, then sells its final product in country E, generating global revenues greater than €20 billion, with more than €1 million of sales occurring in country E.



Going Forward: A Global Minimum Corporate Tax Rate

A multinational company is headquartered in country A, shifts profits to country B to benefit from its low corporate tax rate (<15%), manufactures product parts in country C, assembles the product in country D, then distributes its final product in country E.



The "top up" to the minimum global rate eliminates any financial gain from recording profits in low-tax countries.

Reference

-  Djankov, S. 2021. “How do companies avoid paying international taxes? And will countries agree on new rules to reform the system?” PIIIE.
-  Gravelle, J. G. 2015. “Tax Havens: International Tax Avoidance and Evasion,” Congressional Research Service report, R40623.
-  Jahnsen, K. and K. Pomerleau. 2017. “Corporate Income Tax Rates around the World, 2017,” Tax Foundation, Fiscal Fact No. 559.
-  KPMG. 2018. “Tax Reform - KPMG Report on New Tax Law,” KPMG LLP.
-  Sherlock, M. F. and D. J. Marples. 2018. “Overview of the Federal Tax System in 2018,” Congressional Research Service report, R45145.
-  Zucman, G. 2014. “Taxing across Borders: Tracking Personal Wealth and Corporate Profits,” *Journal of Economic Perspectives*, 28(4).