

\$2.7 Billion 2018 Northeastern State Transfer Pricing Tax Gap

by Nancy Cook and Eric Cook

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In this article, the authors present their 2018 tax year estimates of the state corporate tax gap attributable to transfer pricing for states in the Northeastern region of the United States.

What is a tax gap? According to the IRS, the tax gap is composed of three main components:

- nonfiling, which is the tax not paid on time by those who do not file the required returns on time;
- underreporting, which is the net understatement of tax on timely filed returns; and
- the underpayment tax gap, which is the amount of tax reported on timely filed returns that is not paid on time.

The tax gap is categorized by five types of tax, including individual income tax, corporate income tax, employment taxes (Social Security and federal unemployment insurance — also known as payroll taxes), estate tax, and excise tax.¹

As reported by Alan Rappeport of the *New York Times*:

The United States is losing approximately \$1 trillion in unpaid taxes every year, Charles Rettig, the Internal Revenue Service commissioner, estimated . . . arguing that the agency lacks the resources to catch tax cheats.

The so-called federal tax gap has surged in the last decade. The last official estimate from the I.R.S. was that an average of \$441 billion² per year went unpaid from 2011 to 2013. Most of the unpaid taxes are the result of evasion by the wealthy and large corporations, Mr. Rettig said.

‘We do get outgunned,’ Mr. Rettig said . . . during a Senate Finance Committee hearing on the upcoming tax season.³

A few years ago, using an alternative method based on IRC section 482 to estimate the federal corporate income tax gap,⁴ our company, Chainbridge Software LLC, reviewed a limited set of 1,700 publicly traded companies and found that 645 would receive IRC section 482 federal tax assessments totaling \$264.4 billion for 2011-2013.

IRS Form 1120 Schedule UTP (Uncertain Tax Positions) asks for information about tax positions that affect the federal income tax liabilities of some corporations that issue or are included in audited financial statements and have assets that equal or exceed \$10 million. According to a 2015 IRS Research Conference extract,⁵ the five most frequently cited code sections on Schedule UTP include:

- 482 — transfer pricing;
- 41 — research and development credit;
- 162 — trade or business expense;
- 199 — domestic production activities deduction; and
- 263 — capitalized cost.

² IRS, “Tax Gap Estimates for Tax Years 2011-2013.”

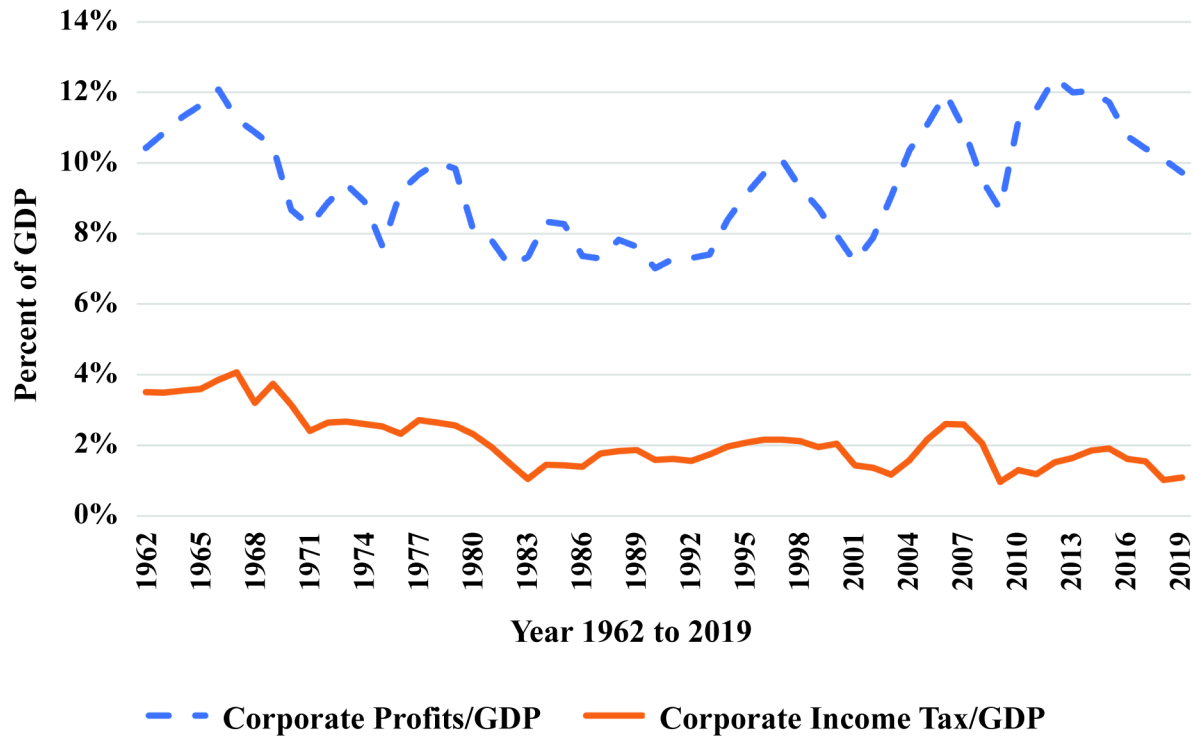
³ Alan Rappeport, “Tax Cheats Cost the U.S. \$1 Trillion Per Year, I.R.S. Chief Says,” *New York Times*, Apr. 13, 2021.

⁴ Chainbridge, Publications and Presentations.

⁵ IRS, “2011-2012 Schedule M-3 Profiles of Schedule UTP Filers by IRC Section Cited” (June 2015).

¹ IRS, “Understanding the Latest Tax Gap Estimates and Overall Taxpayer Compliance,” FS-2019-11 (Sept. 2019).

Figure 1.
U.S. Corporate Profits & Taxes
1962 to 2019



Source: U.S. Congressional Budget Office

The problem is that corporate income and corporate income taxes are inherently at odds with one another. An economist might tell us that a corporation’s goal is to maximize shareholder profit. To maximize shareholder profit, taxes must be minimized, and to minimize taxes, profits must be minimized. Corporations want to boost profits for shareholder purposes and minimize profits for tax agency purposes. If corporations paid taxes commensurate with the profits earned by shareholders, there would be no quibble between taxpayers and tax agencies regarding the amount of corporate income tax due. There would just be arguing among tax agencies about how much tax should be coming their way.

We thought it might be interesting to look at the relationship between U.S. corporate profits as a percentage of gross domestic product and federal corporate income tax as a percentage of GDP over time. Figure 1 presents a graphical representation of these two measures, along

with the difference between them from 1962 to 2019.

As shown in Figure 1, the difference between corporate profits and corporate income taxes has grown over time.

Many state corporate income tax systems are based on federal corporate income tax concepts, with additions and subtractions. Corporate income is then apportioned to the state and taxed. We believe that the state corporate income tax gap attributable to transfer pricing can be estimated using the methods outlined in the U.S. Treasury regulations guiding the application of IRC section 482.

In this article, we present estimates of the state corporate income tax gap attributable to transfer pricing for tax year 2018 for the states in the Northeastern region of the United States excluding Delaware and including the District of Columbia:

- Connecticut — \$163.9 million;
- District of Columbia — \$94.1 million;
- Maine — \$28 million;
- Maryland — \$189.4 million;
- Massachusetts — \$365.4 million;
- New Hampshire — \$143 million;
- New Jersey — \$382.2 million;
- New York — \$856.9 million;
- Pennsylvania — \$413.2 million;
- Rhode Island — \$29.9 million; and
- Vermont — \$28.4 million.

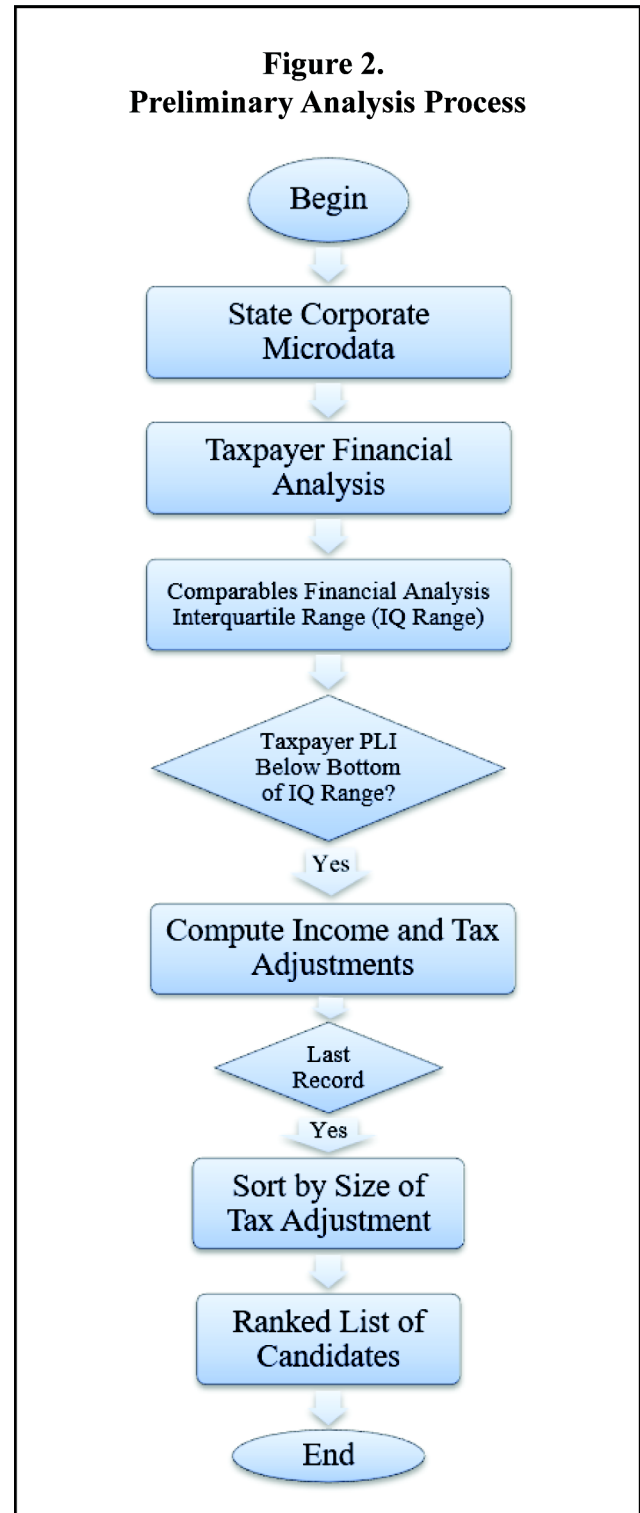
Overall, we find that for the Northeastern states, the corporate tax gap attributable to transfer pricing totals \$2.7 billion for tax year 2018. It is important to point out that these estimates are for only the largest 50 taxpayers with IRC section 482 tax adjustments.

Below we present discussions of the method used to generate these state corporate income tax gap estimates, detailed state-by-state estimates, the effects that related issues might bring to the estimates (combined reporting, the Tax Cuts and Jobs Act, and COVID-19), and a brief conclusion.

Method Used

The principal method that we used to estimate the tax gap attributable to state corporate transfer pricing and to identify corporate taxpayers that might be paying less in corporate taxes than an arm's-length amount was our patented Preliminary Analysis process.⁶ In the Preliminary Analysis, in the context of a state's corporate income tax, each taxpayer is evaluated using concepts detailed in the Treasury regulations guiding application of the comparable profits method under IRC section 482. A quantitative analysis is applied to every corporate taxpayer in the state based on the taxpayer's industry and using data on publicly traded corporations to develop a range of acceptable profits for each.

Figure 2.
Preliminary Analysis Process



⁶U.S. Patent No. 7,716,104 B2 (dated May 11, 2010).

Preliminary Analysis

The primary inputs to the Preliminary Analysis process are state corporate microdata files (electronic returns) for several years and S&P's Compustat database for publicly traded North American firms. The output of the Preliminary Analysis process is the Ranked List of Candidates (RLC) for an IRC section 482 audit.

The Preliminary Analysis starts with an average of five years of electronic data that is provided by the state tax authority and loaded onto our software system. The data of every taxpayer filing a return in the state is subject to a quantitative analysis based on taxpayer industry classification. The microdata base is a data file like a large spreadsheet that has a row of information for each corporate taxpayer and several columns that represent line items on the state corporate tax return, such as the taxpayer's name, address, sales, cost of goods sold, and salary and wages. The data covers tens of thousands of corporations.

Once the data is loaded into the system, internal checks are performed with the data from each separate tax return to validate the quality of that return's data. We term this process error detection and correction. After the quality control tests are performed, the Preliminary Analysis process begins in earnest. Figure 2 presents an overview of this process.

To develop a RLC, a record is read from the corporate microdata file. For each record in the file, we follow these procedures:

- We perform a financial analysis and compute the taxpayer's profit-level indicator (PLI). In many cases, we find that the most appropriate PLI to use is the operating profit to sales ratio (operating profit margin).
- We perform a financial analysis of possible comparable firms (in the taxpayer's industry) from S&P's Compustat database containing microdata for firms filing forms with the Securities and Exchange Commission and construct an interquartile range of observed PLIs for the possible comparable firms. Table 1 presents a graphic representation of the

interquartile range for a hypothetical corporation for tax year 2016.

- If the taxpayer's PLI is below the bottom observation of the interquartile range of PLIs for comparable firms, we compute example income allocation and associated tax adjustments for the taxpayer and place it in the RLC.
- If the taxpayer's PLI is above the bottom observation of the interquartile range of PLIs for comparable firms, no further computations are performed, and the next taxpayer in the database is selected for analysis.
- Once all taxpayers have been processed, the RLC is sorted from highest tax adjustment to lowest. In every state that we have performed a Preliminary Analysis, we began with tens of thousands of corporations and ended up with a list of fewer than 20 (less than 0.01 percent of state corporations) in the RLC.

Chainbridge has performed Preliminary Analyses over the last 15 years for nine states and localities. We have performed these analyses over 20 times for various years. To develop state-specific RLCs for the states in the Northeastern region, we first benchmark the estimates to a state based upon that state's apportionment. To develop the RLC for other states, the resulting state-specific RLC is adjusted to reflect differences in corporate tax revenue, corporate tax rates, apportionment, and the number of corporate returns filed in the state. The result of these adjustments is a separate RLC for each of the 12 Northeastern states.

As shown in Table 2, we use a quick measure of tax compliance, along with profitability information provided in either the taxpayer's or its parent company's annual reports filed with the SEC, in performing our evaluation of the candidate's suitability for inclusion in the final RLC.

**Table 1. Tested Party Corporation Comparables for Tax Year 2016
(in \$ millions)**

Comparable Name	Sales	Cost of Goods Sold	Operating Expense	Operating Profit	Operating Profit to Sales
Suncor Energy Inc.	\$12,957.7	\$9,779	\$712.3	\$2,466.4	19%
Valero LP	\$1,088.3	\$765.9	\$138.3	\$184	16.9%
Exxon Mobil Corp.	\$340,262.2	\$259,316.2	\$27,032.7	\$53,913.4	15.8%
Imperial Oil Ltd.	\$22,235.6	\$16,654.3	\$2,063.7	\$3,517.7	15.8%
Frontier Oil Corp.	\$4,691.1	\$3,982.4	\$85.3	\$623.4	13.3%
ConocoPhillips	\$167,082.9	\$134,758.1	\$10,383	\$21,941.8	13.1%
ChevronTexaco Corp.	\$201,066.9	\$163,022.4	\$13,801.3	\$24,243.2	12.1%
Hess Corp.	\$27,380.5	\$21,074.1	\$3,138	\$3,168.4	11.6%
Marathon Oil Corp.	\$59,306.8	\$49,711.2	\$3,057	\$6,538.6	11%
HollyFrontier Corp.	\$3,998.9	\$3,531.6	\$104	\$363.3	9.1%
Murphy Oil Corp.	\$14,788.5	\$12,763.8	\$827.3	\$1,197.3	8.1%
Valero Energy Corp.	\$89,129.8	\$80,194.5	\$2,143.7	\$6,791.7	7.6%
Calumet Specialty Products Partners LP	\$1,523.2	\$1,338	\$89.7	\$95.6	6.3%
Tesoro Petroleum Corp.	\$18,753.6	\$17,224	\$390.7	\$1,139	6.1%
Western Refining Inc.	\$4,980.8	\$4,599.2	\$79.7	\$301.9	6.1%
Alon USA Energy Inc.	\$3,352.3	\$3,036.5	\$124	\$191.8	5.7%
Chevron Phillips Chem. Co. LLC	\$11,656.3	\$10,180.6	\$850.7	\$625	5.4%
United Refining Co.	\$2,250.3	\$1,998.4	\$140.7	\$111.2	4.9%
Sunoco Inc.	\$36,374.3	\$33,502.2	\$1,341.7	\$1,530.4	4.2%
<p><i>Note:</i> Observation 5 represents the top of the interquartile range. Observation 10 represents the median of the interquartile range. Observation 15 represents the bottom of the interquartile range.</p>					

Table 2. Evaluation of Possible IRC Section 482 Candidates for the Example Preliminary Analysis

Taxpayer Name Accept or Reject Reason for Acceptance or Rejection	Parent Company	Profit Reported in Annual Report 2016-2018	Measure of Tax Compliance* Full = 100% None = 0%	Accept or Reject	Reason for Acceptance or Rejection
Taxpayer No. 1	Parent Taxpayer No. 1	All Years	11%	Accept	Profitable and Relatively Low Compliance
Taxpayer No. 2	Parent Taxpayer No. 2	All Years	0%	Accept	Profitable and Low Compliance
Taxpayer No. 3	Parent Taxpayer No. 3	All Years	24.8%	Accept	Profitable and Relatively Low Compliance
Taxpayer No. 4	Parent Taxpayer No. 4	All Years	17.2%	Accept	Profitable and Relatively Low Compliance
Taxpayer No. 5	Parent Taxpayer No. 5	All Years	1%	Accept	Profitable and Low Compliance
Taxpayer No. 6	Parent Taxpayer No. 6	All Years	0.1%	Accept	Profitable and Low Compliance
Taxpayer No. 7	Parent Taxpayer No. 7	Private: Not Available	24%	Accept	Profitable and Relatively Low Compliance
Taxpayer No. 8	Parent Taxpayer No. 8	Losses in 2017, 2016, 2015	0.1%	Reject	Losses in Three of the Five Audit Years
Taxpayer No. 9	Parent Taxpayer No. 9	All Years	0.2%	Accept	Profitable and Low Compliance
Taxpayer No. 10	Parent Taxpayer No. 10	All Years Except Loss in 2015	1.2%	Accept	Mostly Profitable and Low Compliance
Taxpayer No. 11	Parent Taxpayer No. 11	All Years	11.2%	Accept	Profitable and Relatively Low Compliance
Taxpayer No. 12	Parent Taxpayer No. 12	All Years	2.3%	Accept	Profitable and Low Compliance
Taxpayer No. 13	Parent Taxpayer No. 13	All Years	0.2%	Accept	Profitable and Low Compliance
Taxpayer No. 14	Parent Taxpayer No. 14	Losses in 2017, 2016, 2015	0.1%	Reject	Losses in 2014, 2013, 2012
Taxpayer No. 15	Parent Taxpayer No. 15	All Years	24.5%	Accept	Profitable and Relatively Low Compliance

* Measure of Tax Compliance is computed as: Taxes Paid divided by the sum of Taxes Paid and Median Tax Adjustments for 2016 to 2018.

The denominator of this ratio is a measure of the tax that should have been paid.

Table 3. Example Preliminary Adjustments to the Median of the Interquartile Range for the Ranked List of Section 482 Audit Candidates

Taxpayer Name	2016 to 2018 3-Year Total	2018	2017	2016
Taxpayer No. 1	\$23,898,877	-	-	\$23,898,877
Taxpayer No. 2	\$34,407,398	\$11,484,188	\$10,692,258	\$12,230,952
Taxpayer No. 3	\$10,152,982	-	-	\$10,152,982
Taxpayer No. 4	\$27,022,055	\$8,465,975	\$11,072,535	\$7,483,544
Taxpayer No. 5	\$23,547,231	\$7,056,124	\$8,600,258	\$7,890,849
Taxpayer No. 6	\$17,861,812	\$1,693,640	\$6,690,758	\$9,477,414
Taxpayer No. 7	\$22,010,213	\$6,479,309	\$7,149,573	\$8,381,331
Taxpayer No. 8	\$14,364,817	\$4,541,896	\$5,227,241	\$4,595,680
Taxpayer No. 9	\$14,520,922	\$4,312,923	\$5,029,318	\$5,178,682
Taxpayer No. 10	\$16,091,746	-	\$5,865,629	\$10,226,117
Total	\$203,878,054	\$44,034,055	\$60,327,570	\$99,516,429

Table 3 presents an example final RLC for the 20 taxpayers identified as possible noncompliance candidates using the median observation of the appropriate interquartile range as the point for computing an income allocation using IRC section 482.

Detailed Estimates – Northeastern U.S.

Northeastern States

Table 4 presents the state transfer pricing tax gap results for the 11 Northeastern U.S. states and the District of Columbia. The total state transfer pricing tax gap is estimated to be \$2.7 billion for 2018. It is important to note that these estimates are based only on the top 50 taxpayers in most states because some states have fewer than 50 taxpayers with IRC section 482 tax adjustments.

Table 4. IRC Section 482 Tax Adjustments for Northeastern U.S. States for 2018

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	151	\$2,096,226
\$1,000,000-\$5,000,000	200	\$545,158
\$750,000-\$1,000,000	30	\$26,044
\$500,000-\$750,000	22	\$13,435
\$250,000-\$500,000	28	\$10,731
\$100,000-\$250,000	13	\$2,184
\$0-\$100,000	11	\$524
	455	\$2,694,302

The results in Table 4 show most of the IRC section 482 tax adjustments are skewed in the top tax adjustment class of over \$5 million for a total in that class of \$2.1 billion. The largest number of taxpayers is found in the next tax adjustment class of \$1 million to \$5 million.

Connecticut

Connecticut’s top corporate tax rate is 9 percent, and its corporate income tax accounted for \$778.2 million in tax revenue in 2018. On June 30, 2015, then-Gov. Dan Malloy signed into law H.B. 7061 and S.B. 1502, which together enact significant changes to the corporate income tax law, including the adoption of mandatory unitary combined reporting for tax years beginning after December 31, 2015.

Table 5 presents the transfer pricing tax gap results for Connecticut. The total transfer pricing tax gap is estimated to be \$163.9 million for 2018, accounted for by 44 taxpayers. The estimated transfer pricing tax gap represents 21.1 percent of the total corporate tax in 2018.

Table 5. IRC Section 482 Tax Adjustments for Connecticut

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	7	\$74,638
\$1,000,000-\$5,000,000	33	\$87,608
\$750,000-\$1,000,000	1	\$920
\$500,000-\$750,000	0	-
\$250,000-\$500,000	1	\$467
\$100,000-\$250,000	1	\$202
\$0-\$100,000	1	\$40
	44	163,874

Delaware

The corporate income tax in Delaware has a tax rate of 8.7 percent and is based on federal taxable income. Delaware does not tax income from intangible assets, and this encourages companies to move parts of their business to Delaware to avoid taxes in other states. This has led to Delaware being labeled a tax haven. We have therefore not included the state in our estimates of the tax gap attributable to transfer pricing.

District of Columbia

The District’s top corporate tax rate is 9.4 percent, and its corporate income tax accounted for \$574.7 million in tax revenue in 2018.

On June 14, 2011, the District of Columbia Council approved a \$10.8 billion budget plan for the next fiscal year. The Fiscal Year 2012 Budget Support Act of 2011 included several provisions that affect corporate taxpayers, including mandatory unitary combined reporting. Applicable to tax years beginning on or after December 31, 2010, taxpayers engaged in a unitary business with one or more other corporations that are part of a water’s-edge combined group are required to file a combined report that includes the income and allocation and apportionment factors of the entire group.

Table 6 presents the transfer pricing tax gap results for the District. The total transfer pricing tax gap is estimated to be \$94.1 million for 2018, accounted for by 38 taxpayers. The estimated transfer pricing tax gap represents 16.4 percent of the total corporate tax collected in 2018.

Table 6. IRC Section 482 Tax Adjustments for the District of Columbia

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	3	\$32,886
\$1,000,000-\$5,000,000	25	\$55,745
\$750,000-\$1,000,000	4	\$3,480
\$500,000-\$750,000	1	\$729
\$250,000-\$500,000	3	\$1,063
\$100,000-\$250,000	1	\$138
\$0-\$100,000	1	\$27
	38	\$94,069

Maine

Maine's top corporate tax rate is 8.93 percent, and its corporate income tax accounted for \$28 million in tax revenue in 2018. Maine has had combined reporting for more than 30 years. Maine's law was effective January 1, 1986.

Table 7 presents the transfer pricing tax gap results for Maine. The total transfer pricing tax gap is estimated to be \$28 million for 2018, accounted for by 32 taxpayers. The estimated transfer pricing tax gap represents 15.1 percent of the total corporate tax collected in 2018.

Table 7. IRC Section 482 Tax Adjustments for Maine

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	1	\$5,280
\$1,000,000-\$5,000,000	5	\$9,436
\$750,000-\$1,000,000	5	\$4,259
\$500,000-\$750,000	9	\$5,530
\$250,000-\$500,000	8	\$3,007
\$100,000-\$250,000	3	\$496
\$0-\$100,000	1	\$9
	32	\$28,017

Maryland

Maryland's top corporate tax rate is 8.25 percent, and its corporate income tax accounted for \$1.03 billion in tax revenue in 2018. Maryland does not have combined reporting because it has single-entity reporting. The General Assembly is considering enacting combined reporting in 2021.

Table 8 presents the transfer pricing tax gap results for Maryland. The total transfer pricing tax gap is estimated to be \$189.4 million for 2018, accounted for by 47 taxpayers. The estimated transfer pricing tax gap represents 18.3 percent of the total corporate tax collected in 2018.

Table 8. IRC Section 482 Tax Adjustments for Maryland

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000	8	\$85,961
\$1,000,000-\$5,000,000	34	\$100,980
\$750,000-\$1,000,000	2	\$1,674
\$500,000-\$750,000	0	-
\$250,000-\$500,000	1	\$496
\$100,000-\$250,000	1	\$242
\$0-\$100,000	1	\$48
	47	\$189,401

Massachusetts

Massachusetts's top corporate tax rate is 8 percent, and its corporate income tax accounted for \$2.41 billion in tax revenue in 2018. Massachusetts — whose combined reporting law was effective January 1, 2009 — has had the filing regime for more than 10 years.

Table 9 presents the transfer pricing tax gap results for Massachusetts. The total transfer pricing tax gap is estimated to be \$365.4 million for 2018. The estimated transfer pricing tax gap represents 15.2 percent of the total corporate tax collected in 2018.

Table 9. IRC Section 482 Tax Adjustments for Massachusetts

Size of Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	26	\$300,964
\$1,000,000-\$5,000,000	20	\$62,232
\$750,000-\$1,000,000	2	\$1,705
\$500,000-\$750,000	0	-
\$250,000-\$500,000	1	\$391
\$100,000-\$250,000	0	-
\$0-\$100,000	1	\$77
	50	\$365,369

New Hampshire

New Hampshire’s top corporate tax rate is 8.5 percent, and its corporate income tax accounted for \$790 million in tax revenue in 2018. New Hampshire has had combined reporting for more than 30 years. Its system became effective June 30, 1986.

Table 10 presents the transfer pricing tax gap results for New Hampshire. The total transfer pricing tax gap is estimated to be \$143 million for 2018. The estimated transfer pricing tax gap represents 18.1 percent of the total corporate tax collected in 2018.

Table 10. IRC Section 482 Tax Adjustments for New Hampshire

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	7	\$77,453
\$1,000,000-\$5,000,000	24	\$63,022
\$750,000-\$1,000,000	1	\$786
\$500,000-\$750,000	2	\$1,239
\$250,000-\$500,000	1	\$450
\$100,000-\$250,000	0	-
\$0-\$100,000	1	\$43
	36	\$142,993

New Jersey

New Jersey’s top corporate tax rate is 9 percent, and its corporate income tax accounted for \$2.24 billion in tax revenue in 2018. On July 1, 2018, New Jersey enacted legislation overhauling several state tax laws. Most notably, for tax years beginning in 2019, the legislation imposes mandatory unitary combined reporting and market-based sourcing for sales factor purposes.

Table 11 presents the transfer pricing tax gap results for New Jersey. The total transfer pricing tax gap is estimated to be \$382.2 million for 2018. The estimated transfer pricing tax gap represents 17.1 percent of the total corporate tax collected in 2018.

Table 11. IRC Section 482 Tax Adjustments for New Jersey

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	27	\$319,842
\$1,000,000-\$5,000,000	19	\$60,059
\$750,000-\$1,000,000	2	\$1,784
\$500,000-\$750,000	0	-
\$250,000-\$500,000	1	\$409
\$100,000-\$250,000	0	-
\$0-\$100,000	1	\$80
	50	\$382,174

New York

New York’s top corporate tax rate is 6.5 percent, and its corporate income tax accounted for \$3.62 billion in tax revenue in 2018. The state enacted combined reporting in 2007 for tax years beginning on or after January 1, 2007.

Table 12 presents the transfer pricing tax gap results for New York. The total transfer pricing tax gap is estimated to be \$856.9 million for 2018. The estimated transfer pricing tax gap represents 23.7 percent of the total corporate tax collected in 2018.

Table 12. IRC Section 482 Tax Adjustments for New York

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	42	\$836,445
\$1,000,000-\$5,000,000	6	\$19,347
\$750,000-\$1,000,000	1	\$917
\$500,000-\$750,000	0	-
\$250,000-\$500,000	0	-
\$100,000-\$250,000	1	\$180
\$0-\$100,000	0	-
	50	\$856,889

Pennsylvania

Pennsylvania's top corporate tax rate is 9.99 percent, and its corporate income tax accounted for \$2.49 billion in tax revenue in 2018.

Pennsylvania does not have combined reporting because it has single-entity reporting, but the legislature is considering enacting combined reporting.

Table 13 presents the transfer pricing tax gap results for Pennsylvania. The total transfer pricing tax gap is estimated to be \$413.2 million for 2018. The estimated transfer pricing tax gap represents 16.6 percent of the total corporate tax collected in 2018.

Table 13. IRC Section 482 Tax Adjustments for Pennsylvania

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	28	\$351,202
\$1,000,000-\$5,000,000	19	\$60,565
\$750,000-\$1,000,000	1	\$905
\$500,000-\$750,000	0	-
\$250,000-\$500,000	1	\$442
\$100,000-\$250,000	0	-
\$0-\$100,000	1	\$87
	50	\$413,200

Rhode Island

Rhode Island's top corporate tax rate is 7 percent, and its corporate income tax accounted for \$118.1 million in tax revenue in 2018.

On June 19, 2014, then-Gov. Lincoln Chafee signed into law H.B. 7133 (now codified under title 44, chapter 11 of the General Laws of Rhode Island), which implemented the water's-edge unitary combined reporting requirement for tax years beginning on or after January 1, 2015.

Table 14 presents the transfer pricing tax gap results for Rhode Island. The total transfer pricing tax gap is estimated to be \$29.9 million for 2018. The estimated transfer pricing tax gap represents 25.3 percent of the total corporate tax collected in 2018.

Table 14. IRC Section 482 Tax Adjustments for Rhode Island

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	1	\$5,934
\$1,000,000-\$5,000,000	10	\$14,963
\$750,000-\$1,000,000	5	\$4,442
\$500,000-\$750,000	4	\$2,273
\$250,000-\$500,000	5	\$1,760
\$100,000-\$250,000	3	\$475
\$0-\$100,000	1	\$53
	29	\$29,899

Vermont

Vermont's top corporate tax rate is 6 percent, and its corporate income tax accounted for \$110.8 million in tax revenue in 2018. Vermont adopted mandatory combined reporting in 2004, applicable to tax years beginning on or after January 1, 2006.

Table 15 presents the transfer pricing tax gap results for Vermont. The total transfer pricing tax gap is estimated to be \$28.4 million for 2018. The estimated transfer pricing tax gap represents 25.6 percent of the total corporate tax collected in 2018.

Table 15. IRC Section 482 Tax Adjustments for Vermont

Size of Tax Adjustment	Number of Taxpayers	Total IRC Section 482 Tax Adjustment (\$000s)
\$5,000,000 >	1	\$5,622
\$1,000,000-\$5,000,000	5	\$11,202
\$750,000-\$1,000,000	6	\$5,170
\$500,000-\$750,000	6	\$3,664
\$250,000-\$500,000	6	\$2,246
\$100,000-\$250,000	3	\$450
\$0-\$100,000	2	\$60
	29	\$28,416

Effects of Related Issues on the Estimates

Combined Reporting

A few years ago, we performed an analysis of the impact of combined reporting in the District of Columbia.⁷ One of the more interesting aspects from the analysis was its intersection with the IRC section 482 analysis. Generally, the IRC section 482 analysis is an economic analysis that identifies taxpayers that are consistently not paying a sufficient tax. One would expect that if combined reporting is effective in enhancing tax compliance, the IRC section 482 analysis would not intersect significantly with combined reporting.

In our study of the impact of combined reporting in the District, it is noteworthy that of the 311 taxpayers receiving IRC section 482 tax adjustments, 271 were not affected by combined reporting. Most of the IRC section 482 tax adjustments were associated with these 271 taxpayers. The key point is that both combined reporting and the application of an IRC section 482 analysis are effective methods for achieving tax compliance, but there is little overlap in the two methods.

Since the recent enactment of combined reporting in many states, a taxpayer's filing with a state is essentially the same as the taxpayer's filing at the federal level. At the federal level, IRC section 482 and the associated regulations were developed to provide a mechanism to enforce tax compliance. Essentially, if the federal government has transfer pricing issues and uses IRC section 482 to enforce tax compliance, it stands to reason that the states with combined reporting will have transfer pricing issues and can continue to use IRC section 482 to enforce tax compliance. For example, if a taxpayer has intercompany transactions with foreign subsidiaries excluded from the combined return, the income reported to the states may not be consistent with the arm's-length standard. The determination of whether a taxpayer's reported income is consistent with the arm's-length standard may be made using the comparable profits method under IRC section 482, which generally compares the reported

income on the tax return with the operating profit of comparable companies. If the reported income on the tax return is below the arm's-length range, an income adjustment may be warranted.

TCJA

Is there a possible interaction between the TCJA provisions and the estimated transfer pricing tax gap for the Northeastern states in 2018? The current year inclusion of global intangible low-taxed income is the only international provision expected to have a direct positive revenue impact on some of these states. Generally, we do not believe that the GILTI provision would have a significant effect on the transfer pricing tax gap for the Northeastern states in 2018.

The international provision relating to the repatriation of deferred foreign earnings also will have no direct impact on the transfer pricing tax gap for the Northeastern states in 2018. It is noteworthy, however, that according to a Moody's report, \$1.3 trillion was held overseas by several hundred corporate taxpayers in July 2017, most of which is linked to international transfer pricing.⁸

COVID-19

Like the TCJA, we do not anticipate that there should be any interaction between COVID-19 and the estimated transfer pricing tax gap for the Northeastern states in 2018. The audit period for tax year 2018 is in the books and should be an open audit year.

Conclusion

In this article, we presented estimates of the state corporate income tax gap attributable to transfer pricing for tax year 2018 for the states in the Northeastern region of the United States. Overall, we estimate that these states' corporate tax gap because of transfer pricing totals \$2.7 billion for that year. We remind the reader, however, that these estimates are for only the largest 50 taxpayers having IRC section 482 tax adjustments. ■

⁷ *Supra* note 3.

⁸ Moody's Investor Service, "U.S. Corporate Cash Pile Grows to 1.84 Trillion, Led by Tech Sector," Global Credit Research, July 19, 2017.