

2019 STATE BUSINESS TAX CLIMATE INDEX

BY JARED WALCZAK,
SCOTT DRENKARD,
AND JOSEPH BISHOP-HENCHMAN



PRINCIPLED
INSIGHTFUL
ENGAGED

ISBN: 978-1-942768-22-7

© 2018 Tax Foundation
1325 G Street, NW, Suite 950
Washington, D.C. 20005
202.464.6200
taxfoundation.org

EXECUTIVE SUMMARY

The Tax Foundation's *State Business Tax Climate Index* enables business leaders, government policymakers, and taxpayers to gauge how their states' tax systems compare. While there are many ways to show how much is collected in taxes by state governments, the *Index* is designed to show how well states structure their tax systems and provides a road map for improvement.

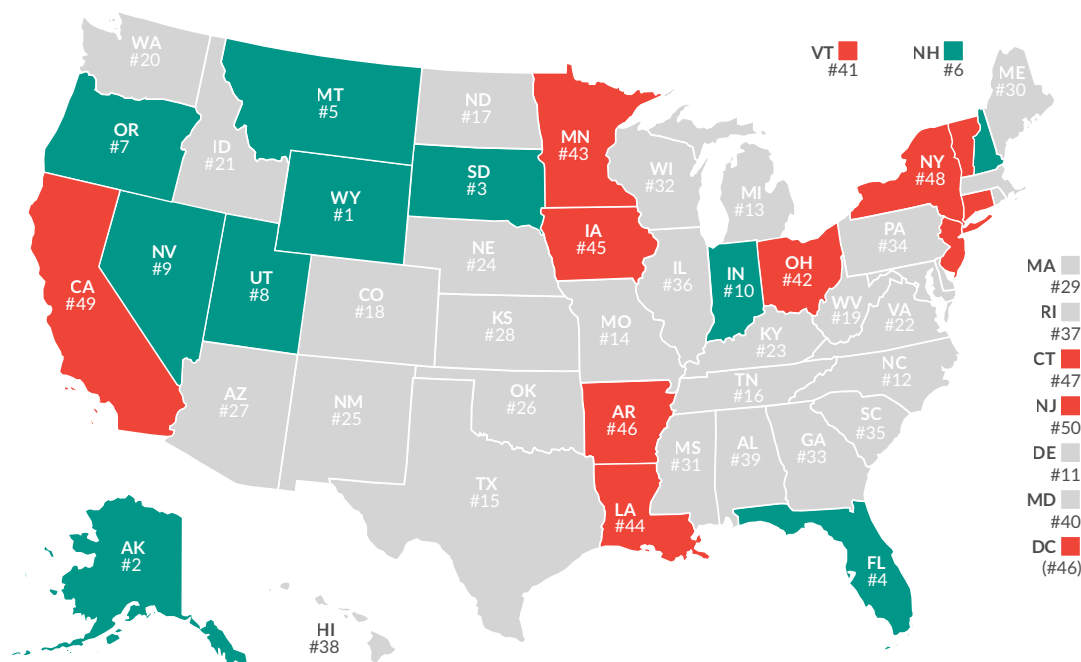
The 10 best states in this year's *Index* are:

1. Wyoming
2. Alaska
3. South Dakota
4. Florida
5. Montana
6. New Hampshire
7. Oregon
8. Utah
9. Nevada
10. Indiana

The 10 lowest ranked, or worst, states in this year's *Index* are:

41. Vermont
42. Ohio
43. Minnesota
44. Louisiana
45. Iowa
46. Arkansas
47. Connecticut
48. New York
49. California
50. New Jersey

2019 State Business Tax Climate Index



Note: A rank of 1 is best, 50 is worst. Rankings do not average to the total. States without a tax rank equally as 1. D.C.'s score and rank do not affect other states. The report shows tax systems as of July 1, 2018 (the beginning of Fiscal Year 2019).

Source: Tax Foundation.

10 Best Business Tax Climates

10 Worst Business Tax Climates

The absence of a major tax is a common factor among many of the top 10 states. Property taxes and unemployment insurance taxes are levied in every state, but there are several states that do without one or more of the major taxes: the corporate income tax, the individual income tax, or the sales tax. Wyoming, Nevada, and South Dakota have no corporate or individual income tax (though Nevada imposes gross receipts taxes); Alaska has no individual income or state-level sales tax; Florida has no individual income tax; and New Hampshire, Montana, and Oregon have no sales tax.

This does not mean, however, that a state cannot rank in the top 10 while still levying all the major taxes. Indiana and Utah, for example, levy all of the major tax types, but do so with low rates on broad bases.

The states in the bottom 10 tend to have a number of afflictions in common: complex, nonneutral taxes with comparatively high rates. New Jersey, for example, is hampered by some of the highest property tax burdens in the country, recently implemented the second highest-rate corporate income tax in the country, levies an inheritance tax, and maintains some of the nation's worst-structured individual income taxes.

TABLE 1.
2019 State Business Tax Climate Index Ranks and Component Tax Ranks

	Overall Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Property Tax Rank	Unemployment Insurance Tax Rank
Alabama	39	20	30	48	15	12
Alaska	2	25	1	5	23	35
Arizona	27	17	19	47	5	13
Arkansas	46	40	40	44	26	34
California	49	31	49	43	14	17
Colorado	18	16	14	38	12	40
Connecticut	47	29	43	30	50	23
Delaware	11	50	41	2	9	3
Florida	4	6	1	22	11	2
Georgia	33	8	38	29	24	38
Hawaii	38	14	47	24	16	26
Idaho	21	26	23	26	4	48
Illinois	36	39	13	36	45	42
Indiana	10	18	15	12	2	11
Iowa	45	48	42	19	39	33
Kansas	28	34	21	31	20	15
Kentucky	23	27	17	14	35	47
Louisiana	44	36	32	50	32	4
Maine	30	41	24	7	41	24
Maryland	40	22	45	18	42	28
Massachusetts	29	37	11	13	46	50
Michigan	13	11	12	11	22	49
Minnesota	43	42	46	27	31	25
Mississippi	31	15	27	35	36	5
Missouri	14	4	25	25	7	8
Montana	5	12	22	3	10	21
Nebraska	24	28	26	9	40	9
Nevada	9	33	5	40	8	45
New Hampshire	6	45	9	1	44	44
New Jersey	50	47	50	45	48	32
New Mexico	25	21	31	41	1	10
New York	48	7	48	42	47	31
North Carolina	12	3	16	20	33	7
North Dakota	17	23	20	32	6	14
Ohio	42	46	44	28	13	6
Oklahoma	26	9	33	39	19	1
Oregon	7	30	36	4	17	37
Pennsylvania	34	43	18	21	34	46
Rhode Island	37	32	29	23	43	29
South Carolina	35	19	34	34	27	27
South Dakota	3	1	1	33	28	39
Tennessee	16	24	8	46	29	22
Texas	15	49	6	37	37	18
Utah	8	5	10	16	3	16
Vermont	41	38	37	15	49	20
Virginia	22	10	35	10	30	43
Washington	20	44	6	49	25	19
West Virginia	19	13	28	17	18	30
Wisconsin	32	35	39	8	21	41
Wyoming	1	1	1	6	38	36
District of Columbia	46	27	45	25	47	33

Note: A rank of 1 is best, 50 is worst. Rankings do not average to the total. States without a tax rank equally as 1. D.C.'s score and rank do not affect other states. The report shows tax systems as of July 1, 2018 (the beginning of Fiscal Year 2019).

Source: Tax Foundation.

NOTABLE RANKING CHANGES IN THIS YEAR'S INDEX

Connecticut

A temporary corporate income tax surcharge in Connecticut was permitted to phase down from 20 to 10 percent in 2018, reducing the top marginal rate (surcharge-inclusive) from 9.0 to 8.25 percent. Originally set to expire at the end of 2015, legislation adopted that year postponed its elimination until 2019, with a phasedown in 2018. This year's budget will further postpone the surcharge's repeal, but the 2018 rate reduction helped the state improve four places on the corporate component of the Index, from 33rd to 29th. Connecticut's overall rank remains unchanged at 47th.

Delaware

Delaware reversed its short-lived and counterproductive experiment with the estate tax, repealing it as of January 1, 2018. First adopted less than a decade ago, the tax generated very little revenue while driving wealthy seniors out of the state. Legislators scrapped the tax this year, and its elimination is the driving force behind the state's improvement from 20th to 9th on the property tax component of the Index, and from 16th to 11th overall.

Hawaii

Last year, Hawaii legislators voted to restore the higher rates and brackets associated with a temporary tax increase which had been allowed to expire a year ago. The legislation reestablished three individual income tax brackets that had been eliminated and restored the top marginal rate to 11 percent, up from 8.25 percent. These changes went into effect in calendar year 2018 and caused the state to slip four places overall, from 34th to 38th, and from 38th to 47th on the individual income tax component.

Idaho

Idaho improved from 23rd to 21st overall due to individual and corporate income tax rate cuts adopted in response to base-broadening provisions of federal tax reform. Policymakers trimmed both rates by 0.475 percentage points, from 7.4 to 6.925 percent.

Indiana

Indiana saw consistent rate reductions through a series of responsible tax reform efforts between 2011 and 2016. Subsequent legislation established a further schedule of corporate income tax reductions through fiscal year 2022. For 2018, the corporate income tax rate declined from 6 to 5.75 percent. This rate reduction, among other changes, drove an improvement of six places on the corporate component of the *Index*. The Hoosier State and Utah continue to post the best rankings among states which impose all the major taxes.

Kansas

Recurring revenue shortfalls precipitated by a shortsighted package of tax cuts adopted in 2012 which, among other things, exempted all pass-through income from taxation, prompted legislators to phase in individual income tax rate increases over the past two years. Last year's rate increase, which also added an additional tax bracket, resulted in a decline in the state's overall ranking. However, this year's further rate increase, from 5.2 to 5.7 percent, had no effect on the state's overall rank. It did, however, drop Kansas two places—from 19th to 21st—on the individual income tax component.

TABLE 2.
State Business Tax Climate Index (2016–2019)

State	2016 Rank	2016 Score	2017 Rank	2017 Score	2018 Rank	2018 Score	2019 Rank	2019 Score	Change from 2018 to 2019	
									Rank	Score
Alabama	38	4.69	37	4.77	37	4.73	39	4.61	-2	-0.12
Alaska	2	7.34	3	7.25	3	7.15	2	7.35	+1	+0.20
Arizona	27	5.08	26	5.10	25	5.09	27	5.00	-2	-0.09
Arkansas	46	4.25	43	4.36	43	4.35	46	4.28	-3	-0.07
California	48	3.91	48	3.91	48	3.88	49	4.00	-1	+0.12
Colorado	18	5.26	18	5.25	18	5.28	18	5.19	0	-0.09
Connecticut	47	4.19	47	4.17	47	4.17	47	4.23	0	+0.06
Delaware	11	5.53	16	5.34	16	5.34	11	5.55	+5	+0.21
Florida	4	6.78	4	6.82	4	6.82	4	6.86	0	+0.04
Georgia	34	4.81	33	4.89	31	4.92	33	4.85	-2	-0.07
Hawaii	35	4.72	31	4.90	34	4.86	38	4.66	-4	-0.20
Idaho	26	5.10	25	5.10	23	5.11	21	5.12	+2	+0.01
Illinois	30	4.97	28	4.99	33	4.86	36	4.74	-3	-0.12
Indiana	10	5.58	9	5.73	9	5.75	10	5.70	-1	-0.05
Iowa	42	4.40	45	4.29	46	4.30	45	4.33	+1	+0.03
Kansas	25	5.11	24	5.11	28	5.04	28	4.99	0	-0.05
Kentucky	37	4.70	38	4.66	39	4.69	23	5.10	+16	+0.41
Louisiana	39	4.68	44	4.31	44	4.32	44	4.34	0	+0.02
Maine	33	4.82	35	4.87	30	4.97	30	4.95	0	-0.02
Maryland	41	4.51	40	4.47	40	4.48	40	4.53	0	+0.05
Massachusetts	28	4.99	29	4.98	27	5.04	29	4.98	-2	-0.06
Michigan	13	5.46	12	5.50	12	5.50	13	5.45	-1	-0.05
Minnesota	45	4.36	46	4.29	45	4.31	43	4.37	+2	+0.06
Mississippi	29	4.98	30	4.98	29	4.98	31	4.95	-2	-0.03
Missouri	16	5.29	15	5.36	15	5.34	14	5.38	+1	+0.04
Montana	5	6.25	5	6.22	5	6.21	5	6.30	0	+0.09
Nebraska	21	5.14	23	5.12	26	5.08	24	5.06	+2	-0.02
Nevada	9	5.86	7	5.92	7	5.92	9	5.81	-2	-0.11
New Hampshire	6	5.99	6	5.97	6	5.99	6	6.06	0	+0.07
New Jersey	50	3.51	50	3.51	50	3.44	50	3.20	0	-0.24
New Mexico	24	5.11	27	5.09	24	5.11	25	5.06	-1	-0.05
New York	49	3.84	49	3.86	49	3.87	48	4.02	+1	+0.15
North Carolina	12	5.49	11	5.55	11	5.58	12	5.52	-1	-0.06
North Dakota	19	5.24	19	5.23	19	5.23	17	5.28	+2	+0.05
Ohio	43	4.40	41	4.46	41	4.44	42	4.51	-1	+0.07
Oklahoma	23	5.12	21	5.16	21	5.13	26	5.05	-5	-0.08
Oregon	8	5.86	10	5.73	10	5.74	7	5.88	+3	+0.14
Pennsylvania	36	4.72	32	4.90	36	4.82	34	4.85	+2	+0.03
Rhode Island	40	4.53	39	4.50	38	4.70	37	4.71	+1	+0.01
South Carolina	31	4.90	34	4.88	32	4.89	35	4.83	-3	-0.06
South Dakota	3	7.33	2	7.34	2	7.34	3	7.27	-1	-0.07
Tennessee	17	5.27	14	5.41	14	5.42	16	5.30	-2	-0.12
Texas	14	5.46	13	5.48	13	5.46	15	5.37	-2	-0.09
Utah	7	5.88	8	5.88	8	5.89	8	5.83	0	-0.06
Vermont	44	4.39	42	4.38	42	4.39	41	4.53	+1	+0.14
Virginia	22	5.13	22	5.13	22	5.12	22	5.11	0	-0.01
Washington	15	5.31	17	5.32	17	5.31	20	5.18	-3	-0.13
West Virginia	20	5.23	20	5.18	20	5.17	19	5.18	+1	+0.01
Wisconsin	32	4.84	36	4.80	35	4.85	32	4.87	+3	+0.02
Wyoming	1	7.62	1	7.64	1	7.70	1	7.62	0	-0.08
District of Columbia	45	4.37	48	4.03	48	4.04	46	4.32	0	+0.28

Note: A rank of 1 is best, 50 is worst. All scores are for fiscal years. D.C.'s score and rank do not affect other states.

Source: Tax Foundation.

Kentucky

Kentucky adopted revenue-positive tax reform which increases tax collections (primarily to address unfunded pension liabilities) while improving the overall tax structure. The state moved from a six-bracket individual income tax with a top rate of 6 percent to a 5 percent single-rate tax and scrapped its three-bracket corporate income tax for a single-rate tax as well. Lawmakers also suspended several business tax credits, broadened the sales tax base, and raised the cigarette tax, among other changes. These structural changes and tax simplifications yielded a 16-place improvement in Kentucky's overall ranking, from 39th to 23rd, with a particularly strong improvement on the individual income tax component, where the state jumped from 37th to 17th nationwide.

New Jersey

New Jersey completed the phaseout of its estate tax in 2018 and reduced its sales tax rate from 6.875 to 6.625 percent, the culmination of a two-year swap involving higher gas tax rates. At the same time, however, lawmakers created a new individual income tax bracket with a rate of 10.75 percent, the third-highest in the country, and added a corporate income tax surcharge on companies with income of \$1 million or more, which brings their tax rate to 11.5 percent. The sales tax rate reduction improves the state one place on that component, while estate tax repeal drives an improvement from 50th to 48th on the property tax component. The state's individual income tax rank drops from 48th to 50th, and its corporate income tax rank falls from 42nd to 47th with the new rate increases. The state continues to rank worst overall on the *Index*.

Vermont

Set to experience a substantial revenue windfall due to federal tax reform, Vermont eliminated an individual income tax bracket while changing the top rate to 8.75 percent, down from 8.95 percent. The rate reduction and bracket contraction drove an improvement of six places on the individual income tax component, from 43rd to 37th, and helped the state improve one place, from 42nd to 41st, overall.

District of Columbia

In 2014, the District of Columbia began phasing in a tax reform package which lowered individual income taxes for middle-income brackets, expanded the sales tax base, raised the estate tax exemption, and reduced the corporate income tax rate. This year saw the final stage of those reforms implemented, with the corporate income tax declining to 8.25 percent and the standard deduction increasing to match the new federal deduction of \$12,000. These changes helped D.C. improve two places overall, from 48th to 46th.

RECENT AND PROPOSED CHANGES NOT REFLECTED IN THE 2019 INDEX

Arkansas

Arkansas legislators are closing in on a comprehensive tax reform package which would overhaul individual and corporate income taxes as well as state-imposed property and wealth taxes, the culmination of the work of a state tax reform commission. Should the state adopt such a plan, it would be reflected in subsequent editions of the *Index*.

Georgia

This year, Georgia lawmakers approved a tax reform package which could reduce the individual income tax rate from 6.0 to 5.5 percent by 2020, among other changes. These changes will begin to go into effect in 2019 and will be reflected in next year's edition of the *Index*.

Iowa

In 2018, Iowa legislators adopted a comprehensive tax reform package which will ultimately reduce both individual and corporate income tax rates and eliminate the state's unusual provision of a deduction for federal income tax payments, subject to revenue availability. These changes are not in effect in 2018, but Iowa's rankings can be expected to improve as reforms phase in over the next few years.

Louisiana

With a temporary one percentage-point sales tax increase known as the "clean penny" set to expire, lawmakers chose a partial extension, keeping the rate above where it was when the temporary increase was adopted, but lower than it was last year. While the state rate declined from 5 to 4.45 percent, Louisiana's combined average state and local sales tax rate remains the second highest in the nation at 9.46 percent, and its exceedingly complex and uncompetitive sales tax structure is still ranked worst in the nation on the sales tax component of the *Index*.

Missouri

In the waning days of the legislative session, Missouri legislators approved bills which will overhaul both the individual and corporate income taxes in coming years. The legislation will eliminate the choice of apportionment factors for most corporate taxpayers, paying for a rate reduction from 6.25 to 4 percent, while the individual income tax is set on a path toward a top rate of 5.1 percent (from 5.9 percent this year). These changes, however, lay in the future, and will show up in subsequent editions of the *Index*.

New Mexico

New Mexico completed its phase-in of corporate income tax rate reductions that began in 2014, with the rate dropping from 6.2 to 5.9 percent. This final reduction was not enough to improve the state's ranking on the corporate component of the *Index*, though the state has improved several places since the rate reductions began.

Tennessee

In 2016, Tennessee began phasing out its Hall Tax, a tax on interest and dividend income, though the state does not tax wage income. The *Index* includes this tax at a calculated rate to reflect its unusually narrow base. Initial reductions are too small to change any component rankings, but Tennessee's rank will improve once the tax is fully phased out in 2022.

Utah

Utah shaved both its corporate and individual income tax rates from 5 to 4.95 percent in response to higher anticipated revenue in the aftermath of federal tax reform. These minor reductions were not enough to improve the state's rank, but Utah continues to rank the best of any state which imposes all the major tax types.

INTRODUCTION

Taxation is inevitable, but the specifics of a state's tax structure matter greatly. The measure of total taxes paid is relevant, but other elements of a state tax system can also enhance or harm the competitiveness of a state's business environment. The *State Business Tax Climate Index* distills many complex considerations to an easy-to-understand ranking.

The modern market is characterized by mobile capital and labor, with all types of businesses, small and large, tending to locate where they have the greatest competitive advantage. The evidence shows that states with the best tax systems will be the most competitive at attracting new businesses and most effective at generating economic and employment growth. It is true that taxes are but one factor in business decision-making. Other concerns also matter—such as access to raw materials or infrastructure or a skilled labor pool—but a simple, sensible tax system can positively impact business operations with regard to these resources. Furthermore, unlike changes to a state's health-care, transportation, or education systems, which can take decades to implement, changes to the tax code can quickly improve a state's business climate.

It is important to remember that even in our global economy, states' stiffest competition often comes from other states. The Department of Labor reports that most mass job relocations are from one U.S. state to another rather than to a foreign location.¹ State lawmakers are right to be concerned about how their states rank in the global competition for jobs and capital, but they need to be more concerned with companies moving from Detroit, Michigan, to Dayton, Ohio, than from Detroit to New Delhi, India. This means that state lawmakers must be aware of how their states' business climates match up against their immediate neighbors and to other regional competitor states.

Anecdotes about the impact of state tax systems on business investment are plentiful. In Illinois early last decade, hundreds of millions of dollars of capital investments were delayed when then-Governor Rod Blagojevich (D) proposed a hefty gross receipts tax.² Only when the legislature resoundingly defeated the bill did the investment resume. In 2005, California-based Intel decided to build a multibillion-dollar chip-making facility in Arizona due to its favorable corporate income tax system.³ In 2010, Northrup Grumman chose to move its headquarters to Virginia over Maryland, citing the better business tax climate.⁴ In 2015, General Electric and Aetna threatened to decamp from Connecticut if the governor signed a budget that would increase corporate tax burdens, and General Electric actually did so.⁵ Anecdotes such as these reinforce what we know from economic theory: taxes matter to businesses, and those places with the most competitive tax systems will reap the benefits of business-friendly tax climates.

Tax competition is an unpleasant reality for state revenue and budget officials, but it is an effective restraint on state and local taxes. When a state imposes higher taxes than a neighboring

1 See U.S. Department of Labor, "Extended Mass Layoffs, First Quarter 2013," Table 10, May 13, 2013.

2 Editorial, "Scale it back, Governor," *Chicago Tribune*, Mar. 23, 2007.

3 Ryan Randazzo, Edythe Jenson, and Mary Jo Pitzl, "Cathy Carter Blog: Chandler getting new \$5 billion Intel facility," AZCentral.com, Mar. 6, 2013.

4 Dana Hedgpeth and Rosalind Helderman, "Northrop Grumman decides to move headquarters to Northern Virginia," *The Washington Post*, Apr. 27, 2010.

5 Susan Haigh, "Connecticut House Speaker: Tax 'mistakes' made in budget," Associated Press, Nov. 5, 2015.

state, businesses will cross the border to some extent. Therefore, states with more competitive tax systems score well in the *Index*, because they are best suited to generate economic growth.

State lawmakers are mindful of their states' business tax climates, but they are sometimes tempted to lure business with lucrative tax incentives and subsidies instead of broad-based tax reform. This can be a dangerous proposition, as the example of Dell Computers and North Carolina illustrates. North Carolina agreed to \$240 million worth of incentives to lure Dell to the state. Many of the incentives came in the form of tax credits from the state and local governments. Unfortunately, Dell announced in 2009 that it would be closing the plant after only four years of operations.⁶ A 2007 *USA TODAY* article chronicled similar problems other states have had with companies that receive generous tax incentives.⁷

Lawmakers make these deals under the banner of job creation and economic development, but the truth is that if a state needs to offer such packages, it is most likely covering for an undesirable business tax climate. A far more effective approach is the systematic improvement of the state's business tax climate for the long term to improve the state's competitiveness. When assessing which changes to make, lawmakers need to remember two rules:

1. **Taxes matter to business.** Business taxes affect business decisions, job creation and retention, plant location, competitiveness, the transparency of the tax system, and the long-term health of a state's economy. Most importantly, taxes diminish profits. If taxes take a larger portion of profits, that cost is passed along to either consumers (through higher prices), employees (through lower wages or fewer jobs), or shareholders (through lower dividends or share value), or some combination of the above. Thus, a state with lower tax costs will be more attractive to business investment and more likely to experience economic growth.
2. **States do not enact tax changes (increases or cuts) in a vacuum.** Every tax law will in some way change a state's competitive position relative to its immediate neighbors, its region, and even globally. Ultimately, it will affect the state's national standing as a place to live and to do business. Entrepreneurial states can take advantage of the tax increases of their neighbors to lure businesses out of high-tax states.

To some extent, tax-induced economic distortions are a fact of life, but policymakers should strive to maximize the occasions when businesses and individuals are guided by business principles and minimize those cases where economic decisions are influenced, micromanaged, or even dictated by a tax system. The more riddled a tax system is with politically motivated preferences, the less likely it is that business decisions will be made in response to market forces. The *Index* rewards those states that minimize tax-induced economic distortions.

⁶ Austin Mondine, "Dell cuts North-Carolina plant despite \$280m sweetener," *TheRegister.co.uk*, Oct. 8, 2009.

⁷ Dennis Cauchon, "Business Incentives Lose Luster for States," *USA TODAY*, Aug. 22, 2007.

Ranking the competitiveness of 50 very different tax systems presents many challenges, especially when a state dispenses with a major tax entirely. Should Indiana's tax system, which includes three relatively neutral taxes on sales, individual income, and corporate income, be considered more or less competitive than Alaska's tax system, which includes a particularly burdensome corporate income tax but no statewide tax on individual income or sales?

The *Index* deals with such questions by comparing the states on more than 100 variables in the five major areas of taxation (corporate taxes, individual income taxes, sales taxes, unemployment insurance taxes, and property taxes) and then adding the results to yield a final, overall ranking. This approach rewards states on particularly strong aspects of their tax systems (or penalizes them on particularly weak aspects), while measuring the general competitiveness of their overall tax systems. The result is a score that can be compared to other states' scores. Ultimately, both Alaska and Indiana score well.

Literature Review

Economists have not always agreed on how individuals and businesses react to taxes. As early as 1956, Charles Tiebout postulated that if citizens were faced with an array of communities that offered different types or levels of public goods and services at different costs or tax levels, then all citizens would choose the community that best satisfied their particular demands, revealing their preferences by "voting with their feet." Tiebout's article is the seminal work on the topic of how taxes affect the location decisions of taxpayers.

Tiebout suggested that citizens with high demands for public goods would concentrate in communities with high levels of public services and high taxes while those with low demands would choose communities with low levels of public services and low taxes. Competition among jurisdictions results in a variety of communities, each with residents who all value public services similarly.

However, businesses sort out the costs and benefits of taxes differently from individuals. For businesses, which can be more mobile and must earn profits to justify their existence, taxes reduce profitability. Theoretically, businesses could be expected to be more responsive than individuals to the lure of low-tax jurisdictions. Research suggests that corporations engage in "yardstick competition," comparing the costs of government services across jurisdictions. Shleifer (1985) first proposed comparing regulated franchises in order to determine efficiency. Salmon (1987) extended Shleifer's work to look at subnational governments. Besley and Case (1995) showed that "yardstick competition" affects voting behavior, and Bosch and Sole-Olle (2006) further confirmed the results found by Besley and Case. Tax changes that are out of sync with neighboring jurisdictions will impact voting behavior.

The economic literature over the past 50 years has slowly cohered around this hypothesis. Ladd (1998) summarizes the post-World War II empirical tax research literature in an excellent survey article, breaking it down into three distinct periods of differing ideas about taxation: (1) taxes do not change behavior; (2) taxes may or may not change business behavior depending on the circumstances; and (3) taxes definitely change behavior.

Period one, with the exception of Tiebout, included the 1950s, 1960s, and 1970s and is summarized succinctly in three survey articles: Due (1961), Oakland (1978), and Wasylenko (1981). Due's was a polemic against tax giveaways to businesses, and his analytical techniques consisted of basic correlations, interview studies, and the examination of taxes relative to other costs. He found no evidence to support the notion that taxes influence business location. Oakland was skeptical of the assertion that tax differentials at the local level had no influence at all. However, because econometric analysis was relatively unsophisticated at the time, he found no significant articles to support his intuition. Wasylenko's survey of the literature found some of the first evidence indicating that taxes do influence business location decisions. However, the statistical significance was lower than that of other factors such as labor supply and agglomeration economies. Therefore, he dismissed taxes as a secondary factor at most.

Period two was a brief transition during the early- to mid-1980s. This was a time of great ferment in tax policy as Congress passed major tax bills, including the so-called Reagan tax cut in 1981 and a dramatic reform of the federal tax code in 1986. Articles revealing the economic significance of tax policy proliferated and became more sophisticated. For example, Wasylenko and McGuire (1985) extended the traditional business location literature to nonmanufacturing sectors and found, "Higher wages, utility prices, personal income tax rates, and an increase in the overall level of taxation discourage employment growth in several industries." However, Newman and Sullivan (1988) still found a mixed bag in "their observation that significant tax effects [only] emerged when models were carefully specified."

Ladd was writing in 1998, so her "period three" started in the late 1980s and continued up to 1998, when the quantity and quality of articles increased significantly. Articles that fit into period three begin to surface as early as 1985, as Helms (1985) and Bartik (1985) put forth forceful arguments based on empirical research that taxes guide business decisions. Helms concluded that a state's ability to attract, retain, and encourage business activity is significantly affected by its pattern of taxation. Furthermore, tax increases significantly retard economic growth when the revenue is used to fund transfer payments. Bartik concluded that the conventional view that state and local taxes have little effect on business is false.

Papke and Papke (1986) found that tax differentials among locations may be an important business location factor, concluding that consistently high business taxes can represent a hindrance to the location of industry. Interestingly, they use the same type of after-tax model used by Tannenwald (1996), who reaches a different conclusion.

Bartik (1989) provides strong evidence that taxes have a negative impact on business start-ups. He finds specifically that property taxes, because they are paid regardless of profit, have the strongest negative effect on business. Bartik's econometric model also predicts tax elasticities of -0.1 to -0.5 that imply a 10 percent cut in tax rates will increase business activity by 1 to 5 percent. Bartik's findings, as well as those of Mark, McGuire, and Papke (2000), and ample anecdotal evidence of the importance of property taxes, buttress the argument for inclusion of a property index devoted to property-type taxes in the *Index*.

By the early 1990s, the literature had expanded sufficiently for Bartik (1991) to identify 57 studies on which to base his literature survey. Ladd succinctly summarizes Bartik's findings:

The large number of studies permitted Bartik to take a different approach from the other authors. Instead of dwelling on the results and limitations of each individual study, he looked at them in the aggregate and in groups. Although he acknowledged potential criticisms of individual studies, he convincingly argued that some systematic flaw would have to cut across all studies for the consensus results to be invalid. In striking contrast to previous reviewers, he concluded that taxes have quite large and significant effects on business activity.

Ladd's "period three" surely continues to this day. Agostini and Tulayasathien (2001) examined the effects of corporate income taxes on the location of foreign direct investment in U.S. states. They determined that for "foreign investors, the corporate tax rate is the most relevant tax in their investment decision." Therefore, they found that foreign direct investment was quite sensitive to states' corporate tax rates.

Mark, McGuire, and Papke (2000) found that taxes are a statistically significant factor in private-sector job growth. Specifically, they found that personal property taxes and sales taxes have economically large negative effects on the annual growth of private employment.

Harden and Hoyt (2003) point to Phillips and Gross (1995) as another study contending that taxes impact state economic growth, and they assert that the consensus among recent literature is that state and local taxes negatively affect employment levels. Harden and Hoyt conclude that the corporate income tax has the most significant negative impact on the rate of growth in employment.

Gupta and Hofmann (2003) regressed capital expenditures against a variety of factors, including weights of apportionment formulas, the number of tax incentives, and burden figures. Their model covered 14 years of data and determined that firms tend to locate property in states where they are subject to lower income tax burdens. Furthermore, Gupta and Hofmann suggest that throwback requirements are the most influential on the location of capital investment, followed by apportionment weights and tax rates, and that investment-related incentives have the least impact.

Other economists have found that taxes on specific products can produce behavioral results similar to those that were found in these general studies. For example, Fleenor (1998) looked at the effect of excise tax differentials between states on cross-border shopping and the smuggling of cigarettes. Moody and Warcholik (2004) examined the cross-border effects of beer excises. Their results, supported by the literature in both cases, showed significant cross-border shopping and smuggling between low-tax states and high-tax states.

Fleenor found that shopping areas sprouted in counties of low-tax states that shared a border with a high-tax state, and that approximately 13.3 percent of the cigarettes consumed in the United States during FY 1997 were procured via some type of cross-border activity. Similarly, Moody and Warcholik found that in 2000, 19.9 million cases of beer, on net, moved from low- to high-tax states. This amounted to some \$40 million in sales and excise tax revenue lost in high-tax states.

Although the literature has largely congealed around a general consensus that taxes are a substantial factor in the decision-making process for businesses, disputes remain, and some scholars are unconvinced.

Based on a substantial review of the literature on business climates and taxes, Wasylenko (1997) concludes that taxes do not appear to have a substantial effect on economic activity among states. However, his conclusion is premised on there being few significant differences in state tax systems. He concedes that high-tax states will lose economic activity to average or low-tax states “as long as the elasticity is negative and significantly different from zero.” Indeed, he approvingly cites a *State Policy Reports* article that finds that the highest-tax states, such as Minnesota, Wisconsin, and New York, have acknowledged that high taxes may be responsible for the low rates of job creation in those states.⁸

Wasylenko’s rejoinder is that policymakers routinely overestimate the degree to which tax policy affects business location decisions and that as a result of this misperception, they respond readily to public pressure for jobs and economic growth by proposing lower taxes. According to Wasylenko, other legislative actions are likely to accomplish more positive economic results because in reality, taxes do not drive economic growth.

However, there is ample evidence that states compete for businesses using their tax systems. A recent example comes from Illinois, where in early 2011 lawmakers passed two major tax increases. The individual income tax rate increased from 3 percent to 5 percent, and the corporate income tax rate rose from 7.3 percent to 9.5 percent.⁹ The result was that many businesses threatened to leave the state, including some very high-profile Illinois companies such as Sears and the Chicago Mercantile Exchange. By the end of the year, lawmakers had cut deals with both firms, totaling \$235 million over the next decade, to keep them from leaving the state.¹⁰

Measuring the Impact of Tax Differentials

Some recent contributions to the literature on state taxation criticize business and tax climate studies in general.¹¹ Authors of such studies contend that comparative reports like the *State Business Tax Climate Index* do not take into account those factors which directly impact a state’s business climate. However, a careful examination of these criticisms reveals that the authors believe taxes are unimportant to businesses and therefore dismiss the studies as merely being designed to advocate low taxes.

⁸ *State Policy Reports*, Vol. 12, No. 11, Issue 1, p. 9, June 1994.

⁹ Both rate increases had a temporary component, and were allowed to partially expire before legislators overrode a gubernatorial veto to increase rates above where they would have been should they have been allowed to sunset.

¹⁰ Benjamin Yount, “Tax increase, impact, dominate Illinois Capitol in 2011,” *Illinois Statehouse News*, Dec. 27, 2011.

¹¹ A trend in tax literature throughout the 1990s was the increasing use of indices to measure a state’s general business climate. These include the Center for Policy and Legal Studies’ *Economic Freedom in America’s 50 States: A 1999 Analysis* and the Beacon Hill Institute’s *State Competitiveness Report 2001*. Such indexes even exist on the international level, including the Heritage Foundation and *The Wall Street Journal’s* 2004 *Index of Economic Freedom*. Plaut and Pluta (1983) examined the use of business climate indices as explanatory variables for business location movements. They found that such general indices do have a significant explanatory power, helping to explain, for example, why businesses have moved from the Northeast and Midwest toward the South and Southwest. In turn, they also found that high taxes have a negative effect on employment growth.

Peter Fisher's *Grading Places: What Do the Business Climate Rankings Really Tell Us?* now published by Good Jobs First, criticizes four indices: The *U.S. Business Policy Index* published by the Small Business and Entrepreneurship Council, Beacon Hill's *Competitiveness Report*, the American Legislative Exchange Council's *Rich States, Poor States*, and this study. The first edition also critiqued the Cato Institute's *Fiscal Policy Report Card* and the *Economic Freedom Index* by the Pacific Research Institute. In the report's first edition, published before Fisher summarized his objections: "The underlying problem with the ... indexes, of course, is twofold: none of them actually do a very good job of measuring what it is they claim to measure, and they do not, for the most part, set out to measure the right things to begin with" (Fisher 2005). In the second edition, he identified three overarching questions: (1) whether the indices included relevant variables, and only relevant variables; (2) whether these variables measured what they purport to measure; and (3) how the index combines these measures into a single index number (Fisher 2013). Fisher's primary argument is that if the indexes did what they purported to do, then all five would rank the states similarly.

Fisher's conclusion holds little weight because the five indices serve such dissimilar purposes, and each group has a different area of expertise. There is no reason to believe that the Tax Foundation's *Index*, which depends entirely on state tax laws, would rank the states in the same or similar order as an index that includes crime rates, electricity costs, and health care (the Small Business and Entrepreneurship Council's *Small Business Survival Index*), or infant mortality rates and the percentage of adults in the workforce (Beacon Hill's *State Competitiveness Report*), or charter schools, tort reform, and minimum wage laws (the Pacific Research Institute's *Economic Freedom Index*).

The Tax Foundation's *State Business Tax Climate Index* is an indicator of which states' tax systems are the most hospitable to business and economic growth. The *Index* does not purport to measure economic opportunity or freedom, or even the broad business climate, but rather the narrower business tax climate, and its variables reflect this focus. We do so not only because the Tax Foundation's expertise is in taxes, but because every component of the *Index* is subject to immediate change by state lawmakers. It is by no means clear what the best course of action is for state lawmakers who want to thwart crime, for example, either in the short or long term, but they can change their tax codes now. Contrary to Fisher's 1970s' view that the effects of taxes are "small or non-existent," our study reflects strong evidence that business decisions are significantly impacted by tax considerations.

Although Fisher does not feel tax climates are important to states' economic growth, other authors contend the opposite. Bittlingmayer, Eathington, Hall, and Orazem (2005) find in their analysis of several business climate studies that a state's tax climate does affect its economic growth rate and that several indices are able to predict growth. Specifically, they concluded, "The *State Business Tax Climate Index* explains growth consistently." This finding was confirmed by Anderson (2006) in a study for the Michigan House of Representatives, and more recently by Kolko, Neumark, and Mejia (2013), who, in an analysis of the ability of 10 business climate indices to predict economic growth, concluded that the *State Business Tax Climate Index* yields "positive, sizable, and statistically significant estimates for every specification" they measured, and specifically cited the *Index* as one of two business climate indices (out of 10) with particularly strong and robust evidence of predictive power.

Bittlingmayer et al. also found that relative tax competitiveness matters, especially at the borders, and therefore, indices that place a high premium on tax policies do a better job of explaining growth. They also observed that studies focused on a single topic do better at explaining economic growth at borders. Lastly, the article concludes that the most important elements of the business climate are tax and regulatory burdens on business (Bittlingmayer et al. 2005). These findings support the argument that taxes impact business decisions and economic growth, and they support the validity of the *Index*.

Fisher and Bittlingmayer et al. hold opposing views about the impact of taxes on economic growth. Fisher finds support from Robert Tannenwald, formerly of the Boston Federal Reserve, who argues that taxes are not as important to businesses as public expenditures. Tannenwald compares 22 states by measuring the after-tax rate of return to cash flow of a new facility built by a representative firm in each state. This very different approach attempts to compute the marginal effective tax rate of a hypothetical firm and yields results that make taxes appear trivial.

The taxes paid by businesses should be a concern to everyone because they are ultimately borne by individuals through lower wages, increased prices, and decreased shareholder value. States do not institute tax policy in a vacuum. Every change to a state's tax system makes its business tax climate more or less competitive compared to other states and makes the state more or less attractive to business. Ultimately, anecdotal and empirical evidence, along with the cohesion of recent literature around the conclusion that taxes matter a great deal to business, show that the *Index* is an important and useful tool for policymakers who want to make their states' tax systems welcoming to business.

METHODOLOGY

The Tax Foundation's *State Business Tax Climate Index* is a hierarchical structure built from five components:

- Individual Income Tax
- Sales Tax
- Corporate Income Tax
- Property Tax
- Unemployment Insurance Tax

Using the economic literature as our guide, we designed these five components to score each state's business tax climate on a scale of 0 (worst) to 10 (best). Each component is devoted to a major area of state taxation and includes numerous variables. Overall, there are 118 variables measured in this report.

The five components are not weighted equally, as they are in some indices. Rather, each component is weighted based on the variability of the 50 states' scores from the mean. The standard deviation of each component is calculated and a weight for each component is created from that measure. The result is a heavier weighting of those components with greater variability.

The weighting of each of the five major components is:

- 30.1% — Individual Income Tax
- 25.3% — Sales Tax
- 19.5% — Corporate Tax
- 15.4% — Property Tax
- 9.8% — Unemployment Insurance Tax

This improves the explanatory power of the *State Business Tax Climate Index* as a whole, because components with higher standard deviations are those areas of tax law where some states have significant competitive advantages. Businesses that are comparing states for new or expanded locations must give greater emphasis to tax climates when the differences are large. On the other hand, components in which the 50 state scores are clustered together, closely distributed around the mean, are those areas of tax law where businesses are more likely to de-emphasize tax factors in their location decisions. For example, Delaware is known to have a significant advantage in sales tax competition, because its tax rate of zero attracts businesses and shoppers from all over the Mid-Atlantic region. That advantage and its drawing power increase every time another state raises its sales tax.

In contrast with this variability in state sales tax rates, unemployment insurance tax systems are similar around the nation, so a small change in one state's law could change its component ranking dramatically.

Within each component are two equally weighted subindices devoted to measuring the impact of the tax rates and the tax bases. Each subindex is composed of one or more variables. There are two types of variables: scalar variables and dummy variables. A scalar variable is one that can have any value between 0 and 10. If a subindex is composed only of scalar variables, then they are weighted equally. A dummy variable is one that has only a value of 0 or 1. For example, a state either indexes its brackets for inflation or does not. Mixing scalar and dummy variables within a subindex is problematic, because the extreme valuation of a dummy can overly influence the results of the subindex. To counter this effect, the *Index* generally weights scalar variables 80 percent and dummy variables 20 percent.

Relative versus Absolute Indexing

The *State Business Tax Climate Index* is designed as a relative index rather than an absolute or ideal index. In other words, each variable is ranked relative to the variable's range in other states. The relative scoring scale is from 0 to 10, with zero meaning not "worst possible" but rather worst among the 50 states.

Many states' tax rates are so close to each other that an absolute index would not provide enough information about the differences among the states' tax systems, especially for pragmatic business owners who want to know which states have the best tax system in each region.

Comparing States without a Tax. One problem associated with a relative scale is that it is mathematically impossible to compare states with a given tax to states that do not have the tax.

As a zero rate is the lowest possible rate and the most neutral base, since it creates the most favorable tax climate for economic growth, those states with a zero rate on individual income, corporate income, or sales gain an immense competitive advantage. Therefore, states without a given tax generally receive a 10, and the *Index* measures all the other states against each other.

Three notable exceptions to this rule exist. The first is in Washington and Texas, which do not have taxes on wage income but do apply their gross receipts taxes to limited liability corporations (LLCs) and S corporations. Because these entities are generally taxed through the individual code, these two states do not score perfectly in the individual income tax component. The second exception is found in Nevada, where a payroll tax (for purposes other than unemployment insurance) is also included in the individual income tax component. The final exception is in zero sales tax states—Alaska, Montana, New Hampshire, Oregon, and Washington—which do not have general sales taxes but still do not score a perfect 10 in that component section because of excise taxes on gasoline, beer, spirits, and cigarettes, which are included in that section. Alaska, moreover, forgoes a state sales tax, but does permit local option sales taxes.

Normalizing Final Scores. Another problem with using a relative scale within the components is that the average scores across the five components vary. This alters the value of not having a given tax across major indices. For example, the unadjusted average score of the corporate income tax component is 6.96 while the average score of the sales tax component is 5.23.

In order to solve this problem, scores on the five major components are “normalized,” which brings the average score for all of them to 5.00, excluding states that do not have the given tax. This is accomplished by multiplying each state’s score by a constant value.

Once the scores are normalized, it is possible to compare states across indices. For example, because of normalization, it is possible to say that Connecticut’s score of 4.97 on corporate income taxes is better than its score of 4.59 on the sales tax.

Time Frame Measured by the *Index* (Snapshot Date)

Starting with the 2006 edition, the *Index* has measured each state’s business tax climate as it stands at the beginning of the standard state fiscal year, July 1. Therefore, this edition is the 2019 *Index* and represents the tax climate of each state as of July 1, 2018, the first day of fiscal year 2019 for most states.

District of Columbia

The District of Columbia (D.C.) is only included as an exhibit and its scores and “phantom ranks” offered do not affect the scores or ranks of other states.

2019 Changes to Methodology

Tax changes to the treatment of capital investment featured prominently in the federal Tax Cuts and Jobs Act, and now assumes a larger role in the *Index*. This year we have added new variables for the expensing of capital investment under both the corporate and individual income tax components. States which follow the federal government in permitting corporations the full and immediate expensing of machinery and equipment purchases under Section 168(k) are rewarded, while lesser credit is given to states which offer some degree of accelerated first-year “bonus” depreciation, short of full expensing. Similarly, a new scalar variable on the individual income tax component of the *Index* scores states by the dollar cap (currently ranging from \$25,000 to \$1 million) they place on Section 179 small business expensing, with higher caps yielding better scores.

A change in how net operating loss carrybacks are treated at the federal level is also reflected in the *Index*. Whereas before, the federal government provided two years of uncapped loss carrybacks and 20 years of uncapped loss carryforwards, the new law provides for indefinite carryforwards and no carrybacks, while limiting the amount of carryforwards claimed in any given year to 80 percent of taxable income.

Previously, the *Index* gave the maximum score to states which offered the most generous number of carryback and carryforward years, while penalizing states with stingy carryover periods or caps on the amount that could be carried forward or backward. Under the revised methodology, states can achieve a perfect score on this subcomponent *either* through generous statutory provisions or by conforming to the new federal law.

This year, Oregon joined Nevada in imposing a payroll tax unrelated to a program of unemployment insurance. Oregon’s tax is levied in addition to the individual income tax, while Nevada’s is in lieu of an income tax. We now model such payroll taxes as a single-rate individual income tax falling exclusively on wage income, gifting the state the best possible scores on structural components of individual income taxation irrelevant to the imposition of a payroll tax.

Finally, modest weighting changes were made to the income tax component as new variables were added. For the individual income tax, the marriage penalty assumes less significance under the revised methodology, now representing 10 percent of the base subindex, while double taxation variables are assigned 40 percent of the base subindex, and other variables, including the new Section 179 scalar variable, are worth 50 percent of the base subindex. On the corporate income tax component, a minor tweak is made to the weighting of net operating loss variables to better capture variations in treatment.

Past Rankings and Scores

This report includes 2016, 2017, and 2018 *Index* rankings and scores that can be used for comparison with the 2019 rankings and scores. These can differ from previously published *Index* rankings and scores due to enactment of retroactive statutes, backcasting of the above methodological changes, and corrections to variables brought to our attention since the last report was published. The scores and rankings in this report are definitive.

CORPORATE TAX

This component measures the impact of each state's principal tax on business activities and accounts for 19.5 percent of each state's total score. It is well established that the extent of business taxation can affect a business's level of economic activity within a state. For example, Newman (1982) found that differentials in state corporate income taxes were a major factor influencing the movement of industry to Southern states. Two decades later, with global investment greatly expanded, Agostini and Tulayasathien (2001) determined that a state's corporate tax rate is the most relevant tax in the investment decisions of foreign investors.

Most states levy standard corporate income taxes on profit (gross receipts minus expenses). Some states, however, problematically impose taxes on the gross receipts of businesses with few or no deductions for expenses. Between 2005 and 2010, for example, Ohio phased in the Commercial Activities Tax (CAT), which has a rate of 0.26 percent. Washington has the Business and Occupation (B&O) Tax, which is a multi-rate tax (depending on industry) on the gross receipts of Washington businesses. Delaware has a similar Manufacturers' and Merchants' License Tax, as does Virginia with its locally-levied Business/Professional/Occupational License (BPOL) tax. Texas also added the Margin Tax, a complicated gross receipts tax, in 2007, and Nevada adopted the gross receipts-based multi-rate Commerce Tax in 2015. However, in 2011, Michigan passed a significant corporate tax reform that eliminated the state's modified gross receipts tax and replaced it with a 6 percent corporate income tax, effective January 1, 2012.¹² The previous tax had been in place since 2007, and Michigan's repeal followed others in Kentucky (2006) and New Jersey (2006). Several states contemplated gross receipts taxes in 2017, but none were adopted.

Since gross receipts taxes and corporate income taxes are levied on different bases, we separately compare gross receipts taxes to each other, and corporate income taxes to each other, in the *Index*.

For states with corporate income taxes, the corporate tax rate subindex is calculated by assessing three key areas: the top tax rate, the level of taxable income at which the top rate kicks in, and the number of brackets. States that levy neither a corporate income tax nor a gross receipts tax achieve a perfectly neutral system in regard to business income and thus receive a perfect score.

States that do impose a corporate tax generally will score well if they have a low rate. States with a high rate or a complex and multiple-rate system score poorly.

To calculate the parallel subindex for the corporate tax base, three broad areas are assessed: tax credits, treatment of net operating losses, and an "other" category that includes variables such as conformity to the Internal Revenue Code, protections against double taxation, and the taxation of "throwback" income, among others. States that score well on the corporate tax base subindex generally will have few business tax credits, generous carryback and carryforward provisions, deductions for net operating losses, conformity to the Internal Revenue Code, and provisions that alleviate double taxation.

12 See Mark Robyn, "Michigan Implements Positive Corporate Tax Reform," Tax Foundation, Feb. 10, 2012.

TABLE 3.

Corporate Tax Component of the State Business Tax Climate Index (2016–2019)

State	2016 Rank	2016 Score	2017 Rank	2017 Score	2018 Rank	2018 Score	2019 Rank	2019 Score	Change from 2018 to 2019	
									Rank	Score
Alabama	22	5.27	13	5.63	18	5.43	20	5.39	-2	-0.04
Alaska	25	5.14	26	5.15	26	5.15	25	5.28	+1	+0.13
Arizona	21	5.31	18	5.37	15	5.49	17	5.42	-2	-0.07
Arkansas	39	4.62	41	4.57	41	4.57	40	4.52	+1	-0.05
California	34	4.83	32	4.83	31	4.83	31	4.84	0	+0.01
Colorado	13	5.62	15	5.55	13	5.55	16	5.47	-3	-0.08
Connecticut	35	4.81	34	4.81	33	4.81	29	4.97	+4	+0.16
Delaware	50	2.98	50	2.66	50	2.66	50	2.63	0	-0.03
Florida	17	5.42	18	5.37	19	5.36	6	5.91	+13	+0.55
Georgia	6	5.80	7	5.76	7	5.76	8	5.82	-1	+0.06
Hawaii	11	5.73	12	5.70	14	5.49	14	5.56	0	+0.07
Idaho	23	5.22	25	5.19	25	5.19	26	5.26	-1	+0.07
Illinois	30	4.94	27	5.12	34	4.74	39	4.56	-5	-0.18
Indiana	26	5.05	24	5.21	24	5.26	18	5.41	+6	+0.15
Iowa	48	3.66	48	3.70	48	3.70	48	3.77	0	+0.07
Kansas	36	4.77	35	4.73	35	4.73	34	4.69	+1	-0.04
Kentucky	28	4.99	29	4.93	28	4.93	27	5.09	+1	+0.16
Louisiana	32	4.87	36	4.70	36	4.70	36	4.69	0	-0.01
Maine	41	4.44	39	4.63	39	4.63	41	4.49	-2	-0.14
Maryland	19	5.36	20	5.35	21	5.35	22	5.36	-1	+0.01
Massachusetts	37	4.70	38	4.68	38	4.68	37	4.67	+1	-0.01
Michigan	10	5.75	10	5.71	10	5.71	11	5.66	-1	-0.05
Minnesota	43	4.40	43	4.21	43	4.21	42	4.40	+1	+0.19
Mississippi	12	5.69	14	5.63	12	5.63	15	5.56	-3	-0.07
Missouri	3	6.09	5	6.06	5	6.05	4	6.02	+1	-0.03
Montana	15	5.54	11	5.70	11	5.70	12	5.57	-1	-0.13
Nebraska	27	5.03	28	5.01	27	5.00	28	4.99	-1	-0.01
Nevada	38	4.68	37	4.70	37	4.69	33	4.78	+4	+0.09
New Hampshire	47	3.81	46	3.85	46	4.00	45	3.98	+1	-0.02
New Jersey	40	4.45	42	4.44	42	4.44	47	3.87	-5	-0.57
New Mexico	24	5.19	23	5.22	20	5.36	21	5.37	-1	+0.01
New York	8	5.80	6	5.90	6	5.90	7	5.87	-1	-0.03
North Carolina	5	6.03	3	6.18	3	6.39	3	6.26	0	-0.13
North Dakota	16	5.52	17	5.45	17	5.44	23	5.36	-6	-0.08
Ohio	46	3.88	47	3.83	47	3.82	46	3.89	+1	+0.07
Oklahoma	9	5.78	9	5.73	9	5.73	9	5.79	0	+0.06
Oregon	29	4.94	30	4.92	29	4.92	30	4.90	-1	-0.02
Pennsylvania	45	4.12	44	4.13	44	4.12	43	4.24	+1	+0.12
Rhode Island	33	4.86	33	4.82	32	4.82	32	4.79	0	-0.03
South Carolina	14	5.54	16	5.47	16	5.47	19	5.40	-3	-0.07
South Dakota	1	9.79	1	9.79	1	9.79	1	9.79	0	0.00
Tennessee	18	5.39	21	5.35	22	5.35	24	5.31	-2	-0.04
Texas	49	3.32	49	3.36	49	3.56	49	3.63	0	+0.07
Utah	4	6.06	4	6.15	4	6.14	5	5.94	-1	-0.20
Vermont	42	4.42	40	4.61	40	4.60	38	4.60	+2	0.00
Virginia	6	5.80	7	5.76	7	5.76	10	5.71	-3	-0.05
Washington	44	4.15	45	4.02	45	4.01	44	4.09	+1	+0.08
West Virginia	20	5.33	22	5.29	23	5.29	13	5.57	+10	+0.28
Wisconsin	31	4.88	31	4.86	30	4.85	35	4.69	-5	-0.16
Wyoming	1	9.79	1	9.79	1	9.79	1	9.79	0	0.00
District of Columbia	37	4.70	31	4.90	28	4.94	27	5.10	+1	+0.16

Note: A rank of 1 is best, 50 is worst. All scores are for fiscal years. D.C.'s score and rank do not affect other states.

Source: Tax Foundation.

Corporate Tax Rate

The corporate tax rate subindex is designed to gauge how a state's corporate income tax top marginal rate, bracket structure, and gross receipts rate affect its competitiveness compared to other states, as the extent of taxation can affect a business's level of economic activity within a state (Newman 1982).

A state's corporate tax is levied in addition to the federal corporate income tax of 21 percent, substantially reduced by the Tax Cuts and Jobs Act of 2017 from a graduated-rate tax with a top rate of 35 percent, the highest rate among industrialized nations. Two states levy neither a corporate income tax nor a gross receipts tax: South Dakota and Wyoming. These states automatically score a perfect 10 on this subindex. Therefore, this section ranks the remaining 48 states relative to each other.

Top Tax Rate. Iowa's 12 percent corporate income tax rate qualifies for the worst ranking among states that levy one, followed by New Jersey's new 11.5 percent rate (including a surcharge). Other states with comparatively high corporate income tax rates are Pennsylvania (9.99 percent), Minnesota (9.8 percent), Alaska (9.4 percent), and Connecticut (9.0 percent). By contrast, North Carolina's relatively new rate of 3.0 percent is the lowest nationally, followed by North Dakota's at 4.31 percent and Colorado's at 4.63 percent. Other states with comparatively low top corporate tax rates are Utah at 4.95 percent and Mississippi and South Carolina, both at 5 percent.

Graduated Rate Structure. Two variables are used to assess the economic drag created by multiple-rate corporate income tax systems: the income level at which the highest tax rate starts to apply and the number of tax brackets. Twenty-nine states and the District of Columbia have single-rate systems, and they score best. Single-rate systems are consistent with the sound tax principles of simplicity and neutrality. In contrast to the individual income tax, there is no meaningful "ability to pay" concept in corporate taxation. Jeffery Kwall, the Kathleen and Bernard Beazley Professor of Law at Loyola University Chicago School of Law, notes that

graduated corporate rates are inequitable—that is, the size of a corporation bears no necessary relation to the income levels of the owners. Indeed, low-income corporations may be owned by individuals with high incomes, and high-income corporations may be owned by individuals with low incomes.¹³

A single-rate system minimizes the incentive for firms to engage in expensive, counterproductive tax planning to mitigate the damage of higher marginal tax rates that some states levy as taxable income rises.

13 Jeffrey L. Kwall, "The Repeal of Graduated Corporate Tax Rates," *Tax Notes*, June 27, 2011, 1395.

The Top Bracket. This variable measures how soon a state's tax system applies its highest corporate income tax rate. The highest score is awarded to a single-rate system that has one bracket that applies to the first dollar of taxable income. Next best is a two-bracket system where the top rate kicks in at a low level of income, since the lower the top rate kicks in, the more the system is like a flat tax. States with multiple brackets spread over a broad income spectrum are given the worst score.

Number of Brackets. An income tax system creates changes in behavior when the taxpayer's income reaches the end of one tax rate bracket and moves into a higher bracket. At such a break point, incentives change, and as a result, numerous rate changes are more economically harmful than a single-rate structure. This variable is intended to measure the disincentive effect the corporate income tax has on rising incomes. States that score the best on this variable are the 29 states—and the District of Columbia—that have a single-rate system. Alaska's 10-bracket system earns the worst score in this category. Other states with multi-bracket systems include Arkansas (six brackets) and Louisiana (five brackets).

Corporate Tax Base

This subindex measures the economic impact of each state's definition of what should be subject to corporate taxation.

The three criteria used to measure the competitiveness of each state's corporate tax base are given equal weight: the availability of certain credits, deductions, and exemptions; the ability of taxpayers to deduct net operating losses; and a host of smaller tax base issues that combine to make up the other third of the corporate tax base subindex.

Under a gross receipts tax, some of these tax base criteria (net operating losses and some corporate income tax base variables) are replaced by the availability of deductions from gross receipts for employee compensation costs and cost of goods sold. States are rewarded for granting these deductions because they diminish the greatest disadvantage of using gross receipts as the base for corporate taxation: the uneven effective tax rates that various industries pay, depending on how many levels of production are hit by the tax.

Net Operating Losses. The corporate income tax is designed to tax only the profits of a corporation. However, a yearly profit snapshot may not fully capture a corporation's true profitability. For example, a corporation in a highly cyclical industry may look very profitable during boom years but lose substantial amounts during bust years. When examined over the entire business cycle, the corporation may actually have an average profit margin.

The deduction for net operating losses (NOL) helps ensure that, over time, the corporate income tax is a tax on average profitability. Without the NOL deduction, corporations in cyclical industries pay much higher taxes than those in stable industries, even assuming identical average profits over time. Simply put, the NOL deduction helps level the playing field among cyclical and noncyclical industries. Under the Tax Cuts and Jobs Act, the federal government allows losses to be carried forward indefinitely, though they may only reduce taxable income by 80 percent in

any given year. Because gross receipts taxes inherently preclude the possibility of carrying net operating losses backward or forward, the *Index* treats states with statewide gross receipts taxes as having the equivalent of no NOL carryback or carryforward provisions.

Number of Years Allowed for Carryback and Carryforward. This variable measures the number of years allowed on a carryback or carryforward of an NOL deduction. The longer the overall time span, the higher the probability that the corporate income tax is being levied on the corporation's average profitability. Generally, states entered FY 2019 with better treatment of the carryforward (up to a maximum of 20 years) than the carryback (up to a maximum of three years). States score well on the *Index* if they conform to the new federal provisions or provide their own robust system of carryforwards and carrybacks.

Caps on the Amount of Carryback and Carryforward. When companies have a larger NOL than they can deduct in one year, most states permit them to carry deductions of any amount back to previous years' returns or forward to future returns. States that limit those amounts are ranked lower in the *Index*. Four states limit the amount of carrybacks: Delaware, Idaho, Montana, and Utah. Of states that allow a carryforward of losses, only New Hampshire and Pennsylvania limit carryforwards. As a result, these states score poorly on this variable.

Gross Receipts Tax Deductions. Proponents of gross receipts taxation invariably praise the steadier flow of tax receipts into government coffers in comparison with the fluctuating revenue generated by corporate income taxes, but this stability comes at a great cost. The attractively low statutory rates associated with gross receipts taxes are an illusion. Since gross receipts taxes are levied many times in the production process, the effective tax rate on a product is much higher than the statutory rate would suggest. Effective tax rates under a gross receipts tax vary dramatically by industry or individual business, a stark departure from the principle of tax neutrality. Firms with few steps in their production chain are relatively lightly taxed under a gross receipts tax, and vertically-integrated, high-margin firms prosper, while firms with longer production chains are exposed to a substantially higher tax burden. The pressure of this economic imbalance often leads lawmakers to enact separate rates for each industry, an inevitably unfair and inefficient process.

Two reforms that states can make to mitigate this damage are to permit deductions from gross receipts for employee compensation costs and cost of goods sold, effectively moving toward a regular corporate income tax.

Delaware, Nevada, Ohio, and Washington score the worst, because their gross receipts taxes do not offer full deductions for either the cost of goods sold or employee compensation. Texas offers a deduction for either the cost of goods sold or employee compensation but not both. The Virginia BPOL tax and the Pennsylvania business privilege tax are not included in this survey, because they are assessed at the local level and not levied uniformly across the state.

Federal Income Used as State Tax Base. States that use federal definitions of income reduce the tax compliance burden on their taxpayers. Two states (Arkansas and Mississippi) do not conform to federal definitions of corporate income and they score poorly.

Allowance of Federal ACRS and MACRS Depreciation. The vast array of federal depreciation schedules is, by itself, a tax complexity nightmare for businesses. The specter of having 50 different schedules would be a disaster from a tax complexity standpoint. This variable measures the degree to which states have adopted the federal Accelerated Cost Recovery System (ACRS) and Modified Accelerated Cost Recovery System (MACRS) depreciation schedules. One state (California) adds complexity by failing to fully conform to the federal system.

Deductibility of Depletion. The deduction for depletion works similarly to depreciation, but it applies to natural resources. As with depreciation, tax complexity would be staggering if all 50 states imposed their own depletion schedules. This variable measures the degree to which states have adopted the federal depletion schedules. Thirteen states are penalized because they do not fully conform to the federal system: Alaska, California, Delaware, Iowa, Louisiana, Maryland, Minnesota, Mississippi, New Hampshire, North Carolina, Oklahoma, Oregon, and Tennessee.

Alternative Minimum Tax. The federal Alternative Minimum Tax (AMT) was created to ensure that all taxpayers paid some minimum level of taxes every year. Unfortunately, it does so by creating a parallel tax system to the standard corporate income tax code. Evidence shows that the AMT does not increase efficiency or improve fairness in any meaningful way. It nets little money for the government, imposes compliance costs that in some years are actually larger than collections, and encourages firms to cut back or shift their investments (Chorvat and Knoll, 2002). As such, states that have mimicked the federal AMT put themselves at a competitive disadvantage through needless tax complexity.

Eight states have an AMT on corporations and thus score poorly: Alaska, California, Florida, Iowa, Kentucky, Maine, Minnesota, and New Hampshire.

Deductibility of Taxes Paid. This variable measures the extent of double taxation on income used to pay foreign taxes, i.e., paying a tax on money the taxpayer has already mailed to foreign taxing authorities. States can avoid this double taxation by allowing the deduction of taxes paid to foreign jurisdictions. Twenty-three states allow deductions for foreign taxes paid and score well. The remaining states with corporate income taxation do not allow deductions for foreign taxes paid and thus score poorly.

Indexation of the Tax Code. For states that have multiple-bracket corporate income taxes, it is important to index the brackets for inflation. That prevents *de facto* tax increases on the nominal increase in income due to inflation. Put simply, this “inflation tax” results in higher tax burdens on taxpayers, usually without their knowledge or consent. All 16 states with graduated corporate income taxes fail to index their tax brackets: Alaska, Arkansas, Hawaii, Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Nebraska, New Jersey, New Mexico, North Dakota, Ohio, Oregon, and Vermont.

Throwback. To reduce the double taxation of corporate income, states use apportionment formulas that seek to determine how much of a company's income a state can properly tax. Generally, states require a company with nexus (that is, sufficient connection to the state to justify the state's power to tax its income) to apportion its income to the state based on some ratio of the company's in-state property, payroll, and sales compared to its total property, payroll, and sales.

Among the 50 states, there is little harmony in apportionment formulas. Many states weight the three factors equally while others weight the sales factor more heavily (a recent trend in state tax policy). Since many businesses make sales into states where they do not have nexus, businesses can end up with "nowhere income," income that is not taxed by any state. To counter this phenomenon, many states have adopted what are called throwback rules because they identify nowhere income and throw it back into a state where it will be taxed, even though it was not earned in that state.

Throwback rules add yet another layer of tax complexity. Since two or more states can theoretically lay claim to "nowhere" income, rules have to be created and enforced to decide who gets to tax it. States with corporate income taxation are almost evenly divided between those with and without throwback rules. Twenty states do not have them, while 25 states and the District of Columbia do.

Section 168(k) expensing. Because corporate income taxes are intended to fall on net income, they should include deductions for business expenses—including investment in machinery and equipment. Historically, however, businesses have been required to depreciate the value of these purchases over time. In recent years, the federal government offered "bonus depreciation" to accelerate the deduction for these investments, and under the Tax Cuts and Jobs Act, investments in machinery and equipment are fully deductible in the first year, a policy known as "full expensing." Fourteen states follow the federal government in offering full expensing, while two offer "bonus depreciation" short of full expensing.

Tax Credits

Many states provide tax credits which lower the effective tax rates for certain industries and investments, often for large firms from out of state that are considering a move. Policymakers create these deals under the banner of job creation and economic development, but the truth is that if a state needs to offer such packages, it is most likely covering for a bad business tax climate. Economic development and job creation tax credits complicate the tax system, narrow the tax base, drive up tax rates for companies that do not qualify, distort the free market, and often fail to achieve economic growth.¹⁴

A more effective approach is to systematically improve the business tax climate for the long term. Thus, this component rewards those states that do not offer the following tax credits, with states that offer them scoring poorly.

¹⁴ For example, see Alan Peters and Peter Fisher, "The Failures of Economic Development Incentives," *Journal of the American Planning Association* 70(1), Winter 2004, 27; and William F. Fox and Matthew N. Murray, "Do Economic Effects Justify the Use of Fiscal Incentives?" *Southern Economic Journal* 71(1), July 2004, 78.

Investment Tax Credits. Investment tax credits typically offer an offset against tax liability if the company invests in new property, plants, equipment, or machinery in the state offering the credit. Sometimes, the new investment will have to be “qualified” and approved by the state’s economic development office. Investment tax credits distort the market by rewarding investment in new property as opposed to the renovation of old property.

Job Tax Credits. Job tax credits typically offer an offset against tax liability if the company creates a specified number of jobs over a specified period of time. Sometimes, the new jobs will have to be “qualified” and approved by the state’s economic development office, allegedly to prevent firms from claiming that jobs shifted were jobs added. Even if administered efficiently, job tax credits can misfire in a number of ways. They induce businesses whose economic position would be best served by spending more on new equipment or marketing to hire new employees instead. They also favor businesses that are expanding anyway, punishing firms that are already struggling. Thus, states that offer such credits score poorly on the *Index*.

Research and Development (R&D) Tax Credits. Research and development tax credits reduce the amount of tax due by a company that invests in “qualified” research and development activities. The theoretical argument for R&D tax credits is that they encourage the kind of basic research that is not economically justifiable in the short run but that is better for society in the long run. In practice, their negative side effects—greatly complicating the tax system and establishing a government agency as the arbiter of what types of research meet a criterion so difficult to assess—far outweigh the potential benefits. Thus, states that offer such credits score poorly on the *Index*.

INDIVIDUAL INCOME TAX

The individual income tax component, which accounts for 30.1 percent of each state's total *Index* score, is important to business because a significant number of businesses, including sole proprietorships, partnerships, and S corporations, report their income through the individual income tax code. The number of individuals filing federal tax returns with business income has more than doubled over the past 30 years, from 13.3 million in 1980 to 32.8 million in 2014.¹⁵

Taxes can have a significant impact on an individual's decision to become a self-employed entrepreneur. Gentry and Hubbard (2004) found, "While the level of the marginal tax rate has a negative effect on entrepreneurial entry, the progressivity of the tax also discourages entrepreneurship, and significantly so for some groups of households." Using education as a measure of potential for innovation, Gentry and Hubbard found that a progressive tax system "discourages entry into self-employment for people of all educational backgrounds." Moreover, citing Carroll, Holtz-Eakin, Rider, and Rosen (2000), Gentry and Hubbard contend, "Higher tax rates reduce investment, hiring, and small business income growth" (p. 7). Less neutral individual income tax systems, therefore, hurt entrepreneurship and a state's business tax climate.

Another important reason individual income tax rates are critical for businesses is the cost of labor. Labor typically constitutes a major business expense, so anything that hurts the labor pool will also affect business decisions and the economy. Complex, poorly designed tax systems that extract an inordinate amount of tax revenue reduce both the quantity and quality of the labor pool. This is consistent with the findings of Wasylenko and McGuire (1985), who found that individual income taxes affect businesses indirectly by influencing the location decisions of individuals. A progressive, multi-rate income tax exacerbates this problem by increasing the marginal tax rate at higher levels of income, continually reducing the value of work vis-à-vis the value of leisure.

For example, suppose a worker has to choose between one hour of additional work worth \$10 and one hour of leisure which to him is worth \$9.50. A rational person would choose to work for another hour. But if a 10 percent income tax rate reduces the after-tax value of labor to \$9, then a rational person would stop working and take the hour to pursue leisure. Additionally, workers earning higher wages—\$30 per hour, for example—who face progressively higher marginal tax rates—20 percent, for instance—are more likely to be discouraged from working additional hours. In this scenario, the worker's after-tax wage is \$24 per hour; therefore, those workers who value leisure more than \$24 per hour will choose not to work. Since the after-tax wage is \$6 lower than the pretax wage in this example, compared to only \$1 lower in the previous example, more workers will choose leisure. In the aggregate, the income tax reduces the available labor supply.¹⁶

The individual income tax rate subindex measures the impact of tax rates on the marginal dollar of individual income using three criteria: the top tax rate, the graduated rate structure, and the standard deductions and exemptions which are treated as a zero percent tax bracket. The rates and brackets used are for a single taxpayer, not a couple filing a joint return.

¹⁵ Internal Revenue Service, *Individual Income Tax Returns 2014*, Rev. 08-2016, Table 1.4.

¹⁶ See Edward C. Prescott, "Why Do Americans Work So Much More than Europeans?" *Federal Reserve Bank of Minneapolis Quarterly Review*, July 2004. See also J. Scott Moody and Scott A. Hodge, "Wealthy Americans and Business Activity," *Tax Foundation*, Aug. 1, 2004.

TABLE 4.

Individual Income Tax Component of the *State Business Tax Climate Index* (2016–2019)

State	2016 Rank	2016 Score	2017 Rank	2017 Score	2018 Rank	2018 Score	2019 Rank	2019 Score	Change from 2018 to 2019	
									Rank	Score
Alabama	27	4.94	28	4.93	28	4.93	30	4.85	-2	-0.08
Alaska	1	10.00	1	10.00	1	10.00	1	10.00	0	0.00
Arizona	18	5.42	19	5.40	18	5.40	19	5.31	-1	-0.09
Arkansas	37	4.35	39	4.12	39	4.12	40	4.09	-1	-0.03
California	50	1.91	50	1.84	50	1.85	49	2.55	+1	+0.70
Colorado	14	5.97	14	5.98	14	5.98	14	5.88	0	-0.10
Connecticut	43	3.80	44	3.76	44	3.77	43	3.90	+1	+0.13
Delaware	40	4.11	40	4.06	40	4.06	41	4.08	-1	+0.02
Florida	1	10.00	1	10.00	1	10.00	1	10.00	0	0.00
Georgia	35	4.60	35	4.56	35	4.57	38	4.36	-3	-0.21
Hawaii	46	3.49	38	4.14	38	4.14	47	3.54	-9	-0.60
Idaho	22	5.06	22	5.02	23	5.02	23	5.05	0	+0.03
Illinois	11	6.21	11	6.22	13	6.02	13	5.89	0	-0.13
Indiana	15	5.95	15	5.97	15	5.98	15	5.81	0	-0.17
Iowa	39	4.28	42	3.93	42	3.93	42	3.96	0	+0.03
Kansas	19	5.41	18	5.41	19	5.25	21	5.19	-2	-0.06
Kentucky	38	4.34	37	4.31	37	4.31	17	5.49	+20	+1.18
Louisiana	21	5.08	21	5.07	22	5.08	32	4.75	-10	-0.33
Maine	29	4.86	25	4.95	20	5.18	24	5.01	-4	-0.17
Maryland	44	3.54	47	3.48	47	3.49	45	3.66	+2	+0.17
Massachusetts	12	6.19	12	6.21	11	6.21	11	6.08	0	-0.13
Michigan	13	6.08	13	6.10	12	6.10	12	5.97	0	-0.13
Minnesota	45	3.51	46	3.49	46	3.49	46	3.62	0	+0.13
Mississippi	24	5.00	24	5.00	25	5.00	27	4.93	-2	-0.07
Missouri	30	4.81	32	4.74	32	4.74	25	4.98	+7	+0.24
Montana	20	5.14	20	5.10	21	5.10	22	5.05	-1	-0.05
Nebraska	23	5.03	23	5.02	24	5.02	26	4.97	-2	-0.05
Nevada	5	8.64	5	8.67	5	8.68	5	8.47	0	-0.21
New Hampshire	9	6.55	9	6.56	9	6.57	9	6.42	0	-0.15
New Jersey	48	2.73	48	2.69	48	2.70	50	1.87	-2	-0.83
New Mexico	28	4.91	29	4.89	29	4.89	31	4.84	-2	-0.05
New York	49	2.56	49	2.53	49	2.53	48	3.12	+1	+0.59
North Carolina	16	5.78	16	5.79	16	5.83	16	5.72	0	-0.11
North Dakota	26	4.95	27	4.93	27	4.93	20	5.27	+7	+0.34
Ohio	47	3.46	45	3.71	45	3.71	44	3.88	+1	+0.17
Oklahoma	33	4.71	31	4.76	31	4.76	33	4.71	-2	-0.05
Oregon	36	4.42	36	4.40	36	4.40	36	4.45	0	+0.05
Pennsylvania	17	5.52	17	5.54	17	5.54	18	5.41	-1	-0.13
Rhode Island	31	4.80	30	4.78	30	4.78	29	4.90	+1	+0.12
South Carolina	32	4.73	34	4.69	34	4.70	34	4.65	0	-0.05
South Dakota	1	10.00	1	10.00	1	10.00	1	10.00	0	0.00
Tennessee	8	7.14	8	7.22	8	7.22	8	7.12	0	-0.10
Texas	6	8.10	6	8.13	6	8.13	6	7.94	0	-0.19
Utah	10	6.21	10	6.23	10	6.23	10	6.13	0	-0.10
Vermont	42	3.94	43	3.91	43	3.91	37	4.40	+6	+0.49
Virginia	34	4.71	33	4.69	33	4.70	35	4.64	-2	-0.06
Washington	6	8.10	6	8.13	6	8.13	6	7.94	0	-0.19
West Virginia	25	4.96	26	4.94	26	4.94	28	4.92	-2	-0.02
Wisconsin	41	4.02	41	4.00	41	4.00	39	4.23	+2	+0.23
Wyoming	1	10.00	1	10.00	1	10.00	1	10.00	0	0.00
District of Columbia	44	3.60	48	2.83	48	2.84	45	3.69	+3	+0.85

Note: A rank of 1 is best, 50 is worst. All scores are for fiscal years. D.C.'s score and rank do not affect other states.

Source: Tax Foundation.

The individual income tax base subindex takes into account measures enacted to prevent double taxation, whether the code is indexed for inflation, and how the tax code treats married couples compared to singles. States that score well protect married couples from being taxed more severely than if they had filed as two single individuals. They also protect taxpayers from double taxation by recognizing LLCs and S corporations under the individual tax code and indexing their brackets, exemptions, and deductions for inflation.

States that do not impose an individual income tax generally receive a perfect score, and states that do impose an individual income tax will generally score well if they have a flat, low tax rate with few deductions and exemptions. States that score poorly have complex, multiple-rate systems.

The six states without an individual income tax or non-UI payroll tax are, not surprisingly, the highest scoring states on this component: Alaska, Florida, South Dakota, Texas, Washington, and Wyoming. Nevada, which taxes wage income (but not unearned income) at a low rate under a non-UI payroll tax, also does extremely well in this component of the *Index*. New Hampshire and Tennessee also score well, because while they levy a significant tax on individual income in the form of interest and dividends, they do not tax wages and salaries.¹⁷ Colorado, Illinois, Indiana, Massachusetts, Michigan, North Carolina, Pennsylvania, and Utah score highly because they have a single, low tax rate.

Scoring near the bottom of this component are states that have high tax rates and very progressive bracket structures. They generally fail to index their brackets, exemptions, and deductions for inflation, do not allow for deductions of foreign or other state taxes, penalize married couples filing jointly, and do not recognize LLCs and S corporations.

Individual Income Tax Rate

The rate subindex compares the states that tax individual income after setting aside the four states that do not and therefore receive perfect scores: Alaska, Florida, South Dakota, and Wyoming. Texas and Washington do not have an individual income tax, but they do tax LLC and S corporation income through their gross receipts taxes and thus do not score perfectly in this component. Nevada has a low-rate payroll tax on wage income. New Hampshire and Tennessee, meanwhile, do not tax wage and salary income but do tax interest and dividend income.

Top Marginal Tax Rate. California has the highest top income tax rate of 13.3 percent. Other states with high top rates include Hawaii (restored to 11.0 percent), New Jersey (just raised to 10.75 percent), Oregon (9.9 percent), Minnesota (9.85 percent), Iowa (8.98 percent), New York (8.82 percent), and Vermont (8.75 percent).

States with the lowest top statutory rates are North Dakota (2.9 percent), Pennsylvania (3.07 percent), Indiana (3.23 percent of federal AGI), Michigan (4.25 percent of federal AGI), Arizona (4.54 percent), Colorado (4.63 percent of federal income), New Mexico (4.9 percent), Utah (4.95 percent), and Ohio (4.997 percent). Alabama, Mississippi, and Oklahoma all impose a top

¹⁷ Tennessee has begun the process of phasing out its tax on interest and dividend income.

statutory rate of 5 percent.¹⁸ Illinois and Kansas, which previously boasted rates below 5 percent, both adopted rate increases in recent years. (Although Illinois' statutory rate is 4.95 percent, it also imposes an additional 1.5 percent tax on pass-through businesses, discussed elsewhere, bringing the rate for these entities to 6.45 percent.)

In addition to statewide income tax rates, some states allow local-level income taxes.¹⁹ We represent these as the mean between the rate in the capital city and most populous city. In some cases, states authorizing local-level income taxes still keep the level of income taxation modest overall. For instance, Alabama, Indiana, Michigan, and Pennsylvania allow local income add-ons, but are still among the states with the lowest overall rates.

Top Tax Bracket Threshold. This variable assesses the degree to which pass-through businesses are subject to reduced after-tax return on investment as net income rises. States are rewarded for a top rate that kicks in at lower levels of income, because doing so approximates a less distortionary flat-rate system. For example, Alabama has a progressive income tax structure with three income tax rates. However, because Alabama's top rate of 5 percent applies to all taxable income over \$3,000, the state's income tax rate structure is nearly flat.

States with flat-rate systems score the best on this variable because their top rate kicks in at the first dollar of income (after accounting for the standard deduction and personal exemption). They include Illinois, Indiana, Massachusetts, Michigan, New Hampshire, Pennsylvania, and Tennessee. States with high kick-in levels score the worst. These include New Jersey (\$5 million of taxable income), New York (\$1,077,550), California (\$1 million), Connecticut (\$500,000), and North Dakota (\$416,700 of taxable income).

Number of Brackets. The *Index* converts exemptions and standard deductions to a zero bracket before tallying income tax brackets. From an economic perspective, standard deductions and exemptions are equivalent to an additional tax bracket with a zero tax rate.

For example, Kansas has a standard deduction of \$3,000 and a personal exemption of \$2,250, for a combined value of \$5,250. Statutorily, Kansas has a top rate on all taxable income over \$30,000 and two lower brackets, one beginning at the first dollar of income and another at \$15,000, so it has an average bracket width of \$10,000. Because of its deduction and exemption, however, Kansas's top rate actually kicks in at \$35,250 of income, and it has three tax brackets below that with an average width of \$11,750. The size of allowed standard deductions and exemptions varies considerably.²⁰

18 New Hampshire and Tennessee both tax only interest and dividends. To account for this, the *Index* converts the statutory tax rate in both states into an effective rate as measured against the typical state income tax base that includes wages. Under a typical income tax base with a flat rate and no tax preferences, this is the statutory rate that would be required to raise the same amount of revenue as the current system. Nationally, dividends and interest account for 19.6 percent of income. For New Hampshire, its 5 percent rate was multiplied by 19.6 percent, yielding the equivalent rate of 0.98 percent. For Tennessee, with a tax rate of 6 percent, this calculation yields an equivalent rate of 1.18 percent.

19 See Joseph Bishop-Henchman and Jason Sapia, "Local Income Taxes: City- and County-Level Income and Wage Taxes Continue to Wane," Tax Foundation, Aug. 31, 2011.

20 Some states offer tax credits in lieu of standard deductions or personal exemptions. Rather than reducing a taxpayer's taxable income before the tax rates are applied, tax credits are subtracted from a taxpayer's tax liability. Like deductions and exemptions, the result is a lower final income tax bill. In order to maintain consistency within the component score, tax credits are converted into equivalent income exemptions or deductions.

Pennsylvania scores the best in this variable by having only one tax bracket. States with only two brackets are Colorado, Illinois, Indiana, Kentucky, Massachusetts, Michigan, New Hampshire, North Carolina, Tennessee, and Utah. On the other end of the spectrum, Hawaii scores worst with 13 brackets, followed by California and Missouri with 11 brackets each, while Iowa and Ohio both have 10 brackets.

Average Width of Brackets. Many states have several narrow tax brackets close together at the low end of the income scale, including a zero bracket created by standard deductions and exemptions. Most taxpayers never notice them, because they pass so quickly through those brackets and pay the top rate on most of their income. On the other hand, some states impose ever-increasing rates throughout the income spectrum, causing individuals and noncorporate businesses to alter their income-earning and tax-planning behavior. This subindex penalizes the latter group of states by measuring the average width of the brackets, rewarding those states where the average width is small, since in these states the top rate is levied on most income, acting more like a flat rate on all income.

Income Recapture. Connecticut, Nebraska, and New York apply the rate of the top income tax bracket to previous taxable income after the taxpayer crosses the top bracket threshold, while Arkansas imposes different tax tables depending on the filer's level of income. New York's recapture provision is the most damaging and results in an approximately \$22,000 penalty for reaching the top bracket. Income recapture provisions are poor policy, because they result in dramatically high marginal tax rates at the point of their kick-in, and they are nontransparent in that they raise tax burdens substantially without being reflected in the statutory rate.

Individual Income Tax Base

States have different definitions of taxable income, and some create greater impediments to economic activity than others. The base subindex gives a 10 percent weight to the marriage penalty, a 40 percent weight to the double taxation of taxable income, and a 50 percent weight to an accumulation of other base issues, including indexation.

The states with no individual income tax of any kind achieve perfect neutrality. Texas and Washington, however, are docked slightly because they do not recognize LLCs or S corporations, and Nevada's payroll tax keeps the state from achieving a perfect store. Of the other 43 states, Tennessee, New Hampshire, Illinois, Indiana, and Utah have the best scores, avoiding many problems with the definition of taxable income that plague other states. Meanwhile, states where the tax base is found to cause an unnecessary drag on economic activity include New Jersey, California, Ohio, Maryland, Minnesota, Delaware, and Georgia.

Marriage Penalty. A marriage penalty exists when a state's standard deduction and tax brackets for married taxpayers filing jointly are not double those for single filers. As a result, two singles (if combined) can have a lower tax bill than a married couple filing jointly with the same income. This is discriminatory and has serious business ramifications. The top-earning 20 percent of taxpayers is dominated (85 percent) by married couples. This same 20 percent also has the highest concentration of business owners of all income groups (Hodge 2003A, Hodge 2003B).

Because of these concentrations, marriage penalties have the potential to affect a significant share of pass-through businesses. Twenty-three states and the District of Columbia have marriage penalties built into their income tax brackets.

Some states attempt to get around the marriage penalty problem by allowing married couples to file as if they were singles or by offering an offsetting tax credit. While helpful in offsetting the dollar cost of the marriage penalty, these solutions come at the expense of added tax complexity. Still, states that allow for married couples to file as singles do not receive a marriage penalty score reduction.

Double Taxation of Capital Income. Since most states with an individual income tax system mimic the federal income tax code, they also possess its greatest flaw: the double taxation of capital income. Double taxation is brought about by the interaction between the corporate income tax and the individual income tax. The ultimate source of most capital income—interest, dividends, and capital gains—is corporate profits. The corporate income tax reduces the level of profits that can eventually be used to generate interest or dividend payments or capital gains.²¹ This capital income must then be declared by the receiving individual and taxed. The result is the double taxation of this capital income—first at the corporate level and again on the individual level.

All states that tax wage income score poorly by this criterion. Tennessee and New Hampshire, which tax individuals on interest and dividends, score somewhat better because they do not tax capital gains. Nevada's payroll tax does not apply to capital income, and thus scores perfectly on this measure, along with states which forgo all income taxation.

Federal Income Used as State Tax Base. Despite the shortcomings of the federal government's definition of income, states that use it reduce the tax compliance burden on taxpayers. Five states score poorly because they do not conform to federal definitions of individual income: Alabama, Arkansas, Mississippi, New Jersey, and Pennsylvania.

Alternative Minimum Tax (AMT). At the federal level, the Alternative Minimum Tax (AMT) was created in 1969 to ensure that all taxpayers paid some minimum level of taxes every year. Unfortunately, it does so by creating a parallel tax system to the standard individual income tax code. AMTs are an inefficient way to prevent tax deductions and credits from totally eliminating tax liability. As such, states that have mimicked the federal AMT put themselves at a competitive disadvantage through needless tax complexity. Six states score poorly for imposing an AMT on individuals: California, Colorado, Connecticut, Iowa, Minnesota, and Wisconsin.

²¹ Equity-related capital gains are not created directly by a corporation. Rather, they are the result of stock appreciations due to corporate activity such as increasing retained earnings, increasing capital investments, or issuing dividends. Stock appreciation becomes taxable realized capital gains when the stock is sold by the holder.

Credit for Taxes Paid

This variable measures the extent of double taxation on income used to pay foreign and state taxes, i.e., paying the same taxes twice. States can avoid double taxation by allowing a credit for state taxes paid to other jurisdictions.

Recognition of Limited Liability Corporation and S Corporation Status

One important development in the federal tax system was the creation of the limited liability corporation (LLC) and the S corporation. LLCs and S corporations provide businesses some of the benefits of incorporation, such as limited liability, without the overhead of becoming a traditional C corporation. The profits of these entities are taxed under the individual income tax code, which avoids the double taxation problems that plague the corporate income tax system. Every state with a full individual income tax recognizes LLCs to at least some degree, and all but Louisiana recognize S corporations in some fashion, but those that require additional state election or make the entity file through the state's gross receipts tax (as in Delaware, Ohio, Texas, and Washington) score poorly in this variable.

Indexation of the Tax Code

Indexing the tax code for inflation is critical in order to prevent *de facto* tax increases on the nominal increase in income due to inflation. This “inflation tax” results in higher tax burdens on taxpayers, usually without their knowledge or consent. Three areas of the individual income tax are commonly indexed for inflation: the standard deduction, personal exemptions, and tax brackets. Twenty-four states index all three or do not impose an individual income tax; 18 states and the District of Columbia index one or two of the three; and nine states do not index at all.

SALES TAXES

Sales tax makes up 25.3 percent of each state's *Index* score. The type of sales tax familiar to taxpayers is a tax levied on the purchase price of a good at the point of sale. Due to the inclusion of some business inputs in most states' sales tax bases, the rate and structure of the sales tax is an important consideration for many businesses. The sales tax can also hurt the business tax climate because as the sales tax rate climbs, customers make fewer purchases or seek low-tax alternatives. As a result, business is lost to lower-tax locations, causing lost profits, lost jobs, and lost tax revenue.²² The effect of differential sales tax rates among states or localities is apparent when a traveler crosses from a high-tax state to a neighboring low-tax state. Typically, a vast expanse of shopping malls springs up along the border in the low-tax jurisdiction.

On the positive side, sales taxes levied on goods and services at the point of sale to the end-user have at least two virtues. First, they are transparent: the tax is never confused with the price of goods by customers. Second, since they are levied at the point of sale, they are less likely to cause economic distortions than taxes levied at some intermediate stage of production (such as a gross receipts tax or sales taxes on business-to-business transactions).

The negative impact of sales taxes is well documented in the economic literature and through anecdotal evidence. For example, Bartik (1989) found that high sales taxes, especially sales taxes levied on equipment, had a negative effect on small business start-ups. Moreover, companies have been known to avoid locating factories or facilities in certain states because the factory's machinery would be subject to the state's sales tax.²³

States that create the most tax pyramiding and economic distortion, and therefore score the worst, are states that levy a sales tax that generally allows no exclusions for business inputs.²⁴ Hawaii, New Mexico, South Dakota, and Washington are examples of states that tax many business inputs. The ideal base for sales taxation is all goods and services at the point of sale to the end-user.

Excise taxes are sales taxes levied on specific goods. Goods subject to excise taxation are typically (but not always) perceived to be luxuries or vices, the latter of which are less sensitive to drops in demand when the tax increases their price. Examples typically include tobacco, liquor, and gasoline. The sales tax component of the *Index* takes into account the excise tax rates each state levies.

²² States have sought to limit this sales tax competition by levying a "use tax" on goods purchased out of state and brought into the state, typically at the same rate as the sales tax. Few consumers comply with use tax obligations.

²³ For example, in early 1993, Intel Corporation was considering California, New Mexico, and four other states as the site of a new billion-dollar factory. California was the only one of the six states that levied its sales tax on machinery and equipment, a tax that would have cost Intel roughly \$80 million. As Intel's Bob Perlman explained in testimony before a committee of the California state legislature, "There are two ways California's not going to get the \$80 million: with the factory or without it." California would not repeal the tax on machinery and equipment; New Mexico got the plant.

²⁴ Sales taxes, which are ideally levied only on sales to final-users, are a form of consumption tax. Consumption taxes that are levied instead at each stage of production are known as value-added taxes (VAT) and are popular internationally. Theoretically a VAT can avoid the economically damaging tax pyramiding effect. The VAT has never gained wide acceptance in the U.S., and only two states (Michigan and New Hampshire) have even attempted a VAT-like tax.

TABLE 5.
Sales Tax Component of the *State Business Tax Climate Index* (2016–2019)

State	2016 Rank	2016 Score	2017 Rank	2017 Score	2018 Rank	2018 Score	2019 Rank	2019 Score	Change from 2018 to 2019	
									Rank	Score
Alabama	48	3.21	48	3.02	48	2.99	48	2.85	0	-0.14
Alaska	5	8.02	5	7.85	5	7.81	5	8.12	0	+0.31
Arizona	46	3.37	47	3.47	47	3.45	47	3.34	0	-0.11
Arkansas	47	3.34	44	3.77	44	3.77	44	3.64	0	-0.13
California	42	3.95	40	4.13	41	4.03	43	3.65	-2	-0.38
Colorado	39	4.10	39	4.17	39	4.17	38	4.12	+1	-0.05
Connecticut	30	4.56	29	4.63	28	4.65	30	4.59	-2	-0.06
Delaware	1	9.14	1	8.94	1	8.93	2	9.24	-1	+0.31
Florida	22	4.92	22	4.96	22	4.92	22	4.89	0	-0.03
Georgia	35	4.25	34	4.46	29	4.65	29	4.59	0	-0.06
Hawaii	24	4.78	26	4.77	26	4.80	24	4.74	+2	-0.06
Idaho	28	4.69	27	4.70	27	4.72	26	4.72	+1	0.00
Illinois	34	4.41	35	4.34	35	4.35	36	4.25	-1	-0.10
Indiana	17	5.09	12	5.47	10	5.50	12	5.42	-2	-0.08
Iowa	19	5.03	20	5.06	19	5.09	19	5.09	0	0.00
Kansas	33	4.53	28	4.63	31	4.61	31	4.57	0	-0.04
Kentucky	14	5.27	13	5.25	14	5.26	14	5.31	0	+0.05
Louisiana	49	3.20	50	1.96	50	1.95	50	2.68	0	+0.73
Maine	8	5.75	8	5.73	8	5.75	7	5.80	+1	+0.05
Maryland	16	5.13	17	5.13	18	5.15	18	5.14	0	-0.01
Massachusetts	18	5.07	18	5.10	13	5.34	13	5.36	0	+0.02
Michigan	10	5.50	11	5.48	12	5.45	11	5.45	+1	0.00
Minnesota	26	4.77	25	4.78	25	4.80	27	4.72	-2	-0.08
Mississippi	38	4.17	38	4.23	38	4.23	35	4.35	+3	+0.12
Missouri	25	4.77	24	4.85	24	4.80	25	4.72	-1	-0.08
Montana	3	9.02	3	8.82	3	8.81	3	9.15	0	+0.34
Nebraska	9	5.59	9	5.66	9	5.59	9	5.61	0	+0.02
Nevada	40	3.97	41	4.05	42	4.02	40	3.96	+2	-0.06
New Hampshire	2	9.11	2	8.92	2	8.90	1	9.28	+1	+0.38
New Jersey	44	3.61	45	3.69	46	3.54	45	3.56	+1	+0.02
New Mexico	41	3.95	42	4.02	40	4.06	41	3.91	-1	-0.15
New York	43	3.63	43	3.78	43	3.83	42	3.74	+1	-0.09
North Carolina	20	5.00	19	5.07	20	5.05	20	5.05	0	0.00
North Dakota	32	4.53	32	4.58	32	4.58	32	4.55	0	-0.03
Ohio	29	4.57	31	4.60	30	4.62	28	4.59	+2	-0.03
Oklahoma	36	4.23	36	4.32	36	4.31	39	4.11	-3	-0.20
Oregon	4	8.92	4	8.72	4	8.71	4	9.03	0	+0.32
Pennsylvania	21	5.00	21	5.03	21	4.95	21	4.97	0	+0.02
Rhode Island	23	4.83	23	4.87	23	4.90	23	4.86	0	-0.04
South Carolina	31	4.54	30	4.60	33	4.53	34	4.44	-1	-0.09
South Dakota	27	4.71	33	4.51	34	4.50	33	4.46	+1	-0.04
Tennessee	45	3.39	46	3.56	45	3.57	46	3.41	-1	-0.16
Texas	37	4.17	37	4.27	37	4.28	37	4.23	0	-0.05
Utah	13	5.27	16	5.21	17	5.21	16	5.21	+1	0.00
Vermont	15	5.23	15	5.21	16	5.22	15	5.24	+1	+0.02
Virginia	11	5.50	10	5.49	11	5.48	10	5.51	+1	+0.03
Washington	50	2.88	49	2.91	49	2.86	49	2.75	0	-0.11
West Virginia	12	5.34	14	5.24	15	5.25	17	5.17	-2	-0.08
Wisconsin	7	5.88	7	5.87	7	5.88	8	5.69	-1	-0.19
Wyoming	6	6.10	6	6.09	6	6.16	6	6.16	0	0.00
District of Columbia	27	4.75	27	4.77	27	4.75	25	4.74	+2	-0.01

Note: A rank of 1 is best, 50 is worst. All scores are for fiscal years. D.C.'s score and rank do not affect other states.
Source: Tax Foundation.

The five states without a state sales tax—Alaska,²⁵ Delaware, Montana, New Hampshire, and Oregon—achieve the best sales tax component scores. Among states with a sales tax, those with low general rates and broad bases, and which avoid tax pyramiding, do best. Wyoming, Maine, Wisconsin, Nebraska, Virginia, Michigan, and Indiana all do well, with well-structured sales taxes and modest excise tax rates.

At the other end of the spectrum, Louisiana, Washington, Alabama, Arizona, Tennessee, and New Jersey fare the worst, imposing high rates and taxing a range of business inputs, such as utilities, services, manufacturing, and leases—and maintaining relatively high excise taxes. Tennessee has the highest combined state and local rate of 9.46 percent, closely followed by Louisiana at 9.45 percent. In general, these states levy high sales tax rates that apply to most or all business input items.

Sales Tax Rate

The tax rate itself is important, and a state with a high sales tax rate reduces demand for in-state retail sales. Consumers will turn more frequently to cross-border, catalog, or online purchases, leaving less business activity in the state. This subindex measures the highest possible sales tax rate applicable to in-state retail shopping and taxable business-to-business transactions. Four states—Delaware, Montana, New Hampshire, and Oregon—do not have state or local sales taxes and thus are given a rate of zero. Alaska is sometimes counted among states with no sales tax since it does not levy a statewide sales tax. However, Alaska localities are allowed to levy sales taxes and the weighted statewide average of these taxes is 1.43 percent.

The *Index* measures the state and local sales tax rate in each state. A combined rate is computed by adding the general state rate to the weighted average of the county and municipal rates.

State Sales Tax Rate. Of the 45 states (and the District of Columbia) with a statewide sales tax, Colorado's 2.9 percent rate is the lowest. Five states have a 4 percent state-level sales tax: Alabama, Georgia, Hawaii, New York, and Wyoming. At the other end is California with a 7.25 percent state sales tax, including a mandatory statewide local add-on tax. Tied for second-highest are Indiana, Mississippi, Rhode Island, and Tennessee (all at 7 percent). Other states with high statewide rates include Minnesota (6.875 percent) and Nevada (6.85 percent).

Local Option Sales Tax Rates. Thirty-eight states authorize the use of local option sales taxes at the county and/or municipal level, and in some states, the local option sales tax significantly increases the tax rate faced by consumers.²⁶ Local jurisdictions in Colorado, for example, add an average of 4.62 percent in local sales taxes to the state's 2.9 percent state-level rate, bringing the total average sales tax rate to 7.52 percent. This may be an understatement in some localities with much higher local add-ons, but by weighting each locality's rate, the *Index* computes a statewide average of local rates that is comparable to the average in other states.

²⁵ Alaska does authorize local governments to levy their own sales taxes, however, which is reflected in the state's sales tax component score.

²⁶ The average local option sales tax rate is calculated as an average of local statutory rates, weighted by population. See Jared Walczak and Scott Drenkard, "State and Local Sales Tax Rates, Midyear 2016," Tax Foundation, July 5, 2016.

Alabama and Louisiana have the highest average local option sales taxes (5.15 and 5.0 percent, respectively), and in both states the average local option sales tax is higher than the state sales tax rate. Other states with high local option sales taxes include Colorado (4.62 percent), New York (4.49 percent), and Oklahoma (4.43 percent).

States with the highest combined state and average local sales tax rates are Tennessee (9.46 percent), Louisiana (9.45 percent), Arkansas (9.42 percent), Washington (9.19 percent), and Alabama (9.15 percent). At the low end are Alaska (1.43 percent), Hawaii (4.35 percent), Wyoming (5.39 percent), Wisconsin (5.44 percent), and Maine (5.5 percent).

Sales Tax Base

The sales tax base subindex is computed according to five features of each state's sales tax:

- whether the base includes a variety of business-to-business transactions such as machinery, raw materials, office equipment, farm equipment, and business leases;
- whether the base includes goods and services typically purchased by consumers, such as groceries, clothing, and gasoline;
- whether the base includes services, such as legal, financial, accounting, medical, fitness, landscaping, and repair;
- whether the state leans on sales tax holidays, which temporarily exempt select goods from the sales tax; and
- the excise tax rate on products such as gasoline, diesel fuel, tobacco, spirits, and beer.

The top five states on this subindex are those without a general state sales tax: Alaska, Delaware, Montana, New Hampshire, and Oregon. However, none receives a perfect score because they all levy gasoline, diesel, tobacco, and beer excise taxes. States like Indiana, Wyoming, Kansas, Colorado, Nebraska, Missouri, and Idaho achieve high scores on their tax base by avoiding the problems of tax pyramiding and adhering to low excise tax rates, though of these, Colorado receives poor marks for a lack of local base conformity.

States with the worst scores on the base subindex are Hawaii, Washington, Alabama, South Dakota, Connecticut, New Mexico, and New Jersey. Their tax systems hamper economic growth by including too many business inputs, excluding too many consumer goods and services, and imposing excessive rates of excise taxation.

Sales Tax on Business-to-Business Transactions (Business Inputs). When a business must pay sales taxes on manufacturing equipment and raw materials, then that tax becomes part of the price of whatever the business makes with that equipment and those materials. The business must then collect sales tax on its own products, with the result that a tax is being charged on a price that already contains taxes. This tax pyramiding invariably results in some industries being taxed more heavily than others, which violates the principle of neutrality and causes economic distortions.

These variables are often inputs to other business operations. For example, a manufacturing firm will count the cost of transporting its final goods to retailers as a significant cost of doing business. Most firms, small and large alike, hire accountants, lawyers, and other professional service providers. If these services are taxed, then it is more expensive for every business to operate.

To understand how business-to-business sales taxes can distort the market, suppose a sales tax were levied on the sale of flour to a bakery. The bakery is not the end-user because the flour will be baked into bread and sold to consumers. Economic theory is not clear as to which party will ultimately bear the burden of the tax. The tax could be “passed forward” onto the customer or “passed backward” onto the bakery.²⁷ Where the tax burden falls depends on how sensitive the demand for bread is to price changes. If customers tend not to change their bread-buying habits when the price rises, then the tax can be fully passed forward onto consumers. However, if the consumer reacts to higher prices by buying less, then the tax will have to be absorbed by the bakery as an added cost of doing business.

The hypothetical sales tax on all flour sales would distort the market, because different businesses that use flour have customers with varying price sensitivity. Suppose the bakery is able to pass the entire tax on flour forward to the consumer but the pizzeria down the street cannot. The owners of the pizzeria would face a higher cost structure and profits would drop. Since profits are the market signal for opportunity, the tax would tilt the market away from pizza-making. Fewer entrepreneurs would enter the pizza business, and existing businesses would hire fewer people. In both cases, the sales tax charged to purchasers of bread and pizza would be partly a tax on a tax because the tax on flour would be built into the price. Economists call this tax pyramiding, and public finance scholars overwhelmingly oppose applying the sales tax to business inputs due to the resulting pyramiding and lack of transparency.

Besley and Rosen (1998) found that for many products, the after-tax price of the good increased by the same amount as the tax itself. That means a sales tax increase was passed along to consumers on a one-for-one basis. For other goods, however, they found that the price of the good rose by twice the amount of the tax, meaning that the tax increase translates into an even larger burden for consumers than is typically thought. Note that these inputs should only be exempt from sales tax if they are truly inputs into the production process. If they are consumed by an end-user, they are properly includable in the state’s sales tax base.

States that create the most tax pyramiding and economic distortion, and therefore score the worst, are states that levy a sales tax that generally allows no exclusions for business inputs. Hawaii, New Mexico, South Dakota, and Washington are examples of states that tax many business inputs.

Sales Tax Breadth. An economically neutral sales tax base includes all final retail sales of goods and services purchased by the end-users. In practice, however, states tend to include most goods, but relatively few services, in their sales tax bases, a growing issue in an increasingly service-oriented economy. Professor John Mikesell of Indiana University estimates that, nationwide, sales

27 See Timothy J. Besley and Harvey S. Rosen, “Sales Taxes and Prices: An Empirical Analysis,” NBER Working Paper No. 6667, July 1998.

taxes extend to about 39 percent of all final consumer transactions.²⁸ Exempting any goods or services narrows the tax base, drives up the sales tax rate on those items still subject to tax, and introduces unnecessary distortions into the market. A well-structured sales tax, however, does not fall upon business inputs. Therefore, states that tax services that are business inputs score poorly on the *Index*, while states are rewarded for expanding their base to include more final retail sales of goods and services.

Sales Tax on Gasoline. There is no economic reason to exempt gasoline from the sales tax, as it is a final retail purchase by consumers. However, all but six states do so. While all states levy an excise tax on gasoline, these funds are often dedicated for transportation purposes, making them a form of user tax distinct from the general sales tax. The five states that fully include gasoline in their sales tax base (Alaska, Hawaii, Illinois, Indiana, and Michigan) get a better score. Several other states receive partial credit for applying an *ad valorem* tax to gasoline sales, but at a different rate than for the general sales tax.

Sales Tax on Groceries. A well-structured sales tax includes all end-user goods in the tax base, to keep the base broad, rates low, and prevent distortions in the marketplace. Many states exempt groceries to reduce the incidence of the sales tax on low-income residents. Such an exemption, however, also benefits grocers and higher-income residents, and creates additional compliance costs due to the necessity of maintaining complex, ever-changing lists of exempt and nonexempt products. Public assistance programs such as the Women, Infants, and Children (WIC) program or the Supplement Nutrition Assistance Program (SNAP) provide more targeted assistance than excluding groceries from the sales tax base. Fourteen states include or partially include groceries in their sales tax base.

Excise Taxes

Excise taxes are single-product sales taxes. Many of them are intended to reduce consumption of the product bearing the tax. Others, like the gasoline tax, are often used to fund specific projects such as road construction.

Gasoline and diesel excise taxes (levied per gallon) are usually justified as a form of user tax paid by those who benefit from road construction and maintenance. Though gas taxes—along with tolls—are one of the best ways to raise revenue for transportation projects (roughly approximating a user fee for infrastructure use), gasoline represents a large input for most businesses, so states that levy higher rates have a less competitive business tax climate. State excise taxes on gasoline range from 58.7 cents in Pennsylvania to 14.65 cents per gallon in Alaska. The *Index* relies upon calculated rates from the American Petroleum Institute, capturing states' base excise taxes in addition to other gallonage-based fees and *ad valorem* taxes placed upon gasoline. General sales tax rates that apply to gasoline are included in this calculated rate, but states which include, or partially include, gasoline in the sales tax base are rewarded in the sales tax breadth measure.

Tobacco, spirits, and beer excise taxes can discourage in-state consumption and encourage consumers to seek lower prices in neighboring jurisdictions (Moody and Warcholik, 2004). This

²⁸ John Mikesell, "State Retail Taxes in 2012: The Recovery Continues," *State Tax Notes*, June 24, 2013, 1003.

impacts a wide swath of retail outlets, such as convenience stores, that move large volumes of tobacco and beer products. The problem is exacerbated for those retailers located near the border of states with lower excise taxes as consumers move their shopping out of state—referred to as cross-border shopping.

There is also the growing problem of cross-border smuggling of products from states and areas that levy low excise taxes on tobacco into states that levy high excise taxes on tobacco. This both increases criminal activity and reduces taxable sales by legitimate retailers.²⁹

States with the highest tobacco taxes per pack of 20 cigarettes are New York and Connecticut (at \$4.35 each), Rhode Island (\$4.25), Massachusetts (\$3.51), and Hawaii (\$3.20), while states with the lowest tobacco taxes are Missouri (17 cents), Virginia (30 cents), Georgia (37 cents), North Dakota (44 cents), and North Carolina (45 cents).

States with the highest beer taxes on a per gallon basis are Tennessee (\$1.29), Alaska (\$1.07), Alabama (\$1.05), Georgia (\$1.01), and Hawaii (\$0.93), while states with the lowest beer taxes are Wyoming (2 cents), Missouri and Wisconsin (6 cents), and Colorado, Oregon, and Pennsylvania (each at 8 cents). States with the highest spirits taxes per gallon are Washington (\$32.52), Oregon (\$22.75), and Virginia (\$19.93).

²⁹ See Scott Drenkard and Joseph Bishop-Henchman, "Cigarette Taxes and Cigarette Smuggling by State, 2014" Tax Foundation, Jan. 17, 2017.

PROPERTY TAX

The property tax component, which includes taxes on real and personal property, net worth, and the transfer of assets, accounts for 15.4 percent of each state's *Index* score.

When properly structured, property taxes exceed most other taxes in comporting with the benefit principle and can be fairly economically efficient. In the realm of public finance, they are often also prized for their comparative transparency among taxes, though that transparency may contribute to the public's generally low view of property taxes. The Tax Foundation's *Survey of Tax Attitudes* found that local property taxes are perceived as the second most unfair state or local tax.³⁰

Property taxes matter to businesses, and the tax rate on commercial property is often higher than the tax on comparable residential property. Additionally, many localities and states levy taxes on the personal property or equipment owned by a business. They can be on assets ranging from cars to machinery and equipment to office furniture and fixtures, but are separate from real property taxes, which are taxes on land and buildings.

Businesses remitted \$671 billion in state and local taxes in fiscal year 2013, of which \$242 billion (36.1 percent) was for property taxes. The property taxes included tax on real, personal, and utility property owned by businesses (Phillips et al. 2014). Since property taxes can be a large burden on business, they can have a significant effect on location decisions.

Mark, McGuire, and Papke (2000) find taxes that vary from one location to another within a region could be uniquely important determinants of intraregional location decisions. They find that higher rates of two business taxes—the sales tax and the personal property tax—are associated with lower employment growth. They estimate that a tax hike on personal property of one percentage point reduces annual employment growth by 2.44 percentage points.

Bartik (1985), finding that property taxes are a significant factor in business location decisions, estimates that a 10 percent increase in business property taxes decreases the number of new plants opening in a state by between 1 and 2 percent. Bartik (1989) backs up his earlier findings by concluding that higher property taxes negatively affect the establishment of small businesses. He elaborates that the particularly strong negative effect of property taxes occurs because they are paid regardless of profits, and many small businesses are not profitable in their first few years, so high property taxes would be more influential than profit-based taxes on the start-up decision.

States which keep statewide property taxes low better position themselves to attract business investment. Localities competing for business can put themselves at a greater competitive advantage by keeping personal property taxes low.

Taxes on capital stock, intangible property, inventory, real estate transfers, estates, inheritance, and gifts are also included in the property tax component of the *Index*. The states that score the best on property tax are New Mexico, Indiana, Utah, Idaho, Arizona, and North Dakota. These

³⁰ See Matt Moon, "How do Americans Feel about Taxes Today?" *Tax Foundation's 2009 Survey of U.S. Attitudes on Taxes, Government Spending and Wealth Distribution*, Tax Foundation, Apr. 8, 2009.

TABLE 6.

Property Tax Component of the State Business Tax Climate Index (2016–2019)

State	2016 Rank	2016 Score	2017 Rank	2017 Score	2018 Rank	2018 Score	2019 Rank	2019 Score	Change from 2018 to 2019	
									Rank	Score
Alabama	17	5.50	16	5.56	12	5.60	15	5.55	-3	-0.05
Alaska	21	5.27	22	5.18	38	4.35	23	5.18	+15	+0.83
Arizona	6	6.24	6	6.30	6	6.36	5	6.32	+1	-0.04
Arkansas	27	5.06	24	5.16	22	5.14	26	5.10	-4	-0.04
California	13	5.56	15	5.56	13	5.58	14	5.58	-1	0.00
Colorado	12	5.59	14	5.57	14	5.57	12	5.60	+2	+0.03
Connecticut	49	2.82	49	2.79	49	2.77	50	2.84	-1	+0.07
Delaware	15	5.53	20	5.34	20	5.33	9	5.79	+11	+0.46
Florida	20	5.40	10	5.61	10	5.68	11	5.68	-1	0.00
Georgia	23	5.18	21	5.20	23	5.12	24	5.12	-1	0.00
Hawaii	14	5.55	17	5.55	16	5.53	16	5.44	0	-0.09
Idaho	4	6.42	2	6.46	3	6.43	4	6.41	-1	-0.02
Illinois	45	3.71	46	3.62	45	3.66	45	3.65	0	-0.01
Indiana	5	6.40	4	6.40	4	6.41	2	6.45	+2	+0.04
Iowa	40	4.32	40	4.25	39	4.28	39	4.23	0	-0.05
Kansas	19	5.45	19	5.39	19	5.41	20	5.42	-1	+0.01
Kentucky	35	4.67	36	4.70	36	4.71	35	4.65	+1	-0.06
Louisiana	28	5.05	30	4.95	30	4.98	32	4.90	-2	-0.08
Maine	41	4.15	41	4.05	41	4.15	41	4.03	0	-0.12
Maryland	42	4.05	42	3.96	42	4.03	42	3.99	0	-0.04
Massachusetts	46	3.65	45	3.64	46	3.57	46	3.58	0	+0.01
Michigan	26	5.07	25	5.15	21	5.17	22	5.18	-1	+0.01
Minnesota	30	4.95	33	4.80	28	5.01	31	4.91	-3	-0.10
Mississippi	34	4.68	35	4.74	35	4.72	36	4.63	-1	-0.09
Missouri	8	5.88	7	6.26	7	6.30	7	6.25	0	-0.05
Montana	9	5.71	9	5.76	9	5.74	10	5.73	-1	-0.01
Nebraska	39	4.38	39	4.28	40	4.17	40	4.07	0	-0.10
Nevada	7	5.88	8	5.91	8	5.95	8	5.99	0	+0.04
New Hampshire	43	3.93	43	3.92	44	3.84	44	3.71	0	-0.13
New Jersey	50	2.76	50	2.71	50	2.71	48	3.34	+2	+0.63
New Mexico	1	6.74	1	6.77	1	6.73	1	6.65	0	-0.08
New York	47	3.60	47	3.45	47	3.46	47	3.41	0	-0.05
North Carolina	31	4.92	31	4.88	32	4.84	33	4.87	-1	+0.03
North Dakota	3	6.46	3	6.45	2	6.48	6	6.32	-4	-0.16
Ohio	11	5.62	11	5.60	11	5.65	13	5.58	-2	-0.07
Oklahoma	18	5.47	12	5.59	15	5.54	19	5.43	-4	-0.11
Oregon	10	5.68	18	5.46	18	5.43	17	5.44	+1	+0.01
Pennsylvania	38	4.41	32	4.82	33	4.82	34	4.77	-1	-0.05
Rhode Island	44	3.83	44	3.79	43	3.87	43	3.88	0	+0.01
South Carolina	25	5.09	26	5.08	24	5.11	27	5.10	-3	-0.01
South Dakota	22	5.19	23	5.17	25	5.10	28	5.02	-3	-0.08
Tennessee	37	4.48	29	4.96	29	4.99	29	4.96	0	-0.03
Texas	33	4.83	37	4.69	37	4.64	37	4.54	0	-0.10
Utah	2	6.48	5	6.38	5	6.38	3	6.42	+2	+0.04
Vermont	48	3.22	48	3.17	48	3.28	49	3.11	-1	-0.17
Virginia	29	5.04	28	4.99	31	4.97	30	4.94	+1	-0.03
Washington	24	5.10	27	5.06	27	5.09	25	5.12	+2	+0.03
West Virginia	16	5.52	13	5.58	17	5.52	18	5.44	-1	-0.08
Wisconsin	32	4.88	34	4.77	26	5.09	21	5.19	+5	+0.10
Wyoming	36	4.59	38	4.58	34	4.76	38	4.47	-4	-0.29
District of Columbia	39	4.41	47	3.56	45	3.67	47	3.57	-2	-0.10

Note: A rank of 1 is best, 50 is worst. All scores are for fiscal years. D.C.'s score and rank do not affect other states.

Source: Tax Foundation.

states generally have low rates of property tax, whether measured per capita or as a percentage of income. They also avoid distortionary taxes like estate, inheritance, gift, and other wealth taxes. States that score poorly on the property tax component are Connecticut, Vermont, New Jersey, New York, and Massachusetts. These states generally have high property tax rates and levy several wealth-based taxes.

The property tax portion of the *Index* is composed of two equally weighted subindices devoted to measuring the economic impact of both rates and bases. The rate subindex consists of property tax collections (measured both per capita and as a percentage of personal income) and capital stock taxes. The base portion consists of dummy variables detailing whether each state levies wealth taxes such as inheritance, estate, gift, inventory, intangible property, and other similar taxes.³¹

Property Tax Rate

The property tax rate subindex consists of property tax collections per capita (40 percent of the subindex score), property tax collections as a percent of personal income (40 percent of the subindex score), and capital stock taxes (20 percent of the subindex score). The heavy weighting of tax collections is due to their importance to businesses and individuals and their increasing size and visibility to all taxpayers. Both are included to gain a better understanding of how much each state collects in proportion to its population and its income. Tax collections as a percentage of personal income forms an effective rate that gives taxpayers a sense of how much of their income is devoted to property taxes, and the per capita figure lets them know how much in actual dollar terms they pay in property taxes compared to residents of other states.

While these measures are not ideal—having effective tax rates of personal and real property for both businesses and individuals would be preferable—they are the best measures available due to the significant data constraints posed by property tax collections. Since a high percentage of property taxes are levied on the local level, there are countless jurisdictions. The sheer number of different localities makes data collection almost impossible. The few studies that tackle the subject use representative towns or cities instead of the entire state. Thus, the best source for data on property taxes is the Census Bureau, because it can compile the data and reconcile definitional problems.

States that maintain low effective rates and low collections per capita are more likely to promote growth than states with high rates and collections.

³¹ Though not included directly in this *Index* for data availability reasons, tangible personal property taxes can also affect business decisions. For a comprehensive review of these taxes and reform recommendations, see Joyce Errecart, Ed Gerrish, and Scott Drenkard, "States Moving Away from Taxes on Tangible Personal Property," Tax Foundation, Oct. 4, 2012.

Property Tax Collections Per Capita. Property tax collections per capita are calculated by dividing property taxes collected in each state (obtained from the Census Bureau) by population. The states with the highest property tax collections per capita are New Jersey (\$3,074), New Hampshire (\$3,054), Connecticut (\$2,847), New York (\$2,697), and Vermont (\$2,542). The states that collect the least per capita are Alabama (\$540), Oklahoma (\$678), Arkansas (\$699), New Mexico (\$770), and Kentucky (\$781).

Effective Property Tax Rate. Property tax collections as a percent of personal income are derived by dividing the Census Bureau's figure for total property tax collections by personal income in each state. This provides an effective property tax rate. States with the highest effective rates and therefore the worst scores are New Hampshire (5.44 percent), Vermont (5.10 percent), New Jersey (5.01 percent), Maine (4.66 percent), Rhode Island (4.64 percent), and New York (4.54 percent). States that score well with low effective tax rates are Alabama (1.39 percent), Oklahoma (1.58 percent), Arkansas (1.75 percent), Delaware (1.78 percent), Tennessee (1.98 percent), and Kentucky (2.00 percent).

Capital Stock Tax Rate. Capital stock taxes (sometimes called franchise taxes) are levied on the wealth of a corporation, usually defined as net worth. They are often levied in addition to corporate income taxes, adding a duplicate layer of taxation and compliance for many corporations. Corporations that find themselves in financial trouble must use their limited cash flow to pay their capital stock tax. In assessing capital stock taxes, the subindex accounts for three variables: the capital stock tax rate; the maximum payment; and whether any capital stock tax is imposed in addition to a corporate income tax, or whether the business is liable for the higher of the two. The capital stock tax subindex is 20 percent of the total rate subindex.

This variable measures the rate of taxation as levied by the 16 states with a capital stock tax. Legislators have come to realize the damaging effects of capital stock taxes, and a handful of states are reducing or repealing them. Kansas completed the phaseout of its tax in 2011. West Virginia and Rhode Island fully phased out their capital stock taxes as of January 1, 2015, and Pennsylvania phased out its capital stock tax in 2016. The New York capital stock tax will phase out by 2021. States with the highest capital stock tax rates include Connecticut (0.341 percent), Arkansas and Louisiana (0.3 percent), Massachusetts (0.26 percent), and Mississippi and Tennessee (0.25 percent).

Maximum Capital Stock Tax Payment. Eight states mitigate the negative economic impact of the capital stock tax by placing a cap on the maximum capital stock tax payment. These states are Alabama, Connecticut, Delaware, Georgia, Illinois, Nebraska, New York, and Oklahoma, and among states with a capital stock tax, they receive the highest score on this variable.

Capital Stock Tax versus Corporate Income Tax. Some states mitigate the negative economic impact of the capital stock tax by allowing corporations to pay the higher of their capital stock tax or their corporate tax. These states (Connecticut, Massachusetts, and New York) are given credit for this provision. States that do not have a capital stock tax get the best scores in this subindex while the states that force companies to pay both score the worst.

Property Tax Base

This subindex is composed of dummy variables listing the different types of property taxes each state levies. Seven taxes are included and each is equally weighted. Arizona, Idaho, Indiana, Missouri, Montana, New Mexico, North Dakota, Utah, and Wyoming receive perfect scores because they do not levy any of the seven taxes. Maryland and Kentucky receive the worst scores because they impose many of these taxes.

Intangible Property Tax. This dummy variable gives low scores to those states that impose taxes on intangible personal property. Intangible personal property includes stocks, bonds, and other intangibles such as trademarks. This tax can be highly detrimental to businesses that hold large amounts of their own or other companies' stock and that have valuable trademarks. Nine states levy this tax in various degrees: Alabama, Iowa, Kentucky, Louisiana, Mississippi, North Carolina, South Dakota, Tennessee, and Texas.³²

Inventory Tax. Levied on the value of a company's inventory, the inventory tax is especially harmful to large retail stores and other businesses that store large amounts of merchandise. Inventory taxes are highly distortionary, because they force companies to make decisions about production that are not entirely based on economic principles but rather on how to pay the least amount of tax on goods produced. Inventory taxes also create strong incentives for companies to locate inventory in states where they can avoid these harmful taxes. Fourteen states levy some form of inventory tax.

Asset Transfer Taxes (including Estate, Inheritance, and Gift Taxes). Five taxes levied on the transfer of assets are part of the property tax base. These taxes, levied in addition to the federal estate tax, all increase the cost and complexity of transferring wealth and hurt a state's business climate. These harmful effects can be particularly acute in the case of small, family-owned businesses if they do not have the liquid assets necessary to pay the estate's tax liability.³³ The five taxes are real estate transfer taxes, estate taxes, inheritance taxes, generation-skipping taxes, and gift taxes. Thirty-six states and the District of Columbia levy taxes on the transfer of real estate, adding to the cost of purchasing real property and increasing the complexity of real estate transactions. This tax is harmful to businesses that transfer real property often.

The federal Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) lowered the federal estate tax rate through 2009 and eliminated it entirely in 2010. Prior to 2001, most states levied an estate tax that piggybacked on the federal system, because the federal tax code allowed individuals to take a dollar-for-dollar tax credit for state estate taxes paid. In other words, states essentially received free tax collections from the estate tax, and individuals did not object because their total tax liability was unchanged. EGTRRA eliminated this dollar-for-dollar credit system, replacing it with a tax deduction.

³² Some states, like Kentucky, are often considered not to impose an intangible property tax, but continue to levy a low millage on financial deposits.

³³ For a summary of the effects of the estate tax on business, see Congressional Budget Office, "Effects of the Federal Estate Tax on Farms and Small Businesses," July 2005. For a summary of the estate tax in general, see David Block and Scott Drenkard, "The Estate Tax: Even Worse Than Republicans Say," Tax Foundation, Sept. 4, 2012.

Consequently, over the past decade, some states enacted their own estate tax while others repealed their estate taxes. Some states have provisions reintroducing the estate tax if the federal dollar-for-dollar credit system is revived. This would have happened in 2011, as EGTRRA expired and the federal estate tax returned to pre-2001 levels. However, in late 2010, Congress reenacted the estate tax for 2011 and 2012 but with higher exemptions and a lower rate than pre-2001 law, and maintained the deduction for state estate taxes. The tax reform law of 2017 raised the federal exemption still further. Thirty-eight states receive a high score for either (1) remaining coupled to the federal credit and allowing their state estate tax to expire or (2) not enacting their own estate tax, including two which repealed their estate tax this year. Twelve states have maintained an estate tax either by linking their tax to the pre-EGTRRA credit or by creating their own stand-alone system. These states score poorly.

Each year, some businesses, especially those that have not spent a sufficient sum on estate tax planning and on large insurance policies, find themselves unable to pay their estate taxes, either federal or state. Usually they are small- to medium-sized family-owned businesses where the death of the owner occasions a surprisingly large tax liability.

Inheritance taxes are similar to estate taxes, but they are levied on the heir of an estate instead of on the estate itself. Therefore, a person could inherit a family-owned company from his or her parents and be forced to downsize it, or sell part or all of it, in order to pay the heir's inheritance tax. Six states have inheritance taxes and are punished in the *Index*, because the inheritance tax causes economic distortions. Maryland has both an estate tax and an inheritance tax, the only state to impose both now that New Jersey has completed the repeal of its estate tax.

Connecticut is the only state with a gift tax, and it scores poorly. Gift taxes are designed to stop individuals' attempts to avoid the estate tax by giving their estates away before they die. Gift taxes have a negative impact on a state's business tax climate because they also heavily impact individuals who have sole proprietorships, S corporations, and LLCs.

UNEMPLOYMENT INSURANCE TAXES

Unemployment insurance (UI) is a social insurance program jointly operated by the federal and state governments. Taxes are paid by employers into the UI program to finance benefits for workers recently unemployed. Compared to the other major taxes assessed in the *State Business Tax Climate Index*, UI taxes are much less well-known. Every state has one, and all 50 of them are complex, variable-rate systems that impose different rates on different industries and different bases depending upon such factors as the health of the state's UI trust fund.³⁴

One of the worst aspects of the UI tax system is that financially troubled businesses, for which layoffs may be a matter of survival, actually pay higher marginal rates as they are forced into higher tax rate schedules. In the academic literature, this has long been called the “shut-down effect” of UI taxes: failing businesses face climbing UI taxes, with the result that they fail sooner.

The unemployment insurance tax component of the *Index* consists of two equally weighted subindices, one that measures each state's rate structure and one that focuses on the tax base. Unemployment insurance taxes comprise 9.8 percent of a state's final *Index* score.

Overall, the states with the least damaging UI taxes are Oklahoma, Florida, Delaware, Louisiana, Mississippi, and Ohio. Comparatively speaking, these states have rate structures with lower minimum and maximum rates and a wage base at the federal level. In addition, they have simpler experience formulas and charging methods, and they have not complicated their systems with benefit add-ons and surtaxes.

On the other hand, the states with the worst UI taxes are Massachusetts, Michigan, Idaho, Kentucky, and Pennsylvania. These states tend to have rate structures with high minimum and maximum rates and wage bases above the federal level. They also tend to feature more complicated experience formulas and charging methods, and have added benefits and surtaxes to their systems.

Unemployment Insurance Tax Rate

UI tax rates in each state are based on a schedule of rates ranging from a minimum rate to a maximum rate. The rate for any particular business is dependent upon the business's experience rating: businesses with the best experience ratings will pay the lowest possible rate on the schedule while those with the worst ratings pay the highest. The rate is applied to a taxable wage base (a predetermined fraction of an employee's wage) to determine UI tax liability.

Multiple rates and rate schedules can affect neutrality as states attempt to balance the dual UI objectives of spreading the cost of unemployment to all employers and ensuring high-turnover employers pay more.

Overall, the states with the best score on this rate subindex are Nebraska, Maine, Florida, Mississippi, South Carolina, and Virginia. Generally, these states have low minimum and maximum tax rates on each schedule and a wage base at or near the federal level. The states with the worst scores are Massachusetts, Pennsylvania, Alaska, Rhode Island, and Oregon.

The subindex gives equal weight to two factors: the actual rate schedules in effect in the most recent year, and the statutory rate schedules that can potentially be implemented at any time depending on the state of the economy and the UI fund.

³⁴ See generally Joseph Bishop-Henchman, “Unemployment Insurance Taxes: Options for Program Design and Insolvent Trust Funds,” Tax Foundation, Oct. 17, 2011.

TABLE 7.

Unemployment Insurance Tax Component of the *State Business Tax Climate Index* (2016–2019)

State	2016 Rank	2016 Score	2017 Rank	2017 Score	2018 Rank	2018 Score	2019 Rank	2019 Score	Change from 2018 to 2019	
									Rank	Score
Alabama	26	5.08	14	5.44	11	5.50	12	5.41	-1	-0.09
Alaska	22	5.15	29	4.82	25	4.99	35	4.75	-10	-0.24
Arizona	5	5.84	11	5.62	15	5.30	13	5.41	+2	+0.11
Arkansas	43	4.26	30	4.81	32	4.80	34	4.76	-2	-0.04
California	13	5.50	16	5.37	13	5.31	17	5.21	-4	-0.10
Colorado	34	4.78	42	4.51	35	4.74	40	4.59	-5	-0.15
Connecticut	20	5.20	21	5.19	19	5.23	23	5.06	-4	-0.17
Delaware	3	5.98	3	5.94	3	5.96	3	5.95	0	-0.01
Florida	2	6.18	2	6.14	2	6.11	2	6.06	0	-0.05
Georgia	39	4.46	35	4.70	38	4.67	38	4.65	0	-0.02
Hawaii	24	5.10	24	5.01	27	4.93	26	4.88	+1	-0.05
Idaho	45	4.12	46	4.07	46	4.07	48	4.04	-2	-0.03
Illinois	37	4.52	38	4.61	42	4.57	42	4.56	0	-0.01
Indiana	15	5.46	10	5.63	10	5.58	11	5.53	-1	-0.05
Iowa	35	4.75	34	4.77	34	4.75	33	4.78	+1	+0.03
Kansas	11	5.63	12	5.55	12	5.45	15	5.39	-3	-0.06
Kentucky	46	4.03	48	3.83	47	3.95	47	4.06	0	+0.11
Louisiana	4	5.93	9	5.64	4	5.94	4	5.85	0	-0.09
Maine	41	4.31	44	4.31	44	4.38	24	4.95	+20	+0.57
Maryland	28	4.97	26	4.95	24	5.00	28	4.87	-4	-0.13
Massachusetts	47	3.86	49	3.64	49	3.70	50	3.40	-1	-0.30
Michigan	48	3.75	47	3.94	48	3.90	49	3.85	-1	-0.05
Minnesota	29	4.94	28	4.87	37	4.73	25	4.89	+12	+0.16
Mississippi	8	5.81	5	5.75	5	5.86	5	5.84	0	-0.02
Missouri	12	5.54	7	5.68	7	5.63	8	5.62	-1	-0.01
Montana	18	5.29	19	5.24	20	5.19	21	5.15	-1	-0.04
Nebraska	10	5.63	8	5.66	9	5.61	9	5.59	0	-0.02
Nevada	42	4.30	43	4.31	45	4.27	45	4.20	0	-0.07
New Hampshire	44	4.21	41	4.55	43	4.47	44	4.44	-1	-0.03
New Jersey	32	4.79	25	4.97	36	4.73	32	4.81	+4	+0.08
New Mexico	7	5.81	17	5.36	16	5.25	10	5.55	+6	+0.30
New York	33	4.79	32	4.80	30	4.86	31	4.81	-1	-0.05
North Carolina	9	5.64	6	5.73	6	5.70	7	5.67	-1	-0.03
North Dakota	16	5.42	15	5.37	14	5.31	14	5.39	0	+0.08
Ohio	6	5.84	4	5.84	8	5.62	6	5.74	+2	+0.12
Oklahoma	1	6.56	1	6.48	1	6.43	1	6.41	0	-0.02
Oregon	27	5.02	33	4.80	31	4.83	37	4.72	-6	-0.11
Pennsylvania	50	3.35	45	4.26	50	3.62	46	4.14	+4	+0.52
Rhode Island	49	3.55	50	3.32	23	5.02	29	4.86	-6	-0.16
South Carolina	31	4.79	37	4.66	29	4.90	27	4.87	+2	-0.03
South Dakota	40	4.38	40	4.57	39	4.61	39	4.61	0	0.00
Tennessee	25	5.08	23	5.07	22	5.10	22	5.08	0	-0.02
Texas	14	5.49	13	5.54	26	4.97	18	5.20	+8	+0.23
Utah	19	5.21	22	5.14	21	5.17	16	5.36	+5	+0.19
Vermont	17	5.34	20	5.23	18	5.24	20	5.18	-2	-0.06
Virginia	38	4.48	39	4.61	41	4.58	43	4.56	-2	-0.02
Washington	21	5.19	18	5.27	17	5.24	19	5.20	-2	-0.04
West Virginia	23	5.14	27	4.93	28	4.91	30	4.83	-2	-0.08
Wisconsin	36	4.72	36	4.70	40	4.59	41	4.58	-1	-0.01
Wyoming	30	4.80	31	4.81	33	4.75	36	4.73	-3	-0.02
District of Columbia	27	5.07	27	4.95	30	4.90	33	4.78	-3	-0.12

Note: A rank of 1 is best, 50 is worst. All scores are for fiscal years. D.C.'s score and rank do not affect other states.

Source: Tax Foundation.

Tax Rates Imposed in the Most Recent Year

Minimum Tax Rate. States with lower minimum rates score better. The minimum rates in effect in the most recent year range from zero percent (in Hawaii, Iowa, Maine, Mississippi, Missouri, Nebraska, and South Dakota) to 2.39 percent (in Pennsylvania).

Maximum Tax Rate. States with lower maximum rates score better. The maximum rates in effect in the most recent year range from 5.4 percent (in Alaska, Florida, Idaho, Maine, Mississippi, Nebraska, Nevada, and Oregon) to 14.3 percent (in Arkansas).

Taxable Wage Base. Arizona, California, Florida, and Tennessee receive the best scores in this variable with a taxable wage base of \$7,000—in line with the federal taxable wage base. The state with the highest taxable bases and, thus, the worst score on this variable, is Washington (\$47,300).

Potential Rates

Due to the effect of business and seasonal cycles on UI funds, states will sometimes change UI tax rate schedules. When UI trust funds are flush, states will trend toward their lower rate schedules (“most favorable schedules”); however, when UI trust funds are low, states will trend toward their higher rate schedules (“least favorable schedules”).

Most Favorable Schedule: Minimum Tax Rate. States receive the best score in this variable with a minimum tax rate of zero, which they implement when unemployment is low and the UI fund is flush. The minimum rate on the most favorable schedule ranges from zero in 16 states to 1.0 percent in Alaska.

Most Favorable Schedule: Maximum Tax Rate. The lowest maximum rate of 5.4 percent is imposed by 18 states and the District of Columbia. The state with the highest maximum tax rate and, thus, the worst maximum tax score is Wisconsin (12.0 percent).

Least Favorable Schedule: Minimum Tax Rate. Five states receive the best score on this variable with a minimum tax rate of zero percent. The state with the highest minimum tax rate and, thus, the worst minimum tax score, is Hawaii (2.4 percent).

Least Favorable Schedule: Maximum Tax Rate. Six states receive the best score in this variable with a comparatively low maximum tax rate of 5.4 percent. The state with the highest maximum tax rate and, thus, the worst maximum tax score, is Massachusetts (18.55 percent).

Unemployment Insurance Tax Base

The UI base subindex scores states on how they determine which businesses should pay the UI tax and how much, as well as other UI-related taxes for which businesses may also be liable.

The states that receive the best scores on this subindex are Oklahoma, Delaware, Vermont, New Mexico, and Ohio. In general, these states have relatively simple experience formulas, they exclude more factors from the charging method, and they enforce fewer surtaxes.

States that receive the worst scores are Virginia, Nevada, Idaho, Georgia, and New Hampshire. In general, they have more complicated experience formulas, exclude fewer factors from the charging method, and have complicated their systems with add-ons and surtaxes. The three factors considered in this subindex are experience rating formulas (40 percent of the subindex score), charging methods (40 percent of the subindex score), and a host of smaller factors aggregated into one variable (20 percent of the subindex score).

Experience Rating Formula. A business's experience rating formula determines the rate the firm must pay—whether it will lean toward the minimum rate or maximum rate of the particular rate schedule in effect in the state at that time.

There are four basic experience formulas: contribution, benefit, payroll, and state experience. The first three experience formulas—contribution, benefit, and payroll—are based solely on the business's experience and are therefore nonneutral by design.³⁵ However, the final variable—state experience—is a positive mitigating factor because it is based on statewide experience. In other words, the state experience is not tied to the experience of any one business; therefore, it is a more neutral factor. This subindex penalizes states that depend on the contribution, benefit, and payroll experience variables while rewarding states with the state experience variable.

Charging Methods and Benefits Excluded from Charging. A business's experience rating will vary depending on which charging method the state government uses. When a former employee applies for unemployment benefits, the benefits paid to the employee must be charged to a previous employer. There are three basic charging methods:

- *Charging Most Recent or Principal Employer:* Ten states charge all the benefits to one employer, usually the most recent.
- *Charging Base-Period Employers in Inverse Chronological Order:* Five states charge all base-period employers in inverse chronological order. This means that all employers within a base period of time (usually the last year, sometimes longer) will have the benefits charged against them, with the most recent employer being charged the most.
- *Charging in Proportion to Base-Period Wages:* Thirty-five states charge in proportion to base-period wages. This means that all employers within a base period of time (usually the last year, sometimes longer) will have the benefits charged against them in proportion to the wages they paid.

None of these charging methods could be called neutral, but at the margin, charging the most recent or principal employer is the least neutral because the business faced with the necessity of laying off employees knows it will bear the full benefit charge. The most neutral of the three is the “charging in proportion to base-period wages” since there is a higher probability of sharing the benefit charges with previous employers.

³⁵ Alaska is the only state to use the payroll experience method. This method does not use benefit payments in the formula but instead the variation in an employer's payroll from quarter to quarter. This is a violation of tax neutrality since any decision by the employer or employee that would affect payroll may trigger higher UI tax rates.

As a result, the states that charge in proportion to base-period wages receive the best score. The states that charge the most recent or principal employer receive the worst score. The states that charge base-period employers in inverse chronological order receive a median score.

Many states also recognize that certain benefit costs should not be charged to employers, especially if the separation is beyond the employer's control. Therefore, this subindex also accounts for six types of exclusions from benefit charges:

- Benefit award reversed
- Reimbursements on combined wage claims
- Voluntary leaving
- Discharge for misconduct
- Refusal of suitable work
- Continues to work for employer on part-time basis

States are rewarded for each of these exclusions because they nudge a UI system toward neutrality. For instance, if benefit charges were levied for employees who voluntarily quit, then industries with high turnover rates, such as retail, would be hit disproportionately harder. States that receive the best scores in this category are Alaska, Connecticut, Delaware, Louisiana, Missouri, Ohio, Rhode Island, and Vermont. On the other hand, the states that receive the worst scores are Virginia, Nevada, Michigan New Hampshire, Maine, Idaho, and Georgia. Most states charge the most recent or principal employer and forbid most benefit exclusions.

Solvency Tax. These taxes are levied on employers when a state's unemployment fund falls below some defined level. Twenty-eight states have a solvency tax on the books, though they fall under different names, such as solvency adjustment tax (Alaska), supplemental assessment tax (Delaware), subsidiary tax (New York), and fund balance factor (Virginia).

Taxes for Socialized Costs or Negative Balance Employer. These are levied on employers when the state desires to recover benefit costs above and beyond the UI tax collections based on the normal experience rating process. Nine states have these taxes on the books, though they fall under different names, such as shared cost assessment tax (Alabama) and social cost factor tax (Washington).

Loan and Interest Repayment Surtaxes. Levied on employers when a loan is taken from the federal government or when bonds are sold to pay for benefit costs, these taxes are of two general types. The first is a tax to pay off the federal loan or bond issue. The second is a tax to pay the interest on the federal loan or bond issue. States are not allowed to pay interest costs directly from the state's unemployment trust fund. Twenty-five states and the District of Columbia have these taxes on the books, though they fall under several names, such as advance interest tax and bond assessment tax (Colorado), temporary emergency assessment tax (Delaware), and unemployment obligation assessment (Texas).

Reserve Taxes. Reserve taxes are levied on employers, to be deposited in a reserve fund separate from the unemployment trust fund. Since the fund is separate, the interest earned on it is often used to create other funds for purposes such as job training and paying the costs of the

reserve tax's collection. Four states have these taxes on the books: Idaho and Iowa (reserve tax), Nebraska (state UI tax), and North Carolina (reserve fund tax).

Surtaxes for UI Administration or Non-UI Purposes. Twenty-seven states and the District of Columbia levy surtaxes on employers, usually to fund administration but sometimes for job training or special improvements in technology. They are often deposited in a fund outside of the state's unemployment fund. Some of the names they go by are job training tax (Arizona), reemployment service fund tax (New York), wage security tax (Oregon), and investment in South Dakota future fee (South Dakota).

Temporary Disability Insurance (TDI). A handful of states—California, Hawaii, New Jersey, and New York—have established a temporary disability insurance (TDI) program that augments the UI program by extending benefits to those unable to work because of sickness or injury. No separate tax funds these programs; the money comes right out of the states' unemployment funds. Because the balance of the funds trigger various taxes, the TDIs are included as a negative factor in the calculation of this subindex.

Voluntary Contributions. Twenty-eight states allow businesses to make voluntary contributions to the unemployment trust fund. In most cases, these contributions are rewarded with a lower rate schedule, often saving the business more money in taxes than was paid through the contribution. The *Index* rewards states that allow voluntary contributions because firms are able to pay when they can best afford to instead of when they are struggling. This provision helps to mitigate the nonneutralities of the UI tax.

Time Period to Qualify for Experience Rating. Newly formed businesses, naturally, do not qualify for an experience rating because they have no significant employment history on which to base the rating. Federal rules stipulate that states can levy a “new employer” rate for one to three years, but no less than one year. From a neutrality perspective, however, this new employer rate is nonneutral in almost all cases since the rate is higher than the lowest rate schedule. The longer this rate is in effect, the worse the nonneutrality. As such, the *Index* rewards states with the minimum one year required to earn an experience rating and penalizes states that require the full three years.

REFERENCES

- Agostini, Claudio and Soraphol Tulayasathien. "Tax Effects on Investment Location: Evidence for Foreign Direct Investment in the United States," Office of Tax Policy Research, University of Michigan Business School (2001).
- Anderson, Patrick. "Benchmarking for Success: A Comparison of State Business Taxes," Anderson Economic Group (2006), 19-20.
- Bartik, Timothy J. *Who Benefits from State and Local Economic Development Policies?* (Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1991).
- Bartik, Timothy J. "Small Business Start-Ups in the United States: Estimates of the Effects of Characteristics of States," *Southern Economic Journal* (April 1989): 1004-1018.
- Bartik, Timothy J. "Business Location Decisions in the United States: Estimates of the Effects of Unionization, Taxes, and Other Characteristics of States," *Journal of Business and Economics Statistics* 3:1 (January 1985): 14-22.
- Besley, Timothy J. and Anne Case. "Does Electoral Accountability Affect Economic Policy Choices? Evidence from Gubernatorial Term Limits," *Quarterly Journal of Economics* 110:1 (August 1995): 769-798.
- Besley, Timothy J. and Harvey S. Rosen. "Sales Taxes and Prices: An Empirical Analysis," NBER Working Paper No. 6667 (July 1998).
- Bishop-Henchman, Joseph. "Unemployment Insurance Taxes: Options for Program Design and Insolvent Trust Funds," Tax Foundation (Oct. 17, 2011).
- Bishop-Henchman, Joseph and Jason Sapia. "Local Income Taxes: City- and County-Level Income and Wage Taxes Continue to Wane," Tax Foundation (Aug. 31, 2011).
- Bittlingmayer, Gregory, Liesel Eathington, Arthur Hall and Peter F. Orazem. "Business Climate Indexes: Which Work, Which Don't, and What Can They Say about the Kansas Economy?" The Center for Applied Economics, Kansas University (June 2005).
- Bosch, Nuria and Albert Sole-Olle. "Yardstick competition and the political costs of raising taxes: An empirical analysis of Spanish municipalities," *International Tax and Public Finance* 14:1 (February 2007): 71-92.
- Brueckner, Jan and Luz A. Saavedra. "Do Local Governments Engage in Strategic Property-Tax Competition?" *National Tax Journal* 54 (June 2001): 203-229.
- Brunori, David. *State Tax Policy: A Political Perspective* (Washington, D.C.: Urban Institute Press, September 2011).
- Brunori, David. *Local Tax Policy: A Federalist Perspective* (Washington, D.C.: Urban Institute Press, December 2007).
- Byars, Jon, Bobby McCormick, and Bruce Yandle. "Economic Freedom in America's 50 States: a 1999 Analysis," Center for Policy and Legal Studies, Department of Economics, Clemson University (March 1, 1999).
- Carroll, Robert, Douglas Holtz-Eakin, Mark Rider, and Harvey S. Rosen. "Income Taxes and Entrepreneurs' Use of Labor," *Journal of Labor Economics* 18 (April 2000): 324-351.
- Chamberlain, Andrew and Patrick Fleenor. "Tax Pyramiding: The Economic Consequences of Gross Receipts Taxes," Tax Foundation (Dec. 4, 2006).
- Chorvat, Terrence R. and Michael S. Knoll. "The Economic and Policy Implications of Repealing the Corporate Alternative Tax," Tax Foundation (Feb. 1, 2002).
- Due, John F. "Studies of State-Local Tax Influences on Location of Industry," *National Tax Journal* 14 (June 1961): 163-173.
- Drenkard, Scott, Liz Emanuel, and Yordan Yahiro. "State and Local Sales Taxes at Midyear 2014," Tax Foundation (Sept. 16, 2014).
- Errecart, Joyce, Ed Gerrish, and Scott Drenkard. "States Moving Away from Taxes on Tangible Personal Property," Tax Foundation (Oct. 4, 2012).
- Fetting, David. "Thomas J. Holmes on Walmart's Location Strategy," *Fedgazette* (March 1, 2006).
- Fisher, Peter. *Grading Places: What do the Business Climate Rankings Really Tell Us?* (Washington, D.C.: Economic Policy Institute, June 2005).

Fisher, Peter. *Grading Places: What Do the Business Climate Rankings Really Tell Us? Second Edition* (Washington, D.C.: Good Jobs First, May 2013).

Fleenor, Patrick. "How Excise Tax Differentials Affect Interstate Smuggling and Cross-Border Sales of Cigarettes in the United States," Tax Foundation (Oct. 1, 1998).

Fleenor, Patrick and J. Scott Moody. "A Primer on the Economic Implications of Marginal Tax Rates," Tax Foundation (Nov. 1, 1999).

Fox, William F. and Matthew N. Murray. "Do Economic Effects Justify the Use of Fiscal Incentives?" *Southern Economic Journal* 71:78 (July 2004).

Gentry, William H. and R. Glenn Hubbard. "'Success Taxes,' Entrepreneurial Entry and Innovation," NBER Working Paper No. 10551 (June 2004).

Goolsbee, Austan (2004). "The impact of the corporate income tax: evidence from state organizational form data," *Journal of Public Economics* 88, issue 11 (Sept. 2004): 2283-2299.

Goolsbee, Austan and Edward L. Maydew. "Coveting Thy Neighbor's Manufacturing: The Dilemma of State Income Apportionment," *Journal of Public Economics* 75:1 (January 2000).

Gupta, Sanjya and Mary Ann Hofmann. "The Effect of State Income Tax Apportionment and Tax Incentives on New Capital Expenditures," *Journal of the American Taxation Association* 25, Supplement 2003 (May 2003): 1-25.

Harden, J. William and Hoyt, William H. "Do States Choose their Mix of Taxes to Minimize Employment Losses?" *National Tax Journal* 56 (March 2003): 7-26.

Haughton, Jonathan and Vadym Slobodyanyuk. *State Competitiveness Report 2001* (Boston: Beacon Hill Institute, Suffolk University, December 2001).

Helms, L. Jay. "The Effect of State and Local Taxes on Economic Growth: A Time Series - Cross Section Approach," *The Review of Economics and Statistics* 67:4 (November 1985): 574-582.

Hodge, Scott A. "Married Couples File Less Than Half of All Tax Returns, But Pay 74 Percent of all Income Taxes," Tax Foundation, (Mar. 25, 2003).

Hodge, Scott A. "Own a Business? You May be Rich: Two-Thirds of Taxpayers Hit by Highest Tax Rate Have Business Income," Tax Foundation (May 5, 2003).

Hodge, Scott A. and J. Scott Moody. "Wealthy American and Business Activity," Tax Foundation (Aug. 1, 2004).

Hodge, Scott A. and Andre Dammert. "U.S. Lags while Competitors Accelerate Corporate Income Tax Reform," Tax Foundation Fiscal Fact No. 184 (Aug. 5, 2009).

Internal Revenue Service. "Individual Income Tax Returns 2013," Rev. 08-2015.

Kolko, Jed, David Neumark, and Marisol Cuellar Mejia. (2013). "What Do Business Climate Indexes Teach Us About State Policy and Economic Growth?" *Journal of Regional Science* 53:2 (Apr. 28, 2013): 220-255.

Kwall, Jeffrey K. "The Repeal of Graduated Corporate Tax Rates," *Tax Notes* (June 27, 2011).

Ladd, Helen F. *Local Government Tax and Land Use Policies in the United States: Understanding the Links*. Northampton, MA: Edward Elgar Publishing, Feb. 1998.

Ladd, Helen F. (1992). "Mimicking of Local Tax Burdens Among Neighboring Counties," *Public Finance Review* 20:4 (Oct. 1, 1992): 450-467.

Mark, Stephen T., Therese J. Mc Quire, and Leslie E. Papke. "The Influence of Taxes on Employment and Population Growth: Evidence from the Washington, D.C. Metropolitan Area," *National Tax Journal* 53 (March 2000): 105-123.

McQuire, Therese J. and Michael Wasylenko. "Jobs and Taxes: The Effects of Business Climate on States' Employment Growth Rates," *National Tax Journal* 38 (December 1985): 497-511.

Mikesell, John L. "Gross Receipts Taxes in State Government Finance: A Review of Their History and Performance," Tax Foundation (Jan. 31, 2007).

Mikesell, John L. "State Retail Taxes in 2012: The Recovery Continues," *State Tax Notes* (Dec. 26, 2012).

Miles, Marc A., Edwin J. Feulner, and Mary Anastasia Miles O'Grady. *The 2004 Index of Economic Freedom: Establishing the Link Between Economic Freedom and Prosperity*, The Heritage Foundation and *The Wall Street Journal* (January 2004).

- Moody, J., and Scott and Wendy P. Warcholik. "How Tax Competition Affects Cross-Border Sales of Beer in the United States," Tax Foundation (March 2004).
- Moon, Matt. (2009). "How Do Americans Feel About Taxes Today? Tax Foundation's 2009 Survey of U.S. Attitudes on Taxes, Government Spending, and Wealth Distribution," Tax Foundation (Apr. 8, 2009).
- Newman, Robert J. (1983). "Industry Migration and Growth in the South," *The Review of Economics and Statistics* 65:1 (February 1983): 76-86.
- Newman, Robert and Dennis Sullivan. "Econometric Analysis of Business Tax Impacts on Industrial Location: What do we know and how do we know it?" *Journal of Urban Economics* 23:2 (March 1988): 215-234.
- Oakland, William H. "Econometric Analysis of Business Tax Impacts on Industrial Location: A Survey," Metropolitan Financing and Growth Management Policies, Committee on Taxation, Resources and Economic Development, University of Wisconsin, Madison (1978): 13-30.
- Papke, James A. and Leslie E. Papke. "Measuring Differential State-Local Tax Liabilities and Their Implications for Business Investment Location," *National Tax Journal* 39:3 (September 1986): 357-366.
- Peters, Alan and Peter Fisher. "The Failure of Economic Development Incentives," *Journal of the American Planning Association* 70:27 (2004).
- Phillips, Andrew, Caroline Sallee, Katie Ballard, and Daniel Sufranski. "Total State and Local Business Taxes: State-by-state estimates for fiscal year 2013," Council On State Taxation (COST) with Ernst and Young LLP (August 2014).
- Poletti, Therese. "Incentive-rich Arizona to House New Intel Plant," *The (San Jose) Mercury News* (July 26, 2005).
- Pomp, Richard. "Reforming a State Corporate Income Tax," *Albany Law Review* 51:3/4 (Spring/Summer 1987).
- Plaut, Thomas R. and Joseph E. Pluta. "Business Climate, Taxes and Expenditures, and State Industrial Growth in the United States," *Southern Economic Journal* 50:1 (July 1983): 99-119.
- Robyn, Mark A. and Gerald T. Prante. "State-Local Tax Burdens Fall in 2009 as Tax Revenues Shrink Faster than Income," Tax Foundation (Feb. 23, 2011).
- Salmon, Pierre. "Decentralisation as an Incentive Scheme," *Oxford Review of Economic Policy* 3:2 (1987): 24-43.
- Shleifer, Andrei. "A theory of yardstick competition," *Rand Journal of Economics* 16:3 (Autumn 1985): 320-328.
- Sullivan, Martin. "The States' Fiscal Mess: How Bad Is It?" *Tax Notes*, 98:4 (2003), 482-486.
- Tannenwald, Robert. "State Business Tax Climate: How Should it be Measured and How Important is it?" *New England Economic Review*, Federal Reserve Bank of Boston (January/February 1996): 23-38.
- Tax Foundation. *Location Matters: A Comparative Analysis of State Tax Costs on Business* (2012).
- Tax Foundation. *Facts & Figures: How Does Your State Compare?* (2015).
- Tiebout, Charles. "A Pure Theory of Local Public Expenditures," *Journal of Political Economy* 64:5 (1956): 416-424.
- Vedder, Richard. "Taxes and Economic Growth," The Taxpayers Network, Inc. (2001).
- Wasylenko, Michael. "Taxation and Economic Development: The State of Economic Literature," *New England Economic Review*, Federal Reserve Bank of Boston (March/April 1997): 37-52.
- Wasylenko, Michael. "The Location of Firms: The Role of Taxes and Fiscal Incentives," *Urban Affairs Annual Review* 20 (1981): 155-189.

Table 8.

State Corporate Income Tax Rates (as of July 1, 2018)

State	Rates	Brackets	Gross Receipts Tax Rate (a)
Alabama	6.5%	> \$0	
Alaska	0.0%	> \$0	
	2.0%	> \$25,000	
	3.0%	> \$49,000	
	4.0%	> \$74,000	
	5.0%	> \$99,000	
	6.0%	> \$124,000	
	7.0%	> \$148,000	
	8.0%	> \$173,000	
	9.0%	> \$198,000	
	9.4%	> \$222,000	
Arizona	4.9%	> \$0	
Arkansas	1.0%	> \$0	
	2.0%	> \$3,000	
	3.0%	> \$6,000	
	5.0%	> \$11,000	
	6.0%	> \$25,000	
	6.5%	> \$100,000	
California	8.84%	> \$0	
Colorado	4.63%	> \$0	
Connecticut (b)	8.25%	> \$0	
Delaware	8.7%	> \$0	0.1006% - 0.7543% (c)
Florida	5.5%	> \$0	
Georgia	6.0%	> \$0	
Hawaii	4.4%	> \$0	
	5.4%	> \$25,000	
	6.4%	> \$100,000	
Idaho	6.925%	> \$0	
Illinois (d)	9.5%	> \$0	
Indiana (e)	5.75%	> \$0	
Iowa	6.0%	> \$0	
	8.0%	> \$25,000	
	10.0%	> \$100,000	
	12.0%	> \$250,000	
Kansas	4.0%	> \$0	
	7.0%	> \$50,000	
Kentucky	5.0%	> \$0	
Louisiana	4.0%	> \$0	
	5.0%	> \$25,000	
	6.0%	> \$50,000	
	7.0%	> \$100,000	
	8.0%	> \$200,000	
Maine	3.50%	> \$0	
	7.93%	> \$25,000	
	8.33%	> \$75,000	
	8.93%	> \$250,000	
Maryland	8.25%	> \$0	
Massachusetts	8.0%	> \$0	
Michigan	6.0%	> \$0	
Minnesota	9.8%	> \$0	
Mississippi	3.0%	> \$0	
	4.0%	> \$5,000	
	5.0%	> \$10,000	
Missouri	6.25%	> \$0	
Montana	6.75%	> \$0	
Nebraska	5.58%	> \$0	
	7.81%	> \$100,000	
Nevada (f)	None		0.051% - 0.331% (c)
New Hampshire	8.2%	> \$0	

Table 8, Continued.

State Corporate Income Tax Rates (as of July 1, 2018)

State	Rates	Brackets	Gross Receipts Tax Rate (a)
New Jersey (g)	6.5%	> \$0	
	7.5%	> \$50,000	
	9.0%	> \$100,000	
	11.5%	> \$1,000,000	
New Mexico	4.8%	> \$0	
	5.9%	> \$500,000	
New York	6.5%	> \$0	
North Carolina	3.0%	> \$0	
North Dakota	1.41%	> \$0	
	3.55%	> \$25,000	
	4.31%	> \$50,000	
Ohio	(a)		0.26%
Oklahoma	6.0%	> \$0	
Oregon	6.6%	> \$0	
	7.6%	> \$1,000,000	
Pennsylvania	9.99%	> \$0	
Rhode Island	7.0%	> \$0	
South Carolina	5.0%	> \$0	
South Dakota	None		
Tennessee	6.5%	> \$0	
Texas	(a)		0.375% - 0.75% (c)
Utah	4.95%	> \$0	
Vermont	6.0%	> \$0	
	7.0%	> \$10,000	
	8.5%	> \$25,000	
Virginia	6.0%	> \$0	0.02% - 0.58% (c)
Washington	(a)		0.13% - 3.3% (c)
West Virginia	6.5%	> \$0	
Wisconsin	7.9%	> \$0	
Wyoming	None		
District of Columbia	8.25%	> \$0	

Note: In addition to regular income taxes, many states impose other taxes on corporations such as gross receipts taxes and franchise taxes. Some states also impose an alternative minimum tax (see Table 11). Some states impose special rates on financial institutions.

(a) While many states collect gross receipts taxes from public utilities and other sectors, and some states label their sales tax as a gross receipts tax, we show only those state gross receipts taxes that broadly tax all business as a percentage of gross receipts: Delaware's Manufacturers' and Merchants' License Tax, the Nevada Commerce Tax, the Ohio Commercial Activities Tax, the Texas Margin Tax, the Virginia locally-levied Business/Professional/Occupational License Tax, and the Washington Business & Occupation Tax. Ohio, Texas, and Washington do not have a corporate income tax but do have a gross receipts tax, while Delaware and Virginia have a gross receipts tax in addition to the corporate income tax.

(b) Connecticut's rate includes a 10% surtax that effectively increases the rate from 7.5% to 8.25%. The surtax is required by businesses with at least \$100 million annual gross income.

(c) Gross receipts tax rates vary by industry in these states. Texas has only two rates: 0.375% on retail and wholesale and 0.75% on all other industries. Virginia's tax is locally levied and rates vary by business and by jurisdiction. Washington has over 30 different industry classifications and rates, while Nevada has 26.

(d) Illinois' rate includes two separate corporate income taxes, one at a 7% rate and one at a 2.5% rate.

(e) Indiana's rate is scheduled to decrease to 4.9% by 2022.

(f) Nevada also levies a payroll tax, the Modified Business Tax, which is reflected in the individual income tax component of the *Index*.

(g) In New Jersey, the rates indicated apply to a corporation's entire net income rather than just income over the threshold. A temporary surcharge is in effect bringing the rate to 11.5% for businesses with income above \$1 million.

Source: Tax Foundation; state tax statutes, forms, and instructions; Bloomberg BNA.

Table 9.

State Corporate Income Tax and Business Tax Bases: Tax Credits and Gross Receipts Tax Deductions (as of July 1, 2018)

	Job Credits	Research and Development Credits	Investment Credits	Gross Receipts Tax Deductions	
				Compensation Expenses Deductible	Cost of Goods Sold Deductible
Alabama	Yes	No	Yes		
Alaska	No	No	No		
Arizona	Yes	Yes	Yes		
Arkansas	Yes	Yes	Yes		
California	Yes	Yes	No		
Colorado	Yes	Yes	Yes		
Connecticut	No	Yes	Yes		
Delaware	Yes	Yes	Yes	No	No
Florida	Yes	Yes	Yes		
Georgia	Yes	Yes	Yes		
Hawaii	Yes	Yes	Yes		
Idaho	Yes	Yes	Yes		
Illinois	Yes	Yes	Yes		
Indiana	Yes	Yes	Yes		
Iowa	Yes	Yes	Yes		
Kansas	Yes	Yes	Yes		
Kentucky	Yes	Yes	Yes		
Louisiana	Yes	Yes	Yes		
Maine	No	Yes	Yes		
Maryland	Yes	Yes	Yes		
Massachusetts	Yes	Yes	Yes		
Michigan	No	No	No		
Minnesota	Yes	Yes	No		
Mississippi	Yes	No	Yes		
Missouri	Yes	No	Yes		
Montana	Yes	Yes	No		
Nebraska	Yes	Yes	Yes		
Nevada	No	No	No	No	No
New Hampshire	Yes	Yes	Yes		
New Jersey	Yes	Yes	Yes		
New Mexico	Yes	No	Yes		
New York	Yes	Yes	Yes		
North Carolina	No	No	No		
North Dakota	Yes	Yes	Yes		
Ohio	Yes	Yes	Yes	No	No
Oklahoma	Yes	No	Yes		
Oregon	No	Yes	No		
Pennsylvania	Yes	Yes	Yes		
Rhode Island	Yes	Yes	Yes		
South Carolina	Yes	Yes	Yes		
South Dakota	No	No	No		
Tennessee	Yes	No	Yes		
Texas	No	Yes	No	Partial (a)	Partial (a)
Utah	Yes	Yes	Yes		
Vermont	No	Yes	Yes		
Virginia	Yes	Yes	Yes		
Washington	No	No	No	No	No
West Virginia	Yes	Yes	Yes		
Wisconsin	Yes	Yes	Yes		
Wyoming	No	No	No		
District of Columbia	Yes	No	No		

(a) Businesses may deduct either compensation or cost of goods sold but not both.

Source: Tax Foundation; Bloomberg BNA; state statutes.

Table 10.

State Corporate Income Tax and Business Tax Bases: Net Operating Losses (as of July 1, 2018)

State	Carryback (Years)	Carryback Cap	Carryforward (Years)	Carryforward Cap
Alabama	0	\$0	15	Unlimited
Alaska		<i>Conforms to federal treatment</i>		
Arizona	0	\$0	20	Unlimited
Arkansas	0	\$0	5	Unlimited
California	2	Unlimited	20	Unlimited
Colorado	0	\$0	20	Unlimited
Connecticut	0	\$0	20	Unlimited
Delaware	2	\$30,000	20	Unlimited
Florida		<i>Conforms to federal treatment</i>		
Georgia		<i>Conforms to federal treatment</i>		
Hawaii		<i>Conforms to federal treatment</i>		
Idaho	2	\$100,000	20	Unlimited
Illinois	0	\$0	12	Unlimited
Indiana	0	\$0	20	Unlimited
Iowa	0	\$0	20	Unlimited
Kansas	0	\$0	10	Unlimited
Kentucky	0	\$0	20	Unlimited
Louisiana	0	\$0	20	Unlimited
Maine	0	\$0	20	Unlimited
Maryland	2	Unlimited	20	Unlimited
Massachusetts	0	\$0	20	Unlimited
Michigan	0	\$0	10	Unlimited
Minnesota	0	\$0	15	Unlimited
Mississippi	2	Unlimited	20	Unlimited
Missouri	2	Unlimited	20	Unlimited
Montana	3	\$500,000	10	Unlimited
Nebraska	0	\$0	20	Unlimited
Nevada	n.a.	n.a.	n.a.	n.a.
New Hampshire	0	\$0	10	\$10,000,000
New Jersey	0	\$0	20	Unlimited
New Mexico	0	\$0	20	Unlimited
New York	3	Unlimited	20	Unlimited
North Carolina	0	\$0	15	Unlimited
North Dakota	0	\$0	20	Unlimited
Ohio	0	n.a.	0	n.a.
Oklahoma		<i>Conforms to federal treatment</i>		
Oregon	0	\$0	15	Unlimited
Pennsylvania	0	\$0	20	(a)
Rhode Island	0	\$0	5	Unlimited
South Carolina	0	\$0	20	Unlimited
South Dakota	n.a.	n.a.	n.a.	n.a.
Tennessee	0	\$0	15	Unlimited
Texas	n.a.	n.a.	n.a.	n.a.
Utah	3	\$1,000,000	15	Unlimited
Vermont	0	\$0	10	Unlimited
Virginia	2	Unlimited	20	Unlimited
Washington	n.a.	n.a.	n.a.	n.a.
West Virginia		<i>Conforms to federal treatment</i>		
Wisconsin	0	\$0	20	Unlimited
Wyoming	n.a.	n.a.	n.a.	n.a.
District of Columbia	0	\$0	20	Unlimited

Note: (a) Pennsylvania caps carryforwards at 35 percent of tax liability.

Source: Tax Foundation; Bloomberg BNA; state statutes.

Table 11.

State Corporate Income Tax and Business Tax Bases: Other Variables (as of July 1, 2018)

	Federal Income Used as State Tax Base	Allows Federal ACRS or MACRS Depreciation	Allows Federal Depletion	Throwback Rule	Foreign Tax Deductibility	Corporate AMT	Brackets Indexed for Inflation	Section 168(k) Expensing
Alabama	Yes	Yes	Yes	Yes	Yes	No	Flat CIT	100%
Alaska	Yes	Yes	Partial	Yes	No	Yes	No	100%
Arizona	Yes	Yes	Yes	No	No	No	Flat CIT	0%
Arkansas	No	Yes	Yes	Yes	Yes	No	No	0%
California	Yes	No	Partial	Yes	No	Yes	Flat CIT	0%
Colorado	Yes	Yes	Yes	Yes	No	No	Flat CIT	100%
Connecticut	Yes	Yes	Yes	No	Yes	No	No	0%
Delaware	Yes	Yes	Partial	No	No	No	Flat CIT	100%
Florida	Yes	Yes	Yes	No	Yes	Yes	Flat CIT	0%
Georgia	Yes	Yes	Yes	No	No	No	Flat CIT	0%
Hawaii	Yes	Yes	Yes	Yes	Yes	No	No	0%
Idaho	Yes	Yes	Yes	Yes	Yes	No	Flat CIT	0%
Illinois	Yes	Yes	Yes	Yes	Yes	No	Flat CIT	100%
Indiana	Yes	Yes	Yes	No	Yes	No	Flat CIT	0%
Iowa	Yes	Yes	Partial	No	Yes	Yes	No	0%
Kansas	Yes	Yes	Yes	Yes	No	No	No	100%
Kentucky	Yes	Yes	Yes	No	No	Yes	No	0%
Louisiana	Yes	Yes	Partial	Yes	Yes	No	No	100%
Maine	Yes	Yes	Yes	Yes	Yes	Yes	No	0%
Maryland	Yes	Yes	Partial	No	Yes	No	Flat CIT	0%
Massachusetts	Yes	Yes	Yes	Yes	No	No	Flat CIT	0%
Michigan	Yes	Yes	Yes	No	No	No	Flat CIT	0%
Minnesota	Yes	Yes	Partial	No	No	Yes	Flat CIT	20%
Mississippi	No	Yes	Partial	Yes	No	No	No	0%
Missouri	Yes	Yes	Yes	Yes	Yes	No	Flat CIT	100%
Montana	Yes	Yes	Yes	Yes	No	No	Flat CIT	100%
Nebraska	Yes	Yes	Yes	No	Yes	No	No	100%
Nevada	Yes	Yes	Yes	No	Yes	No	GRT	0%
New Hampshire	Yes	Yes	Partial	Yes	No	Yes	Flat CIT	0%
New Jersey	Yes	Yes	Yes	No	No	No	No	0%
New Mexico	Yes	Yes	Yes	Yes	Yes	No	No	100%
New York	Yes	Yes	Yes	No	Yes	No	Flat CIT	0%
North Carolina	Yes	Yes	Partial	No	No	No	Flat CIT	15%
North Dakota	Yes	Yes	Yes	Yes	No	No	No	100%
Ohio	Yes	Yes	Yes	No	Yes	No	GRT	0%
Oklahoma	Yes	Yes	Partial	Yes	No	No	Flat CIT	0%
Oregon	Yes	Yes	Partial	Yes	No	No	No	100%
Pennsylvania	Yes	Yes	Yes	No	No	No	Flat CIT	0%
Rhode Island	Yes	Yes	Yes	Yes	Yes	No	Flat CIT	0%
South Carolina	Yes	Yes	Yes	No	No	No	Flat CIT	0%
South Dakota	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0%
Tennessee	Yes	Yes	Partial	No	Yes	No	Flat CIT	0%
Texas	Partial	Yes	Yes	No	Yes	No	Flat CIT	0%
Utah	Yes	Yes	Yes	Yes	No	No	Flat CIT	100%
Vermont	Yes	Yes	Yes	Yes	Yes	No	No	0%
Virginia	Yes	Yes	Yes	No	No	No	Flat CIT	0%
Washington	Yes	Yes	Yes	No	Yes	No	GRT	0%
West Virginia	Yes	Yes	Yes	Yes	No	No	Flat CIT	0%
Wisconsin	Yes	Yes	Yes	Yes	No	No	Flat CIT	0%
Wyoming	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0%
District of Columbia	Yes	Yes	Yes	Yes	Partial	No	Flat CIT	0%

Source: Tax Foundation; Bloomberg BNA; state statutes.

Table 12.

State Individual Income Tax Rates (as of July 1, 2018)

State	Rates	Brackets (a)	Standard Deduction	Personal Exemption		Average Local Income Tax Rates (h)
			Single	Per Filer (i)	Per Dependent	
Alabama	2.0%	> \$0	\$2,500	\$1,500	\$1,000 (d)	0.50%
	4.0%	> \$500				
	5.0%	> \$3,000				
Alaska	No Income Tax					None
Arizona	2.59%	> \$0	\$5,183	\$2,200	\$2,300	None
	2.88%	> \$10,346				
	3.36%	> \$25,861				
	4.24%	> \$51,721				
	4.54%	> \$155,159				
Arkansas (e, k)	0.9%	> \$0	\$2,200	\$26 (c)	\$26 (c)	None
	2.5%	> \$4,299				
	3.5%	> \$8,499				
	4.5%	> \$12,699				
	6.0%	> \$21,199				
	6.9%	> \$35,099				
California (e)	1.0%	> \$0	\$4,236	\$114 (c)	\$353 (c)	None
	2.0%	> \$8,223				
	3.0%	> \$19,495				
	4.0%	> \$30,769				
	8.0%	> \$42,711				
	9.30%	> \$53,980				
	10.30%	> \$275,738				
	11.30%	> \$330,884				
	12.30%	> \$551,473				
	13.30%	> \$1,000,000				
Colorado	4.63% of federal income		n.a.	n.a.	n.a.	None
Connecticut (k)	3.0%	> \$0	n.a.	\$15,000 (d)	\$0	None
	5.0%	> \$10,000				
	5.50%	> \$50,000				
	6.0%	> \$100,000				
	6.50%	> \$200,000				
	6.90%	> \$250,000				
Delaware	6.99%	> \$500,000				
	2.20%	> \$2,000	\$3,250	\$110 (c)	\$110 (c)	0.63%
	3.90%	> \$5,000				
	4.80%	> \$10,000				
	5.20%	> \$20,000				
	5.55%	> \$25,000				
Florida	6.60%	> \$60,000				
	No Income Tax					None
	1.0%	> \$0	\$2,300	\$2,700	\$3,000	None
	2.0%	> \$750				
	3.0%	> \$2,250				
	4.0%	> \$3,750				
Georgia	5.0%	> \$5,250				
	6.0%	> \$7,000				
	1.40%	> \$0	\$2,200	\$1,144 (d)	\$1,144	None
	3.20%	> \$2,400				
	5.50%	> \$4,800				
	6.40%	> \$9,600				
Hawaii	6.80%	> \$14,400				
	7.20%	> \$19,200				
	7.60%	> \$24,000				
	7.90%	> \$36,000				
	8.25%	> \$48,000				
	9.00%	> \$150,000				
	10.00%	> \$175,000				
	11.00%	> \$200,000				

Table 12, Continued.

State Individual Income Tax Rates (as of July 1, 2018)

State	Rates	Brackets (a)	Standard Deduction	Personal Exemption		Average Local Income Tax Rates (h)
			Single	Per Filer (i)	Per Dependent	
Idaho (e)	1.125%	> \$0	\$12,000 (g)	n.a.	n.a.	None
	3.125%	> \$1,454				
	3.625%	> \$2,908				
	4.625%	> \$4,362				
	5.625%	> \$5,816				
	6.625%	> \$7,270				
	6.925%	> \$10,905				
Illinois (l)	4.95% of federal adjusted gross income with modification		\$0	\$2,175	\$2,175	None
Indiana	3.23% of federal adjusted gross income with modification		\$0	\$1,000	\$1,500	1.56%
Iowa (e)	0.36%	> \$0	\$2,000	\$40 (c)	\$40 (c)	0.22%
	0.72%	> \$1,598				
	2.43%	> \$3,196				
	4.50%	> \$6,392				
	6.12%	> \$14,382				
	6.48%	> \$23,970				
	6.80%	> \$31,960				
	7.92%	> \$47,940				
	8.98%	> \$71,910				
Kansas	3.10%	> \$2,500	\$3,000	\$2,250	\$2,250	None
	5.25%	> \$15,000				
	5.70%	> \$30,000				
Kentucky	5.0%	> \$0	\$2,570	n.a.	n.a.	2.08%
Louisiana	2.0%	> \$0	n.a.	\$4,500 (f)	\$1,000	None
	4.0%	> \$12,500				
	6.0%	> \$50,000				
Maine (e)	5.80%	> \$0	\$11,800	\$4,150	\$4,150	None
	6.75%	> \$21,450				
	7.15%	> \$50,750				
Maryland	2.0%	> \$0	\$2,000	\$3,200 (d)	\$3,200	2.85%
	3.0%	> \$1,000				
	4.0%	> \$2,000				
	4.75%	> \$3,000				
	5.0%	> \$100,000				
	5.25%	> \$125,000				
	5.50%	> \$150,000				
	5.75%	> \$250,000				
Massachusetts	5.10%	> \$0	n.a.	\$4,400	\$1,000	None
Michigan	4.25% of federal adjusted gross income with modification		\$0	\$4,000	n.a.	1.70%
Minnesota (e)	5.35%	> \$0	\$12,000 (g)	n.a.	n.a.	None
	7.05%	> \$25,890				
	7.85%	> \$85,060				
	9.85%	> \$160,020				
Mississippi	3.0%	> \$0	\$2,300	\$6,000	\$1,500	None
	4.0%	> \$5,000				
	5.0%	> \$10,000				
Missouri	1.50%	> \$103	\$12,000 (g)	n.a.	n.a.	0.50%
	2.00%	> \$1,028				
	2.50%	> \$2,056				
	3.00%	> \$3,084				
	3.50%	> \$4,113				
	4.00%	> \$5,141				
	4.50%	> \$6,169				
	5.00%	> \$7,197				
	5.50%	> \$8,225				
	5.90%	> \$9,253				

Table 12, Continued.

State Individual Income Tax Rates (as of July 1, 2018)

State	Rates	Brackets (a)	Standard Deduction	Personal Exemption		Average Local Income Tax Rates (h)
			Single	Per Filer (i)	Per Dependent	
Montana (e)	1.0%	> \$0	\$4,580	\$2,440	\$2,440	None
	2.0%	> \$3,000				
	3.0%	> \$5,200				
	4.0%	> \$8,000				
	5.0%	> \$10,800				
	6.0%	> \$13,900				
	6.90%	> \$17,900				
Nebraska (k)	2.46%	> \$0	\$6,500	\$134 (c, d)	\$134 (c, d)	None
	3.51%	> \$3,150				
	5.01%	> \$18,880				
	6.84%	> \$30,420				
Nevada (m)	No Income Tax					None
New Hampshire (b)	5%	> \$0		\$2,400	\$0	None
New Jersey	1.40%	> \$0	\$0	\$1,000	\$1,500	0.50%
	1.75%	> \$20,000				
	3.50%	> \$35,000				
	5.53%	> \$40,000				
	6.37%	> \$75,000				
	8.97%	> \$500,000				
	10.75%	> \$5,000,000				
New Mexico	1.70%	> \$0	\$12,000 (g)	n.a.	n.a.	None
	3.20%	> \$5,500				
	4.70%	> \$11,000				
	4.90%	> \$16,000				
New York (e, k)	4.0%	> \$0	\$8,000	\$0	\$1,000	1.87%
	4.50%	> \$8,500				
	5.25%	> \$11,700				
	5.90%	> \$13,900				
	6.45%	> \$21,400				
	6.65%	> \$80,650				
	6.85%	> \$215,400				
	8.82%	> \$1,077,550				
North Carolina	5.499%	> \$0	\$8,750	\$0	\$0	None
North Dakota (e)	1.10%	> \$0	\$12,000 (g)	n.a.	n.a.	None
	2.04%	> \$37,950				
	2.27%	> \$91,900				
	2.64%	> \$191,650				
	2.90%	> \$416,700				
Ohio (e)	1.980%	> \$10,650	\$0	\$2,250	\$2,250	2.50%
	2.746%	> \$16,000				
	2.969%	> \$21,350				
	3.465%	> \$42,650				
	3.960%	> \$85,300				
	4.597%	> \$106,650				
	4.997%	> \$213,350				
Oklahoma	0.5%	> \$0	\$6,350	\$1,000	\$1,000	None
	1.0%	> \$1,000				
	2.0%	> \$2,500				
	3.0%	> \$3,750				
	4.0%	> \$4,900				
	5.0%	> \$7,200				
Oregon (e, m)	5.0%	> \$0	\$2,175	\$201 (c)	\$201 (c)	0.38%
	7.0%	> \$3,300				
	9.0%	> \$8,250				
	9.90%	> \$125,000				
Pennsylvania	3.07%	> \$0	n.a.	n.a.	n.a.	2.94%
Rhode Island (e)	3.75%	> \$0	\$8,525	\$4,000	\$4,000	None
	4.75%	> \$62,550				
	5.99%	> \$149,150				

Table 12, Continued.

State Individual Income Tax Rates (as of July 1, 2018)

State	Rates	Brackets (a)	Standard Deduction	Personal Exemption		Average Local Income Tax Rates (h)	
			Single	Per Filer (i)	Per Dependent		
South Carolina (e)	0.0%	>	\$0	\$6,350	\$4,050	\$4,050	None
	3.0%	>	\$2,930				
	4.0%	>	\$5,860				
	5.0%	>	\$8,790				
	6.0%	>	\$11,720				
	7.0%	>	\$14,650				
South Dakota	No Income Tax						None
Tennessee (b)	5.0%	>	\$0	\$0	\$1,250	\$0	None
Texas	No Income Tax						None
Utah	4.95%	>	\$0	(j)	(j)	(j)	None
Vermont (e)	3.35%	>	\$0	\$6,000	\$4,150	\$4,150	None
	6.60%	>	\$38,700				
	7.60%	>	\$93,700				
	8.75%	>	\$195,450				
Virginia	2.0%	>	\$0	\$3,000	\$930	\$930	None
	3.0%	>	\$3,000				
	5.0%	>	\$5,000				
	5.75%	>	\$17,000				
Washington	No Income Tax						None
West Virginia	3.0%	>	\$0	\$0	\$2,000	\$2,000	None
	4.0%	>	\$10,000				
	4.50%	>	\$25,000				
	6.0%	>	\$40,000				
	6.50%	>	\$60,000				
Wisconsin (e)	4.00%	>	\$0	\$10,380 (d)	\$700	\$700	None
	5.84%	>	\$11,230				
	6.27%	>	\$22,470				
	7.65%	>	\$247,350				
Wyoming	No Income Tax						None
District of Columbia	4.0%	>	\$0	\$12,000	n.a.	n.a.	None
	6.0%	>	\$10,000				
	6.50%	>	\$40,000				
	8.50%	>	\$60,000				
	8.75%	>	\$350,000				
	8.95%	>	\$1,000,000				

(a) Brackets are for single taxpayers. Some states double bracket widths for joint filers (AL, AZ, CT, HI, ID, KS, LA, ME, NE, OR). New York doubles all except the top two brackets. Some states increase but do not double brackets for joint filers (CA, GA, MN, NM, NC, ND, OK, RI, VT, WI). Maryland decreases some and increases others. New Jersey adds a 2.45% rate and doubles some bracket widths. Consult the Tax Foundation website for tables for joint filers.

(b) Tax applies to interest and dividend income only.

(c) Tax credit.

(d) Subject to phaseout for higher-income taxpayers.

(e) Bracket levels are adjusted for inflation each year.

(f) The standard deduction and personal exemptions are combined: \$4,500 for single and married filing separately; \$9,000 married filing jointly.

(g) These states adopt the same standard deductions or (now zeroed-out) personal exemptions as the federal government. In some cases, the link is implicit in the fact that the state tax calculations begin with federal taxable income.

(h) The average local income tax rate is calculated by taking the mean of the income tax rate in the most populous city and the capital city.

(i) Married joint filers generally receive double the single exemption.

(j) Utah's standard deduction and personal exemption are combined into a single credit equal to 6% of the taxpayer's federal standard deduction (or itemized deductions) plus three-fourths of the taxpayer's federal exemptions. This credit is phased out for higher income taxpayers.

(k) Arkansas, Connecticut, Nebraska, and New York have an income "recapture" provision whereby the benefit of lower tax brackets is removed for the top bracket. See the individual income tax section for details.

(l) Illinois imposes an additional 1.5% tax on pass-through businesses, bringing the combined rate to 6.45%.

(m) Nevada imposes a payroll tax of 1.45%, which is included in the *Index* as a tax on wage income only. Oregon imposes a payroll tax of 0.1% in addition to its income tax; this is also reflected in *Index* calculations.

Source: Tax Foundation; state tax forms and instructions; state statutes.

Table 13.

State Individual Income Tax Bases: Marriage Penalty, Capital Income, and Indexation (as of July 1, 2018)

	Marriage Penalty	Capital Income Taxed			Indexed for Inflation		
		Interest	Dividends	Capital Gains	Tax Brackets	Standard Deduction	Personal Exemption
Alabama	No	Yes	Yes	Yes	No	No	No
Alaska	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona	No	Yes	Yes	Yes	Yes	Yes	No
Arkansas	No	Yes	Yes	Yes	Yes	No	Yes
California	Yes	Yes	Yes	Yes	Partial	Yes	Yes
Colorado	No	Yes	Yes	Yes	Yes	Yes	Yes
Connecticut	No	Yes	Yes	Yes	No	Yes	No
Delaware	No	Yes	Yes	Yes	No	No	No
Florida	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Georgia	Yes	Yes	Yes	Yes	No	No	No
Hawaii	No	Yes	Yes	Yes	No	No	No
Idaho	No	Yes	Yes	Yes	Yes	Yes	Yes
Illinois	No	Yes	Yes	Yes	Yes	Yes	Yes
Indiana	No	Yes	Yes	Yes	Yes	Yes	No
Iowa	No	Yes	Yes	Yes	Yes	Yes	No
Kansas	No	Yes	Yes	Yes	No	No	No
Kentucky	No	Yes	Yes	Yes	Yes	Yes	Yes
Louisiana	No	Yes	Yes	Yes	No	No	No
Maine	No	Yes	Yes	Yes	Yes	Yes	Yes
Maryland	Yes	Yes	Yes	Yes	No	No	No
Massachusetts	No	Yes	Yes	Yes	Yes	Yes	No
Michigan	No	Yes	Yes	Yes	Yes	Yes	Yes
Minnesota	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mississippi	No	Yes	Yes	Yes	No	No	No
Missouri	No	Yes	Yes	Yes	Yes	Yes	No
Montana	No	Yes	Yes	Yes	Yes	Yes	Yes
Nebraska	No	Yes	Yes	Yes	Yes	Yes	Yes
Nevada	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Hampshire	No	Yes	Yes	No	Yes	Yes	No
New Jersey	Yes	Yes	Yes	Yes	No	Yes	No
New Mexico	Yes	Yes	Yes	Yes	No	Yes	Yes
New York	Yes	Yes	Yes	Yes	No	Yes	No
North Carolina	No	Yes	Yes	Yes	Yes	No	Yes
North Dakota	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ohio	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Oklahoma	Yes	Yes	Yes	Yes	No	Yes	No
Oregon	No	Yes	Yes	Yes	Partial	Yes	Yes
Pennsylvania	No	Yes	Yes	Yes	Yes	Yes	Yes
Rhode Island	Yes	Yes	Yes	Yes	Yes	Yes	Yes
South Carolina	Yes	Yes	Yes	Yes	Yes	Yes	Yes
South Dakota	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tennessee	No	Yes	Yes	No	Yes	Yes	Yes
Texas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Utah	No	Yes	Yes	Yes	Yes	Yes	Yes
Vermont	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Virginia	Yes	Yes	Yes	Yes	No	No	No
Washington	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
West Virginia	No	Yes	Yes	Yes	No	Yes	No
Wisconsin	Yes	Yes	Yes	Yes	Yes	Yes	No
Wyoming	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
District of Columbia	No	Yes	Yes	Yes	No	Yes	Yes

Source: Tax Foundation; Bloomberg BNA; state statutes.

Table 14.

State Individual Income Tax Bases: Other Variables (as of July 1, 2018)

State	Federal Income Used as State Tax Base	Credits for Taxes Paid to Other States	AMT Levied	Recognition of LLC Status	Recognition of S-Corp Status	Section 179 Expensing Limit
Alabama	No	Yes	No	Yes	Yes	\$1,000,000
Alaska	n.a.	n.a.	n.a.	Yes	Yes	\$1,000,000
Arizona	Yes	Yes	No	Yes	Yes	\$500,000
Arkansas	No	Yes	No	Yes	Partial	\$25,000
California	Yes	Yes	Yes	Yes	Yes	\$25,000
Colorado	Yes	Yes	Yes	Yes	Yes	\$1,000,000
Connecticut	Yes	Yes	Yes	Yes	Yes	\$200,000
Delaware	Yes	Yes	No	No	No	\$1,000,000
Florida	n.a.	n.a.	n.a.	Yes	Yes	\$1,000,000
Georgia	Yes	Yes	No	Yes	Yes	\$500,000
Hawaii	Yes	Yes	No	Yes	Yes	\$25,000
Idaho	Yes	Yes	No	Yes	Yes	\$1,000,000
Illinois	Yes	Yes	No	Yes	Yes	\$1,000,000
Indiana	Yes	Yes	No	Yes	Yes	\$25,000
Iowa	Yes	Yes	Yes	Yes	Yes	\$70,000
Kansas	Yes	Yes	No	Yes	Yes	\$1,000,000
Kentucky	Yes	Yes	No	Yes	Yes	\$25,000
Louisiana	Yes	Yes	No	Yes	No	\$1,000,000
Maine	Yes	Yes	No	Yes	Yes	\$500,000
Maryland	Yes	Yes	No	Yes	Yes	\$25,000
Massachusetts	Yes	Yes	No	Yes	Yes	\$1,000,000
Michigan	Yes	Yes	No	Yes	Yes	\$1,000,000
Minnesota	Yes	Yes	Yes	Yes	Yes	\$25,000
Mississippi	No	Yes	No	Yes	Yes	\$1,000,000
Missouri	Yes	Yes	No	Yes	Yes	\$1,000,000
Montana	Yes	Yes	No	Yes	Yes	\$1,000,000
Nebraska	Yes	Yes	No	Yes	Yes	\$1,000,000
Nevada	n.a.	n.a.	n.a.	Yes	Yes	\$1,000,000
New Hampshire	Yes	No	No	No	No	\$1,000,000
New Jersey	No	Yes	No	Yes	Partial	\$25,000
New Mexico	Yes	Yes	No	Yes	Yes	\$1,000,000
New York	Yes	Yes	No	Yes	Partial	\$1,000,000
North Carolina	Yes	Yes	No	Yes	Yes	\$25,000
North Dakota	Yes	Yes	No	Yes	Yes	\$1,000,000
Ohio	Yes	Yes	No	No	No	\$1,000,000
Oklahoma	Yes	Yes	No	Yes	Yes	\$1,000,000
Oregon	Yes	Yes	No	Yes	Yes	\$1,000,000
Pennsylvania	No	Yes	No	Yes	Yes	\$25,000
Rhode Island	Yes	Yes	No	Yes	Yes	\$1,000,000
South Carolina	Yes	Yes	No	Yes	Yes	\$1,000,000
South Dakota	n.a.	n.a.	n.a.	Yes	Yes	\$1,000,000
Tennessee	Yes	Yes	No	Yes	No	\$1,000,000
Texas	n.a.	n.a.	n.a.	No	No	\$1,000,000
Utah	Yes	Yes	No	Yes	Yes	\$1,000,000
Vermont	Yes	Yes	No	Yes	Yes	\$1,000,000
Virginia	Yes	Yes	No	Yes	Yes	\$1,000,000
Washington	n.a.	n.a.	n.a.	No	No	\$1,000,000
West Virginia	Yes	Yes	No	Yes	Yes	\$1,000,000
Wisconsin	Yes	Yes	Yes	Yes	Yes	\$1,000,000
Wyoming	n.a.	n.a.	n.a.	Yes	Yes	\$1,000,000
District of Columbia	Yes	Yes	No	Yes	No	\$25,000

Source: Tax Foundation; Bloomberg BNA; state statutes.

Table 15.

State Sales and Excise Tax Rates (as of July 1, 2018)

State	Local Sales Taxes			Excise Taxes				
	State Sales Tax Rate	Average Local Rate	Are Localities Permitted to Define the Tax Base?	Gasoline (cents per gallon) (e)	Diesel (cents per gallon) (e)	Cigarettes (dollars per pack of 20)	Beer (dollars per gallon)	Spirits (dollars per gallon) (g)
Alabama	4.00%	5.15%	No	20.91	21.89	0.675	1.05 (f)	18.27 (h)
Alaska	n.a.	1.43%	Yes	14.65	14.69	2.00	1.07	12.80
Arizona	5.60%	2.78%	Yes	19.00	27.00	2.00	0.16	3.00
Arkansas	6.50%	2.92%	No	21.80	22.80	1.15	0.34	7.73
California (a)	7.25%	1.30%	No	55.22	86.36	2.87	0.20	3.30
Colorado	2.90%	4.62%	Yes	22.00	20.50	0.84	0.08	2.28
Connecticut	6.35%	n.a.	No	43.80	43.90	4.35	0.23	5.40
Delaware	n.a.	n.a.	No	23.00	22.00	2.10	0.26	4.50
Florida	6.00%	0.80%	No	41.36	34.37	1.339	0.48	6.50
Georgia	4.00%	3.23%	No	31.59	34.79	0.37	1.01 (f)	3.79
Hawaii (b)	4.00%	0.35%	No	47.88	49.06	3.20	0.93	5.98
Idaho	6.00%	0.03%	Yes	33.00	33.00	0.57	0.15	10.95 (h)
Illinois	6.25%	2.48%	No	37.32	39.80	1.98	0.23	8.55
Indiana	7.00%	n.a.	No	42.90	49.00	0.995	0.12	2.68
Iowa	6.00%	0.82%	No	30.50	32.50	1.36	0.19	13.07 (h)
Kansas	6.50%	2.18%	No	24.03	26.03	1.29	0.18	2.50
Kentucky	6.00%	n.a.	No	26.00	23.00	1.10	0.85	7.86
Louisiana	4.45%	5.00%	Yes	20.01	20.01	1.08	0.40	3.03
Maine	5.50%	n.a.	No	30.01	31.21	2.00	0.35	5.83 (h)
Maryland	6.00%	n.a.	No	35.30	36.05	2.00	0.53	5.00
Massachusetts	6.25%	n.a.	No	26.54	26.54	3.51	0.11	4.05
Michigan	6.00%	n.a.	No	44.13	45.21	2.00	0.20	11.99 (h)
Minnesota	6.875%	0.55%	No	28.60	28.60	3.04	0.49	8.96
Mississippi	7.00%	0.067%	No	18.79	18.40	0.68	0.43	8.15 (h)
Missouri	4.225%	3.86%	No	17.35	17.30	0.17	0.06	2.00
Montana (c)	n.a.	n.a.	No	32.25	32.50	1.70	0.14	9.78
Nebraska	5.50%	1.39%	No	28.90	28.30	0.64	0.31	3.75
Nevada	6.85%	1.29%	No	33.78	28.56	1.80	0.16	3.60
New Hampshire	n.a.	n.a.	No	23.83	23.83	1.78	0.30	0.00 (h)
New Jersey (d)	6.625%	-0.03%	Yes	37.10	44.20	2.70	0.12	5.50
New Mexico (b)	5.125%	2.65%	No	18.88	22.88	1.66	0.41	6.06
New York	4.00%	4.49%	No	45.76	44.96	4.35	0.14	6.44
North Carolina	4.75%	2.20%	No	35.35	35.35	0.45	0.62	14.63 (h)
North Dakota	5.00%	1.83%	No	23.00	23.00	0.44	0.39	4.66
Ohio	5.75%	1.40%	No	28.01	28.01	1.60	0.18	9.87 (h)
Oklahoma	4.50%	4.43%	No	20.00	20.00	2.03	0.40	5.56
Oregon	n.a.	n.a.	No	36.77	36.01	1.33	0.08	22.75 (h)
Pennsylvania	6.00%	0.34%	No	58.70	75.20	2.60	0.08	7.24 (h)
Rhode Island	7.00%	n.a.	No	34.00	34.00	4.25	0.12	5.40
South Carolina	6.00%	1.43%	Yes	20.75	20.75	0.57	0.77	5.42
South Dakota (b)	4.50%	1.90%	No	30.00	30.00	1.53	0.27	4.67
Tennessee	7.00%	2.46%	No	26.40	25.40	0.62	1.29	4.46
Texas	6.25%	1.92%	No	20.00	20.00	1.41	0.20	2.40
Utah (a)	5.95%	0.83%	No	29.41	29.41	1.70	0.41	15.38 (h)
Vermont	6.00%	0.18%	No	31.22	32.00	3.08	0.27	7.72 (h)
Virginia (a)	5.30%	0.35%	No	22.40	26.09	0.30	0.26	19.93 (h)
Washington	6.50%	2.69%	No	49.40	49.40	3.025	0.26	32.52
West Virginia	6.00%	0.38%	No	35.70	35.70	1.20	0.18	7.67 (h)
Wisconsin	5.00%	0.44%	No	32.90	32.90	2.52	0.06	3.25
Wyoming	4.00%	1.39%	No	24.00	24.00	0.60	0.02	0.00 (h)
District of Columbia	5.75%	n.a.	No	23.50	23.50	2.50	0.70	6.17

(a) Some state sales taxes include a local component collected uniformly across the state: California (1.25%), Utah (1.25%), and Virginia (1%). We include these in their state sales tax rates.

(b) Sales tax rates in Hawaii, New Mexico, North Dakota, and South Dakota are not strictly comparable to other states due to broad bases that include many services.

(c) Special taxes in Montana's resort areas are not included in our analysis.

(d) Some counties in New Jersey are not subject to statewide sales tax rates and collect a local rate of 3.3125%. Their average local score is represented as a negative.

(e) Calculated rate including excise taxes, additional fees levied per gallon (such as storage tank and environmental fees), local excise taxes, and sales or gross receipts taxes.

(f) Includes a statewide local tax of 52 cents in Alabama and 53 cents in Georgia.

(g) May include taxes that are levied based on container size.

(h) These states outlaw private liquor sales and utilize state-run stores. These are called "control states," while "license states" are those that permit private wholesale and retail sales. All license states have an excise tax rate in law, expressed in dollars per gallon. Control states levy no statutory tax but usually raise comparable revenue by charging higher prices. The Distilled Spirits Council of the United States has computed approximate excise tax rates for control states by comparing prices of typical products sold in their state-run stores to the pretax prices of liquor in states where liquor is privately sold. In New Hampshire, average liquor prices charged in state-run stores are lower than pretax prices in license states. Washington privatized its liquor sales but enacted tax increases as a part of the package.

Source: Tax Foundation; Bloomberg BNA; American Petroleum Institute; Distilled Spirits Council of the United States; Campaign for Tobacco-Free Kids.

Table 16.

**State Sales Tax Bases: Exemptions for Business-to-Business Transactions
(as of July 1, 2018)**

	Specific Exemption	Farm Equipment	Office Equipment	Manufacturing Machinery	Manufacturing Raw Materials	Business Fuel & Utilities	Business Lease & Rentals	Information Services
Alabama	No	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable
Alaska	No	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Arizona	No	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt
Arkansas	No	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt
California	No	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Colorado	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Connecticut	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable
Delaware	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Georgia	No	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt
Hawaii	No	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Idaho	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Illinois	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Indiana	No	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt
Iowa	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Kansas	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Kentucky	No	Exempt	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt
Louisiana	No	Taxable	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Maine	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Maryland	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Massachusetts	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Michigan	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Minnesota	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Mississippi	No	Partial	Taxable	Taxable	Exempt	Taxable	Taxable	Exempt
Missouri	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Montana	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nebraska	No	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt
Nevada	No	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Exempt
New Hampshire	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Jersey	No	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Taxable
New Mexico	No	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable
New York	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable
North Carolina	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
North Dakota	No	Partial	Taxable	Taxable	Exempt	Taxable	Taxable	Exempt
Ohio	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable
Oklahoma	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Oregon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pennsylvania	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Rhode Island	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
South Carolina	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable
South Dakota	No	Taxable	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable
Tennessee	No	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt
Texas	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable
Utah	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Vermont	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Virginia	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Washington	No	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable	Taxable
West Virginia	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable
Wisconsin	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
Wyoming	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt
District of Columbia	No	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable

Note: States with no sales tax (DE, MT, NH, and OR) are listed as “not applicable” (n.a.) within Table 16. Alaska has a local option sales tax.
Source: Tax Foundation; Commerce Clearing House; state statutes.

Table 17.

State Sales Tax Bases: Consumer Goods and Services (as of July 1, 2018)

	Goods					Services		
	Groceries	Clothing	Prescription Medication	Non-Prescription Medication	Gasoline	Legal	Financial	Accounting
Alabama	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Alaska	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Arizona	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Arkansas	Alternate Rate	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
California	Exempt	Taxable	Exempt	Taxable	Alternate Rate	Exempt	Exempt	Exempt
Colorado	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Connecticut	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Delaware	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Georgia	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Hawaii	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Idaho	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Illinois	Alternate Rate	Taxable	Alternate Rate	Alternate Rate	Taxable	Exempt	Exempt	Exempt
Indiana	Exempt	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt
Iowa	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt
Kansas	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Kentucky	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Louisiana	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Maine	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Maryland	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Massachusetts	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Michigan	Exempt	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt
Minnesota	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Mississippi	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Missouri	Alternate Rate	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Montana	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nebraska	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Nevada	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
New Hampshire	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Jersey	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
New Mexico	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable
New York	Exempt	Exempt	Exempt	Exempt	Alternate Rate	Exempt	Exempt	Exempt
North Carolina	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
North Dakota	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Ohio	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Oklahoma	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Oregon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pennsylvania	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Rhode Island	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
South Carolina	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
South Dakota	Taxable	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Taxable
Tennessee	Alternate Rate	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Texas	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Utah	Alternate Rate	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Vermont	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Virginia	Alternate Rate	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Washington	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
West Virginia	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Wisconsin	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Wyoming	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
District of Columbia	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt

Note: States with no sales tax (DE, MT, NH, and OR) are listed as "not applicable" (n.a.) within Table 17. Alaska has a local option sales tax.

Source: Tax Foundation; Commerce Clearing House; state statutes.

Table 17, *Continued.***State Sales Tax Bases: Consumer Goods and Services (as of July 1, 2018)**

State	Services								
	Medical	Landscaping	Repair	Real Estate Services	Parking	Dry Cleaning	Fitness	Barber	Veterinary
Alabama	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Alaska	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Arizona	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt
Arkansas	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt
California	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Colorado	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Connecticut	Exempt	Taxable	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt
Delaware	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Florida	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt
Georgia	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Hawaii	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable	Taxable	Taxable
Idaho	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt
Illinois	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Indiana	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Iowa	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Exempt
Kansas	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt	Exempt
Kentucky	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	Taxable	Exempt	Taxable
Louisiana	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt
Maine	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Maryland	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Massachusetts	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Michigan	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Minnesota	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt
Mississippi	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt
Missouri	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt
Montana	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nebraska	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Nevada	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
New Hampshire	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Jersey	Exempt	Taxable	Taxable	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt
New Mexico	Taxable	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
New York	Exempt	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
North Carolina	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
North Dakota	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Ohio	Exempt	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt	Exempt
Oklahoma	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Taxable	Exempt	Exempt
Oregon	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Pennsylvania	Exempt	Taxable	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
Rhode Island	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
South Carolina	Exempt	Exempt	Exempt	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
South Dakota	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Taxable	Taxable
Tennessee	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt
Texas	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt
Utah	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable	Taxable	Exempt	Exempt
Vermont	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Virginia	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Washington	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Taxable
West Virginia	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt
Wisconsin	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Exempt	Exempt	Exempt
Wyoming	Exempt	Exempt	Taxable	Exempt	Exempt	Taxable	Exempt	Exempt	Exempt
District of Columbia	Exempt	Taxable	Taxable	Exempt	Taxable	Taxable	Taxable	Exempt	Exempt

Note: States with no sales tax (DE, MT, NH, and OR) are listed as “not applicable” (n.a.) within Table 17. Alaska has a local option sales tax. Source: Tax Foundation; Commerce Clearing House; state statutes.

Table 18.
State Sales Tax
Holidays
(as of July 1, 2018)

State	Sales Tax Holidays
Alabama	Yes
Alaska	No
Arizona	No
Arkansas	Yes
California	No
Colorado	No
Connecticut	Yes
Delaware	No
Florida	Yes
Georgia	No
Hawaii	No
Idaho	No
Illinois	No
Indiana	No
Iowa	Yes
Kansas	No
Kentucky	No
Louisiana	Yes
Maine	No
Maryland	Yes
Massachusetts	No
Michigan	No
Minnesota	No
Mississippi	Yes
Missouri	Yes
Montana	No
Nebraska	No
Nevada	No
New Hampshire	No
New Jersey	No
New Mexico	Yes
New York	No
North Carolina	No
North Dakota	No
Ohio	Yes
Oklahoma	Yes
Oregon	No
Pennsylvania	No
Rhode Island	No
South Carolina	Yes
South Dakota	No
Tennessee	Yes
Texas	Yes
Utah	No
Vermont	No
Virginia	Yes
Washington	No
West Virginia	No
Wisconsin	Yes
Wyoming	No
District of Columbia	No

Source: Tax Foundation; state statutes.

Table 19.
State Unemployment Insurance Tax Rates
(Rates in Effect on July 1, 2018)

State	Minimum Rate	Maximum Rate	Taxable Wage Base	Most Favorable Schedule		Least Favorable Schedule	
				Minimum Rate	Maximum Rate	Minimum Rate	Maximum Rate
Alabama	0.59%	6.80%	\$8,000	0.14%	5.40%	0.65%	6.80%
Alaska	1.00%	5.40%	\$39,500	1.00%	5.40%	1.00%	5.40%
Arizona	0.05%	12.76%	\$7,000	0.02%	5.40%	0.04%	12.76%
Arkansas	0.40%	14.30%	\$10,000	0.10%	6.00%	0.10%	14.30%
California	1.50%	6.20%	\$7,000	0.10%	5.40%	1.50%	6.20%
Colorado	0.62%	8.15%	\$12,600	0.51%	6.28%	0.75%	10.39%
Connecticut	1.90%	6.80%	\$15,000	0.50%	5.40%	0.50%	6.80%
Delaware	0.30%	8.20%	\$16,500	0.10%	8.00%	0.10%	8.00%
Florida	0.10%	5.40%	\$7,000	0.10%	5.40%	0.10%	5.40%
Georgia	0.04%	8.10%	\$9,500	0.01%	5.40%	0.04%	8.10%
Hawaii	0.00%	5.60%	\$45,900	0.00%	5.40%	2.40%	6.60%
Idaho	0.27%	5.40%	\$38,200	0.18%	5.40%	0.96%	6.80%
Illinois	0.53%	6.93%	\$12,960	0.00%	6.93%	0.00%	6.93%
Indiana	0.50%	7.40%	\$9,500	0.00%	5.40%	0.75%	10.20%
Iowa	0.00%	7.50%	\$29,900	0.00%	7.00%	0.00%	9.00%
Kansas	0.20%	7.60%	\$14,000	0.20%	7.60%	0.20%	7.60%
Kentucky	0.40%	9.25%	\$10,200	0.00%	9.00%	1.00%	10.00%
Louisiana	0.10%	6.20%	\$7,700	0.09%	6.00%	0.09%	6.00%
Maine	0.00%	5.40%	\$12,000	0.00%	5.40%	0.00%	5.40%
Maryland	0.30%	7.50%	\$8,500	0.30%	7.50%	2.20%	13.50%
Massachusetts	0.83%	12.65%	\$15,000	0.56%	8.62%	1.21%	18.55%
Michigan	0.78%	12.77%	\$9,000	0.00%	6.30%	0.78%	12.77%
Minnesota	0.20%	9.10%	\$32,000	0.10%	9.00%	0.40%	9.30%
Mississippi	0.00%	5.40%	\$14,000	0.00%	5.40%	0.20%	5.40%
Missouri	0.00%	9.75%	\$12,500	0.00%	5.40%	0.00%	9.75%
Montana	0.13%	6.30%	\$32,000	0.00%	6.12%	1.62%	6.12%
Nebraska	0.00%	5.40%	\$9,000	No Schedule		No Schedule	
Nevada	0.30%	5.40%	\$30,500	0.25%	5.40%	0.25%	5.40%
New Hampshire	0.10%	7.50%	\$14,000	0.10%	7.00%	0.10%	8.50%
New Jersey	0.50%	5.80%	\$33,700	0.30%	5.40%	1.30%	7.70%
New Mexico	0.33%	6.40%	\$24,200	0.33%	6.40%	0.33%	6.40%
New York	1.30%	9.10%	\$11,100	0.00%	5.90%	1.50%	8.90%
North Carolina	0.06%	5.76%	\$23,500	0.06%	5.76%	0.06%	5.76%
North Dakota	0.30%	10.74%	\$35,500	0.01%	No Schedule	No Schedule	
Ohio	0.30%	9.00%	\$9,500	0.00%	6.30%	0.30%	6.70%
Oklahoma	0.10%	5.50%	\$17,600	0.01%	5.50%	0.30%	9.20%
Oregon	0.90%	5.40%	\$39,300	0.50%	5.40%	2.20%	5.40%
Pennsylvania	2.39%	11.03%	\$10,000	0.00%	8.95%	2.39%	11.03%
Rhode Island	0.89%	9.49%	\$23,000	0.21%	7.40%	1.20%	10.00%
South Carolina	0.06%	5.46%	\$14,000	0.06%	5.46%	0.06%	5.46%
South Dakota	0.00%	10.00%	\$15,000	0.00%	9.35%	0.00%	9.45%
Tennessee	0.01%	10.00%	\$7,000	0.01%	10.00%	0.50%	10.00%
Texas	0.46%	6.46%	\$9,000	0.46%	6.46%	0.46%	6.46%
Utah	0.10%	7.10%	\$34,300	0.10%	7.10%	0.10%	7.10%
Vermont	1.10%	7.70%	\$17,600	0.40%	5.40%	1.30%	8.40%
Virginia	0.11%	6.21%	\$8,000	0.00%	5.40%	0.30%	6.40%
Washington	0.10%	5.70%	\$47,300	0.10%	5.70%	No Schedule	
West Virginia	1.50%	8.50%	\$12,000	0.00%	8.50%	1.50%	8.50%
Wisconsin	0.05%	12.00%	\$14,000	0.05%	12.00%	0.07%	12.00%
Wyoming	0.28%	8.78%	\$24,700	0.28%	8.78%	0.28%	8.78%
District of Columbia	1.80%	7.20%	\$9,000	0.10%	5.40%	1.90%	7.40%

Source: National Foundation for Unemployment Compensation and Workers' Compensation, *Highlights of State Unemployment Compensation Laws* (2018).

Table 20.

State Unemployment Insurance Tax Bases: Experience Formulas and Charging Methods (as of July 1, 2018)

State	Experience Formula Based On	Benefits Are Charged to Employers in Proportion to Base Period Wages	Company Charged for Benefits If					Employee Continues to Work for Employer Part-Time
			Employee's Benefit Award Reversed	Reimbursements on Combined Wage Claims	Employee Left Voluntarily	Employee Discharged for Misconduct	Employee Refused Suitable Work	
Alabama	Benefits Ratio	Yes	No	Yes	No	No	Yes	No
Alaska	Payroll Decline	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Arizona	Reserve Ratio	Yes	No	No	No	No	Yes	No
Arkansas	Reserve Ratio	Yes	No	Yes	No	No	Yes	No
California	Reserve Ratio	Yes	No	Yes	No	No	Yes	No
Colorado	Reserve Ratio	No (b)	No	No	No	No	Yes	No
Connecticut	Benefits Ratio	Yes	No	No	No	No	No	No
Delaware	Benefit Wage Ratio	Yes	No	No	No	No	No	No
Florida	Benefits Ratio	Yes	No	Yes	No	No	No	No
Georgia	Reserve Ratio	No (a)	No	No	No	No	No	Yes
Hawaii	Reserve Ratio	Yes	Yes	No	No	No	No	No
Idaho	Reserve Ratio	No (c)	No	No	No	No	Yes	No
Illinois	Benefits Ratio	No (a)	No	No	No	No	No	No
Indiana	Reserve Ratio	Yes	No	No	No	No	Yes	No
Iowa	Benefits Ratio	No (b)	No	No	No	No	No	No
Kansas	Reserve Ratio	Yes	Yes	Yes	No	No	Yes	No
Kentucky	Reserve Ratio	No (a)	No	No	No	No	No	No
Louisiana	Reserve Ratio	Yes	No	No	No	No	No	No
Maine	Reserve Ratio	No (a)	No	Yes	No	No	No	No
Maryland	Benefits Ratio	Yes	No	Yes	No	Yes	Yes	No
Massachusetts	Reserve Ratio	No (b)	No	Yes	Yes	Yes	Yes	No
Michigan	Benefits Ratio	No (a)	Yes	No	No	No	Yes	No
Minnesota	Benefits Ratio	Yes	No	No	No	No	Yes	No
Mississippi	Benefits Ratio	Yes	Yes	Yes	No	No	No	No
Missouri	Reserve Ratio	Yes	No	No	No	No	No	No
Montana	Reserve Ratio	Yes	No	Yes	No	No	Yes	No
Nebraska	Reserve Ratio	No (b)	No	Yes	No	No	Yes	No
Nevada	Reserve Ratio	No (c)	Yes	No	No	No	Yes	Yes
New Hampshire	Reserve Ratio	No (a)	No	No	No	No	Yes	No
New Jersey	Reserve Ratio	Yes	No	Yes	No	No	No	Yes
New Mexico	Benefits Ratio	Yes	No	Yes	No	No	No	No
New York	Reserve Ratio	Yes	No	Yes	No	No	Yes	No
North Carolina	Reserve Ratio	Yes	No	Yes	No	No	Yes	No
North Dakota	Reserve Ratio	Yes	No	Yes	No	No	Yes	No
Ohio	Reserve Ratio	Yes	No	No	No	No	No	No
Oklahoma	Benefit Wage Ratio	Yes	No	Yes	No	No	No	No
Oregon	Benefits Ratio	Yes	No	No	No	No	Yes	No
Pennsylvania	Benefits Ratio	Yes	No	No	No	No	Yes	No
Rhode Island	Reserve Ratio	Yes	No	No	No	No	No	No
South Carolina	Benefits Ratio	No (a)	No	No	No	No	No	No
South Dakota	Reserve Ratio	No (b)	No	Yes	No	No	Yes	Yes
Tennessee	Reserve Ratio	Yes	No	No	No	No	Yes	No
Texas	Benefits Ratio	Yes	No	Yes	No	No	Yes	Yes
Utah	Benefits Ratio	Yes	No	No	No	No	Yes	No
Vermont	Benefits Ratio	Yes	No	No	No	No	No	No
Virginia	Benefits Ratio	No (a)	Yes	No	Yes	Yes	Yes	Yes
Washington	Benefits Ratio	Yes	No	No	No	No	Yes	No
West Virginia	Reserve Ratio	Yes	No	Yes	No	No	Yes	No
Wisconsin	Reserve Ratio	Yes	Yes	Yes	No	No	No	Yes
Wyoming	Benefits Ratio	Yes	No	Yes	No	No	Yes	No
District of Columbia	Reserve Ratio	Yes	Yes	Yes	No	No	Yes	No

(a) Benefits charged to base-period employers, most recent first (inverse order).

(b) Benefits charged to most recent employer.

(c) Benefits charged to employer who paid largest amount of wages.

Source: National Foundation for Unemployment Compensation and Workers' Compensation, *Highlights of State Unemployment Compensation Laws* (2018)

Table 21.

State Unemployment Insurance Tax Bases: Other Variables (as of July 1, 2018)

State	Solvency Tax	Taxes for Socialized Costs or Negative Balance Employer	Loan and Interest Repayment Surtaxes	Reserve Taxes	Surtaxes for UI Administration or Non-UI Purposes	Temporary Disability Insurance	Voluntary Contributions	Time Period to Qualify for Experience Rating (Years)
Alabama	No	Yes	Yes	No	Yes	No	No	1
Alaska	Yes	No	No	No	Yes	No	No	1
Arizona	No	No	No	No	Yes	No	Yes	2
Arkansas	Yes	No	Yes	No	Yes	No	Yes	3
California	Yes	No	No	No	Yes	Yes	Yes	1
Colorado	Yes	No	Yes	No	No	No	Yes	1
Connecticut	Yes	No	Yes	No	No	No	No	1
Delaware	Yes	No	Yes	No	Yes	No	No	2
Florida	No	No	No	No	No	No	No	2.5
Georgia	Yes	No	No	No	Yes	No	Yes	3
Hawaii	No	No	Yes	No	Yes	Yes	No	1
Idaho	No	No	Yes	Yes	Yes	No	No	1.5
Illinois	Yes	No	No	No	No	No	No	3
Indiana	No	No	Yes	No	No	No	Yes	3
Iowa	No	No	Yes	Yes	No	No	No	3
Kansas	Yes	No	No	No	No	No	Yes	2
Kentucky	Yes	No	No	No	Yes	No	Yes	3
Louisiana	Yes	Yes	Yes	No	No	No	Yes	2
Maine	No	No	Yes	No	Yes	No	Yes	2
Maryland	No	No	No	No	No	No	No	2
Massachusetts	Yes	No	No	No	Yes	No	Yes	3
Michigan	No	Yes	Yes	No	No	No	Yes	1
Minnesota	Yes	No	Yes	No	Yes	No	Yes	1
Mississippi	No	No	No	No	Yes	No	No	3
Missouri	Yes	No	Yes	No	No	No	Yes	2
Montana	No	No	No	No	Yes	No	No	3
Nebraska	No	No	No	Yes	No	No	Yes	1
Nevada	No	No	Yes	No	Yes	No	No	3.5
New Hampshire	Yes	No	No	No	Yes	No	No	1
New Jersey	Yes	No	Yes	No	Yes	Yes	Yes	3
New Mexico	No	No	No	No	No	No	Yes	2
New York	Yes	No	Yes	No	Yes	Yes	Yes	1.25
North Carolina	Yes	No	No	Yes	No	No	Yes	2
North Dakota	No	No	No	No	No	No	Yes	1
Ohio	Yes	No	No	No	No	No	Yes	1.25
Oklahoma	Yes	No	No	No	No	No	No	2
Oregon	No	No	Yes	No	Yes	No	No	1
Pennsylvania	Yes	Yes	Yes	No	No	No	Yes	1.5
Rhode Island	No	No	No	No	Yes	No	Yes	3
South Carolina	No	No	Yes	No	Yes	No	No	1
South Dakota	Yes	No	No	No	Yes	No	Yes	2
Tennessee	Yes	No	Yes	No	No	No	No	3
Texas	Yes	Yes	Yes	No	Yes	No	Yes	1.5
Utah	No	Yes	No	No	No	No	No	1
Vermont	No	No	No	No	No	No	No	1
Virginia	Yes	Yes	No	No	No	No	No	1
Washington	Yes	Yes	Yes	No	Yes	No	Yes	1.5
West Virginia	No	No	Yes	No	No	No	Yes	3
Wisconsin	Yes	No	Yes	No	Yes	No	Yes	3
Wyoming	Yes	Yes	No	No	Yes	No	No	3
District of Columbia	No	No	Yes	No	Yes	No	No	3

Source: National Foundation for Unemployment Compensation and Workers' Compensation, *Highlights of State Unemployment Compensation Laws* (2018)

Table 22.

State Property Tax Rates and Capital Stock Tax Rates (as of July 1, 2018)

	Property Tax Collections Per Capita	Property Tax as a Percentage of Personal Income	Capital Stock Tax Rate	Capital Stock Max Payment	Payment Options for CST and CIT
Alabama	\$540	1.39%	0.175%	\$15,000	Pay both
Alaska	\$2,001	3.58%	None	n.a.	n.a.
Arizona	\$1,036	2.53%	None	n.a.	n.a.
Arkansas	\$699	1.75%	0.3%	Unlimited	Pay both
California	\$1,451	2.57%	None	n.a.	n.a.
Colorado	\$1,382	2.62%	None	n.a.	n.a.
Connecticut	\$2,847	4.12%	0.341%	\$1,000,000	Pay highest
Delaware	\$855	1.78%	0.04%	\$250,000	Pay both
Florida	\$1,232	2.64%	None	n.a.	n.a.
Georgia	\$1,125	2.64%	(a)	\$5,000	Pay both
Hawaii	\$1,070	2.13%	None	n.a.	n.a.
Idaho	\$964	2.40%	None	n.a.	n.a.
Illinois	\$2,087	4.05%	0.1%	\$2,000,000	Pay both
Indiana	\$975	2.26%	None	n.a.	n.a.
Iowa	\$1,569	3.40%	None	n.a.	n.a.
Kansas	\$1,440	3.05%	None	n.a.	n.a.
Kentucky	\$781	2.00%	None	n.a.	n.a.
Louisiana	\$869	2.05%	0.3%	Unlimited	Pay both
Maine	\$2,055	4.66%	None	n.a.	n.a.
Maryland	\$1,555	2.67%	None	n.a.	n.a.
Massachusetts	\$2,258	3.51%	0.26%	Unlimited	Pay highest
Michigan	\$1,382	3.12%	None	n.a.	n.a.
Minnesota	\$1,534	2.93%	None	n.a.	n.a.
Mississippi	\$972	2.74%	0.25%	Unlimited	Pay both
Missouri	\$990	2.30%	None	n.a.	n.a.
Montana	\$1,509	3.48%	None	n.a.	n.a.
Nebraska	\$1,895	3.77%	(a)	\$11,995	Pay both
Nevada	\$959	2.16%	None	n.a.	n.a.
New Hampshire	\$3,054	5.44%	None	n.a.	n.a.
New Jersey	\$3,074	5.01%	None	n.a.	n.a.
New Mexico	\$770	2.01%	None	n.a.	n.a.
New York	\$2,697	4.54%	0.075%	\$1,000,000	Pay highest
North Carolina	\$952	2.23%	0.15%	Unlimited	Pay both
North Dakota	\$1,222	2.23%	None	n.a.	n.a.
Ohio	\$1,271	2.85%	None	n.a.	n.a.
Oklahoma	\$678	1.58%	0.125%	\$20,000	Pay both
Oregon	\$1,404	3.04%	None	n.a.	n.a.
Pennsylvania	\$1,481	2.92%	None	n.a.	n.a.
Rhode Island	\$2,339	4.64%	None	n.a.	n.a.
South Carolina	\$1,130	2.82%	0.1%	Unlimited	Pay both
South Dakota	\$1,381	2.86%	None	n.a.	n.a.
Tennessee	\$863	1.98%	0.25%	Unlimited	Pay both
Texas	\$1,731	3.69%	None	n.a.	n.a.
Utah	\$976	2.34%	None	n.a.	n.a.
Vermont	\$2,542	5.10%	None	n.a.	n.a.
Virginia	\$1,520	2.86%	None	n.a.	n.a.
Washington	\$1,409	2.54%	None	n.a.	n.a.
West Virginia	\$888	2.44%	None	n.a.	n.a.
Wisconsin	\$1,616	3.45%	None	n.a.	n.a.
Wyoming	\$2,347	4.26%	0.02%	Unlimited	No CIT
District of Columbia	\$3,350	4.34%	None	n.a.	n.a.

(a) Based on a fixed dollar payment schedule. Effective tax rates decrease as taxable capital increases.

Source: Tax Foundation calculations from U.S. Census Bureau data; Bloomberg BNA; state statutes.

Table 23.

State Property Tax Bases (as of July 1, 2018)

	Intangible Property Tax	Inventory Tax	Real Estate Transfer Tax	Estate Tax	Inheritance Tax	Generation-Skipping Transfer Tax	Gift Tax
Alabama	Yes	No	Yes	No	No	No	No
Alaska	No	Partial	No	No	No	No	No
Arizona	No	No	No	No	No	No	No
Arkansas	No	Yes	Yes	No	No	No	No
California	No	No	Yes	No	No	No	No
Colorado	No	No	Yes	No	No	No	No
Connecticut	No	No	Yes	Yes	No	No	Yes
Delaware	No	No	Yes	No	No	No	No
Florida	No	No	Yes	No	No	No	No
Georgia	No	Partial	Yes	No	No	No	No
Hawaii	No	No	Yes	Yes	No	No	No
Idaho	No	No	No	No	No	No	No
Illinois	No	No	Yes	Yes	No	No	No
Indiana	No	No	No	No	No	No	No
Iowa	Yes	No	Yes	No	Yes	No	No
Kansas	No	No	Yes	No	No	No	No
Kentucky	Yes	Yes	Yes	No	Yes	No	No
Louisiana	Yes	Yes	No	No	No	No	No
Maine	No	No	Yes	Yes	No	No	No
Maryland	No	Yes	Yes	Yes	Yes	No	No
Massachusetts	No	Partial	Yes	Yes	No	No	No
Michigan	No	Partial	Yes	No	No	No	No
Minnesota	No	No	Yes	Yes	No	No	No
Mississippi	Yes	Yes	No	No	No	No	No
Missouri	No	No	No	No	No	No	No
Montana	No	No	No	No	No	No	No
Nebraska	No	No	Yes	No	Yes	No	No
Nevada	No	No	Yes	No	No	No	No
New Hampshire	No	No	Yes	No	No	No	No
New Jersey	No	No	Yes	No	Yes	No	No
New Mexico	No	No	No	No	No	No	No
New York	No	No	Yes	Yes	No	No	No
North Carolina	Yes	No	Yes	No	No	No	No
North Dakota	No	No	No	No	No	No	No
Ohio	No	No	Yes	No	No	No	No
Oklahoma	No	Yes	Yes	No	No	No	No
Oregon	No	No	No	Yes	No	No	No
Pennsylvania	No	No	Yes	No	Yes	No	No
Rhode Island	No	No	Yes	Yes	No	No	No
South Carolina	No	No	Yes	No	No	No	No
South Dakota	Yes	No	Yes	No	No	No	No
Tennessee	Yes	No	Yes	No	No	No	No
Texas	Yes	Yes	No	No	No	No	No
Utah	No	No	No	No	No	No	No
Vermont	No	Yes	Yes	Yes	No	No	No
Virginia	No	Yes	Yes	No	No	No	No
Washington	No	No	Yes	Yes	No	No	No
West Virginia	No	Yes	Yes	No	No	No	No
Wisconsin	No	No	Yes	No	No	No	No
Wyoming	No	No	No	No	No	No	No
District of Columbia	No	No	Yes	Yes	No	No	No

Source: Tax Foundation; Bloomberg BNA; state statutes.

ABOUT THE TAX FOUNDATION

The Tax Foundation is the nation's leading independent tax policy research organization. Since 1937, our research, analysis, and experts have informed smarter tax policy at the federal, state, and local levels. Our Center for State Tax Policy uses research to foster competition among the states and advises policymakers on how to improve their tax systems.



CENTER FOR STATE TAX POLICY



**Joseph
Bishop-Henchman**
Executive Vice President



Scott Drenkard
Director of State Projects



Katherine Loughhead
Policy Analyst



Jared Walczak
Senior Policy Analyst

LEARN MORE

 taxfoundation.org

 202-464-6200

 info@taxfoundation.org

 facebook.com/taxfoundation

 twitter.com/taxfoundation

 1325 G Street N.W. Suite 950,
Washington, D.C. 20005

The Tax Foundation's *State Business Tax Climate Index* enables business leaders, government policymakers, and taxpayers to gauge how their states' tax systems compare. While there are many ways to show how much is collected in taxes by state governments, the *Index* is designed to show how well states structure their tax systems, and provides a roadmap to improving these structures.



PRINCIPLED
INSIGHTFUL
ENGAGED

The Tax Foundation is the nation's leading independent tax policy research organization. Since 1937, our research, analysis, and experts have informed smarter tax policy at the federal, state, and local levels. We are a 501(c)(3) nonprofit organization.

©2018 Tax Foundation

Editor, Rachel Shuster
Designer, Dan Carvajal

Tax Foundation
1325 G Street, N.W. Suite 950
Washington, D.C. 20005
202.464.6200

taxfoundation.org

ISBN 978-1-942768-22-7
9 0000 >



9 781942 768227