



2021 STATE BUSINESS TAX CLIMATE INDEX

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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 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. Nevada, South Dakota, and Wyoming 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 and Montana have no sales tax.

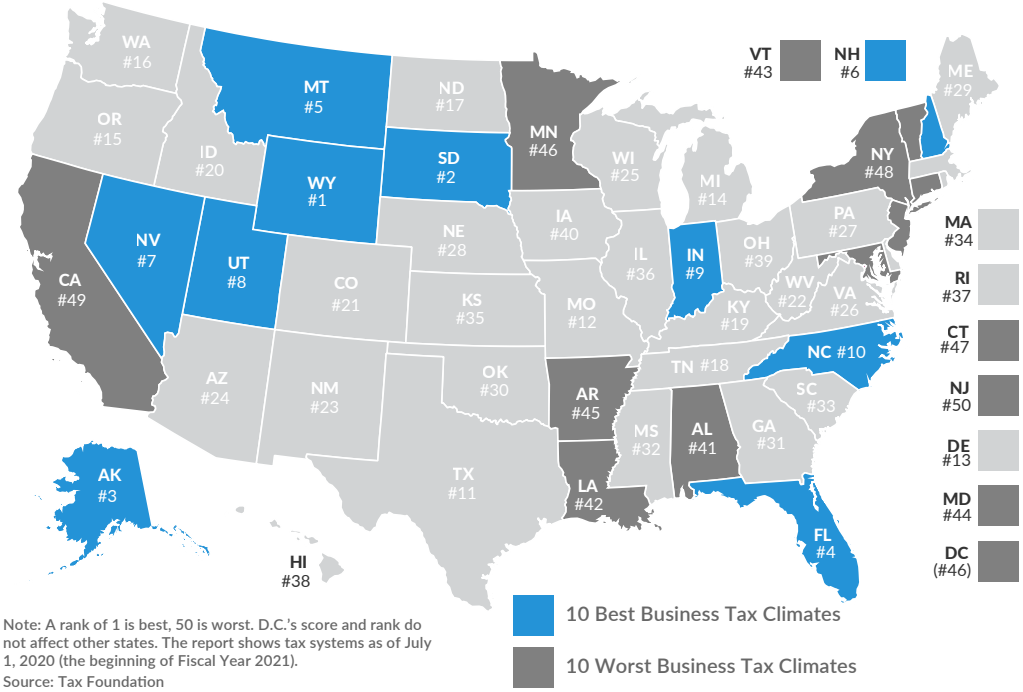
The 10 best states in this year's *Index* are:

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

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

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

2021 State Business Tax Climate Index



Note: A rank of 1 is best, 50 is worst. D.C.'s score and rank do not affect other states. The report shows tax systems as of July 1, 2020 (the beginning of Fiscal Year 2021).
Source: Tax Foundation

This does not mean, however, that a state cannot rank in the top 10 while still levying all the major taxes. Indiana, North Carolina, 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, has the second highest-rate corporate and individual income taxes in the country and a particularly aggressive treatment of international income, levies an inheritance tax, and maintains some of the nation's worst-structured individual income taxes.

NOTABLE RANKING CHANGES IN THIS YEAR'S *INDEX*

Florida

Florida's corporate income rate tax declined from 5.5 to 4.4458 percent in September 2019, effective for tax years 2019-2021. This temporary reduction is the result of revenue triggers adopted in 2018, and enhanced revenue from corporate base broadening—the result of the federal Tax Cuts and Jobs Act (TCJA)—quickly met the 7 percent excess collections threshold required for a rate reduction. The lower rate does not change Florida's already enviable rank of 4th overall but does improve the state's corporate tax component rank from 9th to 6th.

Indiana

The only state to make midyear rate adjustments, Indiana made another scheduled adjustment to its corporate income tax rate on July 1, 2020, the *Index*'s snapshot date, bringing the rate from 5.5 to 5.25 percent.[1] The rate reduction—two more are scheduled, ultimately bringing the rate to 4.9 percent in 2022—was enough to improve Indiana's rank from 10th to 9th overall.

Iowa

On the corporate tax front, Iowa policymakers decoupled from IRC § 163(j), the net interest limitation, and fully decoupled from the Global Intangible Low-Taxed Income (GILTI) provision, which, when incorporated into state tax codes, leads to state taxation of international income. These changes improved Iowa's corporate component rank by two places. The state also, as part of the ongoing implementation of a larger tax reform package, increased the Section 179 expensing allowance from $100,000 to $1 million, matching the federal level, leading to a two-place improvement on the individual component rank as well. These reforms, taken together, drove Iowa's improvement from 45th to 40th on the *Index* overall.

1 Katherine Loughead, "State Tax Changes as of July 1, 2020," Tax Foundation, July 11, 2020, https://taxfoundation.org/state-tax-changes-effective-july-1-2019/.

TABLE 1.

2021 *State Business Tax Climate Index* Ranks and Component Tax Ranks

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

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. DC's score and rank do not affect other states. The report shows tax systems as of July 1, 2020 (the beginning of Fiscal Year 2021).
Source: Tax Foundation.

Kansas

Although Kansas has largely resisted tax conformity changes that would forgo any of the additional revenue associated with TCJA base broadening, the state's existing tax conformity laws led to the temporary adoption of the five-year net operating loss carryback provisions afforded by the Coronavirus Aid, Relief, and Economic Security (CARES) Act, dramatically—if temporarily—improving the state's otherwise stingy treatment of business losses. With this change, the state's corporate component rank rose from 35th to 31st, though the state's overall rank remains unchanged at 35th.

Missouri

In 2018, Missouri adopted individual and corporate income tax reforms, set to phase in over time. Last year saw a significant reduction in the top rate of the individual income tax, from 5.9 to 5.4 percent, with smaller triggered reductions scheduled for future years until the rate declines to 5.1 percent. No additional rate cut has been triggered thus far. The corporate income tax reform package did, however, go into effect in 2020. The state no longer gives companies the option of choosing the apportionment formula most favorable to them, but this consolidation into a single apportionment formula paid down a significant corporate income tax rate reduction, from 6.25 to 4 percent, improving the state's rank on the corporate tax component from 5th to 3rd and allowing the state to improve from 15th to 12th on the *Index* overall.

New Jersey

Two years ago, New Jersey lawmakers adopted a temporary corporate surtax, imposing an additional 2.5 percent atop the existing corporate income tax rate for companies with income of $1 million or more, applicable for tax years 2018 and 2019, before dropping to 1.5 percent for 2020 and 2021. This year's partial rollback of the surtax, yielding a top rate of 10.5 percent (down from 11.5 percent), improved New Jersey one place on the corporate tax component, from 49th to 48th. The state remains 50th on the *Index* overall.

Oregon

In May 2019, the Oregon legislature adopted a modified gross receipts tax, imposed at $250 plus a rate of 0.57 percent on Oregon gross receipts above $1 million. Taxpayers are permitted to subtract 35 percent of the greater of compensation or the cost of goods sold, putting it somewhere between Ohio's commercial activity tax and Texas' franchise ("margin") tax.[2] For comparison, Ohio's tax is imposed at a rate of 0.26 percent and the higher of Texas's two rates on its narrower-based tax is 0.75 percent. Oregon, which straddles the difference between the two rates, is now one of only two states, with Delaware, to impose both a corporate income tax and a gross receipts tax. The new tax dropped the state 16 places on the corporate tax component, from 33rd to 49th, while the state's overall rank slipped from 8th to 15th.

2 Corey L. Rosenthal and Jessie Hu, "Oregon's New Commercial Activity Tax," *The CPA Journal* (September 2019), https://www.cpajournal.com/2019/09/18/oregons-new-commercial-activity-tax/.

TABLE 2.

State Business Tax Climate Index (2014–2021)

	Prior Year Ranks						2020		2021		2020-2021 Change	
State	2014	2015	2016	2017	2018	2019	Rank	Score	Rank	Score	Rank	Score
Alabama	40	40	41	38	40	40	40	4.50	41	4.47	-1	-0.03
Alaska	4	4	3	3	3	3	3	7.27	3	7.28	0	0.01
Arizona	22	24	22	21	22	24	23	5.15	24	5.13	-1	-0.02
Arkansas	41	41	45	42	42	45	44	4.37	45	4.39	-1	0.02
California	48	48	48	48	48	49	49	4.01	49	4.00	0	-0.01
Colorado	24	23	21	22	21	19	21	5.19	21	5.18	0	-0.01
Connecticut	47	47	47	47	47	47	47	4.21	47	4.24	0	0.03
Delaware	17	16	14	19	19	12	13	5.47	13	5.44	0	-0.03
Florida	5	5	4	4	4	4	4	6.86	4	6.89	0	0.04
Georgia	29	32	35	33	33	35	32	4.93	31	4.97	1	0.04
Hawaii	33	30	31	25	27	38	37	4.67	38	4.66	-1	-0.01
Idaho	16	17	18	18	17	20	20	5.22	20	5.20	0	-0.02
Illinois	36	38	29	26	31	36	36	4.80	36	4.75	0	-0.05
Indiana	9	9	9	7	7	10	10	5.59	9	5.58	1	-0.01
Iowa	45	43	44	44	44	44	45	4.34	40	4.50	5	0.16
Kansas	26	26	27	30	29	30	35	4.83	35	4.88	0	0.04
Kentucky	30	35	33	36	36	21	19	5.22	19	5.23	0	0.00
Louisiana	35	37	38	46	46	42	41	4.47	42	4.46	-1	-0.01
Maine	28	33	37	34	34	28	30	4.98	29	4.99	1	0.01
Maryland	39	39	39	39	39	41	42	4.44	44	4.42	-2	-0.01
Massachusetts	25	28	26	29	25	27	34	4.91	34	4.92	0	0.01
Michigan	11	13	15	14	15	17	14	5.41	14	5.42	0	0.01
Minnesota	46	46	46	45	45	46	46	4.26	46	4.26	0	0.00
Mississippi	27	29	30	32	32	29	31	4.96	32	4.96	-1	0.00
Missouri	15	18	20	16	16	15	15	5.36	12	5.45	3	0.09
Montana	6	6	6	6	6	5	5	6.08	5	6.07	0	0.00
Nebraska	38	27	28	31	30	25	27	5.01	28	5.00	-1	-0.01
Nevada	3	3	5	5	5	6	7	5.91	7	5.90	0	-0.01
New Hampshire	8	8	7	8	8	7	6	6.04	6	6.05	0	0.00
New Jersey	49	50	50	50	50	50	50	3.29	50	3.34	0	0.04
New Mexico	23	25	25	28	26	26	24	5.09	23	5.17	1	0.07
New York	50	49	49	49	49	48	48	4.03	48	4.06	0	0.03
North Carolina	34	11	11	10	10	11	11	5.51	10	5.51	1	0.01
North Dakota	20	20	19	20	20	16	17	5.28	17	5.29	0	0.01
Ohio	42	42	42	41	41	39	38	4.66	39	4.64	-1	-0.02
Oklahoma	21	22	24	24	24	31	29	4.98	30	4.97	-1	-0.01
Oregon	10	10	10	11	11	9	8	5.75	15	5.42	-7	-0.34
Pennsylvania	31	31	32	27	28	32	28	5.00	27	5.01	1	0.01
Rhode Island	43	44	40	40	38	37	39	4.65	37	4.68	2	0.03
South Carolina	32	34	34	35	35	33	33	4.91	33	4.92	0	0.01
South Dakota	2	2	2	2	2	2	2	7.42	2	7.42	0	0.00
Tennessee	13	14	16	13	13	18	18	5.27	18	5.25	0	-0.02
Texas	12	12	12	12	12	13	12	5.50	11	5.46	1	-0.04
Utah	7	7	8	9	9	8	9	5.62	8	5.60	1	-0.03
Vermont	44	45	43	43	43	43	43	4.43	43	4.45	0	0.01
Virginia	18	21	23	23	23	23	25	5.08	26	5.04	-1	-0.04
Washington	14	15	13	15	14	14	16	5.34	16	5.33	0	-0.01
West Virginia	19	19	17	17	18	22	22	5.18	22	5.17	0	-0.01
Wisconsin	37	36	36	37	37	34	26	5.05	25	5.06	1	0.01
Wyoming	1	1	1	1	1	1	1	7.62	1	7.72	0	0.10
District of Columbia	47	47	46	48	48	47	46	4.30	46	4.32	0	0.02

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

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.[3] Certainly, job creation is rapid overseas, as previously underdeveloped nations enter the world economy, though in the aftermath of federal tax reform, U.S. businesses no longer face the third-highest corporate tax rate in the world, but rather one in line with averages for industrialized nations.[4] 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.[5] 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.[6] In 2010, Northrup Grumman chose to move its headquarters to Virginia over Maryland, citing the better business tax climate.[7] 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

3 See U.S. Department of Labor, "Extended Mass Layoffs, First Quarter 2013," Table 10, May 13, 2013.
4 Daniel Bunn, "Corporate Income Tax Rates Around the World, 2018," Tax Foundation, Nov. 27, 2018, https://taxfoundation.org/publications/corporate-tax-rates-around-the-world/.
5 Editorial, "Scale it back, Governor," *Chicago Tribune*, March 23, 2007.
6 Ryan Randazzo, Edythe Jenson, and Mary Jo Pitzl, "Cathy Carter Blog: Chandler getting new $5 billion Intel facility," AZCentral.com, Mar. 6, 2013.
7 Dana Hedgpeth and Rosalind Helderman, "Northrop Grumman decides to move headquarters to Northern Virginia," *The Washington Post*, April 27, 2010.

Electric actually did so.[8] 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 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.[9] A 2007 *USA TODAY* article chronicled similar problems other states have had with companies that receive generous tax incentives.[10]

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.

8 Susan Haigh, "Connecticut House Speaker: Tax 'mistakes' made in budget," Associated Press, Nov. 5, 2015.
9 Austin Mondine, "Dell cuts North-Carolina plant despite $280m sweetener," TheRegister.co.uk, Oct. 8, 2009.
10 Dennis Cauchon, "Business Incentives Lose Luster for States," *USA TODAY*, Aug. 22, 2007.

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.

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 120 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.[11]

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.

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

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.[12] 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.[13]

A new literature review, Kleven et al. (2019), summarizes recent evidence for tax-driven migration. Meanwhile, Giroud and Rauh (2019) use microdata on multistate firms to estimate the impact of state taxes on business activity, and find that C corporation employment and establishments have short-run corporate tax elasticities of -0.4 to -0.5, while pass-through entities show elasticities of -0.2 to -0.4, meaning that, for each percentage-point increase in the rate, employment decreases by 0.4 to 0.5 percent for C corporations subject to the corporate income tax, and by 0.2 to 0.4 percent within pass-through businesses subject to the individual income tax.

Measuring the Impact of Tax Differentials

Some recent contributions to the literature on state taxation criticize business and tax climate studies in general.[14] 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.

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

12 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.

13 Benjamin Yount, "Tax increase, impact, dominate Illinois Capitol in 2011," *Illinois Statehouse News*, Dec. 27, 2011.

14 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.

(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 124 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:

30.5% — Individual Income Tax
24.4% — Sales Tax
20.8% — Corporate Tax
14.8% — Property Tax
9.4% — 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(Nevada likewise imposes a gross receipts tax, called the Commerce Tax.") 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 6.92 while the average score of the sales tax component is 5.35.

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 5.12 on corporate income taxes is better than its score of 4.76 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 2021 *Index* and represents the tax climate of each state as of July 1, 2020, the first day of fiscal year 2021 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.

2021 Changes to Methodology

The 2021 edition of the *Index* introduces new variables to the property tax base subindex, accounting for split roll property taxation and property tax limitations. These additions are intended to provide more nuance to the *Index*'s treatment of the real property tax base, in addition to existing variables on the taxation of tangible and intangible personal property and other classes of property or wealth, including estate, inheritance, and gift taxes.

States vary considerably in their treatment of different classes of property—residential, agricultural, commercial, industrial, etc. Sometimes, local governments are permitted to establish different rates on different classes of property. More frequently, differential treatment is accomplished through assessment ratios, where different percentages of a property's market value are subject to taxation based on its class. Commercial property might, for instance, have an assessment ratio of 50 percent, while residential property faces a 25 percent assessment ratio—meaning that, with the same rate applied to both, commercial properties face twice the effective rate of residential properties. Such differentials divide the property tax roll by class, creating what is known as a "split roll" property tax system. The *Index* now includes a dummy variable on the existence of a split roll, as well as a variable measuring the ratio between commercial and residential effective rates.

The *Index* now takes property tax limitation regimes into account as well. Nearly all states impose some sort of restriction on local governments' ability to raise property taxes, but these limitation regimes vary dramatically. In broad terms, they take on a tripartite typology: assessment, rate, and levy limits. Assessment limits restrict the rate at which a given property's assessed value can increase each year. They often, but not always, reset upon sale or change of use, and sometimes reset when substantial improvements are made. Rate limits either cap the allowable rate or restrict the amount by which the rate can be raised in a given year. Levy limits impose a restriction on the growth of total collections (excluding those from new construction), implementing or necessitating rate reductions if revenues exceed the allowable growth rate. Most limitation regimes permit voter overrides.

Assessment limits distort property taxation, leading to similar properties facing highly disparate effective rates of taxation and influencing decisions about property utilization. Rate and levy limits, by contrast, maintain tax neutrality while restricting—with varying degrees of rigidity—the growth of property tax burdens. The *Index* now includes two dummy variables, one penalizing states for imposing assessment limitations and the other rewarding states for adopting either a rate or levy limit, or both.

Past Rankings and Scores

This report includes 2014-2020 *Index* rankings that can be used for comparison with the 2021 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 20.8 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 and West Virginia with its local Business & Occupation (B&O) tax. Texas also added the Margin Tax, a complicated gross receipts tax, in 2007, Nevada adopted the gross receipts-based multi-rate Commerce Tax in 2015, and Oregon implemented a new modified gross receipts tax this year. 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.[15] 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

15 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* (2014–2021)

	Prior Year Ranks						2020		2021		2020-2021 Change	
State	2014	2015	2016	2017	2018	2019	Rank	Score	Rank	Score	Rank	Score
Alabama	24	25	23	14	22	22	23	5.25	23	5.22	0	-0.02
Alaska	26	27	28	27	26	25	26	5.13	26	5.11	0	-0.02
Arizona	23	23	21	19	14	15	22	5.29	22	5.27	0	-0.02
Arkansas	37	37	39	39	39	40	34	4.81	34	4.82	0	0.01
California	30	32	34	33	32	38	28	4.95	28	4.92	0	-0.02
Colorado	20	13	15	18	18	5	7	5.83	10	5.80	-3	-0.03
Connecticut	28	30	32	32	31	34	27	5.12	27	5.10	0	-0.02
Delaware	50	50	50	50	50	50	50	2.45	50	2.45	0	-0.01
Florida	13	14	16	19	19	11	9	5.78	6	5.94	3	0.17
Georgia	9	10	10	11	10	8	6	5.91	7	5.93	-1	0.02
Hawaii	5	5	4	6	11	12	16	5.48	18	5.45	-2	-0.03
Idaho	18	22	22	24	25	28	29	4.94	29	4.92	0	-0.02
Illinois	44	45	33	26	36	37	36	4.66	36	4.63	0	-0.02
Indiana	29	28	24	23	23	18	11	5.62	12	5.64	-1	0.02
Iowa	48	48	48	48	48	47	48	3.59	46	4.03	2	0.44
Kansas	36	36	38	38	38	32	35	4.66	31	4.87	4	0.21
Kentucky	25	26	27	28	27	20	17	5.47	19	5.45	-2	-0.03
Louisiana	17	21	36	40	40	35	37	4.63	35	4.76	2	0.13
Maine	42	43	42	41	41	33	38	4.60	37	4.58	1	-0.02
Maryland	15	16	18	21	20	26	32	4.89	33	4.87	-1	-0.02
Massachusetts	33	35	37	36	35	39	39	4.58	38	4.56	1	-0.02
Michigan	8	8	8	9	8	13	18	5.44	20	5.41	-2	-0.03
Minnesota	41	41	43	43	43	44	46	4.19	45	4.17	1	-0.02
Mississippi	10	11	12	12	12	14	10	5.64	13	5.61	-3	-0.03
Missouri	4	4	3	5	5	6	5	5.97	3	6.36	2	0.39
Montana	16	17	19	13	13	9	21	5.36	21	5.33	0	-0.02
Nebraska	35	29	29	29	28	29	31	4.89	32	4.87	-1	-0.02
Nevada	1	1	26	34	33	21	25	5.16	25	5.13	0	-0.03
New Hampshire	47	47	47	47	45	46	43	4.39	41	4.41	2	0.02
New Jersey	38	38	40	42	42	49	49	3.57	48	3.74	1	0.17
New Mexico	34	34	25	25	24	23	20	5.41	9	5.85	11	0.44
New York	22	20	11	8	7	17	13	5.59	15	5.56	-2	-0.03
North Carolina	27	24	7	4	3	3	3	6.12	4	6.09	-1	-0.03
North Dakota	21	19	14	16	16	16	19	5.42	8	5.86	11	0.44
Ohio	45	44	46	46	47	43	42	4.41	42	4.39	0	-0.02
Oklahoma	11	9	9	10	9	19	8	5.82	11	5.79	-3	-0.03
Oregon	31	33	35	35	34	30	33	4.83	49	3.19	-16	-1.64
Pennsylvania	43	42	44	44	44	45	45	4.20	43	4.20	2	0.00
Rhode Island	39	39	31	31	30	36	40	4.57	39	4.55	1	-0.02
South Carolina	12	12	13	15	15	4	4	6.05	5	6.02	-1	-0.03
South Dakota	1	1	1	1	1	1	1	10.00	1	10.00	0	0.00
Tennessee	14	15	17	22	21	27	24	5.16	24	5.13	0	-0.02
Texas	49	49	49	49	49	48	47	3.97	47	3.95	0	-0.03
Utah	6	6	5	3	4	7	12	5.61	14	5.59	-2	-0.03
Vermont	40	40	41	37	37	41	44	4.20	44	4.18	0	-0.02
Virginia	7	7	6	7	6	10	14	5.55	16	5.53	-2	-0.03
Washington	46	46	45	45	46	42	41	4.46	40	4.43	1	-0.03
West Virginia	19	18	20	17	17	24	15	5.48	17	5.46	-2	-0.03
Wisconsin	32	31	30	30	29	31	30	4.91	30	4.89	0	-0.02
Wyoming	1	1	1	1	1	1	1	10.00	1	10.00	0	0.00
District of Columbia	38	38	38	28	26	24	15	5.53	17	5.51	-2	-0.03

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

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.

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 10.5 percent rate (including a surcharge, which declined this year). Other states with comparatively high corporate income tax rates are Pennsylvania (9.99 percent), Minnesota (9.8 percent), Alaska (9.4 percent), and California (8.84 percent). By contrast, North Carolina's rate of 2.5 percent is the lowest nationally, followed by Missouri's at 4 percent, North Dakota's at 4.31 percent, and Florida at 4.458 percent. Other states with comparatively low top corporate tax rates are Colorado (4.63 percent), Arizona (4.9 percent), Utah (4.95 percent), and Kentucky, Mississippi, and South Carolina, all 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.[16]

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

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.

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 30 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 2021 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*. Two states, Idaho and Montana, limit the amount of carrybacks, though they do better than many of their peers in offering any carryback provisions at all. 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, Oregon, 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, the West Virginia B&O, 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.

Five states have an AMT on corporations and thus score poorly: California, Iowa, Kentucky, 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 14 states with graduated corporate income taxes fail to index their tax brackets: Alaska, Arkansas, Hawaii, Iowa, Kansas, Louisiana, Maine, Mississippi, Nebraska, New Jersey, New Mexico, North Dakota, 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 and throwout rules for sales of tangible property 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." Eighteen states follow the federal government in offering full expensing, while two offer "bonus depreciation" short of full expensing.

Net Interest Limitation. Federal law now restricts the deduction of business interest, limiting the deduction to 30 percent of modified income, with the ability to carry the remainder forward to future tax years. This change was intended to eliminate the bias in favor of debt financing (over equity financing) in the federal code, but particularly when states adopt this limitation without incorporating its counterbalancing provision, full expensing, the result is higher investment costs. Thirty-five states conform to the net interest limitation.

Inclusion of GILTI. Historically, states have largely avoided taxing international income. Following federal tax reform, however, some states have latched onto the federal provision for the taxation of Global Low-Taxed Intangible Income (GILTI), intended as a guardrail for the new federal territorial system of taxation, as a means to broaden their tax bases to include foreign business activity. States which tax GILTI are penalized in the *Index*, while states receive partial credit for moderate taxation of GILTI (for instance, by adopting the Section 250 deduction) and are rewarded for decoupling or almost fully decoupling from GILTI (by, for instance, treating it as largely-deductible foreign dividend income in addition to providing the Section 250 deduction).

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.[17]

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.

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

17 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.

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 30.5 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.

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

TABLE 4.

Individual Income Tax Component of the *State Business Tax Climate Index* (2014–2021)

	Prior Year Ranks						2020		2021		2020-2021 Change	
State	2014	2015	2016	2017	2018	2019	Rank	Score	Rank	Score	Rank	Score
Alabama	25	28	27	28	28	30	30	4.82	30	4.81	0	-0.01
Alaska	1	1	1	1	1	1	1	10.00	1	10.00	0	0.00
Arizona	19	20	18	18	18	19	17	5.51	17	5.49	0	-0.02
Arkansas	29	31	36	39	39	40	40	4.07	41	4.18	-1	0.11
California	50	50	50	50	50	49	49	2.54	49	2.53	0	-0.01
Colorado	15	16	16	16	16	14	14	5.85	14	5.84	0	-0.02
Connecticut	40	40	46	46	46	43	43	3.88	44	3.87	-1	-0.01
Delaware	43	42	41	43	43	41	41	4.06	42	4.05	-1	-0.01
Florida	1	1	1	1	1	1	1	10.00	1	10.00	0	0.00
Georgia	35	37	37	36	36	38	36	4.53	36	4.56	0	0.03
Hawaii	46	46	45	37	37	47	47	3.52	47	3.51	0	-0.01
Idaho	21	22	21	21	21	24	26	5.03	26	5.01	0	-0.01
Illinois	11	15	12	12	15	13	13	5.87	13	5.85	0	-0.02
Indiana	10	10	10	10	10	15	15	5.74	15	5.77	0	0.03
Iowa	39	39	39	40	40	42	42	4.03	40	4.29	2	0.26
Kansas	17	18	19	19	19	22	23	5.09	24	5.07	-1	-0.01
Kentucky	34	36	35	35	35	17	18	5.47	18	5.47	0	0.01
Louisiana	32	34	32	33	33	32	32	4.73	32	4.71	0	-0.01
Maine	20	21	28	24	26	25	22	5.14	22	5.13	0	-0.02
Maryland	44	44	43	45	45	45	45	3.67	45	3.64	0	-0.04
Massachusetts	13	12	13	13	12	11	11	5.96	11	5.94	0	-0.02
Michigan	14	13	14	14	14	12	12	5.95	12	5.93	0	-0.02
Minnesota	45	45	44	44	44	46	46	3.61	46	3.59	0	-0.01
Mississippi	23	25	25	25	24	27	27	4.90	27	4.89	0	-0.01
Missouri	28	30	30	32	31	26	24	5.07	23	5.10	1	0.03
Montana	18	19	20	20	20	23	25	5.03	25	5.02	0	-0.01
Nebraska	37	23	22	22	22	21	21	5.16	21	5.15	0	-0.01
Nevada	1	1	1	1	1	5	5	8.43	5	8.40	0	-0.02
New Hampshire	9	9	9	9	9	9	9	6.39	9	6.37	0	-0.02
New Jersey	48	48	48	48	48	50	50	1.86	50	1.86	0	-0.01
New Mexico	24	27	26	27	27	31	31	4.81	31	4.80	0	-0.01
New York	49	49	49	49	49	48	48	3.06	48	3.05	0	-0.01
North Carolina	38	14	15	15	13	16	16	5.73	16	5.71	0	-0.02
North Dakota	27	26	23	23	23	20	20	5.24	20	5.23	0	-0.02
Ohio	47	47	47	47	47	44	44	3.86	43	3.96	1	0.10
Oklahoma	31	33	33	30	32	33	33	4.66	33	4.64	0	-0.01
Oregon	36	38	38	38	38	36	38	4.43	38	4.42	0	-0.01
Pennsylvania	16	17	17	17	17	18	19	5.38	19	5.41	0	0.03
Rhode Island	26	29	29	29	29	29	29	4.88	29	4.86	0	-0.01
South Carolina	30	32	31	31	30	34	34	4.63	34	4.62	0	-0.01
South Dakota	1	1	1	1	1	1	1	10.00	1	10.00	0	0.00
Tennessee	8	8	8	8	8	8	8	7.09	8	7.07	0	-0.02
Texas	6	6	6	6	6	6	6	7.90	6	7.88	0	-0.02
Utah	12	11	11	11	11	10	10	6.10	10	6.08	0	-0.02
Vermont	42	43	42	42	42	37	39	4.37	39	4.36	0	-0.01
Virginia	33	35	34	34	34	35	35	4.62	35	4.60	0	-0.01
Washington	6	6	6	6	6	6	6	7.90	6	7.88	0	-0.02
West Virginia	22	24	24	26	25	28	28	4.90	28	4.88	0	-0.01
Wisconsin	41	41	40	41	41	39	37	4.51	37	4.50	0	-0.01
Wyoming	1	1	1	1	1	1	1	10.00	1	10.00	0	0.00
District of Columbia	45	45	43	48	48	45	45	3.68	45	3.67	0	-0.01

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

leisure. In the aggregate, the income tax reduces the available labor supply.[18]

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.

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.[19] Colorado, Illinois, Indiana, Kentucky, 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.

18 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.

19 Tennessee has begun the process of phasing out its tax on 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 (11.0 percent), New Jersey (recently raised to 10.75 percent), Oregon (9.9 percent), Minnesota (9.85 percent), New York (8.82 percent), Vermont (8.75 percent), and Iowa (8.53 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 (4.5 percent), Colorado (4.63 percent of federal AGI), New Mexico (4.9 percent), Ohio (4.797 percent), and Utah (4.95 percent). Alabama, Kentucky, Mississippi, New Hampshire, and Oklahoma all impose a top statutory rate of 5 percent.[20] 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.[21] 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, Kentucky, Massachusetts, Michigan, Pennsylvania, and Utah, among others. 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 ($433,200 of taxable income).

20 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.

21 See Jared Walczak, "Local Income Taxes in 2019," Tax Foundation, July 30, 2019, https://taxfoundation.org/local-income-taxes-2019/.

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.[22]

Pennsylvania scores the best in this variable by having only one tax bracket (that is, a flat tax with no standard deduction). States with only two brackets (that is, flat taxes with a standard deduction) 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 with 11 brackets, and Iowa and Missouri with nine 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 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.

22 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.

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, Arizona, Idaho, Illinois, Maine, Michigan, Missouri, Montana, and Nebraska 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, Minnesota, Maryland, Delaware, and New York.

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.[23] 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.

23 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.

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. Five states score poorly for imposing an AMT on individuals: California, Colorado, Connecticut, Iowa, and Minnesota.

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-five states index all three or do not impose an individual income tax; 15 states and the District of Columbia index one or two of the three; and ten states do not index at all.

SALES TAXES

Sales tax makes up 24.4 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.[24] 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.[25]

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.[26] 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

24 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.

25 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.

26 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 (2014–2021)

	Prior Year Ranks						2020		2021		2020-2021 Change	
State	2014	2015	2016	2017	2018	2019	Rank	Score	Rank	Score	Rank	Score
Alabama	50	50	50	49	49	50	50	2.62	50	2.56	0	-0.06
Alaska	5	5	5	5	5	5	5	8.10	5	8.10	0	0.00
Arizona	43	43	44	44	44	40	40	4.03	40	4.05	0	0.02
Arkansas	46	48	48	46	46	45	46	3.59	46	3.57	0	-0.02
California	44	44	42	41	40	46	45	3.75	45	3.75	0	0.00
Colorado	37	37	36	37	37	37	37	4.35	36	4.37	1	0.02
Connecticut	34	34	32	31	31	30	26	4.76	26	4.78	0	0.02
Delaware	2	2	1	1	1	2	2	9.04	2	9.04	0	0.00
Florida	21	23	21	27	28	22	21	4.93	21	4.96	0	0.03
Georgia	29	28	37	34	30	29	29	4.61	27	4.68	2	0.06
Hawaii	31	31	27	26	26	33	30	4.61	30	4.61	0	0.01
Idaho	14	12	14	14	15	12	11	5.34	9	5.38	2	0.05
Illinois	35	35	33	28	27	35	34	4.41	38	4.26	-4	-0.15
Indiana	20	21	17	9	9	13	20	5.01	20	5.00	0	-0.01
Iowa	17	17	19	19	19	18	14	5.19	14	5.16	0	-0.03
Kansas	24	25	29	29	29	27	38	4.31	37	4.34	1	0.02
Kentucky	11	18	13	12	14	19	13	5.20	13	5.21	0	0.02
Louisiana	48	46	47	50	50	48	48	3.05	49	2.94	-1	-0.10
Maine	7	8	8	8	8	8	8	5.67	8	5.63	0	-0.03
Maryland	12	15	16	17	18	17	19	5.03	18	5.04	1	0.01
Massachusetts	18	20	18	18	11	10	12	5.21	12	5.23	0	0.02
Michigan	10	10	9	10	12	14	10	5.35	10	5.38	0	0.03
Minnesota	30	33	26	25	25	26	28	4.63	28	4.65	0	0.02
Mississippi	38	39	39	39	39	36	33	4.47	32	4.49	1	0.02
Missouri	23	24	25	23	24	25	24	4.81	24	4.81	0	0.00
Montana	3	3	3	3	3	3	3	8.96	3	8.96	0	0.00
Nebraska	22	22	22	20	21	11	15	5.18	15	5.15	0	-0.03
Nevada	41	41	41	42	43	44	44	3.90	44	3.89	0	-0.01
New Hampshire	1	1	2	2	2	1	1	9.08	1	9.08	0	0.00
New Jersey	40	40	40	40	42	42	42	3.99	42	4.02	0	0.02
New Mexico	42	42	43	43	41	41	41	4.03	41	4.05	0	0.02
New York	45	45	45	45	45	43	43	3.92	43	3.96	0	0.04
North Carolina	26	16	20	21	20	24	22	4.93	22	4.96	0	0.03
North Dakota	33	32	34	35	35	31	27	4.64	29	4.61	-2	-0.02
Ohio	28	29	30	32	32	28	32	4.50	34	4.40	-2	-0.10
Oklahoma	36	36	35	36	36	39	39	4.05	39	4.08	0	0.03
Oregon	4	4	4	4	4	4	4	8.84	4	8.82	0	-0.01
Pennsylvania	19	19	23	22	22	21	17	5.06	17	5.09	0	0.03
Rhode Island	27	27	24	24	23	23	25	4.77	25	4.78	0	0.02
South Carolina	32	30	31	30	33	34	31	4.54	31	4.55	0	0.01
South Dakota	25	26	28	33	34	32	35	4.40	33	4.42	2	0.02
Tennessee	47	47	46	47	47	47	47	3.54	47	3.53	0	-0.02
Texas	39	38	38	38	38	38	36	4.35	35	4.38	1	0.03
Utah	16	13	12	16	17	15	23	4.92	23	4.92	0	0.00
Vermont	15	14	15	15	16	20	16	5.12	16	5.14	0	0.02
Virginia	9	9	10	11	10	9	9	5.41	11	5.36	-2	-0.05
Washington	49	49	49	48	48	49	49	2.92	48	2.95	1	0.03
West Virginia	13	11	11	13	13	16	18	5.05	19	5.03	-1	-0.02
Wisconsin	8	7	7	7	7	7	7	5.80	7	5.82	0	0.02
Wyoming	6	6	6	6	6	6	6	6.06	6	6.06	0	0.01
District of Columbia	34	34	34	34	35	32	36	4.39	34	4.41	2	0.02

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

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.

The five states without a state sales tax–Alaska,[27] 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, Wisconsin, Maine, Idaho, Michigan, and Virginia all do well, with well-structured sales taxes and modest excise tax rates.

At the other end of the spectrum, Alabama, Louisiana, Washington, Tennessee, and Arkansas 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 9.55 percent, closely followed by Arkansas at 9.53 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 sales, 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 1.76 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 forty-five 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 (6.88 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.[28] Local jurisdictions in Colorado,

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

28 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.

for example, add an average of 4.75 percent in local sales taxes to the state's 2.9 percent state-level rate, bringing the total average sales tax rate to 7.65 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.

Alabama and Louisiana have the highest average local option sales taxes (5.22 and 5.07 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 (4.75 percent), New York (4.52 percent), and Oklahoma (4.45 percent).

States with the highest combined state and average local sales tax rates are Tennessee (9.55 percent), Arkansas (9.53 percent), Louisiana (9.52 percent), Washington (9.23 percent), and Alabama (9.22 percent). At the low end are Alaska (1.76 percent), Hawaii (4.44 percent), Wyoming (5.34 percent), Wisconsin (5.43 percent), and Maine (5.5 percent).

Remote Seller Protections. With the Supreme Court's elimination of the physical presence requirement for imposing sales tax collection obligations, nearly all states are now requiring remote sellers to collect and remit sales tax. While most states have adopted safe harbors for small sellers and have a single point of administration for all state and local sales taxes, a few diverge from these practices, imposing substantial compliance costs on out-of-state retailers. Alabama, Alaska (which only has local sales taxes), Colorado, and Louisiana lack uniform administration, while Kansas does not offer a safe harbor for small sellers.

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—New Hampshire, Delaware, Montana, Oregon, and Alaska—are the five states without a general state sales tax. However, none receives a perfect score because each levies gasoline, diesel, tobacco, and beer excise taxes. States like Wyoming, Kansas, Colorado, Idaho, Missouri, and Nebraska 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, New Jersey, New Mexico, and Connecticut. 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.[29] 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.

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

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 taxes extend to about 36 percent of all final consumer transactions.[30] 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 seven 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 (Florida, 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. New York applies local sales taxes only.

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. Thirteen states include or partially include groceries in their sales tax base.

30 Data from John Mikesell. For older published data, see Mikesell, "State Retail Taxes in 2012: The Recovery Continues," *State Tax Notes*, June 24, 2013, 1003.

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 13.77 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 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.[31]

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), Georgia (37 cents), North Dakota (44 cents), North Carolina (45 cents), and Virginia (60 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 ($21.98), and Virginia ($19.93).

31 See Ulrik Boesen, "Cigarette Taxes and Cigarette Smuggling by State, 2017," Tax Foundation, Dec. 4, 2019.

PROPERTY TAX

The property tax component, which includes taxes on real and personal property, net worth, and the transfer of assets, accounts for 14.8 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.[32]

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 $782 billion in state and local taxes in fiscal year 2018, of which $297 billion (38.0 percent) was for property taxes. The property taxes included tax on real, personal, and utility property owned by businesses (Phillips et al. 2019). 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.

32 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 (2014–2021)

	Prior Year Ranks						2020		2021		2020-2021 Change	
State	2014	2015	2016	2017	2018	2019	Rank	Score	Rank	Score	Rank	Score
Alabama	13	13	17	18	17	19	18	5.38	19	5.33	-1	-0.05
Alaska	32	33	22	24	40	21	23	5.20	22	5.20	1	0.00
Arizona	6	6	6	12	12	12	12	5.69	11	5.69	1	0.00
Arkansas	19	19	28	23	24	24	24	5.19	25	5.17	-1	-0.02
California	16	16	15	15	15	14	15	5.46	14	5.48	1	0.02
Colorado	21	21	14	31	31	31	31	4.79	32	4.73	-1	-0.05
Connecticut	50	50	50	50	50	50	50	2.26	50	2.34	0	0.09
Delaware	8	8	9	8	8	4	4	6.36	4	6.30	0	-0.06
Florida	18	18	21	14	13	13	13	5.62	13	5.59	0	-0.03
Georgia	30	30	24	25	26	27	29	5.12	24	5.18	5	0.06
Hawaii	7	7	8	7	7	9	10	5.88	9	5.80	1	-0.07
Idaho	3	3	4	2	2	3	3	6.52	3	6.44	0	-0.07
Illinois	42	42	41	47	47	48	48	3.65	48	3.63	0	-0.02
Indiana	5	5	5	3	3	2	2	6.54	2	6.47	0	-0.07
Iowa	31	32	35	39	37	38	38	4.37	38	4.38	0	0.02
Kansas	28	28	19	29	29	30	30	5.01	30	5.02	0	0.01
Kentucky	34	35	37	21	20	22	21	5.26	21	5.20	0	-0.05
Louisiana	23	23	29	26	22	25	25	5.17	23	5.18	2	0.01
Maine	43	43	43	40	39	40	40	4.20	40	4.34	0	0.13
Maryland	45	45	44	41	42	41	41	4.19	43	4.17	-2	-0.02
Massachusetts	46	46	47	45	45	44	44	3.78	44	3.84	0	0.06
Michigan	27	27	27	38	36	36	36	4.48	35	4.57	1	0.08
Minnesota	25	26	23	34	30	32	32	4.72	31	4.77	1	0.05
Mississippi	33	34	36	36	35	37	37	4.47	37	4.47	0	0.00
Missouri	9	9	11	11	10	10	9	5.89	8	5.84	1	-0.05
Montana	10	10	12	27	27	29	26	5.17	28	5.15	-2	-0.02
Nebraska	40	40	40	37	38	39	39	4.28	41	4.31	-2	0.03
Nevada	11	11	10	6	6	5	6	6.15	5	6.17	1	0.02
New Hampshire	41	41	42	44	44	45	45	3.74	47	3.70	-2	-0.04
New Jersey	49	49	49	49	49	46	46	3.69	46	3.75	0	0.05
New Mexico	1	1	1	1	1	1	1	6.56	1	6.53	0	-0.04
New York	44	44	45	46	46	47	47	3.67	45	3.77	2	0.10
North Carolina	29	29	31	28	28	28	28	5.13	26	5.17	2	0.04
North Dakota	2	2	2	4	4	6	7	6.07	12	5.65	-5	-0.42
Ohio	12	12	7	5	5	7	5	6.16	6	6.14	-1	-0.02
Oklahoma	14	14	18	20	21	26	27	5.14	29	5.11	-2	-0.03
Oregon	17	17	13	17	18	16	19	5.38	16	5.40	3	0.02
Pennsylvania	39	39	32	16	16	17	16	5.45	15	5.45	1	0.00
Rhode Island	47	47	46	43	43	42	42	4.03	42	4.19	0	0.16
South Carolina	20	20	26	35	34	35	34	4.57	34	4.60	0	0.02
South Dakota	15	15	20	13	14	15	14	5.50	20	5.26	-6	-0.23
Tennessee	38	38	39	33	33	33	33	4.71	33	4.68	0	-0.03
Texas	36	37	34	32	32	34	35	4.56	36	4.54	-1	-0.03
Utah	4	4	3	9	9	8	8	5.97	7	5.98	1	0.02
Vermont	48	48	48	48	48	49	49	3.23	49	3.30	0	0.07
Virginia	24	25	30	22	23	23	22	5.21	27	5.16	-5	-0.05
Washington	22	22	25	19	19	18	17	5.39	18	5.39	-1	0.00
West Virginia	26	24	16	10	11	11	11	5.73	10	5.73	1	0.00
Wisconsin	37	31	33	30	25	20	20	5.35	17	5.40	3	0.05
Wyoming	35	36	38	42	41	43	43	3.98	39	4.34	4	0.36
District of Columbia	46	46	40	48	47	49	49	3.50	49	3.57	0	0.07

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

Taxes on capital stock, tangible and 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, Idaho, Delaware, Nevada, and Ohio. These 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, Illinois, New Hampshire, New Jersey, and New York. 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.[33]

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.

33 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 Hampshire ($3,310), New Jersey ($3,277), Connecticut ($3,020), New York ($2,902), and Vermont ($2,671. The states that collect the least per capita are Alabama ($582), Oklahoma ($731), Arkansas ($742), New Mexico ($792), and Kentucky ($831).

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 (5.66 percent), Vermont (5.14 percent), New Jersey (5.05 percent), Rhode Island (4.6 percent), Maine (4.59 percent), and New York (4.42 percent). States that score well with low effective tax rates are Alabama (1.44 percent), Oklahoma (1.67 percent), Arkansas (1.79 percent), Delaware (1.83 percent), Tennessee (1.95 percent), and Kentucky (2.03 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. Illinois will begin a phaseout in 2020, completing the process in 2024. Connecticut will phase out its tax over five years starting in 2021. States with the highest capital stock tax rates include Connecticut (0.341 percent), Arkansas and Louisiana (0.3 percent), Massachusetts (0.26 percent), Tennessee (0.25 percent), and Mississippi (0.225 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. Delaware, Idaho, Indiana, Ohio, Alaska, New Mexico, North Dakota, Nevada, New Hampshire, and Pennsylvania score the best because they each only levy one of the seven taxes. Connecticut, Maryland, and Kentucky receive the worst scores because they impose many of these taxes.

Business Tangible Property Tax. This variable rewards states which remove, or substantially remove, business tangible personal property from their tax base. Taxes on tangible personal property, meaning property that can be touched or moved (as opposed to real estate), are a source of tax complexity and nonneutrality, incentivizing firms to change their investment decisions and relocate to avoid the tax. Seven states (Delaware, Hawaii, Illinois, Iowa, New York, Ohio, and Pennsylvania) exempt all tangible personal property from taxation, while another five states (Minnesota, New Hampshire, New Jersey, North Dakota, and South Dakota) exempt most such property from taxation except for select industries that are centrally assessed.

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. Ten states levy this tax in various degrees: Alabama, Iowa, Kansas, Kentucky, Louisiana, Mississippi, North Carolina, South Dakota, Tennessee, and Texas.[34]

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.

Split Roll Taxation. In some states, different classes of property—like residential, commercial, industrial, and agricultural property—face distinct tax burdens, either because they are taxed at different rates or are exposed to different assessment ratios.

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

When such distinctions exist, the state is said to have a split (rather than unified) property tax roll. The *Index* assesses whether states utilize split roll taxation, which tends to discriminate against business property, and what ratio exists between commercial and residential property taxation.

Property Tax Limitation Regimes. Most states limit the degree to which localities can raise property taxes, but these property tax limitation regimes vary dramatically. Broadly speaking, there are three types of property tax limitations. Assessment limits restrict the rate at which a given property's assessed value can increase each year. (It often, but not always, resets upon sale or change of use, and sometimes resets when substantial improvements are made.) Rate limits, as the name implies, either cap the allowable rate or restrict the amount by which the rate can be raised in a given year. Finally, levy limits impose a restriction on the growth of total collections (excluding those from new construction), implementing or necessitating rate reductions if revenues exceed the allowable growth rate. Most limitation regimes permit voter overrides. The *Index* penalizes states for imposing assessment limitations, which distort property taxation, leading to similar properties facing highly disparate effective rates of taxation and influencing decisions about property utilization. It also rewards states for adopting either a rate or levy limit, or both.

Asset Transfer Taxes (Estate, Inheritance, and Gift Taxes). Four 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.[35] The four taxes are real estate transfer taxes, estate taxes, inheritance taxes, and gift taxes. Thirty-five 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.

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

35 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 on the estate tax in general, see David Block and Scott Drenkard, "The Estate Tax: Even Worse Than Republicans Say," Tax Foundation, Sept. 4, 2012.

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.[36]

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.

36 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 (2014–2021)

	Prior Year Ranks						2020		2021		2020-2021 Change	
State	2014	2015	2016	2017	2018	2019	Rank	Score	Rank	Score	Rank	Score
Alabama	13	13	17	18	17	19	18	5.38	19	5.33	-1	-0.05
Alaska	32	33	22	24	40	21	23	5.20	22	5.20	1	0.00
Arizona	6	6	6	12	12	12	12	5.69	11	5.69	1	0.00
Arkansas	19	19	28	23	24	24	24	5.19	25	5.17	-1	-0.02
California	16	16	15	15	15	14	15	5.46	14	5.48	1	0.02
Colorado	21	21	14	31	31	31	31	4.79	32	4.73	-1	-0.05
Connecticut	50	50	50	50	50	50	50	2.26	50	2.34	0	0.09
Delaware	8	8	9	8	8	4	4	6.36	4	6.30	0	-0.06
Florida	18	18	21	14	13	13	13	5.62	13	5.59	0	-0.03
Georgia	30	30	24	25	26	27	29	5.12	24	5.18	5	0.06
Hawaii	7	7	8	7	7	9	10	5.88	9	5.80	1	-0.07
Idaho	3	3	4	2	2	3	3	6.52	3	6.44	0	-0.07
Illinois	42	42	41	47	47	48	48	3.65	48	3.63	0	-0.02
Indiana	5	5	5	3	3	2	2	6.54	2	6.47	0	-0.07
Iowa	31	32	35	39	37	38	38	4.37	38	4.38	0	0.02
Kansas	28	28	19	29	29	30	30	5.01	30	5.02	0	0.01
Kentucky	34	35	37	21	20	22	21	5.26	21	5.20	0	-0.05
Louisiana	23	23	29	26	22	25	25	5.17	23	5.18	2	0.01
Maine	43	43	43	40	39	40	40	4.20	40	4.34	0	0.13
Maryland	45	45	44	41	42	41	41	4.19	43	4.17	-2	-0.02
Massachusetts	46	46	47	45	45	44	44	3.78	44	3.84	0	0.06
Michigan	27	27	27	38	36	36	36	4.48	35	4.57	1	0.08
Minnesota	25	26	23	34	30	32	32	4.72	31	4.77	1	0.05
Mississippi	33	34	36	36	35	37	37	4.47	37	4.47	0	0.00
Missouri	9	9	11	11	10	10	9	5.89	8	5.84	1	-0.05
Montana	10	10	12	27	27	29	26	5.17	28	5.15	-2	-0.02
Nebraska	40	40	40	37	38	39	39	4.28	41	4.31	-2	0.03
Nevada	11	11	10	6	6	5	6	6.15	5	6.17	1	0.02
New Hampshire	41	41	42	44	44	45	45	3.74	47	3.70	-2	-0.04
New Jersey	49	49	49	49	49	46	46	3.69	46	3.75	0	0.05
New Mexico	1	1	1	1	1	1	1	6.56	1	6.53	0	-0.04
New York	44	44	45	46	46	47	47	3.67	45	3.77	2	0.10
North Carolina	29	29	31	28	28	28	28	5.13	26	5.17	2	0.04
North Dakota	2	2	2	4	4	6	7	6.07	12	5.65	-5	-0.42
Ohio	12	12	7	5	5	7	5	6.16	6	6.14	-1	-0.02
Oklahoma	14	14	18	20	21	26	27	5.14	29	5.11	-2	-0.03
Oregon	17	17	13	17	18	16	19	5.38	16	5.40	3	0.02
Pennsylvania	39	39	32	16	16	17	16	5.45	15	5.45	1	0.00
Rhode Island	47	47	46	43	43	42	42	4.03	42	4.19	0	0.16
South Carolina	20	20	26	35	34	35	34	4.57	34	4.60	0	0.02
South Dakota	15	15	20	13	14	15	14	5.50	20	5.26	-6	-0.23
Tennessee	38	38	39	33	33	33	33	4.71	33	4.68	0	-0.03
Texas	36	37	34	32	32	34	35	4.56	36	4.54	-1	-0.03
Utah	4	4	3	9	9	8	8	5.97	7	5.98	1	0.02
Vermont	48	48	48	48	48	49	49	3.23	49	3.30	0	0.07
Virginia	24	25	30	22	23	23	22	5.21	27	5.16	-5	-0.05
Washington	22	22	25	19	19	18	17	5.39	18	5.39	-1	0.00
West Virginia	26	24	16	10	11	11	11	5.73	10	5.73	1	0.00
Wisconsin	37	31	33	30	25	20	20	5.35	17	5.40	3	0.05
Wyoming	35	36	38	42	41	43	43	3.98	39	4.34	4	0.36
District of Columbia	46	46	40	48	47	49	49	3.50	49	3.57	0	0.07

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

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 9.5 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.

Conversely, the states with the worst UI taxes are Massachusetts, Kentucky, Idaho, Nevada, and Virginia. 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, South Carolina, Mississippi, and Louisiana. 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, Alaska, Pennsylvania, 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.

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, Kansas, Missouri, and Nebraska) 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, Nebraska, Nevada, New Jersey, and Oregon) to 14.37 percent (in Massachusetts).

Taxable Wage Base. Arizona, California, Florida, 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 ($52,700).

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 20 states to 1.0 percent in Alaska.

Most Favorable Schedule: Maximum Tax Rate. The lowest maximum rate of 5.4 percent is imposed by 20 states and the District of Columbia. The state with the highest maximum tax rate and, thus, the worst maximum tax score, is Wisconsin (10.7 percent).

Least Favorable Schedule: Minimum Tax Rate. Twelve 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. Ten 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, Maine, and Georgia. 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.[37] 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*: Nine states charge all the benefits to one employer, usually the most recent.

- *Charging Base-Period Employers in Inverse Chronological Order*: Six 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-four states and the District of Columbia 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.

37 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.

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.

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-seven 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. Ten 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. Eighteen 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) and temporary emergency assessment tax (Delaware).

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-six 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 triggers various taxes, the TDIs are included as a negative factor in the calculation of this subindex.

Voluntary Contributions. Twenty-five 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.

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TABLE 8.

State Corporate Income Tax Rates (as of July 1, 2020)

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	0.0945% - 0.7468% (c)
Florida	4.458%	> $0	
Georgia	5.5%	> $0	
Hawaii	4.4%	> $0	
	5.4%	> $25,000	
	6.4%	> $100,000	
Idaho	6.925%	> $0	
Illinois (d)	9.5%	> $0	
Indiana (e)	5.25%	> $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	3.5%	> $0	
	7.93%	> $350,000	
	8.33%	> $1,050,000	
	8.93%	> $3,500,000	
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	4.0%	> $0	
Montana	6.75%	> $0	
Nebraska	5.58%	> $0	
	7.81%	> $100,000	
Nevada (f)	None		0.051% - 0.331% (c)
New Hampshire	7.7%	> $0	
New Jersey (g)	6.5%	> $0	
	7.5%	> $50,000	
	9.0%	> $100,000	
	10.5%	> $1,000,000	

TABLE 8, CONTINUED.

State Corporate Income Tax Rates (as of July 1, 2020)

State	Rates	Brackets	Gross Receipts Tax Rate (a)
New Mexico	4.8%	> $0	
	5.9%	> $500,000	
New York	6.5%	> $0	
North Carolina	2.5%	> $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	0.57%
	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)		0.331% - 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 12). 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: the Delaware Manufacturers & Merchants' License Tax, the Nevada Commerce Tax, the Ohio Commercial Activities Tax, the Oregon Corporate Activity 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, Oregon 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 10.5% for businesses with income above $1 million.

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

TABLE 9.

State Corporate Income Tax and Business Tax Bases: Tax Credits and Gross Receipts Tax Deductions (as of July 1, 2020)

				Gross Receipts Tax Deductions	
	Job Credits	Research and Development Credits	Investment Credits	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	No	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	Yes		
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	No	Yes	Yes		
Ohio	Yes	Yes	Yes	No	No
Oklahoma	Yes	No	Yes		
Oregon	No	Yes	No	No	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 Tax; state statutes.

TABLE 10.

State Corporate Income Tax and Business Tax Bases: Net Operating Losses (as of July 1, 2020)

	Carryback (Years)	Carryback Cap	Carryforward (Years)	Carryforward Cap
Alabama	0	$0	15	Unlimited
Alaska		Conforms to federal treatment		
Arizona	0	$0	20	Unlimited
Arkansas	0	$0	8	Unlimited
California	2	Unlimited	20	Unlimited
Colorado		Conforms to federal treatment		
Connecticut	0	$0	20	Unlimited
Delaware		Conforms to federal treatment		
Florida		Conforms to federal treatment		
Georgia		Conforms to federal treatment		
Hawaii		Conforms to federal treatment		
Idaho	2	$100,000	20	Unlimited
Illinois	0	$0	12	Unlimited
Indiana	0	$0	20	Unlimited
Iowa	0	$0	20	Unlimited
Kansas	5	$0	10	Unlimited
Kentucky		Conforms to federal treatment		
Louisiana	0	$0	20	Unlimited
Maine		Conforms to federal treatment		
Maryland		Conforms to federal treatment		
Massachusetts	0	$0	20	Unlimited
Michigan	0	$0	10	Unlimited
Minnesota	0	$0	15	Unlimited
Mississippi	2	Unlimited	20	Unlimited
Missouri		Conforms to federal treatment		
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	n.a.	n.a.	n.a.	n.a.
Oklahoma		Conforms to federal treatment		
Oregon	0	$0	15	Unlimited
Pennsylvania	0	$0	20	35% of Liability (a)
Rhode Island	0	$0	5	Unlimited
South Carolina		Conforms to federal treatment		
South Dakota		Conforms to federal treatment		
Tennessee	0	$0	15	Unlimited
Texas	n.a.	n.a.	n.a.	n.a.
Utah		Conforms to federal treatment		
Vermont	0	$0	10	Unlimited
Virginia		Conforms to federal treatment		
Washington	n.a.	n.a.	n.a.	n.a.
West Virginia		Conforms to federal treatment		
Wisconsin	0	$0	20	Unlimited
Wyoming	n.a.	n.a.	n.a.	n.a.
District of Columbia		Conforms to federal treatment		

(a) Pennsylvania allows unlimited carryforwards but caps claims at 35 percent of tax liability in any given year.
Source: Tax Foundation; Bloomberg Tax; state statutes.

TABLE 11.

State Corporate Income Tax and Business Tax Bases: Treatment of Capital Investment (as of July 1, 2020)

	Section 168(k) Expensing	Conforms to Section 163(j) Limitation	GILTI Inclusion
Alabama	100%	Yes	Mostly Excluded
Alaska	100%	Yes	Decouples/95% exclusion
Arizona	0%	Yes	Decouples/95% exclusion
Arkansas	0%	No	Decouples/95% exclusion
California	0%	No	Decouples/95% exclusion
Colorado	100%	Yes	Mostly Excluded
Connecticut	0%	No	Decouples/95% exclusion
Delaware	100%	Yes	Mostly Excluded
Florida	0%	Yes	Decouples/95% exclusion
Georgia	0%	No	Decouples/95% exclusion
Hawaii	0%	Yes	Decouples/95% exclusion
Idaho	0%	Yes	Mostly Excluded
Illinois	100%	Yes	Decouples/95% exclusion
Indiana	0%	No	Decouples/95% exclusion
Iowa	0%	Yes	Decouples/95% exclusion
Kansas	100%	Yes	Mostly Excluded
Kentucky	0%	Yes	Decouples/95% exclusion
Louisiana	100%	Yes	Decouples/95% exclusion
Maine	0%	Yes	Taxes 50% or more of GILTI
Maryland	0%	Yes	Taxes 50% or more of GILTI
Massachusetts	0%	Yes	Decouples/95% exclusion
Michigan	0%	Yes	Decouples/95% exclusion
Minnesota	20%	Yes	Decouples/95% exclusion
Mississippi	0%	No	Decouples/95% exclusion
Missouri	100%	Yes	Decouples/95% exclusion
Montana	100%	Yes	Mostly Excluded
Nebraska	100%	Yes	Mostly Excluded
Nevada	0%	No	Decouples/95% exclusion
New Hampshire	0%	No	Decouples/95% exclusion
New Jersey	0%	Yes	Taxes 50% or more of GILTI
New Mexico	100%	Yes	Decouples/95% exclusion
New York	0%	Yes	Decouples/95% exclusion
North Carolina	15%	Yes	Decouples/95% exclusion
North Dakota	100%	Yes	Mostly Excluded
Ohio	0%	No	Decouples/95% exclusion
Oklahoma	100%	Yes	Decouples/95% exclusion
Oregon	100%	Yes	Mostly Excluded
Pennsylvania	0%	Yes	Decouples/95% exclusion
Rhode Island	0%	Yes	Mostly Excluded
South Carolina	0%	No	Decouples/95% exclusion
South Dakota	100%	No	Decouples/95% exclusion
Tennessee	0%	Yes	Decouples/95% exclusion
Texas	0%	No	Decouples/95% exclusion
Utah	100%	Yes	Taxes 50% or more of GILTI
Vermont	0%	Yes	Taxes 50% or more of GILTI
Virginia	0%	Yes	Decouples/95% exclusion
Washington	0%	No	Decouples/95% exclusion
West Virginia	100%	Yes	Mostly Excluded
Wisconsin	0%	No	Decouples/95% exclusion
Wyoming	100%	No	Decouples/95% exclusion
District of Columbia	0%	No	Mostly Excluded

"Mostly Excluded" means GILTI may apply or that the deduction is less than 95%.
Source: Tax Foundation; Bloomberg Tax; state statutes.

TABLE 12.

State Corporate Income Tax and Business Tax Bases: Other Variables (as of July 1, 2020)

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

Source: Tax Foundation; Bloomberg Tax; state statutes.

TABLE 13.

State Individual Income Tax Rates (as of July 1, 2020)

State	Rates	Brackets (a)	Standard Deduction	Personal Exemption		Average Local Income Tax Rates (c)
			Single	Per Filer (b)	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	$12,400 (j)	n.a.	n.a.	None
	3.34% >	$26,500				
	4.17% >	$53,000				
	4.50% >	$159,000				
Arkansas (e, f)	2.0% >	$4,500	$2,200	$26 (g)	$26 (g)	None
	4.0% >	$8,900				
	5.9% >	$13,400				
	6.6% >	$79,300				
California (e)	1.0% >	$0	$4,537	$122 (g)	$378 (g)	None
	2.0% >	$8,544				
	4.0% >	$20,255				
	6.0% >	$31,969				
	8.0% >	$44,377				
	9.3% >	$56,085				
	10.3% >	$286,492				
	11.3% >	$343,788				
	12.3% >	$572,980				
	13.3% >	$1,000,000				
Colorado	4.63% of federal income		n.a.	n.a.	n.a.	None
Connecticut (f)	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				
	6.99% >	$500,000				
Delaware	2.20% >	$2,000	$3,250	$110 (g)	$110 (g)	0.625%
	3.90% >	$5,000				
	4.80% >	$10,000				
	5.20% >	$20,000				
	5.55% >	$25,000				
	6.60% >	$60,000				
Florida	No Income Tax					None
Georgia	1.0% >	$0	$4,600	$2,700	$3,000	None
	2.0% >	$750				
	3.0% >	$2,250				
	4.0% >	$3,750				
	5.0% >	$5,250				
	5.50% >	$7,000				
Hawaii	1.40% >	$0	$2,200	$1,144 (d)	$1,144	None
	3.20% >	$2,400				
	5.50% >	$4,800				
	6.40% >	$9,600				
	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				
Idaho (e)	1.125% >	$0	$12,400 (j)	n.a.	n.a.	None
	3.125% >	$1,541.00				
	3.625% >	$3,081.00				
	4.625% >	$4,622.00				
	5.625% >	$6,162.00				
	6.625% >	$7,703.00				
	6.925% >	$11,760.00				
Illinois (h)	4.95% of federal adjusted gross income with modification		$0	$2,275	$2,275	None

TABLE 13, CONTINUED.

State Individual Income Tax Rates (as of July 1, 2020)

State	Rates	Brackets (a)	Standard Deduction	Personal Exemption		Average Local Income Tax Rates (c)
			Single	Per Filer (b)	Per Dependent	
Indiana	3.23% of federal adjusted gross income with modification		$0	$1,000	$1,500	1.75%
Iowa (e)	0.33%	> $0	$2,080	$40 (g)	$40 (g)	0.213%
	0.67%	> $1,638				
	2.25%	> $3,276				
	4.14%	> $6,552				
	5.63%	> $14,742				
	5.96%	> $24,570				
	6.25%	> $32,760				
	7.44%	> $49,140				
	8.53%	> $73,710				
Kansas	3.10%	> $2,500	$3,000	$2,250	$2,250	None
	5.25%	> $15,000				
	5.70%	> $30,000				
Kentucky	5.0%	> $0	$2,650	n.a.	n.a.	2.075%
Louisiana	2.0%	> $0	n.a.	$4,500 (i)	$1,000	None
	4.0%	> $12,500				
	6.0%	> $50,000				
Maine (e)	5.80%	> $0	$12,400	$4,200	$300 (g)	None
	6.75%	> $22,200				
	7.15%	> $52,600				
Maryland	2.0%	> $0	$2,250	$3,200 (d)	$3,200	3.01%
	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	5.05%	> $0	n.a.	$4,400	$1,000	None
Michigan	4.25% of federal adjusted gross income with modification		$0	$4,750	$4,400	1.70%
Minnesota (e)	5.35%	> $0	$12,400 (j)	n.a.	$4,300	None
	7.05%	> $26,520				
	7.85%	> $87,110				
	9.85%	> $161,400				
Mississippi	3.0%	> $0	$2,300	$6,000	$1,500	None
	4.0%	> $5,000				
	5.0%	> $10,000				
Missouri	1.5%	> $103	$12,400 (j)	n.a.	n.a.	0.50%
	2.0%	> $1,053				
	2.5%	> $2,106				
	3.0%	> $3,159				
	3.5%	> $4,212				
	4.0%	> $5,265				
	4.5%	> $6,318				
	5.0%	> $7,371				
	5.4%	> $8,424				
Montana (e)	1.0%	> $0	$4,710	$2,510	$2,510	None
	2.0%	> $3,100				
	3.0%	> $5,400				
	4.0%	> $8,200				
	5.0%	> $11,100				
	6.0%	> $14,300				
	6.9%	> $18,400				
Nebraska (f)	2.46%	> $0	$6,900	$137 (d, g)	$137 (d, g)	None
	3.51%	> $3,290				
	5.01%	> $19,700				
	6.84%	> $31,750				
Nevada (k)	No Income Tax					None
New Hampshire (l)	5%	> $0	n.a.	$2,400	$0	None

TABLE 13, CONTINUED.

State Individual Income Tax Rates (as of July 1, 2020)

State	Rates	Brackets (a)	Standard Deduction	Personal Exemption		Average Local Income Tax Rates (c)
			Single	Per Filer (b)	Per Dependent	
New Jersey	1.400% >	$0	$0	$1,000	$1,500	0.50%
	1.750% >	$20,000				
	3.500% >	$35,000				
	5.525% >	$40,000				
	6.370% >	$75,000				
	8.970% >	$500,000				
	10.750% >	$5,000,000				
New Mexico	1.7% >	$0	$12,400 (j)	n.a.	n.a.	None
	3.2% >	$5,500				
	4.7% >	$11,000				
	4.9% >	$16,000				
New York (e, f)	4.00% >	$0	$8,000	$0	$1,000	1.938%
	4.50% >	$8,500				
	5.25% >	$11,700				
	5.90% >	$13,900				
	6.21% >	$21,400				
	6.49% >	$80,650				
	6.85% >	$215,400				
	8.82% >	$1,077,550				
North Carolina	5.25% >	$0	$10,750	$0	$0	None
North Dakota (e)	1.10% >	$0	$12,400 (j)	n.a.	n.a.	None
	2.04% >	$39,450				
	2.27% >	$95,500				
	2.64% >	$199,250				
	2.90% >	$433,200				
Ohio (e)	1.980% >	$10,850	$0	$2,350	$2,350	2.50%
	2.746% >	$16,300				
	2.969% >	$21,750				
	3.465% >	$43,450				
	3.960% >	$86,900				
	4.597% >	$108,700				
	4.797% >	$217,400				
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, k)	5.0% >	$0	$2,270	$206 (g)	$206 (g)	0.382%
	7.0% >	$3,550				
	9.0% >	$8,900				
	9.90% >	$125,000				
Pennsylvania	3.07% >	$0	n.a.	n.a.	n.a.	2.69%
Rhode Island (e)	3.75% >	$0	$8,900	$4,150	$4,150	None
	4.75% >	$65,250				
	5.99% >	$148,350				
South Carolina (e)	0.0% >	$0	$12,400 (j)	n.a.	n.a.	None
	3.0% >	$3,070				
	4.0% >	$6,150				
	5.0% >	$9,230				
	6.0% >	$12,310				
	7.0% >	$15,400				
South Dakota	No Income Tax					None
Tennessee (l)	2% >	$0	$0	$1,250	$0	None
Texas	No Income Tax					None
Utah	4.95% >	$0	(m)	(m)	(m)	None
Vermont (e)	3.35% >	$0	$6,150	$4,250	$4,250	None
	6.60% >	$39,600				
	7.60% >	$96,000				
	8.75% >	$200,200				
Virginia	2.0% >	$0	$4,500	$930	$930	None
	3.0% >	$3,000				
	5.0% >	$5,000				
	5.75% >	$17,000				

TABLE 13, CONTINUED.

State Individual Income Tax Rates (as of July 1, 2020)

State	Rates	Brackets (a)	Standard Deduction	Personal Exemption		Average Local Income Tax Rates (c)
			Single	Per Filer (b)	Per Dependent	
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	$11,050 (d)	$700	$700	None
	5.84% >	$11,760				
	6.27% >	$23,520				
	7.65% >	$258,950				
Wyoming	No Income Tax					None
District of Columbia	4.0% >	$0	12400 (j)	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) Married joint filers generally receive double the single exemption.
(c) 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.
(d) Subject to phaseout for higher-income taxpayers.
(e) Bracket levels are adjusted for inflation each year.
(f) 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.
(g) Tax credit.
(h) Illinois imposes an additional 1.5% tax on pass-through businesses, bringing the combined rate to 6.45%.
(i) The standard deduction and personal exemptions are combined: $4,500 for single and married filing separately; $9,000 married filing jointly.
(j) 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.
(k) 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.
(l) Tax applies to interest and dividend income only.
(m) 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-forths of the taxpayer's federal exemptions. This credit is phased out for higher income taxpayers.

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

TABLE 14.

State Individual Income Tax Bases: Marriage Penalty, Capital Income, and Indexation (as of July 1, 2020)

		Capital Income Taxed			Indexed for Inflation		
	Marriage Penalty	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	Yes
Arkansas	Yes	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	Yes	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	Yes	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	Yes	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	Yes	Yes	Yes	Yes	No	No	No
Missouri	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Montana	Yes	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	No	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	No	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	No
Texas	n.a.	n.a.	n.a.	n.a.	Yes	Yes	Yes
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	Yes	Yes	Yes	Yes	No	Yes	No
Wisconsin	Yes	Yes	Yes	Yes	Yes	Yes	No
Wyoming	n.a.	n.a.	n.a.	n.a.	Yes	Yes	Yes
District of Columbia	Yes	Yes	Yes	Yes	No	Yes	Yes

Source: Tax Foundation; Bloomberg Tax; state statutes.

TABLE 15.

State Individual Income Tax Bases: Other Variables (as of July 1, 2020)

	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	Yes	Yes	No	Yes	Yes	$1,000,000
Arizona	Yes	Yes	No	Yes	Yes	$1,000,000
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	$1,000,000
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	$1,000,000
Kansas	Yes	Yes	No	Yes	Yes	$1,000,000
Kentucky	Yes	Yes	No	Yes	Yes	$100,000
Louisiana	Yes	Yes	No	Yes	No	$1,000,000
Maine	Yes	Yes	No	Yes	Yes	$1,000,000
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	No	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 Tax; state statutes.

TABLE 16.

State Sales and Excise Tax Rates (as of July 1, 2020)

	Sales Taxes		Excise Taxes				
	State Sales Tax Rate	Average Local Rate	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%	5.22%	27.21	28.15	$0.68	$1.05 (f)	$18.27 (h)
Alaska	n.a.	1.76%	13.77	13.69	$2.00	$1.07	$12.80
Arizona	5.60%	2.80%	19.00	27.00	$2.00	$0.16	$3.00
Arkansas	6.50%	3.03%	24.80	22.80	$1.15	$0.34	$7.73
California (a)	7.25%	1.43%	62.47	81.28	$2.87	$0.20	$3.30
Colorado	2.90%	4.75%	22.00	20.50	$0.84	$0.08	$2.28
Connecticut	6.35%	n.a.	35.75	44.60	$4.35	$0.23	$5.40
Delaware	n.a.	n.a.	23.00	22.00	$2.10	$0.26	$4.50
Florida	6.00%	1.05%	42.29	35.27	$1.34	$0.48	$6.50
Georgia	4.00%	3.31%	32.20	37.54	$0.37	$1.01 (f)	$3.79
Hawaii (b)	4.00%	0.44%	46.28	49.25	$3.20	$0.93	$5.98
Idaho	6.00%	0.03%	33.00	33.00	$0.57	$0.15	$10.95 (h)
Illinois	6.25%	2.55%	52.01	58.44	$2.98	$0.23	$8.55
Indiana	7.00%	n.a.	47.62	52.00	$1.00	$0.12	$2.68
Iowa	6.00%	0.94%	30.50	32.50	$1.36	$0.19	$13.07 (h)
Kansas	6.50%	2.18%	24.03	26.03	$1.29	$0.18	$2.50
Kentucky	6.00%	n.a.	26.00	23.00	$1.10	$0.87	$8.04
Louisiana	4.45%	5.07%	20.01	20.01	$1.08	$0.40	$3.03
Maine	5.50%	n.a.	30.01	31.21	$2.00	$0.35	$5.83 (h)
Maryland	6.00%	n.a.	36.30	37.05	$2.00	$0.54	$5.02
Massachusetts	6.25%	n.a.	26.54	26.54	$3.51	$0.11	$4.05
Michigan	6.00%	n.a.	41.98	43.18	$2.00	$0.20	$11.99 (h)
Minnesota	6.88%	0.58%	28.54	28.60	$3.04	$0.49	$8.96
Mississippi	7.00%	0.07%	18.79	18.40	$0.68	$0.43	$8.15
Missouri	4.225%	3.98%	17.42	17.42	$0.17	$0.06	$2.00
Montana (c)	n.a.	n.a.	32.75	30.20	$1.70	$0.14	$9.78
Nebraska	5.50%	1.43%	34.10	33.50	$0.64	$0.31	$3.75
Nevada	6.85%	1.38%	33.78	28.56	$1.80	$0.16	$3.60
New Hampshire	n.a.	n.a.	23.83	23.83	$1.78	$0.30	$0.00 (h)
New Jersey (d)	6.625%	-0.03%	41.40	48.50	$2.70	$0.12	$5.50
New Mexico (b)	5.125%	2.70%	18.88	22.88	$2.00	$0.41	$6.06
New York	4.00%	4.52%	43.12	43.43	$4.35	$0.14	$6.44
North Carolina	4.75%	2.23%	36.35	36.35	$0.45	$0.62	$14.63 (h)
North Dakota (b)	5.00%	1.94%	23.00	23.00	$0.44	$0.42	$4.92
Ohio	5.75%	1.42%	35.51	47.01	$1.60	$0.18	$9.87 (h)
Oklahoma	4.50%	4.45%	20.00	20.00	$2.03	$0.40	$5.56
Oregon	n.a.	n.a.	38.83	38.06	$1.33	$0.08	$21.98 (h)
Pennsylvania	6.00%	0.34%	58.70	75.20	$2.60	$0.08	$7.24 (h)
Rhode Island	7.00%	n.a.	35.00	35.00	$4.25	$0.12	$5.40
South Carolina	6.00%	1.46%	20.75	24.75	$0.57	$0.77	$5.42
South Dakota (b)	4.50%	1.90%	30.00	30.00	$1.53	$0.27	$4.67
Tennessee	7.00%	2.55%	27.40	28.40	$0.62	$1.29	$4.46
Texas	6.25%	1.94%	20.00	20.00	$1.41	$0.20	$2.40
Utah (a)	6.10%	1.08%	31.11	31.01	$1.70	$0.41	$15.38 (h)
Vermont	6.00%	0.22%	30.17	32.00	$3.08	$0.27	$7.72 (h)
Virginia (a)	5.30%	0.35%	29.40	24.50	$0.60	$0.26	$19.93 (h)
Washington	6.50%	2.73%	49.40	49.40	$3.03	$0.26	$32.52
West Virginia	6.00%	0.50%	35.70	35.70	$1.20	$0.18	$7.67 (h)
Wisconsin	5.00%	0.43%	32.90	32.90	$2.52	$0.06	$3.25
Wyoming	4.00%	1.34%	24.00	24.00	$0.60	$0.02	$0.00 (h)
District of Columbia	6.00%	n.a.	23.50	23.50	$4.50	$0.71	$6.19

(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 U.S. has computed approximate excise tax rates for control states by comparing prices of typical products sold in their state-run stores to the pre-tax prices of liquor in states where liquor is privately sold. In New Hampshire, average liquor prices charged in state-run stores are lower than pre-tax prices in license states. Washington privatized its liquor sales but enacted tax increases as a part of the package.

Source: Tax Foundation; Bloomberg Tax; American Petroleum Institute; Distilled Spirits Council of the United States; state revenue departments.

TABLE 17.

State Sales Tax Bases: Exemptions for Business-to-Business Transactions (as of July 1, 2020)

	Specific Exemption	Farm Equipment	Office Equipment	Manufacturing Machinery	Manufacturing Raw Materials	Busines Fuel & Utilities	Business Lease & Rentals	Information Services
Alabama	No	Taxable	Taxable	Taxable	Exempt	Exempt	Taxable	Taxable
Alaska	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
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	Exempt	Exempt
Indiana	No	Exempt	Taxable	Exempt	Exempt	Exempt	Taxable	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	Taxable	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 state sales tax (AK, DE, MT, NH, and OR) are listed as "not applicable" (n.a.) within Table 17, although Alaska has a local option sales tax.
Source: Tax Foundation; Bloomberg Tax; state statutes.

TABLE 18.

State Sales Tax Bases: Consumer Goods and Services (as of July 1, 2020)

	Goods					Services		
	Groceries	Clothing	Prescription Medication	Non-Prescription Medication	Gasoline	Legal	Financial	Accounting
Alabama	Taxable	Taxable	Exempt	Taxable	Exempt	Exempt	Exempt	Exempt
Alaska	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
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	Taxable	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	Taxable	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 state sales tax (AK, DE, MT, NH, and OR) are listed as "not applicable" (n.a.) within Table 18, although Alaska has a local option sales tax. New York only imposes local sales taxes on gasoline.
Source: Tax Foundation; state statutes.

TABLE 18, CONTINUED.

State Sales Tax Bases: Consumer Goods and Services (as of July 1, 2020)

	Services								
	Medical	Landscaping	Repair	Real Estate Services	Parking	Dry Cleaning	Fitness	Barber	Veterinary
Alabama	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
Alaska	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
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	Taxable	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	Taxable	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	Taxable	Taxable	Taxable	Taxable	Taxable	Taxable
Tennessee	Exempt	Exempt	Taxable	Exempt	Taxable	Taxable	Exempt	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 state sales tax (AK, DE, MT, NH, and OR) are listed as "not applicable" (n.a.) within Table 18, although Alaska has a local option sales tax. New York only imposes local sales taxes on gasoline.
Source: Tax Foundation; state statutes.

TABLE 19.

Sales Tax Structure (as of July 1, 2020)

	Uniform Base Definitions	Unified Tax Administration	Safe Harbor for Remote Sellers
Alabama	Yes	No	Gross Sales Threshold
Alaska	No	No	n.a.
Arizona	No	Yes	Gross Sales Threshold
Arkansas	Yes	Yes	Sales or Transactions Threshold
California	Yes	Yes	Gross Sales Threshold
Colorado	No	No	Gross Sales Threshold
Connecticut	Yes	Yes	Gross Sales Threshold
Delaware	n.a.	n.a.	n.a.
Florida	Yes	Yes	n.a.
Georgia	Yes	Yes	Gross Sales Threshold
Hawaii	Yes	Yes	Sales or Transactions Threshold
Idaho	No	Yes	Gross Sales Threshold
Illinois	Yes	Yes	Sales or Transactions Threshold
Indiana	Yes	Yes	Sales or Transactions Threshold
Iowa	Yes	Yes	Gross Sales Threshold
Kansas	Yes	Yes	No Safe Harbor
Kentucky	Yes	Yes	Sales or Transactions Threshold
Louisiana	No	No	Sales or Transactions Threshold
Maine	Yes	Yes	Sales or Transactions Threshold
Maryland	Yes	Yes	Sales or Transactions Threshold
Massachusetts	Yes	Yes	Gross Sales Threshold
Michigan	Yes	Yes	Sales or Transactions Threshold
Minnesota	Yes	Yes	Sales or Transactions Threshold
Mississippi	Yes	Yes	Gross Sales Threshold
Missouri	Yes	Yes	n.a.
Montana	n.a.	n.a.	n.a.
Nebraska	Yes	Yes	Sales or Transactions Threshold
Nevada	Yes	Yes	Sales or Transactions Threshold
New Hampshire	n.a.	n.a.	n.a.
New Jersey	Yes	Yes	Sales or Transactions Threshold
New Mexico	Yes	Yes	Gross Sales Threshold
New York	Yes	Yes	Gross Sales Threshold
North Carolina	Yes	Yes	Sales or Transactions Threshold
North Dakota	Yes	Yes	Gross Sales Threshold
Ohio	Yes	Yes	Sales or Transactions Threshold
Oklahoma	Yes	Yes	Low Gross Sales Threshold
Oregon	Yes	n.a.	n.a.
Pennsylvania	Yes	Yes	Gross Sales Threshold
Rhode Island	Yes	Yes	Sales or Transactions Threshold
South Carolina	Yes	Yes	Gross Sales Threshold
South Dakota	Yes	Yes	Sales or Transactions Threshold
Tennessee	Yes	Yes	Gross Sales Threshold
Texas	Yes	Yes	Gross Sales Threshold
Utah	Yes	Yes	Sales or Transactions Threshold
Vermont	Yes	Yes	Sales or Transactions Threshold
Virginia	Yes	Yes	Sales or Transactions Threshold
Washington	Yes	Yes	Gross Sales Threshold
West Virginia	Yes	Yes	Sales or Transactions Threshold
Wisconsin	Yes	Yes	Sales or Transactions Threshold
Wyoming	Yes	Yes	Sales or Transactions Threshold
District of Columbia	Yes	Yes	Sales or Transactions Threshold

Note: States which do not require remote sales tax collection are listed as "not applicable" (n.a.) within Table 19.
Source: Tax Foundation; state statutes.

TABLE 20.

State Property Tax Rates and Capital Stock Tax Rates (as of July 1, 2020)

	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	$582	1.44%	0.175%	$15,000	Pay both
Alaska	$2,120	3.73%	None	n.a.	n.a.
Arizona	$1,100	2.59%	None	n.a.	n.a.
Arkansas	$742	1.79%	0.3%	Unlimited	Pay both
California	$1,608	2.67%	None	n.a.	n.a.
Colorado	$1,545	2.79%	None	n.a.	n.a.
Connecticut	$3,020	4.18%	0.341%	$1,000,000	Pay highest
Delaware	$923	1.83%	0.04%	$250,000	Pay both
Florida	$1,331	2.78%	None	n.a.	n.a.
Georgia	$1,161	2.61%	(a)	$5,000	Pay both
Hawaii	$1,235	2.32%	None	n.a.	n.a.
Idaho	$1,018	2.42%	None	n.a.	n.a.
Illinois	$2,240	4.15%	0.1%	$2,000,000	Pay both
Indiana	$1,042	2.30%	None	n.a.	n.a.
Iowa	$1,634	3.44%	None	n.a.	n.a.
Kansas	$1,541	3.15%	None	n.a.	n.a.
Kentucky	$831	2.03%	None	n.a.	n.a.
Louisiana	$902	2.05%	0.3%	Unlimited	Pay both
Maine	$2,139	4.59%	None	n.a.	n.a.
Maryland	$1,623	2.68%	None	n.a.	n.a.
Massachusetts	$2,437	3.57%	0.26%	Unlimited	Pay highest
Michigan	$1,411	3.05%	None	n.a.	n.a.
Minnesota	$1,599	2.91%	None	n.a.	n.a.
Mississippi	$1,017	2.79%	0.225%	Unlimited	Pay both
Missouri	$1,040	2.27%	None	n.a.	n.a.
Montana	$1,588	3.50%	None	n.a.	n.a.
Nebraska	$1,959	3.86%	(a)	$11,995	Pay both
Nevada	$1,013	2.16%	None	n.a.	n.a.
New Hampshire	$3,310	5.66%	None	n.a.	n.a.
New Jersey	$3,277	5.05%	None	n.a.	n.a.
New Mexico	$792	2.00%	None	n.a.	n.a.
New York	$2,902	4.42%	0.05%	$5,000,000	Pay highest
North Carolina	$974	2.20%	0.15%	Unlimited	Pay both
North Dakota	$1,655	3.14%	None	n.a.	n.a.
Ohio	$1,316	2.82%	None	n.a.	n.a.
Oklahoma	$731	1.67%	0.125%	$20,000	Pay both
Oregon	$1,488	3.07%	None	n.a.	n.a.
Pennsylvania	$1,528	2.88%	None	n.a.	n.a.
Rhode Island	$2,409	4.60%	None	n.a.	n.a.
South Carolina	$1,201	2.85%	0.1%	Unlimited	Pay both
South Dakota	$1,621	3.27%	None	n.a.	n.a.
Tennessee	$877	1.95%	0.25%	Unlimited	Pay both
Texas	$1,874	3.91%	None	n.a.	n.a.
Utah	$1,038	2.36%	None	n.a.	n.a.
Vermont	$2,671	5.14%	None	n.a.	n.a.
Virginia	$1,653	2.99%	None	n.a.	n.a.
Washington	$1,498	2.56%	None	n.a.	n.a.
West Virginia	$948	2.45%	None	n.a.	n.a.
Wisconsin	$1,656	3.36%	None	n.a.	n.a.
Wyoming	$2,188	3.88%	0.02%	Unlimited	Pay both
District of Columbia	$3,500	4.43%	None	n.a.	n.a.

(a) Based on a fixed dollar payment schedule. Effective tax rates decrease as taxable capital increases.
Note: States without a capital stock tax are listed as "not applicable" (n.a.) within Table 20.
Source: Tax Foundation calculations from U.S. Census Bureau data; Bloomberg Tax; state statutes.

TABLE 21.

State Property Tax Bases (as of July 1, 2020)

	Tangible Personal Property Tax	Intangible Property Tax	Inventory Tax	Real Estate Transfer Tax	Split Roll Ratio	Estate Tax	Inheritance Tax	Gift Tax
Alabama	Yes	Yes	No	Yes	2.00	No	No	No
Alaska	Yes	No	Partial	No	No Split Roll	No	No	No
Arizona	Yes	No	No	No	1.80	No	No	No
Arkansas	Yes	No	Yes	Yes	No Split Roll	No	No	No
California	Yes	No	No	Yes	No Split Roll	No	No	No
Colorado	Yes	No	No	Yes	4.03	No	No	No
Connecticut	Yes	No	No	Yes	2.17	Yes	No	Yes
Delaware	No	No	No	Yes	No Split Roll	No	No	No
Florida	Yes	No	No	Yes	No Split Roll	No	No	No
Georgia	Yes	No	Partial	Yes	No Split Roll	No	No	No
Hawaii	No	No	No	Yes	No Split Roll	Yes	No	No
Idaho	Yes	No	No	No	No Split Roll	No	No	No
Illinois	No	No	No	Yes	2.00	Yes	No	No
Indiana	Yes	No	No	No	No Split Roll	No	No	No
Iowa	No	Yes	No	Yes	1.62	No	Yes	No
Kansas	Yes	Yes	No	No	2.17	No	No	No
Kentucky	Yes	Yes	Yes	Yes	No Split Roll	No	Yes	No
Louisiana	Yes	Yes	Yes	No	No Split Roll	No	No	No
Maine	Yes	No	No	Yes	No Split Roll	Yes	No	No
Maryland	Yes	No	Yes	Yes	No Split Roll	Yes	Yes	No
Massachusetts	Yes	No	Partial	Yes	No Split Roll	Yes	No	No
Michigan	Yes	No	Partial	Yes	3.75	No	No	No
Minnesota	Partial	No	No	Yes	3.17	Yes	No	No
Mississippi	Yes	Yes	Yes	No	1.50	No	No	No
Missouri	Yes	No	No	No	1.75	No	No	No
Montana	Yes	No	No	No	1.40	No	No	No
Nebraska	Yes	No	No	Yes	No Split Roll	No	Yes	No
Nevada	Yes	No	No	Yes	No Split Roll	No	No	No
New Hampshire	Partial	No	No	Yes	No Split Roll	No	No	No
New Jersey	Partial	No	No	Yes	No Split Roll	No	Yes	No
New Mexico	Yes	No	No	No	No Split Roll	No	No	No
New York	No	No	No	Yes	No Split Roll	Yes	No	No
North Carolina	Yes	Yes	No	Yes	No Split Roll	No	No	No
North Dakota	Partial	No	No	No	1.11	No	No	No
Ohio	No	No	No	Yes	No Split Roll	No	No	No
Oklahoma	Yes	No	Yes	Yes	1.11	No	No	No
Oregon	Yes	No	No	No	No Split Roll	Yes	No	No
Pennsylvania	No	No	No	Yes	No Split Roll	No	Yes	No
Rhode Island	Yes	No	No	Yes	No Split Roll	Yes	No	No
South Carolina	Yes	No	No	Yes	1.50	No	No	No
South Dakota	Partial	Yes	No	Yes	No Split Roll	No	No	No
Tennessee	Yes	Yes	No	Yes	1.20	No	No	No
Texas	Yes	Yes	Yes	No	No Split Roll	No	No	No
Utah	Yes	No	No	No	1.82	No	No	No
Vermont	Yes	No	Partial	Yes	No Split Roll	Yes	No	No
Virginia	Yes	No	Yes	Yes	No Split Roll	No	No	No
Washington	Yes	No	No	Yes	No Split Roll	Yes	No	No
West Virginia	Yes	No	Yes	Yes	No Split Roll	No	No	No
Wisconsin	Yes	No	No	Yes	No Split Roll	No	No	No
Wyoming	Yes	No	No	No	1.21	No	No	No
District of Columbia	Yes	No	No	Yes	No Split Roll	Yes	No	No

Note: Split roll ratio represents the ratio between commercial and residential property taxes.
Source: Tax Foundation; Bloomberg Tax; state statutes.

TABLE 22.

State Unemployment Insurance Tax Rates (as of July 1, 2020)

State	Minimum Rate	Maximum Rate	Taxable Wage Base	Most Favorable Schedule		Least Favorable Schedule	
				Minimum Rate	Maximum Rate	Minimum Rate	Maximum Rate
Alabama	0.65%	6.80%	$8,000	0.14%	5.40%	0.65%	6.80%
Alaska	1.00%	5.40%	$41,500	1.00%	6.50%	1.00%	6.50%
Arizona	0.04%	12.76%	$7,000	0.02%	5.40%	0.02%	5.40%
Arkansas	0.30%	14.20%	$10,000	0.10%	6.00%	0.10%	6.00%
California	1.50%	6.20%	$7,000	0.10%	5.40%	1.50%	6.20%
Colorado	0.62%	8.15%	$13,600	0.51%	6.28%	0.75%	10.39%
Connecticut	1.90%	6.80%	$15,000	0.50%	5.40%	0.50%	5.40%
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%	7.56%	$9,500	0.01%	5.40%	0.04%	8.10%
Hawaii	0.00%	5.60%	$48,100	0.00%	5.40%	2.40%	6.60%
Idaho	0.26%	5.40%	$41,600	0.18%	5.40%	0.96%	6.80%
Illinois	0.63%	6.83%	$12,740	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%	$31,600	0.00%	7.00%	0.00%	9.00%
Kansas	0.00%	7.10%	$14,000	0.20%	7.60%	0.20%	7.60%
Kentucky	0.30%	9.00%	$10,800	0.00%	9.00%	1.00%	10.00%
Louisiana	0.10%	6.20%	$7,700	0.09%	6.00%	0.09%	6.00%
Maine	0.06%	5.46%	$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	0.94%	14.37%	$15,000	0.56%	8.62%	1.21%	18.55%
Michigan	0.78%	12.77%	$9,000	0.00%	6.30%	0.00%	6.30%
Minnesota	0.10%	9.00%	$35,000	0.10%	9.00%	0.40%	9.30%
Mississippi	0.20%	5.60%	$14,000	0.00%	5.40%	0.20%	5.40%
Missouri	0.00%	9.75%	$11,500	0.00%	5.40%	0.00%	5.40%
Montana	0.13%	6.30%	$34,100	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	0.40%	5.40%	$35,300	0.30%	5.40%	1.30%	7.70%
New Mexico	0.33%	6.40%	$25,800	0.33%	5.40%	0.33%	5.40%
New York	1.30%	9.10%	$11,600	0.00%	5.90%	1.50%	8.90%
North Carolina	0.06%	5.76%	$25,200	0.06%	5.76%	0.06%	5.76%
North Dakota	0.30%	9.69%	$37,900	0.01%	No Schedule	No Schedule	
Ohio	0.30%	9.40%	$9,000	0.00%	6.30%	0.30%	6.70%
Oklahoma	0.10%	5.50%	$18,700	0.01%	5.50%	0.30%	9.20%
Oregon	0.70%	5.40%	$42,100	0.50%	5.40%	2.20%	5.40%
Pennsylvania	2.39%	11.03%	$10,000	0.00%	8.95%	0.00%	8.95%
Rhode Island	0.69%	9.19%	$24,000	0.21%	7.40%	1.20%	10.00%
South Carolina	0.06%	5.46%	$14,000	0.00%	5.40%	0.00%	5.40%
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	0.31%	6.31%	$9,000	0.46%	6.00%	0.46%	6.00%
Utah	0.10%	7.10%	$36,600	0.10%	7.00%	0.10%	10.00%
Vermont	0.80%	6.50%	$16,100	0.40%	5.40%	1.30%	8.40%
Virginia	0.11%	6.21%	$8,000	0.00%	5.40%	1.00%	6.20%
Washington	0.13%	5.72%	$52,700	0.00%	5.40%	No Schedule	
West Virginia	1.50%	8.50%	$12,000	0.00%	7.50%	1.50%	7.50%
Wisconsin	0.05%	12.00%	$14,000	0.00%	10.70%	0.07%	10.70%
Wyoming	0.09%	8.70%	$26,400	0.00%	8.50%	0.00%	8.50%
District of Columbia	1.80%	7.20%	$9,000	0.10%	5.40%	1.90%	7.40%

Source: National Foundation for Unemployment Compensation & Workers' Compensation, *Highlights of State Unemployment Compensation Laws* (2020).

TABLE 23.

State Unemployment Insurance Tax Bases: Experience Formulas and Charging Methods (as of July 1, 2020)

State	Experience Formula Based On	Benefits Are Charged to Employers in Proportion to Base Period Wages	Company Charged for Benefits If					
			Employee's Benefit Award Reversed	Reimbursements on Combined Wage Claims	Employee Left Voluntarily	Employee Discharged for Misconduct	Employee Refused Suitable Work	Employee Continues to Work for Employer Part-Time
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 (a)	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 (b)	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 (b)	No	No	No	No	No	No
Indiana	Reserve Ratio	No (a)	No	No	No	No	Yes	No
Iowa	Benefits Ratio	No (a)	No	No	No	No	No	No
Kansas	Reserve Ratio	Yes	Yes	Yes	No	No	Yes	No
Kentucky	Reserve Ratio	No (b)	No	No	No	No	No	No
Louisiana	Reserve Ratio	Yes	No	No	No	No	No	No
Maine	Reserve Ratio	No (b)	No	Yes	No	No	No	No
Maryland	Benefits Ratio	Yes	No	Yes	No	Yes	Yes	No
Massachusetts	Reserve Ratio	No (a)	No	Yes	Yes	Yes	Yes	No
Michigan	Benefits Ratio	Yes	Yes	No	No	No	No	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 (a)	No	Yes	No	No	Yes	No
Nevada	Reserve Ratio	No (c)	Yes	No	No	No	Yes	Yes
New Hampshire	Reserve Ratio	No (b)	No	No	No	No	No	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	Yes	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 (b)	No	No	No	No	No	No
South Dakota	Reserve Ratio	No (a)	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 (b)	Yes	No	Yes	Yes	Yes	Yes
Washington	Benefits Ratio	Yes	Yes	Yes	No	No	Yes	No
West Virginia	Reserve Ratio	Yes	No	Yes	No	No	Yes	No
Wisconsin	Reserve Ratio	Yes	Yes	No	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.
Note: Alaska uses a payroll decline experience formula, so other features are listed as not applicable (n.a.).
Source: National Foundation for Unemployment Compensation & Workers' Compensation, Highlights of State Unemployment Compensation Laws (2020)

TABLE 24.

State Unemployment Insurance Tax Bases: Other Variables (as of July 1, 2020)

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	No	No	Yes	No	No	2.5
Alaska	Yes	No	No	No	No	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	2.5
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	No	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	No	Yes	No	No	Yes	No	Yes	3
Louisiana	Yes	Yes	Yes	No	No	No	Yes	2
Maine	No	No	Yes	No	Yes	No	No	2
Maryland	No	No	No	No	No	No	No	2
Massachusetts	No	No	No	No	Yes	No	Yes	3
Michigan	Yes	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	No	2
Montana	No	No	No	No	Yes	No	No	3
Nebraska	No	No	No	Yes	No	No	Yes	1
Nevada	No	No	No	No	Yes	No	No	3
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	No	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	No	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	No	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	No	No	No	No	Yes	3
Wisconsin	Yes	No	No	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 & Workers' Compensation, *Highlights of State Unemployment Compensation Laws* (2020); U.S. Department of Labor, *Comparison of State Unemployment Laws* (2020).

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