



January 25, 2012

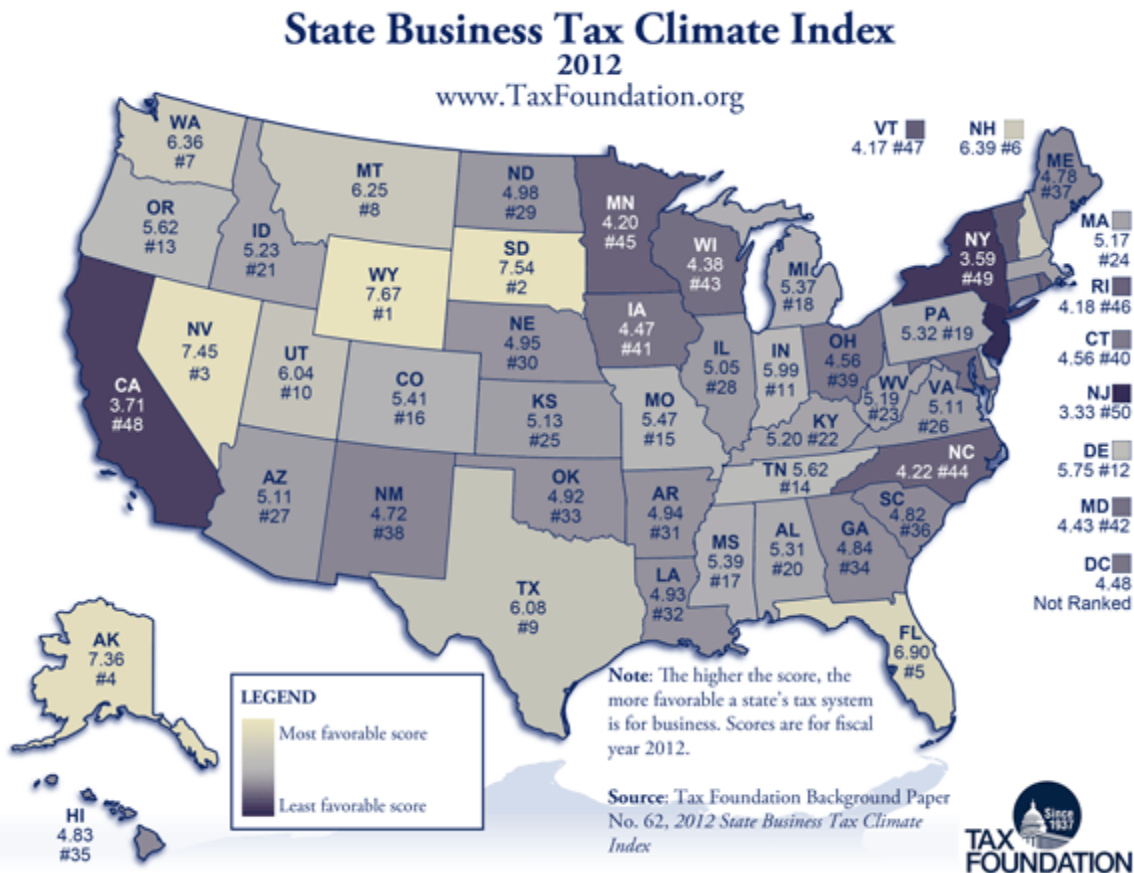
2012 State Business Tax Climate Index

by [Mark Robyn](#)

Tax Foundation Background Paper No. 62

Download a full PDF of the study [here](#), or download Excel tables [here](#).

The Tax Foundation presents the 2012 version of the *State Business Tax Climate Index* to enable business leaders, government policymakers, and taxpayers to gauge how their states' tax systems compare.



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

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

It is obvious that the absence of a major tax is a dominant factor in vaulting many of these 10 states to the top of the rankings. 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 tax, the individual income tax, or the sales tax. Wyoming, Nevada and South Dakota have no corporate or individual income tax; 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 lesson is simple: a state that raises sufficient revenue without one of the major taxes will, all things being equal, have an advantage over those states that levy every tax in the state tax collector's arsenal.

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

41. Iowa
42. Maryland
43. Wisconsin
44. North Carolina
45. Minnesota
46. Rhode Island
47. Vermont
48. California
49. New York
50. New Jersey

New Jersey scores at the bottom by having the third-worst individual income tax, the fifth-worst sales tax, the 13th-worst corporate tax, and the second-worst property tax. Rhode Island has improved from 47th to 46th by implementing a modest individual income tax reform, but still has the worst unemployment tax system and fifth-worst property tax system. Maryland improved from 44th to 42nd this year due mostly to the expiration of the state's "millionaire's tax" on high-income earners. The states in the bottom 10 suffer from the same afflictions: complex, non-neutral taxes with comparatively high rates.

Illinois moved most dramatically in its *Index* rank over the past year, falling twelve places (from 16th place in 2011 to 28th place in 2012).

The 2012 *Index* represents the tax climate of each state as of July 1, 2011, the first day of the standard 2012 state fiscal year.

Table 1.
2012 State Business Tax Climate Index Ranks and Component Tax Ranks

State	Overall Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Unemployment Insurance Tax Rank	Property Tax Rank
Alabama	20	16	18	41	11	6
Alaska	4	27	1	5	28	13
Arizona	27	28	17	50	1	5
Arkansas	31	36	27	38	17	18
California	48	43	50	40	13	17
Colorado	16	20	16	44	23	9
Connecticut	40	25	31	30	32	50
Delaware	12	50	28	2	3	14
Florida	5	12	1	19	5	24
Georgia	34	9	40	12	22	39
Hawaii	35	4	41	31	30	15
Idaho	21	19	26	23	48	2
Illinois	28	45	13	33	43	44
Indiana	11	18	10	11	16	11
Iowa	41	48	32	25	35	36
Kansas	25	35	21	32	6	28
Kentucky	22	26	25	8	47	19
Louisiana	32	17	24	49	4	23
Maine	37	47	30	10	40	38
Maryland	42	14	46	9	45	40
Massachusetts	24	34	15	17	49	47

Source: Tax Foundation. Rankings do not average across to total. States without a given tax rank equally as per 1.

Source: Tax Foundation

State	Overall Rank	Corporate Tax Rank	Individual Income Tax Rank	Sales Tax Rank	Unemployment Insurance Tax Rank	Property Tax Rank
Michigan	18	49	11	7	44	30
Minnesota	45	42	44	36	34	26
Mississippi	17	11	19	28	8	29
Missouri	15	8	23	26	9	7
Montana	8	15	20	3	20	8
Nebraska	30	33	29	27	12	37
Nevada	3	1	1	42	42	16
New Hampshire	6	46	9	1	39	41
New Jersey	50	39	48	46	25	49
New Mexico	38	38	33	45	14	1
New York	49	23	49	37	46	45
North Carolina	44	29	43	47	7	35
North Dakota	29	21	35	15	31	4
Ohio	39	22	42	29	10	33
Oklahoma	33	7	38	39	2	12
Oregon	13	31	34	4	33	10
Pennsylvania	19	44	12	21	37	42
Rhode Island	46	40	36	24	50	46
South Carolina	36	10	39	20	38	21
South Dakota	2	1	1	34	41	20
Tennessee	14	13	8	43	27	48
Texas	9	37	7	35	15	31
Vermont	10	5	14	22	24	3
Washington	47	41	47	14	19	43
West Virginia	26	6	37	6	36	27
West Virginia	23	24	22	18	26	25
Wisconsin	43	32	45	16	21	32
Wyoming	1	1	1	13	29	34

Note: Rankings do not average across to total. States without a given tax rank equally as per 1.

Source: Tax Foundation

Table 2.
State Business Tax Climate Index, 2011-2012

State	FY 2012		FY 2011		Change From 2011 to 2012	
	Score	Rank	Score	Rank	Score	Rank
Alabama	5.31	20	5.35	20	-0.04	0
Alaska	7.36	4	7.44	3	-0.08	-1

Arizona	5.11	27	5.14	27	-0.03	0
Arkansas	4.94	31	4.94	32	0.00	1
California	3.71	48	3.61	48	0.10	0
Colorado	5.41	16	5.50	17	-0.10	1
Connecticut	4.56	40	4.53	40	0.03	0
Delaware	5.75	12	5.76	12	-0.01	0
Florida	6.90	5	6.84	5	0.06	0
Georgia	4.84	34	4.82	34	0.01	0
Hawaii	4.83	35	4.80	35	0.03	0
Idaho	5.23	21	5.21	22	0.02	1
Illinois	5.05	28	5.52	16	-0.47	-12
Indiana	5.99	11	5.99	11	0.00	0
Iowa	4.47	41	4.38	42	0.09	1
Kansas	5.13	25	5.14	26	-0.01	1
Kentucky	5.20	22	5.17	25	0.03	3
Louisiana	4.93	32	4.94	31	-0.01	-1
Maine	4.78	37	4.70	38	0.08	1
Maryland	4.43	42	4.21	44	0.22	2
Massachusetts	5.17	24	5.12	28	0.05	4
Michigan	5.37	18	5.37	19	-0.01	1
Minnesota	4.20	45	4.18	45	0.02	0
Mississippi	5.39	17	5.39	18	0.00	1
Missouri	5.47	15	5.63	14	-0.16	-1
Montana	6.25	8	6.30	7	-0.05	-1
Nebraska	4.95	30	4.99	30	-0.04	0
Nevada	7.45	3	7.42	4	0.03	1
New Hampshire	6.39	6	6.44	6	-0.05	0
New Jersey	3.33	50	3.34	50	-0.01	0
New Mexico	4.72	38	4.76	37	-0.04	-1
New York	3.59	49	3.60	49	-0.02	0
North Carolina	4.22	44	4.08	46	0.14	2
North Dakota	4.98	29	4.87	33	0.11	4
Ohio	4.56	39	4.54	39	0.03	0
Oklahoma	4.92	33	5.01	29	-0.09	-4
Oregon	5.62	13	5.61	15	0.01	2
Pennsylvania	5.32	19	5.33	21	-0.01	2
Rhode Island	4.18	46	3.88	47	0.30	1
South Carolina	4.82	36	4.77	36	0.05	0
South Dakota	7.54	2	7.57	2	-0.03	0
Tennessee	5.62	14	5.65	13	-0.03	-1
Texas	6.08	9	6.12	9	-0.03	0
Utah	6.04	10	6.09	10	-0.04	0
Vermont	4.17	47	4.23	43	-0.06	-4
Virginia	5.11	26	5.20	23	-0.08	-3
Washington	6.36	7	6.20	8	0.16	1
West Virginia	5.19	23	5.17	24	0.02	1
Wisconsin	4.38	43	4.40	41	-0.01	-2
Wyoming	7.67	1	7.63	1	0.04	0
DC	4.48		4.43		0.05	

Note: The higher the score, the more favorable a state's tax system is for business. All scores are for fiscal years.

Source: Tax Foundation

Introduction

While taxes are a fact of life, not all tax systems are created equal. One measure, 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 *Index* reduces many complex considerations to an easy-to-use ranking. (Our *State-Local Tax Burdens* report looks at tax burdens in states.)

The modern market is characterized by mobile capital and labor, with all types of business, 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 in 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, such as raw materials or infrastructure or a skilled labor pool, matter, but a simple, sensible tax system can positively or negatively impact business operations with regard to these very resources. Furthermore, unlike changes to a state's health care, transportation, or education system—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 and most direct 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 an overseas location.¹ Certainly job creation is rapid overseas, as previously underdeveloped nations enter the world economy without facing the second-highest corporate tax rate in the world, as U.S. businesses do. So 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, MI, to Dayton, OH, rather than from Detroit to New Delhi. This means that state lawmakers must be aware of how their states' business climates match up to their immediate neighbors and to other states within their regions.

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 proposed a hefty gross receipts tax. Only when the legislature resoundingly defeated the bill did the investment resume. In 2005, California-based Intel decided to build a multi-billion dollar chip-making facility in Arizona due to its favorable corporate income tax system. In 2010 Northrup Grumman chose to move its headquarters to Virginia over Maryland, citing the better business tax climate.² 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. It also helps to more efficiently allocate resources because businesses can locate in the states where they receive the services they need at the lowest cost. 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 always mindful of their states' business tax climates but they are often 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.³ A 2007 *USA Today* article chronicled similar problems other states are having with companies that receive generous tax incentives.⁴

Lawmakers 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 woeful business tax climate. A far more effective approach is to systematically improve the business tax climate for the long term so as to improve the state's competitiveness. When assessing which changes to make, lawmakers need to remember these 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). 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 geographic 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.

In reality, tax-induced economic distortions are a fact of life, so a more realistic goal is 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 apply these principles.

Ranking the competitiveness of 50 very different tax systems presents many challenges, especially when a state dispenses with a major tax entirely. Should Colorado's tax system, which includes three relatively neutral taxes on general 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 tax on individual income or general statewide sales?

The *Index* deals with such questions by comparing the states on 118 different variables in the five important areas of taxation (major business taxes, individual income taxes, sales taxes, unemployment insurance taxes, and property taxes) and then adding the results up to a final, overall ranking. This approach has the advantage of rewarding states on particularly strong aspects of their tax systems (or penalizing them on particularly weak aspects) while also 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 Colorado score well.

A Review of the Economic Literature

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 themselves 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 that all value public services similarly.

However, businesses sort out the costs and benefits of taxes differently from individuals. To businesses, which can be more mobile and must earn profits to justify their existence, taxes reduce profitability. Theoretically, then, businesses could be expected to be more responsive than individuals to the lure of low-tax jurisdictions.

No matter what level of government services individuals prefer, they want to know that public goods and services are provided efficiently. Because there is little competition for providing government goods and services, ferreting out inefficiency in government is notoriously difficult. There is a partial solution to this “information asymmetry” between taxpayers and government: “Yardstick Competition.” Shleifer (1985) first proposed comparing regulated franchises in order to determine efficiency. Salmon (1987) extended Shleifer’s work to look at sub-national 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 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 non-manufacturing 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, p. 89).

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 found that the conventional view that state and local taxes have little effect on business, as he describes it, is false.

Papke and Papke (1986) found that tax differentials between 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 that tax elasticities of $-.1$ to $-.5$ imply that 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 expanded enough so that Bartik (1991) found 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) find that taxes are a statistically significant factor in private-sector job growth. Specifically, they find that personal property taxes and sales taxes have economically large negative effects on the annual growth of private employment (Mark, et al. 2000).

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 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.

Even though the general consensus of the literature has progressed to the view that taxes are a substantial factor in the decision-making process for businesses, there remain some authors who are not convinced.

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. He does, however, cite a *State Policy Report* article that asserts the opposite: that as long as the tax elasticity is negative and significantly different from zero, high-tax states will lose more economic activity than average or low-tax states. Indeed, *State Policy Report* continues, 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.⁵

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. He asserts that lawmakers need better advice than just "Lower your taxes," but there is no coherent message advocating a different course of action.

However, there is ample evidence that states certainly still 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 rate increased from 3 percent to 5 percent, and the corporate rate rose from 7.3 percent to 9.5 percent.⁶ 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 sweetheart deals with both of these firms, totaling \$235 million over the next decade, to keep them from leaving the state.⁷

Measuring the Impact of Tax Differentials

Some recent contributions to the literature on state taxation criticize business and tax climate studies in general.⁸ 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?*, published by the Economic Policy Institute, criticizes five indexes: The *Small Business Survival Index* published by the Small Business and Entrepreneurship Council, Beacon Hill's *Competitiveness Reports*, the Cato Institute's *Fiscal Policy Report Card*, the *Economic Freedom Index* by the Pacific Research Institute, and this study. Fisher concludes: "The underlying problem with the five 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). Fisher's major argument is that if the indexes did what they purported to do, then all five of them would rank the states similarly.

Fisher's conclusion holds little weight because the five indexes 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 (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 (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 the narrower business tax climate. 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 contrarian 1970s view that the effects of taxes are "small or non-existent," our study reflects overwhelming 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 indexes are able to predict growth. In fact, they found, "The *State Business Tax Climate Index* explains growth consistently." This finding was recently confirmed by Anderson (2006) in a study for the Michigan House of Representatives.

Bittlingmayer, et al, also found that relative tax competitiveness matters, especially at the borders, and therefore, indexes that place a high premium on tax policies better explain growth. Also, they 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 (METR) 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 2012 *State Business Tax Climate Index* is a hierarchical structure built from five components:

- Corporate Tax
- Individual Income Tax
- Sales 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 zero (worst) to 10 (best). Each component is devoted to a major area of state taxation and includes numerous variables. Overall, there are 118 variables measured in this report.

The five components are not weighted equally, as they are in many indexes. 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:

33.1% — Individual Income Tax

21.4% — Sales Tax

20.3% — Corporate Tax

14.1% — Property Tax

11.1% — 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 a state in the region 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 sub-indexes devoted to measuring the impact of the tax rates and the tax base. Each sub-index 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 sub-index 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 sub-index is problematic because the extreme valuation of a dummy can overly influence the results of the sub-index. To counter this effect, the *Index* 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 between the states' tax systems, especially to pragmatic business owners who want to know what states have the best tax system in each region.

Comparing States without a Tax. One problem associated with a relative scale, however, 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.

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 indexes. For example, the unadjusted average score of the corporate income tax component is 7.0 while the average score of the sales tax component is 5.32.

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 every state's score by a constant value.

Once the scores are normalized, it is possible to compare states across indexes. For example, because of normalization it is possible to say that Connecticut's score of 5.12 on corporate income tax is better than its score of 2.88 on property 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 2012 *Index* and represents the tax climate of each state as of July 1, 2011, the first day of fiscal year 2012 for most states.

District of Columbia

The District of Columbia (DC) is only included as an exhibit and does not affect the relative scores among states.

Changes to Methodology

The marriage penalty section of the individual income tax sub-index was changed to a dummy variable which indicates states that have a marriage penalty built into their tax brackets and do not allow married taxpayers to file separately to avoid this penalty. In previous editions of the *Index* the marriage penalty was a scalar variable.

The *Index* generally penalizes states that have top income tax rates that kick in at high income levels and thus only apply to a relatively small proportion of taxpayers. However, previous editions of the *Index* included an exception that did not penalize states if the top individual or corporate income tax rate kicked in at an income level more than one standard deviation above the average for all states. The 2012 edition removes this exception.

The *Index* includes an estimate of local individual income tax rates that are levied in addition to the state rate. In previous editions of the *Index* this had been calculated as a weighted average of statutory rates in large counties and municipalities. In the 2012 edition the average local rate has been changed to an effective rate equal to total local income tax collections divided by state personal income.

2011 Rankings & Scores

This report includes 2011 *Index* rankings and scores that can be used for comparison with the 2012 rankings and scores. These can differ from previously published 2011 *Index* rankings and scores, due to backcasting of the above methodological changes and corrections to variables brought to our attention since the last report was published. The 2011 scores and rankings in this report are definitive.

Corporate Income Tax

Table 3

Corporate Tax Component of the State Business Tax Climate Index, 2011-2012

State	FY 2012		FY 2011		Change From 2011 to 2012	
	Score	Rank	Score	Rank	Score	Rank
Alabama	5.39	16	5.08	24	0.31	8
Alaska	5.08	27	5.06	27	0.03	0
Arizona	5.02	28	4.99	29	0.03	1
Arkansas	4.73	36	4.71	35	0.02	-1

California	4.42	43	4.39	44	0.02	1
Colorado	5.31	20	5.58	14	-0.27	-6
Connecticut	5.12	25	5.26	19	-0.15	-6
Delaware	3.15	50	3.13	50	0.02	0
Florida	5.58	12	5.55	15	0.03	3
Georgia	5.88	9	5.93	8	-0.05	-1
Hawaii	6.07	4	5.84	10	0.23	6
Idaho	5.33	19	5.30	18	0.03	-1
Illinois	4.07	45	5.02	28	-0.96	-17
Indiana	5.33	18	5.19	22	0.14	4
Iowa	3.78	48	3.76	48	0.02	0
Kansas	4.73	35	4.70	36	0.04	1
Kentucky	5.10	26	5.07	26	0.03	0
Louisiana	5.38	17	5.36	17	0.03	0
Maine	3.97	47	3.95	47	0.02	0
Maryland	5.53	14	5.59	13	-0.06	-1
Massachusetts	4.78	34	4.63	37	0.15	3
Michigan	3.35	49	3.36	49	-0.01	0
Minnesota	4.46	42	4.35	45	0.11	3
Mississippi	5.78	11	5.63	11	0.14	0
Missouri	5.91	8	6.07	6	-0.17	-2
Montana	5.53	15	5.50	16	0.03	1
Nebraska	4.81	33	4.78	33	0.02	0
Nevada	10.00	1	10.00	1	0.00	0
New Hampshire	4.02	46	4.00	46	0.02	0
New Jersey	4.58	39	4.55	40	0.02	1
New Mexico	4.60	38	4.77	34	-0.17	-4
New York	5.24	23	5.22	21	0.03	-2
North Carolina	5.02	29	5.07	25	-0.06	-4
North Dakota	5.30	21	4.96	30	0.34	9
Ohio	5.26	22	5.23	20	0.03	-2
Oklahoma	5.91	7	5.96	7	-0.05	0
Oregon	4.96	31	4.59	39	0.38	8
Pennsylvania	4.36	44	4.62	38	-0.26	-6
Rhode Island	4.55	40	4.53	41	0.02	1
South Carolina	5.81	10	5.86	9	-0.05	-1
South Dakota	10.00	1	10.00	1	0.00	0
Tennessee	5.56	13	5.62	12	-0.06	-1
Texas	4.67	37	4.45	43	0.22	6
Utah	6.05	5	6.21	4	-0.17	-1
Vermont	4.55	41	4.53	42	0.02	1
Virginia	5.96	6	6.13	5	-0.17	-1
Washington	4.98	30	4.79	32	0.19	2
West Virginia	5.18	24	5.15	23	0.03	-1
Wisconsin	4.87	32	4.96	31	-0.09	-1
Wyoming	10.00	1	10.00	1	0.00	0
DC	4.78		4.58		0.19	

Note: The higher the score, the more favorable a state's tax system is for business. All scores are for fiscal years.

Source: Tax Foundation

This component measures the impact of each state's principal tax on business activities and accounts for 20.3 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. profit (gross receipts minus expenses). A growing number of states, however, 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 Merchant's License Tax, as does Virginia, with its locally-levied Business/Professional/Occupational License (BPOL) tax. Texas also added a complicated gross receipts "margin" tax in 2007. However, in 2011, Michigan passed a significant corporate tax reform that eliminates the state's modified gross receipts tax and replaces it with a 6 percent corporate income tax, effective January 1, 2012.⁹ The previous tax had been in place since 2007 and Michigan's repeal follows others in Kentucky (2006) and New Jersey (2006).

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 sub-index is computed 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 so receive a perfect score.

For states with gross receipts taxes—or their functional equivalent—the state's corporate tax rate sub-index is computed by assessing two key areas: the gross receipts tax rate, and whether the gross receipts rate is an alternative assessment or a generally applicable tax. The latter variable was included so the states that levy a gross receipts tax as an alternative to the corporate income tax are not unduly penalized.

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 compute the parallel sub-index 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 provisions, among others. States that score well on the corporate tax base sub-index generally will have few business tax credits, generous carry-back and carry-forward provisions, deductions for net operating losses, conformity to the Internal Revenue Code, and provisions for alleviating double taxation.

Corporate Tax Rate

The corporate tax rate sub-index is designed to gauge how a state's corporate income tax top 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 rate, which varies from 15 percent on the first dollar of income to a top rate of 35 percent. This top rate is the second-highest corporate income tax rate among industrial nations. In many states, federal and state corporate tax rates combine to levy the highest corporate tax rates in the world.¹⁰

On the other hand, there are three states that levy neither a corporate income tax nor a gross receipts tax: Nevada, South Dakota and Wyoming. These states automatically score a perfect 10 for this sub-index. Therefore, this section ranks the remaining 47 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 Pennsylvania's 9.99 percent rate. Other states with comparatively high corporate income tax rates are the District of Columbia (9.975 percent), Minnesota (9.8 percent), Illinois (9.5 percent), Alaska (9.4 percent), and New Jersey and Rhode Island (9 percent). By contrast, Colorado's 4.63 percent is the lowest nationally. Other states with comparatively low top corporate tax rates are Mississippi, South Carolina, and Utah (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. Thirty-two states and the District of Columbia have flat, single-rate systems, and they score best. Flat-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

[G]raduated 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.¹¹

A flat 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 29 states—and the District of Columbia—that have a single-rate system. Alaska's 10-bracket system earns the worst score in this category. Other states with multi-bracket systems include Arkansas (six brackets), and Louisiana (five brackets).

Corporate Tax Base

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

Under a corporate income tax, three criteria used to measure the competitiveness of each state's 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.

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. Put simply, the NOL deduction helps level the playing field among cyclical and non-cyclical industries. The federal government currently allows a two-year carry-back cap and a 20-year carry-forward cap, and these two variables are taken into account.

Number of Years Allowed for Carry-Back and Carry-Forward. This variable measures the number of years allowed on a carry-back or carry-forward 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 2012 with better treatment of the carry-forward (up to a maximum of 20 years) than the carry-back (maximum of three years).

Caps on the Amount of Carry-Back and Carry-Forward. When companies have a bigger 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 downgraded in the *Index*. Five states limit the amount of carry-backs: Delaware, Idaho, New York, Utah and West Virginia. Of states that allow a carry-forward of losses, only Pennsylvania and New Hampshire limit carry-forwards, and Colorado has limited them temporarily for 2011-2013. As a result, these states score poorly in 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 product. Firms with few steps in production are relatively lightly taxed under a gross receipts tax, and vertically-integrated,

high-margin firms prosper. 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, Ohio, and Washington score the worst because their gross receipts taxes do not offer full deductions for either the cost of goods sold or employee compensation. Texas offers a deduction for either the cost of goods sold or compensation, but not both.

Federal Income Used as State Tax Base. States that use federal definitions of income reduce the tax compliance burden on their taxpayers.¹² Two states do not conform to federal definitions of corporate income—Arkansas and Mississippi—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 ACRS and MACRS depreciation schedules.¹³ 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.¹⁴ Seventeen states are penalized because they do not fully conform to the federal system: Alabama, Alaska, California, Delaware, Indiana, Iowa, Louisiana, Maryland, Minnesota, Mississippi, New Hampshire, North Carolina, Oklahoma, Oregon, South Carolina, Tennessee, and Wisconsin.

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.

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

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. 21 states allow deductions for foreign taxes paid and score well. The remaining 26 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 income tax codes, it is important to index the brackets for inflation. That prevents de facto tax increases on the nominal increase in income due to inflation. Put simply, this “inflation tax” results in higher tax burdens on taxpayers, usually without their knowledge or consent. All 16 states with graduated corporate income taxes fail

to index their tax brackets: Alaska, Arkansas, Hawaii, Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Nebraska, New Jersey, New Mexico, North Dakota, Ohio, Oregon and Vermont.

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

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

Throwback rules add yet another layer of tax complexity. Since two or more states can theoretically lay claim to "nowhere" income, rules have to be created and enforced to decide who gets to tax it. States with corporate income taxation are almost evenly divided between those with and without throwback rules. 24 states do not have them and 23 states and the District of Columbia do.

Tax Credits

Many states provide tax credits which lower the effective tax rates for certain industries and/or 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.¹⁵

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, and states that offer them score 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 free 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, which is uncommon, job tax credits can misfire in a number of ways. They push businesses whose economic position would be best served by spending more on new equipment or marketing to hire new employees instead. They 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. R&D tax credits reduce the amount of tax due by a company that invests in “qualified” research and development activities. The theoretical argument for R&D tax credits is that they encourage the kind of basic research that is not economically justifiable in the short run but that is better for society in the long run. In practice, their negative side effects—greatly complicating the tax system and establishing a government agency as the arbiter of what types of research meet a criterion so difficult to assess—far outweigh the potential benefits. To the extent that there is a public good justification for R&D credits, it is likely that a policy implemented at the federal level will be the most efficient since the public good aspects of R&D are not bound by state lines. Thus, states that offer such credits score poorly on the *Index*.

Individual Income Tax

Table 4.
Individual Income Tax Component of the State Business Tax Climate Index

State	FY 2012		FY 2011		Change From 2011 to 2012	
	Score	Rank	Score	Rank	Score	Rank
Alabama	5.62	18	5.66	18	-0.04	0
Alaska	10.00	1	10.00	1	0.00	0
Arizona	5.73	17	5.79	17	-0.05	0
Arkansas	5.23	27	5.24	27	-0.01	0
California	1.72	50	1.77	50	-0.05	0
Colorado	6.65	16	6.70	16	-0.05	0
Connecticut	4.80	31	4.46	31	0.34	0
Delaware	5.19	28	5.19	29	0.01	1
Florida	10.00	1	10.00	1	0.00	0
Georgia	3.95	40	3.97	39	-0.02	-1
Hawaii	3.88	41	3.92	40	-0.05	-1
Idaho	5.24	26	5.28	26	-0.04	0
Illinois	6.83	13	7.34	10	-0.51	-3
Indiana	7.06	10	7.13	11	-0.07	1
Iowa	4.57	32	4.35	34	0.22	2
Kansas	5.51	21	5.55	20	-0.04	-1
Kentucky	5.29	25	5.33	25	-0.04	0
Louisiana	5.31	24	5.36	23	-0.04	-1
Maine	4.97	30	5.02	30	-0.04	0
Maryland	3.07	46	2.43	47	0.64	1
Massachusetts	6.75	15	6.80	15	-0.05	0
Michigan	6.97	11	7.02	12	-0.04	1
Minnesota	3.51	44	3.55	42	-0.04	-2
Mississippi	5.62	19	5.66	19	-0.04	0
Missouri	5.32	23	5.35	24	-0.04	1
Montana	5.51	20	5.55	21	-0.04	1
Nebraska	5.17	29	5.21	28	-0.04	-1
Nevada	10.00	1	10.00	1	0.00	0
New Hampshire	7.78	9	7.85	9	-0.07	0
New Jersey	2.13	48	2.20	48	-0.07	0
New Mexico	4.33	33	4.36	33	-0.02	0
New York	2.03	49	2.04	49	-0.02	0
North Carolina	3.60	43	3.42	44	0.18	1
North Dakota	4.20	35	4.07	36	0.13	1

Ohio	3.63	42	3.61	41	0.03	-1
Oklahoma	4.04	38	4.06	37	-0.02	-1
Oregon	4.31	34	4.38	32	-0.07	-2
Pennsylvania	6.92	12	6.96	13	-0.04	1
Rhode Island	4.11	36	3.54	43	0.57	7
South Carolina	3.96	39	3.99	38	-0.03	-1
South Dakota	10.00	1	10.00	1	0.00	0
Tennessee	8.00	8	8.08	8	-0.08	0
Texas	8.90	7	8.98	7	-0.08	0
Utah	6.82	14	6.87	14	-0.05	0
Vermont	3.03	47	3.11	46	-0.08	-1
Virginia	4.09	37	4.11	35	-0.02	-2
Washington	10.00	1	10.00	1	0.00	0
West Virginia	5.41	22	5.45	22	-0.04	0
Wisconsin	3.24	45	3.29	45	-0.05	0
Wyoming	10.00	1	10.00	1	0.00	0
DC	4.80		4.84		-0.05	

Note: The higher the score, the more favorable a state's tax system is for business. All scores are for fiscal years.

Source: Tax Foundation

The individual income tax component, which accounts for 33.1 percent of each state's total *Index* score, is important to business because a significant number of businesses, including sole proprietorships, partnerships and S-corporations, report their income through the individual income tax code. The number of individuals filing federal tax returns with business income has more than doubled over the past 30 years, from 13.3 million in 1980 to 30 million in 2009.¹⁶ The structure of the individual income tax is thus critical.

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." (p. 21) 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 business 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 are known to reduce both the quantity and quality of the labor pool. This finding was supported by 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. Thus the tax system continually reduces 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 \$9.00, then a rational person would stop working and take the hour to pursue leisure. Additionally, workers earning higher

wages— \$30 per hour, for example—that 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 pre-tax wage in this example, compared to only \$1 lower in the previous example, more workers will choose leisure. In the aggregate, the income tax reduces the available labor supply.¹⁷

The individual income tax rate sub-index 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 sub-index takes into account how the tax code treats married couples compared to singles, the measures enacted to prevent double taxation, and whether the code is indexed for inflation. States that score well protect married couples from being taxed more severely than if they had filed as two single people. They also protect taxpayers from double taxation by recognizing LLCs and S-corps 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 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 seven states without an individual income tax are, not surprisingly, the highest-scoring states on this component: Alaska, Florida, Nevada, South Dakota, Texas, Washington and Wyoming. 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. Of the 41 states that do have a broad-based individual income tax, Illinois, Indiana, Michigan, Massachusetts, Pennsylvania, Utah and Colorado score highly because they have a single, low tax rate.

The bottom 10 states are Hawaii, North Carolina, Minnesota, Ohio, Wisconsin, Maryland, Vermont, New Jersey, New York, and California. The individual income tax systems in these states tend to 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-Corps.

Individual Income Tax Rate

The rate sub-index compares the 43 states that tax individual income after setting aside the seven states that levy no individual income tax and therefore receive perfect scores: Alaska, Florida, Nevada, South Dakota, Texas, Washington and Wyoming.

Top Marginal Tax Rate. At the start of fiscal year 2011 Oregon¹⁸ and Hawaii impose the highest top statutory rate, 11 percent. In Oregon it applies to taxable income over \$250,000, in Hawaii on taxable income over \$200,000. Other states with high top tax rates include California (10.3 percent), New York (8.97), New Jersey (8.97), and Vermont (8.95 percent).

States with the lowest top statutory rates are Pennsylvania (3.07 percent), Indiana (3.4 percent of federal AGI), Michigan (4.35 percent of federal AGI), Arizona (4.54 percent); Colorado (4.63 percent of federal taxable income), and Mississippi, Illinois, Alabama, and Utah (all at 5 percent).¹⁹

In addition to statewide income tax rates, some states allow municipal- and county-level income taxes. The Tax Foundation calculates an average effective local option income tax rate for these states and finds that Maryland has the highest average effective local rate, at 1.56 percent of state personal income.²⁰ Other states with local option income taxes levied in addition to the state rate include Ohio (1.06 percent average effective local income tax rate), New York (0.85 percent), Pennsylvania (0.78 percent), Kentucky (0.74 percent), Indiana (0.64 percent), Delaware (0.16 percent), Missouri (0.14 percent), Michigan (0.13 percent), Alabama (0.08 percent), Iowa (0.08 percent), Kansas (less than 0.01 percent), and Oregon (less than 0.01 percent).

Even though Alabama, Indiana, Michigan and Pennsylvania allow local income add-ons, they are still among the states with the lowest overall rates.

Top Tax Bracket Threshold. This variable assesses the degree to which 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 New Hampshire, Tennessee, Pennsylvania, Illinois, Indiana, Michigan, and Massachusetts. States with high kick-in levels score the worst. These include California (\$1,000,000 of taxable income), New Jersey (\$500,000 of taxable income), Maryland (\$500,000 of taxable income), Vermont (\$379,150 of taxable income), and North Dakota (\$379,150 of taxable income).

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

For example, Kansas has a standard deduction of \$3,000 and a personal exemption of \$2,250 for a combined value of \$5,250. Statutorily, Kansas has a top rate on all taxable income over \$30,000 and two lower brackets that have an average width of \$15,000. But because of its deduction and exemption, 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.²¹

Pennsylvania scores the best in this variable by having only one tax bracket. States with only two brackets are Colorado, Illinois, Indiana, Massachusetts, Michigan, New Hampshire and Tennessee. On the other end of the spectrum, Hawaii scores the worst in this variable by having 13 tax brackets. Other states with many brackets include Missouri (with 11 brackets), Iowa and Ohio (10 brackets) and Idaho (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 continue placing ever increasing rates throughout the income spectrum, causing individuals and non-corporate businesses to alter their income-earning and tax-planning behavior. This sub-index 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.

Individual Income Tax Base

States have different definitions of taxable income, and some create greater impediments to economic activity. The base sub-index gives equal weight, 33 percent, to two major issues in base definition: marriage penalty and double taxation of capital income. Then it gives a 33 percent weight to an accumulation of more minor base issues.

The seven states with no individual income tax of any kind achieve perfect neutrality. Texas, however, receives a slight deduction because it does not recognize LLCs or S-Corps. Of the other 43 states, Tennessee, Idaho, Michigan, Montana, Oregon, and Utah have the best scores. They avoid the marriage penalty and other problems with the definition of taxable income. Meanwhile, states where the tax base is found to cause an unnecessary drag on economic activity are New Jersey, New York, Wisconsin, California, Georgia, Maryland, Minnesota, and Virginia.

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 businesses. Twenty-four states have marriage penalties built into their income tax brackets.

Some states get around the marriage penalty problem by allowing married couples to file as if they were singles. While helpful in offsetting the marriage penalty, it comes at the expense of added tax complexity. Despite the complexity, the sub-index rewards states that have this provision.

Double Taxation of Capital Income. Since several 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.²² This capital income must then be declared by the receiving individual and taxed. The result is the double taxation of this capital income—first at the corporate level and again on the individual level.

All states with an individual wage income tax 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.

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.

The Federal Alternative Minimum Tax (AMT). 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. Evidence shows that the AMT is 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. Nine states score poorly for having an AMT on

individuals: California, Colorado, Connecticut, Iowa, Maine, Minnesota, Nebraska, New York, and Wisconsin.

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 is the creation of the limited liability corporation (LLC) and the S-corporation (S-corp). LLCs and S-corps provide businesses some of the benefits of incorporation, such as limited liability, without the overhead of becoming a regular 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 or S-corporations to at least some degree.

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. Put simply, 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-one states index all three; 19 states and the District of Columbia index at least one of the three; and 10 states do not index at all.

Sales Tax

Table 5.
Sales Tax Component of the State Business Tax Climate Index, 2011-2012

State	FY 2012		FY 2011		Change From 2011 to 2012	
	Score	Rank	Score	Rank	Score	Rank
Alabama	3.98	41	4.37	36	-0.38	-5
Alaska	7.90	5	8.02	5	-0.11	0
Arizona	2.80	50	2.87	50	-0.07	0
Arkansas	4.12	38	4.16	40	-0.04	2
California	4.03	40	3.57	44	0.47	4
Colorado	3.54	44	3.58	43	-0.04	-1
Connecticut	4.65	30	4.81	28	-0.16	-2
Delaware	8.97	2	9.07	2	-0.11	0
Florida	5.04	19	4.83	26	0.21	7
Georgia	5.37	12	5.20	15	0.17	3
Hawaii	4.63	31	4.50	33	0.12	2
Idaho	4.92	23	4.84	24	0.08	1
Illinois	4.45	33	4.47	34	-0.03	1
Indiana	5.42	11	5.38	11	0.04	0
Iowa	4.88	25	4.75	29	0.13	4

Kansas	4.62	32	4.90	23	-0.29	-9
Kentucky	5.71	8	5.70	8	0.01	0
Louisiana	3.15	49	3.13	47	0.02	-2
Maine	5.64	10	5.44	10	0.20	0
Maryland	5.70	9	5.64	9	0.07	0
Massachusetts	5.07	17	5.00	17	0.07	0
Michigan	5.74	7	5.71	7	0.03	0
Minnesota	4.20	36	4.20	38	0.00	2
Mississippi	4.71	28	4.69	30	0.02	2
Missouri	4.77	26	5.32	13	-0.55	-13
Montana	8.81	3	8.92	3	-0.10	0
Nebraska	4.72	27	4.83	25	-0.11	-2
Nevada	3.96	42	3.92	41	0.04	-1
New Hampshire	9.01	1	9.12	1	-0.10	0
New Jersey	3.44	46	3.38	46	0.05	0
New Mexico	3.50	45	3.49	45	0.01	0
New York	4.19	37	4.19	39	0.00	2
North Carolina	3.39	47	2.91	49	0.48	2
North Dakota	5.11	15	5.04	16	0.06	1
Ohio	4.69	29	4.64	31	0.05	2
Oklahoma	4.09	39	4.26	37	-0.17	-2
Oregon	8.68	4	8.86	4	-0.18	0
Pennsylvania	4.99	21	4.91	22	0.08	1
Rhode Island	4.88	24	4.82	27	0.06	3
South Carolina	5.00	20	4.92	21	0.07	1
South Dakota	4.44	34	4.61	32	-0.18	-2
Tennessee	3.70	43	3.83	42	-0.13	-1
Texas	4.22	35	4.46	35	-0.24	0
Utah	4.98	22	4.97	19	0.01	-3
Vermont	5.20	14	5.24	14	-0.04	0
Virginia	6.21	6	6.28	6	-0.08	0
Washington	3.33	48	2.92	48	0.41	0
West Virginia	5.04	18	4.96	20	0.08	2
Wisconsin	5.08	16	4.97	18	0.11	2
Wyoming	5.36	13	5.36	12	0.00	-1
DC	3.99		3.93		0.06	0

Note: The higher the score, the more favorable a state's tax system is for business. All scores are for fiscal years.

Source: Tax Foundation

Sales tax makes up 21.4 percent of each state's *Index* score. The type of sales tax familiar to all taxpayers is a tax levied on the purchase price of a good at the point of sale. This tax can hurt the business tax climate because as the sales tax rate climbs, customers make fewer purchases or seek out low-tax alternatives. As a result, business is lost to lower-tax locations, causing lost profits, lost jobs and lost tax revenue.²³ The effect of differential sales tax rates between 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.²⁴

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.²⁵ Hawaii, New Mexico, Washington and South Dakota 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.²⁶

Excise taxes are sales taxes levied on specific goods. Goods subject to excise taxation are typically perceived to be luxuries or vices, and thus less likely to see 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, Delaware, New Hampshire, Oregon, and Montana—achieve the best sales tax component scores. For states with a sales tax, Virginia has the best score because it has a low general sales tax rate, avoids tax pyramiding, and maintains low excise tax rates. Other states that score well include Kentucky, Maine, Michigan, and Maryland.

At the other end of the spectrum, Arizona, Louisiana, and Washington levy sales tax on many business inputs—such as utilities, services, manufacturing, and leases—and maintain relatively high excise taxes. Tennessee has the highest combined state and local rate of 9.4 percent. In general, these states levy high sales tax rates that apply to most or all business input items.

Sales Tax Rate

The tax rate itself is important, and a state with a high sales tax rate reduces demand for in-state retail sales. Consumers will turn more frequently to cross-border, catalog, or online purchases, leaving less business activity in-state. This sub-index 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 1.74 percent.

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

State Sales Tax Rate. Of the 45 states with a statewide sales tax, Colorado's 2.9 percent rate is lowest. Seven states have a 4 percent state-level sales tax: Alabama, Georgia, Hawaii, Louisiana, New York, South Dakota, and Wyoming. At the other end is California with a 7.25 percent state sales tax, including a mandatory statewide local add-on tax of 1 percent. Tied for second-highest are Indiana, Mississippi, New Jersey, Rhode Island and Tennessee (all at 7 percent). Other states with high statewide rates include Minnesota (6.875 percent) and Nevada (6.85 percent).

Local Option Sales Tax Rates. State-level sales taxes are only part of the story. Thirty-three 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.²⁷ Local jurisdictions in Colorado, for example, add an average of 4.58 percent in local sales taxes to the state's 2.9 percent state-level rate, bringing the total average sales tax rate to 7.48 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 (4.64 and 4.84 percent, respectively) and both states' average local option sales tax is higher than the state sales tax rate of 4 percent. Other states with high local option sales taxes include Colorado (4.58 percent), New York (4.48 percent), Oklahoma (4.16 percent) and Missouri (3.45 percent).

States with the highest combined state and average local sales tax rates are Tennessee (9.43 percent), Arizona (9.12 percent), Louisiana (8.84 percent), and Washington (8.79 percent). At the low end are Alaska (1.74 percent), Hawaii (4.35 percent), and Maine and Virginia (both 5 percent).

Sales Tax Base

The sales tax base sub-index is computed according to three features of each state's sales tax:

1. whether the base includes a variety of business-to-business transactions such as agricultural products, services, machinery, computer software, and leased/rented items;
2. whether the base includes goods and services typically purchased by consumers; and
3. the excise tax rate on products such as gasoline, diesel fuel, tobacco, spirits and beer.

The top five states on this sub-index are those without a general sales tax: New Hampshire, Delaware, Montana, Alaska and Oregon. However, none receives a perfect score because they all levy gasoline, diesel, tobacco, and beer excise taxes. For the states that do have a general sales tax, Indiana, Idaho, Georgia, Virginia, and Michigan have the highest scores. These states avoid the problems of tax pyramiding and have low excise tax rates. States with the worst scores on the base sub-index are Hawaii, New Mexico, Washington, South Dakota and North Carolina. Their tax systems hamper economic growth by including too many business inputs, excluding too many consumer goods and services, and/or 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 tax. This "tax pyramiding" invariably results in some industries' being taxed more heavily than others, which 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 firms. 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.²⁸ 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 pizza shop down the street cannot. The owners of the pizza shop 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.

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.

Consider the following quote from David Brunori, Executive Vice President of Editorial Operations for *Tax Analysts*:

Everyone who has ever studied the issue will tell you that the sales tax should not be imposed on business purchases. That is, when a business purchases a product or service, it should not pay tax on the purchase. There is near unanimity among public finance scholars on the issue. The sales tax is supposed to be imposed on the final consumer. Taxing business purchases causes the tax to be passed on to consumers without their knowledge. There is nothing efficient or fair about that. But business purchases are taxed widely in every state with a sales tax. Some studies have estimated that business taxes make up nearly 50 percent of total sales tax revenue. Why? Two reasons. First, because business sales taxes raise so much money that the states cannot repeal them. The states would have to either raise other taxes or cut services. Second, many politicians think it is only fair that “businesses” pay taxes because individuals pay them. That ridiculous belief is unfortunately shared by many state legislators; it’s usually espoused by liberals who don’t understand that businesses aren’t the ones who pay taxes. People do. Every time a business pays sales tax on a purchase, people are burdened. They just don’t know it.²⁹

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.³⁰ Hawaii, New Mexico, South Dakota, and Washington are examples of states that tax many business inputs.

Sales Tax on Services. An economically neutral sales tax base includes all final retail sales of goods and services purchased by the end users. 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.

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 five states do so. While all states levy an excise tax on gasoline, these funds are often dedicated for transportation purposes: a form of user tax distinct from the general sales tax. The five states that fully include gasoline in their sales tax base (California, Georgia, Illinois, Indiana, and Michigan) get a better score. Connecticut and New York get partial credit for applying an ad valorem tax to gasoline sales, but at a different rate than for the general sales tax.

Sales Tax on Groceries. A principled approach to sales tax policy calls for all end-user goods to be included in the tax base, to keep the base broad, rates low, and prevent distortions in the marketplace. Should groceries be the exception?

Many state officials will say that they exempt groceries in order to make the sales tax system easier on low-income people. In reality, exempting groceries from the sales tax mostly benefits grocers and higher-income people, not the poor, although even grocers have occasion to complain because the maintenance of complex, ever-changing lists of exempt and non-exempt products constitutes an administrative burden for all concerned. Most importantly, though, widespread availability of public assistance for the purchase of groceries—from the Women, Infants and Children (WIC) program or the food-stamp program—makes the argument for such exemptions unpersuasive. If the poor need more assistance to afford groceries, these more targeted approaches should be used. Fourteen states include or partially include groceries in their sales tax base.

Excise Taxes

Excise taxes are single-product sales taxes. Many of them are intended to reduce consumption of the product bearing the tax. Others, like the gasoline tax, are often used to fund specific projects like 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. Since gasoline represents a large input for most businesses, states that levy higher rates have a less competitive business tax climate. State excise taxes on gasoline range from 37.7 cents per gallon in California to 7.4 cents per gallon in Georgia.

Tobacco, spirits, and beer excise taxes are problematic because they 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 (Fleenor 1998).

States with the highest tobacco taxes per pack of 20 cigarettes are New York (\$4.35), Rhode Island (\$3.46), Connecticut (\$3.40), Hawaii (\$3.20), and Washington (\$3.03) while states with the lowest

tobacco taxes are Missouri (17 cents), Virginia (30 cents), Louisiana (36 cents), and Georgia (37 cents).

States with the highest beer taxes on a per gallon basis are 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 (6 cents) and Wisconsin (6 cents). States with the highest spirits taxes per gallon are Washington (\$26.70), Oregon (\$23.03) and Virginia (\$20.91).

Property Tax

Table 6.
Property Tax Component of the State Business Tax Climate Index, 2011-2012

State	FY 2012		FY 2011		Change from 2011 to 2012	
	Score	Rank	Score	Rank	Score	Rank
Alabama	6.27	6	6.28	6	-0.01	0
Alaska	5.58	13	5.74	9	-0.16	-4
Arizona	6.27	5	6.28	5	-0.01	0
Arkansas	5.42	18	5.48	17	-0.06	-1
California	5.42	17	5.38	18	0.04	1
Colorado	5.72	9	5.71	10	0.01	1
Connecticut	2.88	50	3.03	49	-0.15	-1
Delaware	5.58	14	5.59	15	-0.01	1
Florida	5.10	24	4.94	28	0.17	4
Georgia	4.39	39	4.36	40	0.04	1
Hawaii	5.56	15	5.53	16	0.03	1
Idaho	6.68	2	6.73	2	-0.05	0
Illinois	3.84	44	4.58	32	-0.75	-12
Indiana	5.69	11	5.69	11	0.00	0
Iowa	4.47	36	4.50	35	-0.04	-1
Kansas	4.97	28	4.53	34	0.44	6
Kentucky	5.40	19	5.38	19	0.03	0
Louisiana	5.26	23	5.35	20	-0.08	-3
Maine	4.39	38	4.27	41	0.12	3
Maryland	4.37	40	4.46	38	-0.10	-2
Massachusetts	3.61	47	3.64	46	-0.03	-1
Michigan	4.90	30	4.87	29	0.03	-1
Minnesota	5.06	26	5.12	24	-0.06	-2
Mississippi	4.96	29	4.96	27	0.00	-2
Missouri	6.05	7	6.02	7	0.03	0
Montana	5.93	8	6.00	8	-0.07	0
Nebraska	4.46	37	4.47	37	-0.01	0
Nevada	5.48	16	5.59	14	-0.12	-2
New Hampshire	3.99	41	4.03	42	-0.04	1
New Jersey	2.91	49	2.87	50	0.04	1
New Mexico	7.06	1	7.11	1	-0.04	0
New York	3.74	45	3.72	45	0.02	0
North Carolina	4.49	35	4.48	36	0.01	1
North Dakota	6.30	4	6.30	4	-0.01	0
Ohio	4.69	33	4.54	33	0.15	0
Oklahoma	5.67	12	5.68	12	-0.01	0

Oregon	5.70	10	5.67	13	0.03	3
Pennsylvania	3.97	42	3.91	44	0.07	2
Rhode Island	3.65	46	3.10	48	0.55	2
South Carolina	5.31	21	5.31	22	0.01	1
South Dakota	5.35	20	5.33	21	0.02	1
Tennessee	3.59	48	3.56	47	0.03	-1
Texas	4.78	31	4.84	30	-0.06	-1
Utah	6.64	3	6.62	3	0.01	0
Vermont	3.86	43	3.99	43	-0.13	0
Virginia	4.99	27	5.02	26	-0.03	-1
Washington	5.27	22	5.26	23	0.02	1
West Virginia	5.09	25	5.08	25	0.01	0
Wisconsin	4.72	32	4.71	31	0.01	-1
Wyoming	4.51	34	4.38	39	0.13	5
DC	3.57		3.49		0.08	

Note: The higher the score, the more favorable a state's tax system is for business. All scores are for fiscal years.

Source: Tax Foundation

The property tax component, which is comprised of taxes on real and personal property, net worth, and the transfer of assets, accounts for 14.1 percent of each state's *Index* score.

In the recent economic downturn, real and personal property taxes have been a contentious subject as individuals and businesses protest higher taxes on residential and business property even though property values have fallen. That occurs because local governments generally respond to falling property values not by maintaining current tax rates and enduring lower revenue, but by raising tax rates to make up the revenue. The Tax Foundation's *Survey of Tax Attitudes* found that local property taxes are perceived as the second-most unfair state or local tax.³¹

Property taxes matter to businesses because the tax rate on commercial property is often higher than the tax on comparable residential property. Additionally, many localities and states often 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 \$619 billion in state and local taxes in fiscal year 2010, of which 40 percent or \$250 billion was for property taxes. The property taxes included tax on real, personal, and utility property owned by business (Cline et al 2011). Coupled with the academic findings that property taxes are the most influential tax in terms of impacting location decisions by businesses, the evidence supports the conclusion that property taxes are a significant factor in a state's business tax climate. Since property taxes can be a large burden to 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 more 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 (Mark et al. 2000).

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 small business starts. 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 competing for business would be well served to keep statewide property taxes low so as to be more attractive to business investment. Localities competing for business can put themselves at greater competitive advantage by keeping personal property taxes low.

Taxes on capital stock, intangible property, inventory, real estate transfers, estates, inheritance, and gifts are also included in the property tax component of the *Index*.

The states that score the best on property tax are New Mexico, Idaho, Utah, North Dakota, and Arizona. 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 are Connecticut, New Jersey, Tennessee, Massachusetts, and Rhode Island. These states generally have high property tax rates and levy several wealth-based taxes.

The property tax portion of the *Index* is comprised of two equally weighted sub-indexes devoted to measuring the economic damage of the rates and the tax bases. The rate sub-index consists of property tax collection (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.

Property Tax Rate

The property tax rate sub-index consists of property tax collections per capita (40 percent of the sub-index score), property tax collections as a percent of personal income (40 percent of the sub-index score), and capital stock tax (20 percent of the sub-index score). The heavy weighting of tax collections is due 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 ideal—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 since 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.

Property Tax Collections Per Capita. Property tax collections per capita are calculated by dividing property taxes collected in each state (obtained from the Census Bureau) by population. The states

with the highest property tax collections per capita are New Jersey (\$2,671), Connecticut (\$2,498), New Hampshire (\$2,424), Wyoming (\$2,321), and New York (\$2,105). The states that collect the least per capita are Alabama (\$506), Arkansas (\$548), Oklahoma (\$598), New Mexico (\$611), and Kentucky (\$662).

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 (5.68 percent), New Jersey (5.34 percent), Vermont (5.27 percent), Rhode Island (4.88 percent), and Wyoming (4.81 percent). States that score well with low effective tax rates are Alabama (1.52 percent), Oklahoma (1.67 percent), Arkansas (1.70 percent), Delaware (1.80 percent), and New Mexico (1.84 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 precious cash flow to pay their capital stock tax. In assessing capital stock taxes, the sub-index accounts for three variables: the capital stock tax rate, maximum payment, and capital stock tax versus corporate income tax dummy variable. The capital stock tax sub-index is 20 percent of the total rate sub-index.

This variable measures the rate of taxation as levied by the 20 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. West Virginia is in the middle of a 10-year phase-out of its previous 0.7 percent tax (currently levied at 0.34 percent), with full repeal taking effect in 2015. Pennsylvania will phase out its tax by 2014 and Kansas completed the phase-out of its tax in 2011. States with the highest capital stock tax rates include West Virginia (0.34 percent), Connecticut (0.31 percent), Louisiana and Arkansas (0.3 percent), and Pennsylvania (0.289 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 include Alabama, Connecticut, Delaware, Georgia, Illinois, Nebraska, New York, , and Oklahoma, and 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 the two taxes. These states (Connecticut, New York and Rhode Island) are given credit for this provision. States that do not have a capital stock tax get the best scores in this sub-index while the states that force companies to pay both score the lowest.

Property Tax Base

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

Intangible Property Tax. This dummy variable gives low scores to those states that impose taxes on intangible personal property. Intangible personal property includes stocks, bonds and other intangibles such as trademarks. This tax can be highly detrimental to businesses that hold large amounts of their

own or other companies' stock and that have valuable trademarks. Twelve states levy this tax in various degrees: Alabama, Georgia, Iowa, Kansas, Louisiana, Mississippi, North Carolina, Ohio, Pennsylvania, South Dakota, Tennessee and Texas.

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

Asset Transfer Taxes (Estate, Inheritance, and Gift Taxes). Five taxes levied on the transfer of assets are part of the property tax base. These taxes, levied in addition to the federal estate tax, all increase the cost and complexity of transferring wealth and hurt a state's business climate. These harmful effects can be particularly acute in the case of small, family-owned businesses if they do not have the liquid assets necessary to pay the estate's tax liability.³² The five taxes are real estate transfer taxes, estate taxes (or death taxes), inheritance taxes, generation-skipping 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 piggy-backed 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 re-introducing 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 re-enacted the estate tax for 2011 and 2012 but with higher exemptions and a lower rate than pre-2001 law, and maintained the deduction for state estate taxes. Thirty-four 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. Sixteen 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. Eight states have inheritance taxes and are punished in the *Index* because the inheritance tax causes economic distortions.

Connecticut and Tennessee have a gift tax and score poorly. Gift taxes are designed to stop individuals' attempts to avoid the estate tax by giving their estates away before they die. Gift taxes are negatives to a state's business tax climate because they also heavily impact individuals who have sole proprietorships, S-corps and LLCs.

Unemployment Insurance Tax

Table 7.
Unemployment Insurance Tax Component of the State Business Tax Climate Index, 2011-2012

State	FY 2012		FY 2011		Change From 2011 to 2012	
	Score	Rank	Score	Rank	Score	Rank
Alabama	5.62	11	5.67	11	-0.05	0
Alaska	4.90	28	5.23	21	-0.33	-7
Arizona	6.39	1	6.38	2	0.01	1
Arkansas	5.43	17	5.29	19	0.14	2
California	5.54	13	5.46	15	0.08	2
Colorado	5.09	23	5.32	17	-0.23	-6
Connecticut	4.81	32	4.76	32	0.05	0
Delaware	6.16	3	5.90	8	0.26	5
Florida	5.92	5	6.14	3	-0.22	-2
Georgia	5.11	22	5.20	22	-0.09	0
Hawaii	4.87	30	5.16	23	-0.30	-7
Idaho	3.83	48	3.76	47	0.07	-1
Illinois	4.22	43	4.27	41	-0.05	-2
Indiana	5.51	16	5.62	12	-0.11	-4
Iowa	4.68	35	4.68	35	0.00	0
Kansas	5.91	6	5.90	7	0.01	1
Kentucky	3.83	47	3.62	48	0.22	1
Louisiana	5.94	4	5.93	5	0.02	1
Maine	4.50	40	4.18	43	0.32	3
Maryland	4.06	45	3.93	46	0.13	1
Massachusetts	3.36	49	3.21	49	0.15	0
Michigan	4.15	44	4.14	44	0.01	0
Minnesota	4.69	34	4.52	37	0.17	3
Mississippi	5.83	8	6.02	4	-0.19	-4
Missouri	5.79	9	5.79	10	0.00	1
Montana	5.19	20	5.27	20	-0.08	0
Nebraska	5.60	12	5.60	13	0.00	1
Nevada	4.44	42	4.39	40	0.05	-2
New Hampshire	4.53	39	4.52	38	0.01	-1
New Jersey	4.99	25	5.02	27	-0.02	2
New Mexico	5.53	14	5.44	16	0.09	2
New York	3.86	46	4.03	45	-0.17	-1
North Carolina	5.87	7	5.93	6	-0.05	-1
North Dakota	4.82	31	4.94	29	-0.11	-2
Ohio	5.66	10	5.79	9	-0.13	-1
Oklahoma	6.37	2	6.63	1	-0.25	-1
Oregon	4.69	33	4.68	36	0.01	3
Pennsylvania	4.64	37	4.40	39	0.24	2

Rhode Island	3.02	50	2.88	50	0.14	0
South Carolina	4.56	38	4.18	42	0.37	4
South Dakota	4.44	41	4.69	34	-0.25	-7
Tennessee	4.91	27	4.70	33	0.21	6
Texas	5.53	15	5.48	14	0.05	-1
Utah	5.05	24	5.10	26	-0.06	2
Vermont	5.25	19	5.31	18	-0.06	-1
Virginia	4.67	36	4.86	31	-0.20	-5
Washington	5.29	18	5.12	24	0.16	6
West Virginia	4.96	26	4.89	30	0.07	4
Wisconsin	5.12	21	5.12	25	-0.01	4
Wyoming	4.89	29	4.97	28	-0.08	-1
DC	5.05		5.06		-0.01	

Note: The higher the score, the more favorable a state's tax system is for business. All scores are for fiscal years.

Source: Tax Foundation

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. Unlike 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.³³

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

The unemployment insurance tax *Index* component consists of two equally weighted sub-indexes, one that measures each state's rate structure and one that focuses on the tax base. Unemployment insurance taxes comprise 11.1 percent of a state's final *Index* score.

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

On the other hand, the states with the worst UI taxes are Rhode Island, Massachusetts, Idaho, Kentucky, and New York. These states tend to have rate structures with high minimum and maximum rates and wage bases above the federal level. Moreover, they have more complicated experience formulas and charging methods, and they 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 sub-index are Arizona, Louisiana, Georgia, Nebraska, and Florida. 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, Maryland, Rhode Island, Oregon, and Pennsylvania.

The sub-index 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 Iowa, Missouri, Nebraska, and South Dakota) to 2.68 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, Colorado, Florida, Georgia, Hawaii, Mississippi, Nevada, New Mexico, Oregon) to 13.5 percent (in Maryland).
- *Taxable Wage Base.* Three states receive the best score in this variable with a taxable wage base of \$7,000—in line with the federal taxable wage base: Arizona, California, and Florida. The states with the highest taxable bases and, thus, the worst scores in this variable are Washington (\$37,300), Hawaii (\$34,200), Alaska (\$34,600), Idaho (\$33,300) and Oregon (\$32,300).

Potential Rates

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

- *Most Favorable Schedule: Minimum Tax Rate.* States receive the best score in this variable with a minimum tax rate of zero, which they levy when unemployment is low and the UI fund is flush. The minimum rate on the most favorable schedule ranges from zero in 23 states to 1.0 percent in Alaska.
- *Most Favorable Schedule: Maximum Tax Rate.* Twenty-three states receive high scores in this variable with a comparatively low maximum tax rate of 5.4 percent. Louisiana has the best rate with 4.9 percent. The states with the highest maximum tax rates and thus the worst maximum tax scores are Michigan (10.3 percent), Tennessee and North Dakota (10 percent), South Dakota (9.5 percent) and Kentucky, Minnesota and Utah (9.0 percent).
- *Least Favorable Schedule: Minimum Tax Rate.* Ten states receive the best score in this variable with a minimum tax rate of zero percent. The states with the highest minimum tax rates and, thus, the worst minimum tax scores are New Mexico (2.7 percent), Hawaii (2.4 percent), Maryland (2.2 percent), Oregon (2.11 percent) and Rhode Island and Connecticut (1.9 percent).
- *Least Favorable Schedule: Maximum Tax Rate.* Twelve states receive the best score in this variable with a comparatively low maximum tax rate of 5.4 percent. The states with the highest maximum tax rates and, thus, the worst maximum tax scores are Massachusetts (15.4 percent), Maryland (13.5 percent), Michigan (10.3 percent), Indiana (10.2 percent) and Tennessee (10 percent).

Unemployment Insurance Tax Base

The UI base sub-index 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 sub-index are Oklahoma, Delaware, Ohio, Arizona, and Vermont. 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 New York, Rhode Island, New Hampshire, Idaho and Virginia. 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 sub-index are experience rating formulas (40 percent of sub-index score), charging methods (40 percent of sub-index score), and a host of smaller factors aggregated into one variable (20 percent of sub-index score).

Experience Rating Formula. A business's experience rating formula determines the rate the firm must pay—whether it will lean towards 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—the contribution, benefit and payroll—are based solely on the business's experience and are therefore non-neutral by design.³⁴ 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 sub-index 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:* Thirteen 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-one states charge in proportion to base period wages. This means that all employers within a base-period of time (usually the last year, sometimes longer) will have the benefits charged against them in proportion to the wages they paid.

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

As a result, the 32 states that charge in proportion to base-period wages receive the best score. The 12 states that charge the most recent or principal employer receive the worst score. The five 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 sub-index also accounts for six types of exclusions from benefit charges.

1. Benefit award reversed
2. Reimbursements on combined wage claims
3. Voluntary leaving
4. Discharge for misconduct
5. Refusal of suitable work
6. 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 Ohio, Utah, Vermont, Oregon, Louisiana, Delaware, Missouri and Arizona. Ohio receives a perfect score by charging in proportion to base-period wages and including all six benefit exclusions. On the other hand, the states that receive the worst scores are New Hampshire, Kentucky, Michigan, Nevada, New York, Rhode Island and Virginia. All 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 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: shared cost assessment tax (Alabama) and social cost factor tax (Washington).

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

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

Surtaxes for UI Administration or Non-UI Purposes. Thirty states 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), social charge rate tax (Louisiana), 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, New Jersey, Hawaii 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 them; the money comes right out of the state’s unemployment fund, and because the balance of the fund triggers various taxes, the TDIs are included as a negative factor in the calculation of this sub-index.

Voluntary Contributions. Twenty-nine 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 non-neutralities 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 non-neutral in almost all cases since the rate is higher than the lowest rate schedule. The longer this rate is in effect, the worse the non-neutrality. 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.

Recent and Proposed Changes Not Reflected in the 2012 State Business Tax Climate Index

Connecticut

Connecticut’s corporate income tax surcharge will increase from 10 percent to 20 percent for calendar years 2012 and 2013, effectively raising the statutory rate from 8.25 percent to 9 percent. This will reduce Connecticut’s score on corporate income tax.

Delaware

Delaware’s various gross receipts tax rates are cut by 3 percent for calendar years 2012 and 2013. This will slightly improve Delaware’s score on corporate income tax.

Massachusetts

Massachusetts’s individual income tax rate will fall from 5.3 percent to 5.25 percent beginning in calendar year 2012. This automatic cut is a result of a rule adopted in 2002 at the same time that a scheduled phase-down of the income tax rate was frozen at 5.3 percent. The rule dictates that if certain revenue growth conditions are met the rate would fall in subsequent years. Since these conditions were met the rate will fall by 0.05 percentage points for 2012 and thereafter. This change will slightly improve Massachusetts’ score on individual income tax.

Michigan

Michigan passed corporate and individual tax changes in 2011. The flat individual tax rate will be reduced slightly beginning in calendar year 2013 and some credits and deductions will be eliminated. The corporate reforms are more significant from the perspective of the *Index*. Most importantly, beginning in calendar year 2012 the state’s two-part Michigan Business Tax (MBT), which includes a 6.04 percent net income tax and a 0.98 percent gross receipts tax (both rates include a 21.99 percent

surtax), will be replaced with a 6 percent corporate income tax on net income. The elimination of the state's damaging gross receipts tax will improve the state's score on corporate income tax.

New Jersey

Although New Jersey has consistently ranked at the bottom of the *Index*, recent actions by the state show the beginnings of improvement in business tax climate. These include reducing minimum tax on S corporations and reducing restrictions on the ability of taxpayers to carry forward net operating losses. While these changes will not be captured by the current methodology of the *Index*, they would help to offset some of the negative components of the state's tax system for those businesses affected. New Jersey still ranks behind New York (49th) and California (48th), but pending proposals in the three states could see New Jersey rising.

New York

New York's two temporary top individual income tax rates of 7.85 percent and 8.97 percent, applying to income over \$200,000 and \$500,000 respectively, were set to expire at the end of 2011, leaving the top rate at 6.85 percent of income over \$40,000 (for joint filers). However, Gov. Cuomo signed legislation that will temporarily alter the state's tax rates. The new rates will begin at 4 percent, increasing to 4.5 percent over \$16,000, 5.25 percent over \$22,000, 5.9 percent over 26,000, 6.45 percent over \$40,000, 6.65 percent over \$150,000, 6.85 percent over \$300,000, and 8.82 percent over \$2 million (all brackets are for joint filers). While the somewhat lower rates will improve New York's score on the individual income tax rate sub-index, the new higher \$2 million threshold for the highest tax rate will lower the state's score in top tax bracket threshold and average bracket width. The two effects will somewhat offset each other. The new rates will apply through 2014, after which the top two rates are scheduled to expire and the top rate will be 6.85 percent over \$40,000 (for joint filers).

Ohio

Ohio Gov. Kasich in June 2011 signed the state's biennial budget which included the repeal of the estate tax, effective January 1, 2013. This change will improve the state's score on property tax once it takes effect.

Oklahoma

Oklahoma's top individual income tax rate will fall from 5.5 percent to 5.25 percent (on income over \$8,700) for calendar year 2012. This change will slightly improve Oklahoma's score on individual income tax.

Oregon

Oregon's top individual income tax rate will fall from 11 percent to 9.9 percent in calendar year 2012 and thereafter. This reduction is a result of Measure 66, which was voted on in January 2010 and temporarily increased income tax rates on high-income taxpayers from the previous rate of 9 percent to 11 percent for 2009 through 2011, and 9.9 percent in calendar year 2012 and thereafter. This change will improve Oregon's score on individual income tax. In addition, the threshold level for Oregon's top corporate income tax rate will increase beginning in calendar year 2013, as a result of 2010's ballot measure 67.

Pennsylvania

Pennsylvania continues the phase-out of the capital stock tax. The rate will be 0.189 percent in calendar year 2012 and is scheduled to fall to 0.089 percent in 2013 and 0 percent in 2014 and thereafter. The continued phase-out and eventual elimination of the damaging and outdated tax will improve Pennsylvania's score on property tax.

West Virginia

West Virginia is one of the few states that ended fiscal year 2011 with a budget surplus. As a result

the state's corporate income tax rate will automatically fall from 8.5 percent to 7.75 percent in calendar year 2012. If the budget surpluses continue and the rainy day fund balance is greater than 10 percent of the general fund, the rate could fall to 7.0 percent for 2013 and 6.5 percent after 2013.

District of Columbia

The Council of the District of Columbia in 2011 approved a new temporary income tax rate of 8.95 percent (up from 8.5 percent) for taxpayers with income above \$350,000, effective 2012. This change will harm DC's score on individual income tax.

Endnotes

1 U.S. Department of Labor, "Extended Mass Layoffs in the First Quarter of 2007," August 9, 2007, <http://www.bls.gov/opub/ted/2007/may/wk2/art04.htm>. In the press release, DOL reported that, "In the 61 actions where employers were able to provide more complete separations information, 84 percent of relocations (51 out of 61) occurred among establishments within the same company. In 64 percent of these relocations, the work activities were reassigned to place elsewhere in the U.S. Thirty six percent of the movement-of-work relocations involved out-of-country moves (22 out of 50)."

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

3 Austin Mondine, "Dell cuts North Carolina plant despite \$280m sweetener," *The Register*, October 8, 2009.

4 Dennis Cauchon, "Business Incentives Lose Luster for States," *USA Today*, August 22, 2007.

5 *State Policy Reports*. 1994, Vol. 12, No. 11 (June), Issue 1 of 2, p.9.

6 Both rate increases have a temporary component. After four years, the individual income tax will decrease to 3.75%. Then in 2025, the individual income tax rate will drop to 3.5%. The corporate tax will follow a similar schedule of rate decreases: in four years the rate will be 7.75% and then in 2025 it will go back to the current rate of 7.3%.

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

8 A trend in tax literature throughout the 1990s has been the increasing use of indexes 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 *Wall Street Journal's* "2004 Index of Economic Freedom." Plaut and Pluta (1983) examined the use of business climate indexes as explanatory variables for business location movements. They found that such general indexes do have a significant explanatory power, helping to explain, for example, why businesses have moved from the Northeast and Midwest towards the South and Southwest. In turn, they also found that high taxes have a negative effect on employment growth.

9 This change takes effect in calendar year 2012 and therefore is not captured by the July 1, 2011 snapshot date for the 2012 edition of the *Index*.

10 Scott Hodge and Andre Dammert, "U.S. Lags While Competitors Accelerate Corporate Income Tax Reform," *Tax Foundation Fiscal Fact*, No.184.

11 Jeffrey L. Kwall, "The Repeal of Graduated Corporate Tax Rates," *Tax Notes*, June 27, 2011, p. 1395, Doc 2011-12306.

12 This is not an endorsement of the economic efficiency of the federal definition of corporate income.

13 This is not an endorsement of the federal ACRS/MACRS depreciation system. It is well known that federal tax depreciation schedules often bear little resemblance to actual economic depreciation rates.

14 This is not an endorsement of the economic efficiency of the federal depletion system.

15 For example, see: Alan Peters and Peter Fisher, "The Failure of Economic Development Incentives," *Journal of the American Planning Association*, Vol. 70, No. 1, Winter 2004; and William F. Fox and Matthew N. Murray, "Do Economic Effects Justify the Use of Fiscal Incentives?," *Southern Economic Journal*, Southern Economic Association, 2004, vol. 71(1), pages 78-92.

16 Scott A. Hodge, "Over One-Third of New Tax Revenue Would Come from Business Income If High-Income Personal Tax Cuts Expire," *Tax Foundation Special Report*, No. 185, September 13, 2010.

17 Scott A. Hodge and J. Scott Moody, "Wealthy Americans and Business Activity," *Tax Foundation Special Report*, No. 131, August 1, 2004.

18 Oregon's top income tax rate is reduced to 9.9% on income over \$125,000 (\$250,000 married) in 2012 and after. This change takes effect in calendar year 2012 and therefore is not captured by the July 1, 2011 snapshot date for the 2012 edition of the *Index*.

19 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.

20 Average effective local income tax rates are calculated by dividing statewide local income tax collections (from the U.S. Census Bureau) by state personal income (from the Bureau of Economic Analysis).

21 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 sub-index, tax credits are converted into equivalent income exemptions or deductions.

22 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.

23 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.

24 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 put it 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.

25 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.

26 In some cases, transactions that appear to be business-to-business turn out to be business-to-consumer. For example, a hobby farmer needs many of the same products as a commercial farmer. In the case of the commercial farmer these purchases are business inputs. Thus, the hobby farmer may be able to take advantage of the same sales tax exclusions as the commercial farmer. Such cases are rare, however.

27 The average local option sales tax rate is calculated as an average of local statutory rates, weighted by population.

28 See Besley and Rosen, *op. cit.*

29 David Brunori, “An Odd Admission of Gambling,” *State Tax Notes*, Jan. 30, 2005, p. 332-339.

30 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.

31 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 Special Report*, No 199, April 2009.

32 For a summary of the effects of the estate tax on business, see “Effects of the Federal Estate Tax on Farms and Small Businesses,” Congressional Budget Office, July 2005. For a summary on the failures of the estate tax in general see David Logan, “The Economic Effects of the Estate Tax,” Tax Foundation, October 17, 2011.

33 *See generally* Joseph Henchman, “Unemployment Insurance Taxes: Options for Program Design and Insolvent Trust Funds,” Tax Foundation Background Paper No. 61, October 2011.

34 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 UIT rates.

References

- Agostini, Claudio and Soraphol Tulayasathien (2001). Tax Effects on Investment Location: Evidence for Foreign Direct Investment in the United States, Office of Tax Policy Research, University of Michigan Business School.
- Anderson, Patrick (2006). *Benchmarking for Success: A Comparison of State Business Taxes*, Anderson Economic Group, pp. 19-20.
- Bartik, Timothy J. (1991). *Who Benefits from State and Local Economic Development Policies?* Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1991.
- Bartik, Timothy J. (1989). "Small Business Start-Ups in the United States: Estimates of the Effects of Characteristics of States," *Southern Economic Journal*. Pp. 1004-1018.
- Bartik, Timothy J. (1985). "Business Location Decisions in the United States: Estimates of the Effects of Unionization, Taxes, and Other Characteristics of States," *Journal of Business and Economic Statistics*, Volume 3, No.1, January 1985, pp. 14-22.
- Besley, Timothy J. and Anne Case (1995) "Does Electoral Accountability Affect Economic Policy Choices? Evidence from Gubernatorial Term Limits," *Quarterly Journal of Economics*, Volume 85, Issue 1, pp. 769 – 798.
- Besley, Timothy J. and Harvy S. Rosen (1998) "Sales Taxes and Prices: An Empirical Analysis," *NBER Working Paper* No. w6667.
- Bittlingmayer, Gregory, Liesel Eathington, Arthur Hall and Peter F. Orazem (2005). "Business Climate Indexes: Which Work, Which Don't, and What can they say about Kansas?" The Center for Applied Economics, Kansas University, June 2005.
- Bosch, Nuria and Albert Sole-Olle (2007) "Yardstick competition and the political costs of raising taxes: An empirical analysis of Spanish municipalities," *International Tax and Public Finance*, Volume 14, Issue 1, pp. 71-92.
- Brueckner, Jan and Luz A. Saavedra (2001). "Do Local Governments Engage in Strategic Property-Tax Competition?" *National Tax Journal* 54, pp 203 – 229, June 2001.
- Byars, Jon and Bobby McCormick and Bruce Yandle (1999). *Economic Freedom in American's States: A 1999 Analysis*, Center for Policy and Legal Studies. Clemson University.
- Carroll, Rober, Douglas Holtz-Eakin, Mark Rider, and Harvey S. Rosen (2000). "Income Taxes and Entrepreneurs' Use of Labor," *Journal of Labor Economics*. 18, pp. 324-351.
- Chorvat, Terrence R. and Michael S. Knoll (2002). "The Economic and Policy Implications of Repealing the Corporate Alternative Tax," *Tax Foundation Background Paper*, No. 40.
- Cline, Robert, Thomas Neubig, Andrew Phillips, and Julia Thayne (2011). "Total State and Local Business Taxes," Council on State Taxation (COST) with Ernst and Young LLP, July, 2011.
- Due, John F. (1961). "Studies of State-Local Tax Influences on Location of Industry," *National Tax Journal*, Vol. 14, pp. 163 -73.

Eiras, Ana I., Edwin J. Feulner, Marc A. Miles and Mary Anastasia O'Grady (2004). *The 2004 Index of Economic Freedom*, The Heritage Foundation and The Wall Street Journal

Fisher, Peter (2005). *Trading Places: What do the Business Climate Rankings Really Tell Us?* Economic Policy Institute, 2005.

Fetting, David (2006). "Thomas J. Holmes on Wal-Mart's Location Strategy" *Fed gazette* March 2006.

Fleener, Patrick (1998). "How Excise Tax Differentials Affect Interstate Smuggling and Cross-Border Sales of Cigarettes in the United States," *Tax Foundation Background Paper*, No. 26.

Fleener, Patrick and J. Scott Moody (1999). "A Primer on the Economic Implications of Marginal Tax Rates," *Tax Foundation Background Paper*, No. 32.

Gentry, William H. and R. Glenn Hubbard (2004). "Success Taxes, Entrepreneurial Entry and Innovation," NBER Working Paper No. w10551.

Goolsbee, Austan (2004). "The Impact and Inefficiency of the Corporate Income Tax: Evidence from State Organizational Forms," *Journal of Public Economics* Vol 88. Is. 11 pp. 2283 -2299

Goolsbee, Austan and Edward L. Maydew (1999). "Coveting Thy Neighbor's Manufacturing: The Dilemma of State Income Apportionment," revised Feb, 1999.

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

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

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

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

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

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

Hodge, Scott A. and J. Scott Moody, (2004) "Wealthy American and Business Activity," *Tax Foundation Special Report*, No. 131, August 1, 2004.

Hodge, Scott and Andre Dammert, "US Lags while Competitors Accelerate Corporate Income Tax Reform," *Tax Foundation Fiscal Fact*, No. 184.

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

- Ladd, Helen F. (1992). "Mimicking of Local Tax Burdens Among Neighboring Counties" *Public Finance Review*. Volume 53 Number 4, pp. 450-467.
- Mark, Stephen T., Therese J. Mc Quire and Leslie E. Papke (2000). "The Influence of Taxes on Employment and Population Growth: Evidence from the Washington, D.C. Metropolitan Area," *National Tax Journal*, Volume 53, pp.105-123, March 2000.
- McQuire, Therses and Michael Wasylenko (1985). "Jobs and Taxes: The Effects of Business Climate on States' Employment Growth Rates," *National Tax Journal*, Vol. 38, pp. 497 – 511.
- Moody, J. Scott and Wendy P. Warcholik (2004). "How Tax Competition Affects Cross-Border Sales of Beer in the United States," *Tax Foundation Background Paper*, No. 44.
- Newman, Robert J. (1983). "Industry Migration and Growth in the South," *Review of Economics and Statistics*, Vol. 65, No. 1, pp. 76-86.
- Newman, Robert and Dennis Sullivan (1988). "Econometric Analysis of Business Tax Impacts on Industrial Location: What do we know and how do we know it?" *Journal of Urban Economics*, Vol. 23, pp. 215 – 34.
- Oakland, William H (1978) "Econometric Analysis of Business Tax Impacts on Industrial Location: A Survey," Metropolitan Financing and Growth Management Policies, Committee on Taxation, Resources and Economic Development, University of Wisconsin, Madison, pp. 13 – 30.
- Papke, James A. and Leslie E. Papke (1986). "Measuring Differential State-Local Tax Liabilities and Their Implications for Business Investment Location," *National Tax Journal*, Vol. 39. No. 3, pp. 357 – 66.
- Poletti, Therese (2005). "Incentive-rich Arizona to House New Intel Plant," *San Jose Mercury News*, July 26, 2005.
- Pomp, R. (1987), "Reforming a State Corporate Income Tax," *Albany Law Review*, Vol. 3, No. 4.
- Plaut, Thomas R. and Joseph E. Pluta (1983). "Business Climate, Taxes and Expenditures, and State Industrial Growth in the United States," *Southern Economic Journal*, Vol. 50, No. 1. pp 99 – 119.
- Salmon, Pierre (1987) "Decentralization as an Incentive Scheme," *Oxford Review of Economic Policy*, Volume 3, Issue 2, pp. 24 – 43.
- Shleifer, Andrei (1985) "A theory of yardstick competition," *Rand Journal of Economics*, Volume 16, Number 3, pp. 320 – 328.
- Sullivan, Martin (2003). "The States' Fiscal Mess How Bad Is It?" *Tax Notes*, Vol. 98, No. 4, pp. 482 -486.
- Tannenwald, Robert (1996). "State Business Tax Climate: How Should it be Measured and How Important is it?" *New England Economic Review*: Federal Reserve Bank of Boston, Jan/Feb 1996, pp. 23 -38.
- Tiebout, Charles (1956). "A Pure Theory of Local Public Expenditures," *Journal of Political Economy*, Vol. 64, pp. 416 – 24.
- Vedder, Richard (2001). "Taxes and Economic Growth," Taxpayers Network, Inc.

Wasylenko, Michael (1981). "The Location of Firms: The Role of Taxes and Fiscal Incentives," *Urban Affairs Annual Review*, Vol. 20, pp. 155-89.

Wasylenko, Michael (1997). "Taxation and Economic Development: The State of Economic Literature," *New England Economic Review*: Federal Reserve Bank of Boston, March/April 1997, pp. 37 – 52.

Attached Files

- [Tax Foundation 2012 State Business Tax Climate Index](#), *PDF*, 976.8 KB
by [Mark Robyn](#)

[If you found this material useful, please consider making a donation to the Tax Foundation.](#)