

California



Prosperity



Taxifornia:

California's tax system, comparisons
with other states, and the path to
reform in the Golden State

by Robert P. Murphy , Ph.D.
and Jason Clemens

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March 2010

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Acknowledgements

The authors would like to thank the Searle Freedom Trust for its generous contribution. Without its financial support, this study could not have been completed. The authors would like to recognize Karrie Rufer and Julie Kaszton, research interns at the Pacific Research Institute, who provided invaluable assistance throughout the research process. The authors also thank Niels Veldhuis of the Fraser Institute (Canada) and Chris Edwards of the Cato Institute for their formal review of this study as well as their ongoing suggestions, and Dr. Lawrence McQuillan of the Pacific Research Institute for his suggestions. All three scholars are experienced in sub-national comparisons and provided valuable input during the research process. Any remaining errors or omissions are the sole responsibility of the authors. As the authors of this study have worked independently, their views and conclusions do not necessarily represent those of the board, supporters, or staff of PRI.

Executive Summary

Taxes Matter—Really

In a quest for solutions, this second installment of the California Prosperity Project assesses California's tax burden, the structure of its tax system, and how both of these affect the state's competitiveness. The research on which this study is based shows that taxes matter.

When we impose taxes on certain things, we basically tend to get less of those things. Taxes influence decisions concerning work effort, savings, investment, entrepreneurship, risk taking, and job creation. These are all things California needs. Additional work, greater investing by individuals and businesses, and more entrepreneurship are the foundations for a prosperous society. Understanding how tax rates, and in particular marginal tax rates, influence these activities is critical in understanding the challenges facing California.

Measuring Taxes across the States

This study calculates three measures of taxation: (1) burden, (2) structure, and (3) overall or composite. This approach is designed to measure two different, although interrelated, aspects of taxation: the total amount of taxes extracted by government, along with the design or mix of taxes used.

(1) Burden of Government

The first measure is the total burden of government imposed in a state, or, put differently, the extent to which state and local governments extract resources from the economy. To calculate the burden of government, we computed state and local government spending as a share of the state economy (Gross State Product [GSP]) for the most recent year for which all relevant data are available (2007).

We believe that government *spending* is a more accurate measure of the size of government than alternative measures such as tax receipts. The main reason for this is borrowing. If governments use debt (deferred taxes) to finance current spending, then measures of revenues will underestimate the size and perhaps the scope of the government in question. The nature of the reallocation from the private sector to the government sector remains the same whether the spending is financed through revenues or borrowing. If government spending exceeds tax receipts in a given year, that implies higher future taxes necessary to cover interest payments and/or to retire debt.

Second, we incorporate local government spending as well as state-level spending. Excluding local spending necessarily biases the results for state governments that have decentralized taxation and/or spending to local governments. This activity at the local level can be substantial. Further, there is only one set of taxpayers in a state. It is largely irrelevant to the taxpayers themselves and the incentives they face whether the burden of government is imposed on them from their state capital or their local municipality.

Results for Burden of Government

The results are summarized in executive summary table 1. South Dakota was the top-ranked state in this category—meaning it had the lowest burden of government—with state and local spending representing 11.6 percent of its state economy (i.e., its GSP) in 2007. Delaware ranked second, with state and local spending accounting for 12.0 percent of its state economy. The other states in the top five were: Texas (12.1 percent), Louisiana (12.2 percent), and New Hampshire (13.2 percent).

At the other end of the spectrum, Alaska ranked 50th, with state and local government spending representing a little more than one-fifth (20.2 percent) of the state's economy.¹ South Carolina ranked 49th, with 19.4 percent of its economy consumed by state and local government spending.

California, New York, and New Mexico rounded out the list of lowest-ranked states. New York ranked 48th, with 18.4 percent of its economy consumed by state and local government spending, while California ranked 47th (18.3 percent) and New Mexico 46th (17.9 percent).

Executive Summary Table 1: Summary Scores

BURDEN OF GOVERNMENT			STRUCTURE OF TAX BURDEN	
State	State and Local Government Spending as a Percentage of GSP (2007) (Score worst 0 -10 best)	Rank	Personal Income Taxes (Score 0-10)	Corporate Income Taxes (Score 0-10)
Alabama	3.8	38	6.0	7.5
Alaska	0.0	50	10.0	0.7
Arizona	5.4	25	6.7	7.1
Arkansas	5.8	21	4.0	5.1
California	2.2	47	1.1	6.1
Colorado	6.4	12	6.9	8.2
Connecticut	7.9	7	5.5	7.0
Delaware	9.6	2	4.1	6.8
Florida	4.0	35	10.0	7.7
Georgia	5.9	20	4.5	7.7
Hawaii	5.1	29	1.1	7.0
Idaho	5.9	19	3.4	7.1
Illinois	6.4	13	7.8	6.8
Indiana	5.7	23	7.2	6.7
Iowa	6.1	16	2.4	3.8
Kansas	6.0	17	5.1	5.8
Kentucky	4.6	32	4.6	5.7
Louisiana	9.3	4	5.3	5.5
Maine	3.6	40	3.0	4.4
Maryland	6.2	15	3.7	6.9
Massachusetts	6.0	18	5.9	5.7
Michigan	3.2	43	7.3	7.4
Minnesota	5.3	27	4.4	6.1
Mississippi	3.7	39	6.6	6.8
Missouri	6.7	11	4.8	7.8
Montana	5.3	26	4.0	7.0
Nebraska	3.3	42	4.6	6.4
Nevada	7.8	9	10.0	10.0
New Hampshire	8.2	5	9.6	5.0
New Jersey	4.7	30	1.6	4.9
New Mexico	2.6	46	6.0	5.5
New York	2.1	48	2.2	5.4
North Carolina	7.6	10	4.6	7.2
North Dakota	7.9	8	6.5	5.6
Ohio	3.0	45	3.9	9.4
Oklahoma	6.3	14	5.1	7.5
Oregon	4.1	33	1.6	6.7
Pennsylvania	4.0	34	7.1	6.2
Rhode Island	3.9	37	3.0	6.6
South Carolina	1.0	49	3.8	8.1
South Dakota	10.0	1	10.0	9.6
Tennessee	4.6	31	9.6	7.1
Texas	9.4	3	10.0	10.0
Utah	5.4	24	6.2	7.8
Vermont	3.1	44	3.4	5.7
Virginia	8.0	6	4.7	7.8
Washington	3.5	41	10.0	10.0
West Virginia	5.1	28	5.0	5.4
Wisconsin	4.0	36	4.4	6.8
Wyoming	5.7	22	10.0	10.0

Drawn from various sources as noted in the text, with calculations by the authors.

STRUCTURE OF TAX BURDEN					COMBINED SCORE	
Capital-Based Taxes (Score 0-10)	Sales Taxes (Score 0-10)	Property Taxes (Score 0-10)	Total (Score 0-10)	Rank	Score (0-10)	Rank
10.0	5.0	9.2	6.9	4	5.4	27
10.0	9.4	6.6	6.7	8	3.3	46
10.0	2.2	6.1	5.5	30	5.5	25
10.0	2.1	8.8	5.0	41	5.4	26
10.0	2.2	6.6	4.0	45	3.1	50
10.0	5.7	6.4	6.8	5	6.6	10
9.8	4.7	3.0	5.1	37	6.5	11
3.3	10.0	10.0	7.7	1	8.6	2
10.0	3.0	3.5	6.0	18	5.0	33
10.0	4.5	6.3	5.8	22	5.8	18
10.0	2.6	7.8	4.6	43	4.8	35
10.0	3.7	7.0	5.3	33	5.6	23
10.0	4.5	4.2	5.8	21	6.1	15
10.0	3.3	6.2	5.9	20	5.8	20
10.0	4.2	5.5	4.0	46	5.0	32
9.8	3.9	5.1	5.0	39	5.5	24
9.6	4.3	8.1	5.8	24	5.2	30
8.9	3.2	9.2	6.0	17	7.7	4
10.0	4.7	1.8	3.5	49	3.5	45
10.0	5.0	6.2	5.5	31	5.8	16
9.6	4.9	4.6	5.3	35	5.6	22
10.0	4.1	2.9	5.4	32	4.3	39
10.0	3.7	6.4	5.1	36	5.2	29
9.0	2.2	6.1	5.6	28	4.6	36
9.8	5.0	6.7	6.1	13	6.4	13
10.0	10.0	4.4	6.3	10	5.8	17
10.0	4.0	5.0	5.0	40	4.2	42
10.0	2.4	6.8	7.3	3	7.6	5
10.0	10.0	0.0	6.1	14	7.2	6
10.0	3.7	0.9	2.8	50	3.7	44
10.0	2.4	9.0	5.7	26	4.2	41
9.9	5.0	3.9	4.1	44	3.1	48
9.3	5.0	7.7	6.3	11	6.9	8
10.0	4.6	6.3	5.8	25	6.8	9
9.1	4.3	5.2	5.7	27	4.3	38
9.7	4.7	8.8	6.5	9	6.4	12
10.0	10.0	6.2	6.1	15	5.1	31
10.0	4.5	5.2	5.8	23	4.9	34
10.0	3.7	2.0	3.8	47	3.9	43
10.0	4.0	5.4	5.3	34	3.1	49
10.0	4.3	6.6	7.6	2	8.8	1
8.8	1.8	7.8	6.7	6	5.7	21
5.9	3.5	5.0	6.1	16	7.7	3
10.0	3.2	7.6	6.2	12	5.8	19
10.0	4.9	0.1	3.5	48	3.3	47
10.0	5.5	5.9	6.0	19	7.0	7
2.5	1.3	6.5	5.1	38	4.3	40
9.1	4.3	7.5	5.6	29	5.3	28
10.0	4.8	3.5	4.9	42	4.4	37
10.0	3.9	3.0	6.7	7	6.2	14

(2) Structure of Taxes

It is a question not merely of the *amount* of resources extracted by the government, but also of *how* those resources are obtained. The second part of the study concerns itself with how the tax burden is designed or structured. The structures of five major taxes—personal income tax, corporate income tax, capital-based taxes, sales tax, and property tax—were analyzed.

i. Personal Income Tax

Three aspects of the personal income tax were examined: the top statutory personal income tax rate, the progressivity of personal income tax rates, and the effective rate of personal income taxes.

<p>If policy makers want to understand why the Golden State's economy is lagging behind those of other states, the punitive and steeply progressive personal income tax is a good place to start looking.</p>	<p>The seven states that do not impose a personal income tax tied for first place: Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming. Tennessee and New Hampshire also rank high, eighth and ninth respectively, based largely on the fact that they impose personal income tax only on investment income. Illinois ranked 10th overall but first among the states that impose personal income tax on all income.</p>
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California ranked dead last (50th) for personal income tax. It received a score of 1.1 out of a possible 10.0. If policy makers want to understand why the Golden State's economy is lagging behind those of other states, the punitive and steeply progressive personal income tax is a good place to start looking.

Other low-ranking (poor-performing) states were Hawaii (49th), New Jersey (48th), Oregon (47th), and New York (46th).

ii. Corporate Income Tax

The statutory tax rate, progressivity, and effective rate were assessed for corporate income tax. Four states tied for the top position, because they do not impose a corporate income tax: Nevada, Texas, Washington, and Wyoming. South Dakota, Ohio, and Colorado also ranked high.

Alaska ranked lowest on this measure. California ranked 34th overall for corporate income tax.

iii. Capital-Based Taxes

Several states levy taxes on a firm's capital base, through a tax on gross receipts or a direct tax on capital. These types of capital-based taxes need to be considered alongside corporate income taxes.

The lowest-ranked state was Washington. Delaware, and Texas all ranked low for their reliance on capital-based taxes.

California does not have a capital-based tax and so, like most states, received a 10.0. Indeed, 33 states fortunately avoid using this type of tax, which imposes enormous economic costs on society.

iv. Sales Tax

Consumption taxes are actually among the most efficient (least costly) ways of raising revenue. This is especially true if the sales tax base is broad (i.e., the tax is levied on most items) and the rate is low. Relying on sales or consumption taxes more broadly imposes fewer economic costs on society and allows for a more prosperous state.

Even so, consumption taxes do draw resources away from the private sector, and therefore our ranking penalizes states that have a high sales tax. The four states with no sales tax at any level (Delaware, Montana, New Hampshire, and Oregon) received the highest overall ranking in this category. Washington was the lowest-ranked state.

California came in dead last: its sales tax rate of 8.25 percent is the highest in the country.

California did poorly in this category with an overall rank of 45th. On the statutory rate California came in dead last: its sales tax rate of 8.25 percent is the highest in the country. Its sales tax receipts as a share of personal disposable income was ranked 35th.

v. Property Tax

Although Californians are politically sensitive to property taxes, as demonstrated by Proposition 13, a property tax, depending on its design, can be a fairly efficient (low cost) type of tax. Although punitive taxes of *any* sort are destructive, property taxes do not, relatively speaking, distort economic behavior as much as income or capital-based taxes.

Delaware ranked highest on this measure, with 0.9 percent of its Gross State Product taken in the form of property taxes (state and local). The lowest-ranked state was New Hampshire, which took 5.0 percent of GSP through property taxes.

California performed fairly well on this measure, 17th in the nation. However, given the legacy of Proposition 13 and the tremendous political battles that preceded and followed it, one would have expected California to score much better. It is interesting that the foes of Proposition 13 place so much blame on it for California's periodic budgetary crises, when 16 other states have smaller property-tax burdens.

Overall Scores and Ranking for Tax Structure

Delaware ranked first for its tax structure or mix, with an overall score of 7.7 out of a possible 10.0 (executive summary table 1). The other states in the top five were South Dakota (7.6), Nevada (7.3),

Alabama (6.9), and Colorado (6.8). It's important to note, however, that these top-performing states did not have overly strong scores in an absolute sense, as witnessed by top-ranked Delaware's 7.7 out of a possible 10.0.

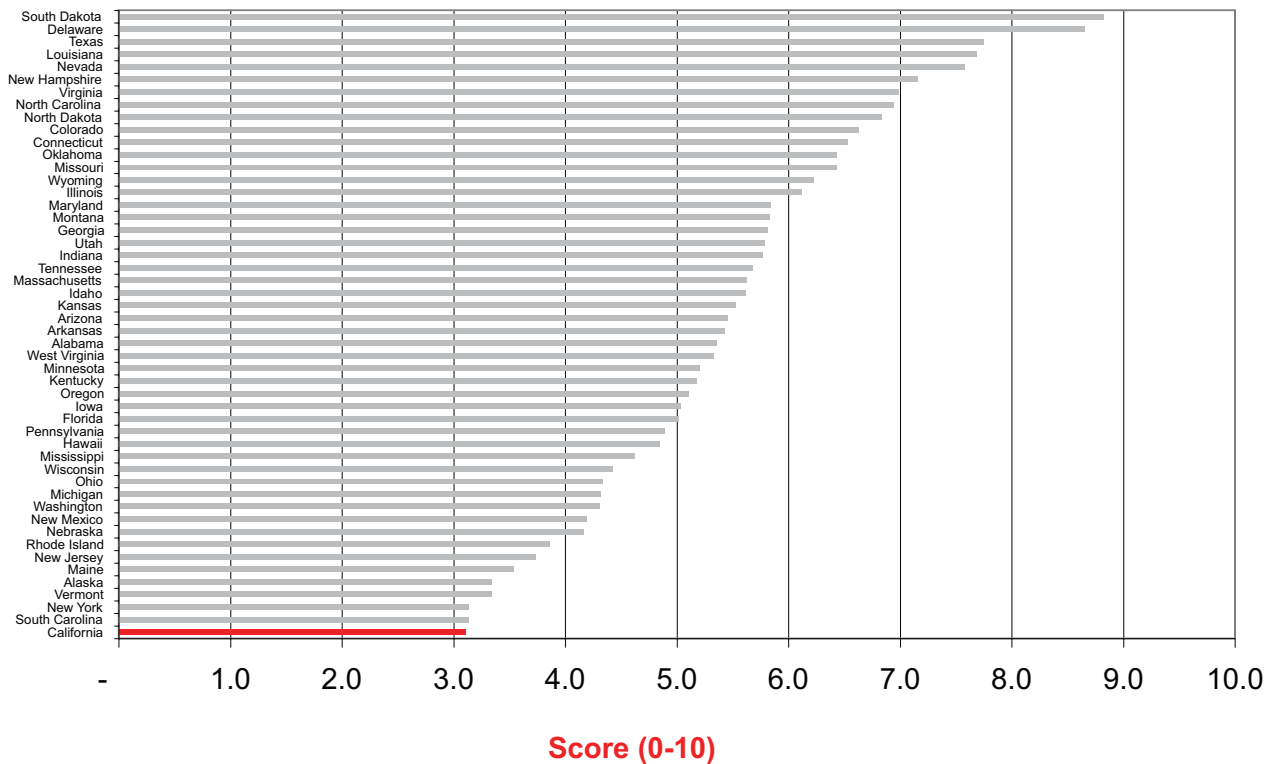
The lowest-ranked state was New Jersey (2.8). Other low-ranking states were Maine (49th), Vermont (48th), Rhode Island (47th), and Iowa (46th). California also performed poorly, with a score of 4.0 (out of a possible 10.0) and a ranking of 45th.

(3) Composite Rankings, Discussion and Recommendations

South Dakota ranked first, with an overall score of 8.8 out of a possible 10.0 (executive summary table 1 and executive summary figure 1) when the scores from the burden of government are combined with those for the design or structure of the tax burden. The others in the top five were Delaware (8.6), Texas (7.7), Louisiana (7.7), and Nevada (7.6).

The lowest-ranked state was California, with a dismal score of 3.1 out of a possible 10.0. It ranked above-average in the areas of property and corporate income taxes, but in all other major areas California ranked among the worst of all the states. Indeed, it ranked last on personal income taxes and had the fourth-largest burden of government. Other low-ranking states were South Carolina (49th, with a score of 3.1), New York (48th, with a score of 3.1), Vermont (47th, with a score of 3.3), and Alaska (46th, with a score of 3.3).

Exec Summ Figure 1: Combined Overall Score (worst 0-10 best)



California's Performance: Big Taxes, Inefficient Structure

California ranks dead last for the combination of its burden of government and its structure of taxes. The state imposes the fourth-largest burden of government among the states. The most recent data show California state and local government spending at 18.3 percent of the state's economy.

In the mix and design of its major taxes, which include personal and corporate income taxes, capital-based taxes, sales taxes, and property taxes, California ranks 45th in the country.

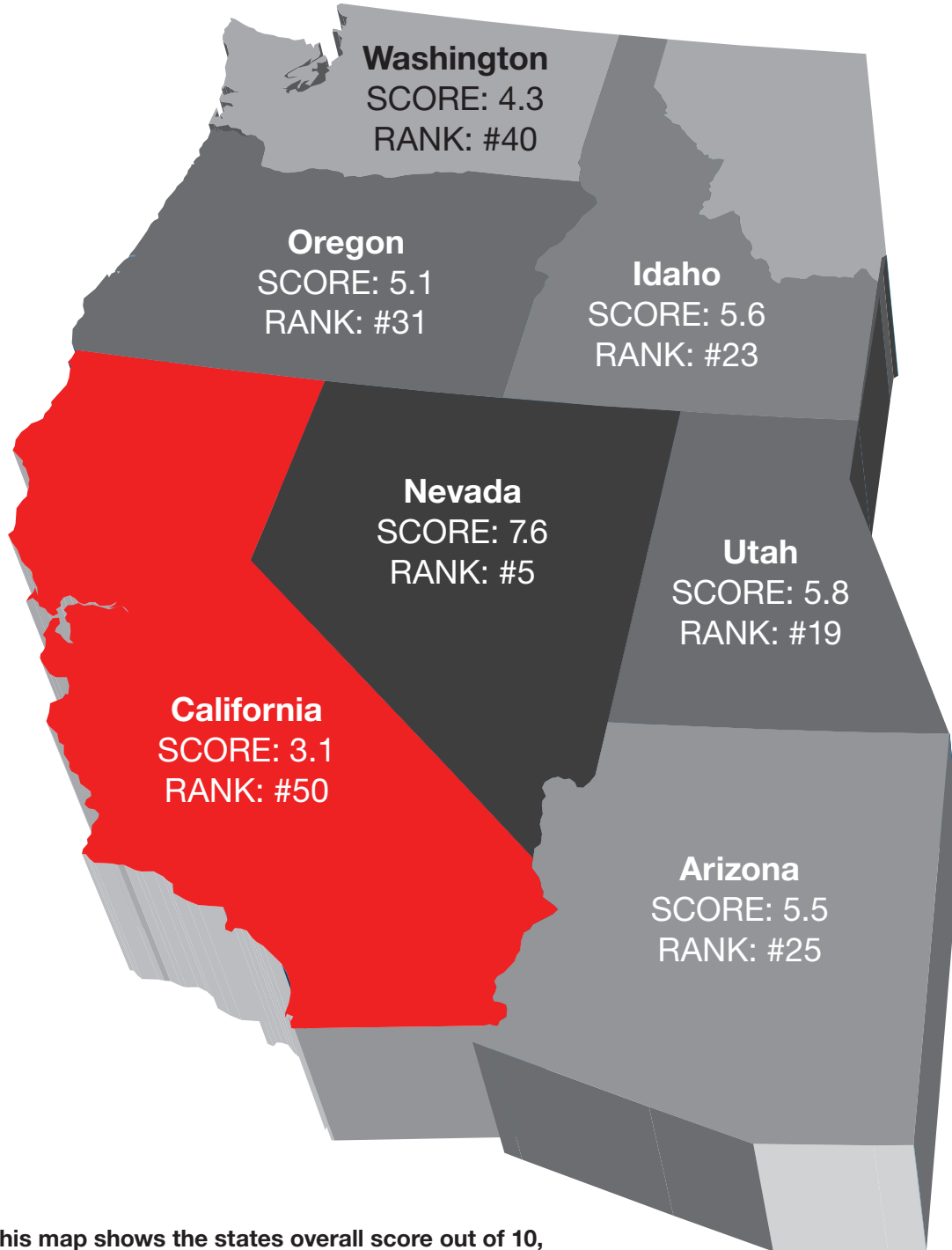
Some of the highlights:

- Personal Income Taxes: 50th
- Corporate Income Taxes: 34th
- Sales Taxes: 45th
- Property Taxes: 17th

Competitiveness

There is another angle to these data that we need to acknowledge and understand, which is that California's performance does not exist in a vacuum. Whether we are considering other Southwestern states or other West Coast states, only Washington performs anywhere near as poorly as California in terms of burden of government and tax structure. Businesses and entrepreneurs are sensitive to taxes, and California is simply not tax-competitive with its neighbors.

OVERALL SCORE
(Tax Burden and Structure)



This map shows the states overall score out of 10, and where they rank.

Recommendations

Governments should pursue tax policies that promote economic growth and prosperity, and they should avoid costly and damaging taxes. This requires using low-cost taxes like consumption taxes as the primary source of revenue. More costly taxes, such as personal and corporate income taxes and capital-based taxes, should be avoided or at the very least minimized.

Those states that choose to use income taxes, whether personal or corporate, should do so in the least distortive manner, so as to minimize their economic impacts and costs. This requires that governments avoid multiple tax rates that increase as income goes up, and that they use the broadest base possible upon which to assess the tax, which means avoiding the use of tax credits, deductions, and other exemptions.

We urge policy makers as well as the general public to consider the undeniable lesson: Higher taxes—especially on income and capital—stifle entrepreneurship and lead to lower investment and slower economic growth. Particularly during a severe recession, when states are struggling with low tax receipts and rising costs of social programs, there is a temptation to close budget deficits by ratcheting up tax rates that are already high.

California-Specific Recommendations

Not only is California a high-tax state—as everyone already knew—but it is also an *inefficient*-tax state, perhaps equally troubling. From one point of view, though, California's rank of 45th on the tax structure side is *good* news.

It means that through sensible tax reform, economic growth can be fostered along with job creation, without the need for sacrificing tax revenues to state and local governments. This means shifting from costly income taxes, both personal and corporate, to consumption taxes. Of course, once the low-hanging fruit of efficient tax reform has been plucked, further incentives for private-sector growth will have to come through reductions in California's total tax burden, currently the fourth-highest in the nation. California should simultaneously pursue tax reform and tax reduction.

Not only is California a high-tax state—as everyone already knew—but it is also an inefficient-tax state, perhaps equally troubling.

Our tax research suggests that one obvious candidate for immediate reform is California's personal income tax code, which has a top rate (10.55 percent) that is fourth-highest in the nation, and a progressivity (spread between top and bottom rate) that is third-highest.

Perhaps the most salient lesson from our California Prosperity series is that the Golden State is on a dangerous downward path. Our first report, *Assessing the State of the Golden State*, showed that on a series of objective measures of state economic performance—none of which involved government

policies per se—California ranked a disappointing 38th in the nation. What the current paper shows is that the solution *can't* be more government spending and higher tax rates, since these are already among the highest in the nation.

The solution can't be more government spending and higher tax rates, since these are already among the highest in the nation.

Our recommendation is that policy makers break out of the economic and fiscal rut *not* through temporary fixes, such as emergency tax hikes and other revenue gimmicks, but through a genuine commitment to shrinking the size and scope of the state and local government, which then allows for meaningful tax relief. That is the path to renewed prosperity in California.

Introduction

California stands in urgent need of reform based on sound economic analysis and policy suggestions. Therefore, the Pacific Research Institute (PRI) has launched its California Prosperity Project, a series of studies examining the state's economic performance and policies.

The first study in this series, *Assessing the State of the Golden State*, looked at U.S. states across four measures of economic performance and found that California ranked 38th. The paper documented the bleak condition of the California economy, without dwelling on explanations for this unsatisfactory performance.

The present paper, *Taxifornia*, identifies causes and proposes solutions. The study compares California's tax system to those of the other states across two broad measures: (1) burden and (2) structure²—in other words, how large a tax burden is imposed on citizens as well as how that burden is structured or designed. The concern with the structure of taxation is based on empirical research demonstrating that different types of taxes impose different costs on society. In a nutshell, what matters is not just *how much* the government takes, but also *how* it takes it.

Assessing the State of the Golden State

The first installment in the California Prosperity series documented the poor state of California's economy.³ We hope that the study has educated Californians about the depth of the economic challenges facing the state and the urgent need to consider fundamental economic policy reforms.

The first study measured California's economic performance over the previous five years against those of the other 49 states across four broad categories; California's final ranks were as follows:

- Income: 24th
- Labor: 48th
- Migration: 44th
- Entrepreneurship: 16th

When the scores were combined, California ranked 38th among the 50 states. California also performed poorly on a regional basis. The other West Coast states all outperformed California, as did every state in the Southwest region. Indeed, most of the states in the region were among the national leaders in economic performance over this period: Nevada (first), Arizona (third), Utah (fourth), Colorado (11th), Washington (12th), and Oregon (13th). This leaves California no excuse, such as "recession" or "regional housing crash," to explain away the dismal economic numbers; there is something wrong that is specific to California.

Some of the specific measures in the various categories highlight the severity of the economic problems plaguing the state:

-
- There is something wrong that is specific to California.
-
- 26th in growth in per capita disposable income;
 - 34th in the state poverty level;
 - 33rd in private-sector job creation;
 - seventh-highest unemployment rate over the last five years; currently fifth-highest;
 - 38th in the duration (severity) of unemployment;
 - an average of 0.6 percent of California residents left the state (in excess of those arriving) each year over the last five years, resulting in a net out-migration of more than one million Californians.

The Quest for Improved Performance

Given that terrible performance, the best approach to reform is to examine big-picture policy areas such as taxes. The aim is to identify aspects of California's tax system where changes could result in improved performance, broadly defined. The present study examines the size and design of California's tax system compared to those of the other states and within the context of scholarly research. This is a better approach than attempting to implement micro reforms that affect much smaller portions of the state economy. The overall objective of the study is to determine and prioritize areas of tax reduction and reform in order to promote better economic performance and prosperity.

Organization

Taxifornia begins with a comprehensive discussion of how taxes affect behavior, which in turn affects economic performance. If taxes result in less work effort, less savings and investment, less entrepreneurship, and fewer business startups, the inevitable result will be a reduction in economic performance, meaning less wage and income growth, higher unemployment and less job creation, and a generally less dynamic and robust economy. The review of tax research concludes with a discussion of the relative efficiency of different types of taxes. It is this research that will identify those particular tax policies most harmful to economic performance in the state.

The academic tax literature will also establish the scholarly foundation for our measurement sections. The first examines the total tax burden imposed on citizens in each state. The second examines the mix or design of the tax system in each state. As the tax research demonstrates, it is important to measure not only the total amount of resources the government extracts from the private sector but also the *way* those resources are diverted. This is the rationale for our two-pronged approach. The two measures are then combined to calculate an overall score for each state's tax system. The paper concludes with a short section outlining recommendations for tax reforms in California.

I. Research on the Effects of Taxes⁴

This section reviews economic research on the impact of taxes on decisions to work, save, invest, undertake risk, and engage in entrepreneurial activity. This overview includes a section summarizing the research on the economic costs of different taxes. The summary will provide readers with a broad understanding of how taxes can negatively affect economic performance by discouraging productive behavior.

1. Taxes and Behavior

Tax Rates and Progressivity

This section is primarily concerned with the economic effects of high marginal⁵ tax rates that increase as people or businesses earn additional income. The theory behind these studies is that increasing marginal tax rates discourages people from undertaking additional work effort, savings, investment, and entrepreneurship by reducing the rewards to those activities as one's income increases.

Two studies by Fabio Padovano and Emma Galli confirm that high marginal tax rates have a negative effect on overall economic growth.⁶ Their 2001 study relied on data for 23 OECD countries for the years 1951 to 1990. They found that high marginal tax rates and progressivity were negatively associated with long-run economic growth. They followed up the original 2001 study with a similar research paper in 2002. They found that a 10-percentage-point increase in marginal tax rates decreased the annual rate of economic growth by 0.23 percentage point.⁷

A number of research studies support these findings. For example, in 1989, Reinhard Koester and Roger Kormendi, using data for 63 countries during the 1970s, found that reducing the progressivity of the tax system (i.e., shrinking the gaps in rates between different tax brackets) raised the same amount of revenue (as a share of GDP) but led to higher levels of GDP.⁸

A study by Elizabeth Caucutt, Selahattin Imrohorglu, and Krishna B. Kumar, using data for the U.S. economy, found that increasing the progressivity of taxes—meaning increasing marginal tax rates—can have important effects on economic growth.⁹ In particular, they found that a tax system with a rising marginal tax rate reduced economic growth by 0.13 to 0.53 percentage point.¹⁰

Most recently, in 2007, American professors Christina Romer and David Romer examined the effects of changes in the tax level on GDP growth.¹¹ They concluded that tax changes had large effects on GDP growth. Specifically, a tax increase of 1 percent of GDP lowered output as measured by real GDP by roughly 2 to 3 percent. They also concluded that tax increases were linked to declines in investment, which ultimately reduced GDP.

Similarly, John Mullen and Martin Williams examined state and local tax systems and compared them to state economic performance.¹² Using state data from 1969 to 1986, they concluded that “lowering marginal tax rates can have a considerable positive impact on growth” and that “creating a less confiscatory tax structure, while maintaining the same average level of taxation, enables sub-national governments to spur economic growth” (p. 703).¹³ These are important insights for our

Lowering marginal tax rates can have a considerable positive impact on growth.

purposes because they highlight how a better-structured tax system can raise the same amount of revenue while promoting economic growth.¹⁴

Eric Engen and Jonathan Skinner buttress these conclusions. They examined more than 20 studies looking at evidence on tax rates and economic growth¹⁵ in the United States and abroad.¹⁶ They concluded that “a major tax reform reducing all marginal rates by 5 percentage points, and average tax rates by 2.5 percentage points, is predicted to increase long term growth rates by between 0.2 and 0.3 percentage points” (p. 34). This might appear to be a small effect, but the cumulative and compound effect is considerable.¹⁷

Taxes and Labor

Taxes influence labor in a number of ways, by changing the after-tax returns people receive in exchange for their efforts and productivity. Taxes can influence the number of hours worked, the intensity of the work effort, investment in skills-development and education, and labor market entry itself. Given the centrality of labor to any functioning market, understanding how taxes affect labor decisions is critical.

A plethora of academic studies examines the influence of taxes on labor supply in terms of both hours worked and work participation.¹⁸ One of the more prominent papers is “Why Do Americans Work So Much More than Europeans?” by Nobel laureate Edward Prescott.¹⁹ Prescott analyzed the effect of marginal tax rates on hours worked and employment income for the working-age population (15 to 64 years old). He looked at data for the G-7 countries over the periods 1970–74 and 1993–96.²⁰ Prescott concluded that differences in marginal tax rates explained a large part of the differences in hours worked in the early 1970s and the early 1990s for the United States and several European countries. Specifically, he found that lower marginal tax rates accounted for the fact that Americans worked nearly 50 percent more than Germans, French, and Italians.

Similarly, Steven Davis and Magnus Henrekson studied the effects of national differences in tax rates on employment income, payrolls, and consumer spending.²¹ The authors suggested that higher tax rates decreased work time in the private sector and increased the size of the underground economy by decreasing the reward (after-tax income) to legitimate employment.²² They looked at data across 16 Western countries over the 1990s and found that an increase in the tax rate of 12.8 percentage points resulted in 122 fewer hours worked per adult annually. They calculated that this decline in hours worked meant a reduction of 4.9 percentage points in employment and an increase in the underground economy of 3.8 percent of GDP.

A study by Emanuela Cardia, Norma Kozhaya, and Francisco J. Ruge-Murcia corroborates Prescott's findings.²³ They analyzed the effect of income tax changes on hours worked across several countries, including the United States. They concluded that a decrease of 10 percentage points in marginal tax rates increased the weekly hours worked by between 4.5 percent (in Germany) and 18.0 percent (in the United States).

In a recent NBER paper, Lee Ohanian, Andrea Raffo, and Richard Rogerson examined the trends in average hours worked by the working-age population (15 to 64 years old) across 21 OECD countries between 1956 and 2004.²⁴ The authors noticed considerable variance across countries while also noticing a general declining trend in average hours worked. They concluded that income and consumption taxes explained the decrease in hours worked better than other policy factors such as labor regulations, union membership, and the size and duration of unemployment benefits.

They concluded that income and consumption taxes explained the decrease in hours worked better than other policy factors.

A number of studies have investigated the impact of taxes on labor supply in the context of tax reforms in the United States. A key contributor in this area is Harvard professor Martin Feldstein. In a study published in the prestigious *American Economic Review*, Feldstein reviewed all major literature available on the impact of the Tax Reform Act of 1986 on labor supply.²⁵ He concluded that the consensus in the existing research was that men's working hours and participation rates were generally insensitive to net wages (after-tax wages), but that married women's working hours and participation rates were substantially more sensitive. He explained, however, that the consensus was wrong to conclude that taxes did not affect the supply of men's labor, since the amount of labor also depended on the intensity of work effort, the nature of the occupation, on-the-job skills training, education, and many related factors influenced by tax-rate changes.

Similarly, James Ziliak and Thomas Kniesner examined the effect of income taxes on labor supply using the 1986 and 1991 U.S. tax reforms.²⁶ They concluded that a 10 percent increase in net wages resulted in increased hours worked of roughly 3 percent.

European countries also provide evidence that tax rates influence labor supply. For example, Richard Blundell, Alan Duncan, and Costas Meghir looked at changes in British tax policy from 1978 to 1992 and the impact of those changes on the labor supply.²⁷ They concluded that increases in after-tax wages owing to lower marginal tax rates had a positive impact on hours worked.^{28, 29}

Taxes and Investment

High marginal tax rates reduce an investor's willingness to invest by lowering the returns on the investment.³⁰ A great deal of research has investigated the negative consequences of taxing investment.

One of the most influential studies on the relationship between business taxes and investment was completed by Robert Hall and Dale W. Jorgenson.³¹ They calculated the effects of tax policy changes on investment based on three major tax changes since World War II.³² They found that tax policy was highly influential in changing both the level and timing of investments, and also the composition of investments.

An important area of inquiry regarding taxes and investment is the effect of taxes on capital spending, which is a particular type of investment. Steven Fazzari, Glenn Hubbard, and Bruce Petersen analyzed the tax effects on capital spending.³³ The authors looked at whether marginal and/or average tax rates had an impact on capital investment by firms. Interestingly, they differentiated between firms they deemed to have financing constraints and those less constrained.³⁴ They found that lower average tax rates for firms facing financing constraints resulted in increased funds for reinvestment in capital. They specifically noted that the elimination of corporate income taxes would increase investment for firms facing financing constraints. In addition, they concluded that lower marginal tax rates for firms not facing significant financing constraints would stimulate capital investment.

Lower marginal tax rates for firms not facing significant financing constraints would stimulate capital investment.

Similarly, Peter Clark investigated the behavior of businesses with respect to equipment investment (capital) in the United States between 1953 and 1992.³⁵ He estimated that an increase of 1 percent in taxes would decrease equipment investment by 0.40 percent. As Clark observed, equipment investment, a type of capital investment, was quite sensitive to taxes.

Jason Cummins, Kevin Hassett, and Glenn Hubbard provided empirical evidence on the influence of business taxes on capital investment in a series of papers published by the Brookings Institution in Washington, D.C.³⁶ The first paper in the series examined responsiveness of capital investment (with a focus on fixed assets), using U.S. tax reforms as natural experiments. They concluded that investment changed significantly, as predicted, with every major business tax reform since 1962. In other words, reductions in effective taxes resulted in increases in investment, and increases in effective taxes resulted in decreases in investment. In addition, they determined that the change in investment spending was most pronounced for those firms that experienced the greatest change in tax incentives.

A subsequent paper by Cummins, Hassett, and Hubbard expanded the scope of the study to look internationally.³⁷ Specifically, the authors investigated the effect of tax reforms in 14 OECD countries on the investment decisions of over 3,000 companies between 1981 and 1992. The authors concluded that tax policy changes affected investment decisions and levels in 12 of the 14 countries over the period.³⁸

Harvard economist Andrei Shleifer and his colleagues Simeon Djankov, Tim Ganser, Caralee McLiesh, and Rita Ramalho have completed an important (although not yet published) study of corporate taxes and their effect on investment and entrepreneurship.³⁹ The study computed all relevant taxes for a notional firm across 85 countries for fiscal 2004 and compares the results against aggregate

investment, foreign direct investment, and entrepreneurship.⁴⁰ The study also differentiated between the goods-producing sector and the services sector. The authors concluded that corporate taxes had a “consistent and large adverse” influence on both investment and entrepreneurship. Specifically, they found that a 10-percentage-point increase in the effective corporate tax rate reduced aggregate investment (compared to GDP) by 2.2 percentage points, foreign direct investment by 2.3 percentage points, and business formation by 1.4 percentage points. The authors also found that higher corporate taxes led to a larger informal economy.

Finally, a paper by Robert Carroll, Douglas Holtz-Eakin, Mark Rider, and Harvey Rosen looked at how entrepreneurs responded to tax changes in terms of capital investments.⁴¹ They found that “a 5 percentage point rise in marginal tax rates would reduce the proportion of entrepreneurs who make new capital investment by 10.4 percent.”

Taxes and Entrepreneurship

Rising interest in entrepreneurship has generally corresponded with heightened interest in how taxes might affect entrepreneurial decisions. This section scans some of the research.

William Gentry and Glenn Hubbard examined how tax progressivity affected the decisions by individuals to become entrepreneurs (defined as self-employed).⁴² The authors concluded that there was evidence that a more progressive tax system reduced the likelihood of people being self-employed, which Gentry and Hubbard used as a proxy for entrepreneurship.^{43, 44, 45}

Another interesting perspective on entrepreneurship is how taxes affect the growth of small businesses. Robert Carroll, Douglas Holtz-Eakin, Mark Rider, and Harvey Rosen completed a number of studies on this particular question. A 2000 paper examined how personal income tax rates influenced entrepreneurial decisions to hire labor.⁴⁶ They found personal income taxes significantly influenced the probability of entrepreneurial hiring.⁴⁷ A subsequent paper by the same authors, using similar data, found that lower marginal tax rates stimulated business growth among sole proprietors.⁴⁸

A reduction in the capital gains tax increases the value of the payoff and therefore increases the profitability of undertaking entrepreneurial endeavors.

A large body of research considers the impact of capital gains taxes⁴⁹ on entrepreneurship. An important study by James Poterba in 1989 provided a framework for thinking about the impact of capital gains taxes on entrepreneurship.⁵⁰ Poterba explained that potential entrepreneurs compared the benefits (compensation) available from employment at existing companies against the likely payoff from a start-up company. Poterba also explained that a proportionally large share of the payoff or compensation for the entrepreneur would come in the form of a capital gain.⁵¹ Thus, a reduction in the capital gains tax increases the value of the payoff and therefore increases the profitability of undertaking entrepreneurial endeavors.

Paul Gompers and Josh Lerner built on this framework and provided empirical evidence based on venture capital funding.⁵² They analyzed the amount of venture capital and compared it to tax rates on capital gains from 1972 to 1994. They concluded that a 1-percentage-point increase in the capital gains tax rate resulted in a 3.8 percent reduction in venture capital funding.

Christian Keuschnigg and Søren Bo Nielsen extended the Gompers and Lerner analysis to look at the effect of taxes as well as other public policies on the creation and success of small businesses that were financed by venture capital.⁵³ Critically, they concluded that “even a small capital gains tax . . . diminishes incentives to provide entrepreneurial effort” (p. 1033).

Marco Da Rin, Giovanna Nicodano, and Alessandro Sembenelli analyzed a host of government policies to determine their effect on business start-ups.⁵⁴ Their paper relies on data from 14 European countries between 1988 and 2001. They conclude that a reduction in the capital gains tax resulted in an increase in the proportion of high-tech and early-stage ventures, which they used as a proxy for entrepreneurial activity.⁵⁵

The implications of this body of research are that taxes can influence—often to a great degree—people’s decisions regarding work effort, work participation, education, savings, investment, entrepreneurship, and business development. These insights will guide us in evaluating tax systems across the 50 states, and in suggesting reform for California.

2. Tax Structure: Different Taxes Impose Different Costs

“Tax structure” or “tax design” refers to the mix of taxes governments use to raise the revenues necessary to finance government operations. The tax structure, in other words, relates to how much of each type of tax is used to raise revenues. The design is a critical consideration, since some taxes (on capital) are more damaging to the economy than others (on goods and services).⁵⁶

As noted, taxes impose significant costs on society by distorting the behavior of individuals, families, and businesses.⁵⁷ Individuals and firms make decisions based on prices. Raise the price of a good, and consumers are likely to purchase less of it, or turn to substitute goods. Similarly, raise the price of an input for business, and it will search for ways to compensate for the increased costs through substitution and innovation. Taxes change the relative prices of goods, services, and inputs by making some inputs more expensive and others relatively less expensive.

This distorts production decisions—what firms produce, and how, where, and when they produce it. Taxes can also reduce the net return that workers get from working or taking advanced training or education and the net returns that investors get from employing their capital in one industry rather than another.

For example, an increase in an employer payroll tax means that labor, at least in the short term,⁵⁸ has become more expensive. Labor-intensive firms, in particular, will now face higher costs and therefore

look for ways to mitigate the increased expense through the substitution of capital, in the form of machinery and equipment, for labor.

Taxes on savings, such as personal income taxes on interest, dividends, and capital gains, and taxes on capital, such as corporate income taxes, reduce the after-tax rate of return received by investors, reducing the incentive to save and invest.⁵⁹ This can have important, and indeed profound, effects on productivity-enhancing investment, and ultimately on workers' wage rates.⁶⁰

Sales taxes also affect the incentive to work, because they reduce a worker's real wage rate by increasing the prices of consumer goods.

Personal income taxes affect labor supply incentives by decreasing after-tax wages, thereby affecting the total number of hours worked and the overall effort of workers. Finally, sales taxes also affect the incentive to work, because they reduce a worker's real wage rate by increasing the prices of consumer goods.⁶¹ In addition, sales taxes levied on the inputs purchased by firms (a common feature of state sales taxes) drive up businesses' costs and reduce their competitiveness.

It's clear that taxes distort decisions regarding labor, savings, investment, and entrepreneurship. These distortions can impose costs on society by leading to a mix of outputs that is less valued than other combinations that would have emerged under different tax systems.⁶² The U.S. Government Accountability Office (GAO) summarized efficiency costs as follows:

... efficiency costs occur when tax rules cause individuals to change their work, savings, consumption, and investment behavior in ways that ultimately leave them with a combination of consumption and leisure (now and in the future) that they value less than the combination they would have obtained under a tax system that did not distort their behavior.⁶³

A number of studies have investigated the overall or aggregate effect of tax structure on economic growth.⁶⁴ For example, Richard Kneller, Michael Bleaney, and Norman Gemmell examined data for 22 OECD countries from 1970 to 1995.⁶⁵ They found that taxes on income, profits, payroll, and property, as well as social security taxes, reduced economic growth. They also found that value-added or consumption taxes assessed on goods and services did not negatively affect economic growth. They calculated that reducing the use of the more costly taxes by 1 percent of GDP would increase economic growth by between 0.1 and 0.2 percent annually.

Frida Widmalm corroborated these findings in a 2001 study examining taxation and its effect on economic growth.⁶⁶ She relied on data for 23 OECD countries for the period 1965 to 1990. She found that certain tax mixes did indeed have negative effects on economic growth. In addition, she found a negative relationship between economic growth and the share of total taxes levied on personal income.

These studies all relate to the core observation that some taxes impose greater costs on society than other taxes. The implication is that two jurisdictions with the same tax burden can experience different tax-based costs if their mix of taxes is sufficiently different. To repeat, what matters is not just how much revenue the government raises, but the way in which it does so. The following section summarizes the research concerning what is referred to as marginal efficiency cost of taxes.

Marginal Efficiency Cost of Taxes: Not All Taxes Are Equal

Numerous studies have estimated the economic cost of different types of taxes. A critical contribution to this field was by Nobel laureate James Mirrlees, who in the early 1970s developed the theory of optimal taxation.⁶⁷ The core of Mirrlees's watershed work was that governments should achieve given revenue requirements by choosing taxes that have the best social welfare outcome.

The research summarized in this section relies on what is referred to as marginal efficiency cost (MEC) or marginal excess burden (MEB) calculations. The MEC methodology provides a mechanism by which to estimate the costs of different taxes. Specifically, the MEC calculates the efficiency cost of raising one additional dollar of revenue.⁶⁸ The following section highlights a number of key studies on the efficiency costs of taxes for the United States.⁶⁹

Among the most widely cited calculations of marginal efficiency costs are those estimated by Harvard professor Dale Jorgenson and his colleague Kun-Young Yun.⁷⁰ Capital-based taxes (MEC = \$0.92) and corporate income taxes (MEC = \$0.84) were shown to impose much higher costs than other, more efficient types of taxes such as sales tax (MEC = \$0.26).⁷¹ Please note that these efficiency costs are in addition to the direct cost of extracting an additional dollar of resources from the economy. In other words, to raise an additional dollar of revenue for the government using corporate income taxes, society incurs the direct cost of the \$1 extracted from the economy plus an additional \$0.84 in efficiency costs.

Table 1: Estimates of Marginal Efficiency Costs for Selected U.S. Taxes

Type of Tax	MEC
Capital Income Tax (Individual & Corporate)	\$0.924
Corporate Income Tax	\$0.838
individual Income Tax	\$0.598
Labor Income Tax	\$0.482
All Taxes	\$0.460
Sales Tax	\$0.256
Property Tax	\$0.174

Source: Jorgenson and Yun (1991)

Another important study that calculated the costs of different taxes was completed by Charles Ballard, John Shoven, and John Whalley in 1985 and published in the prestigious *American Economic Review*.⁷² The study reported MEC estimates for a broad range of taxes in the United States (table 2). The authors calculated that each dollar of additional tax revenue imposed costs in the range of

17 to 56 cents on the U.S. economy. As observed in the previous studies, however, there were across-the-board differences in the costs for different taxes. The authors found that the efficiency costs of sales taxes⁷³ were significantly lower (\$0.035) than those of other taxes, such as capital taxes (\$0.181), income taxes (\$0.163), and payroll taxes (\$0.121).

Table 2: Marginal Excess Burden from Raising Extra Revenue from Specific Portions of the Tax System

Type of Tax	MEC
Capital Taxes at Industry Level	\$0.181
All Taxes	\$0.170
Income Taxes	\$0.163
Labor Taxes at Industry Level	\$0.121
Sales Taxes on Commodities	\$0.035

Source: Ballard et al. (1985), page 136

Note: The original table provided four cost estimates. We have presented only what the authors deemed to be the most conservative cost estimates. The above table, therefore, is only a partial presentation of the complete table found in the study.

Harvard economist Martin Feldstein recently summarized the incentive effects of raising taxes on labor and investment.⁷⁴ This surprisingly accessible paper, “The Effect of Taxes on Efficiency and Growth,” explains how increasing marginal tax rates negatively affects economic behavior. Feldstein arrives at two conclusions based on an analysis of the effects of increasing marginal rates of personal income taxes by 1 percent. First, the actual revenue collected is only 57 percent of the static estimate (which ignores incentive effects). More important, Feldstein calculates the total deadweight loss emanating from an across-the-board tax increase at \$0.76. In other words, it would cost \$1.76 to finance \$1.00 in government spending by increasing personal income tax rates across the board.

The specific cost estimates of different taxes included in each of the studies noted is less important than the consistent general finding that the costs (specifically the marginal efficiency costs) of sales (consumption) and payroll (wage and salary) taxes are much less (i.e., more efficient) than taxes on capital. As a result, economic gains can be achieved from simply shifting the tax mix away from capital-based taxes to more efficient taxes such as those based on consumption.⁷⁵

The specific cost estimates of different taxes included in each of the studies noted is less important than the consistent general finding that the costs (specifically the marginal efficiency costs).

3. Conclusion and Implications of Tax Research

The research on all the subjects we have reviewed points to a set of guidelines for taxation. (1) Taxes should be assessed on the broadest base possible with an accordingly low rate rather than narrowing the base through deductions and credits and using an accordingly higher rate. (2) There are real economic costs to a progressive tax system with increasing marginal tax rates. (3) The sensitivity of behavior in response to investment-oriented taxes appears to be much greater than with other taxes. (4) The costs imposed on society through the use of inefficient taxes such as capital-based and income

These taxes should be applied to consumption as opposed to income and certainly as opposed to income from capital.

taxes are materially greater than the costs imposed by other, more efficient measures, such as consumption and payroll taxes.

Policy makers, of course, must confront many political and moral considerations when implementing real-world tax reform. Yet the academic literature provides clear guidance as far as the basic economics are concerned: If the objective is to raise a given amount of revenue while minimizing the negative effects on per capita

income, employment, and economic growth, policy makers should aim for a broad-based, flat (or flatter) tax code with low marginal rates. Moreover, these taxes should be applied to consumption as opposed to income and certainly as opposed to income from capital.

II. Measuring the Burden of Government

In this section we rank the 50 states according to the aggregate burden of taxation that each imposes on its residents. We focus on the share of each state's economy diverted to government, both state and local. In other words, we're interested in measuring and ranking the burden or size of government in each state.

There are a number of ways to measure the burden of government. Most studies measure the tax burden, or perhaps the total amount of revenues collected by a government. These tax or revenue burdens are then compared to the amount of economic activity in the jurisdiction in order to calculate the size of the government compared to the size of the economy.

We have chosen a different approach. Specifically, we compute state and local government spending as a share of the state economy (the Gross State Product [GSP]) for the most recent year for which all relevant data are available (2007). Our approach differs from the standard method in two ways.

First, we measure spending rather than revenues. We believe government spending is a more accurate measure of the size of government than alternative measures such as tax receipts. The main reason for this is borrowing. If governments use debt (deferred taxes) to finance current spending, then measures of revenues will underestimate the size and perhaps the scope of the government in question. The nature of the reallocation from the private sector to the government sector remains the same whether the spending is financed through revenues or borrowing. Because state and local governments cannot simply resort to printing money like the federal government, in the long run they must finance all spending by taxing citizens in one way or another. If government spending exceeds tax receipts in a given year, that implies higher future taxes to finance interest payments or to retire debt.⁷⁶

If government spending exceeds tax receipts in a given year, that implies higher future taxes to finance interest payments or to retire debt.

Second, we incorporate local government spending, for two main reasons. One, excluding local spending necessarily biases the results in favor of state governments that have decentralized taxation and/or spending to local governments. If one measures only state-level spending, the analysis overlooks activity at the local level, which can often be substantial. And, two, there is only one set of taxpayers in a state. It is irrelevant to the taxpayers themselves whether the burden of government is imposed on them from their state capital or their local municipality. Combining state and local spending allows the study to measure the total burden of government imposed on citizens in any given state.⁷⁷

A Note on Scoring

We will be ranking the 50 states in a variety of categories. In the current section, we use only state and local spending as a share of GSP. In the next section, we will have categories for each of the main taxes (personal income tax, sales tax, property tax, etc.), and we will have separate rankings of the states for each of several components *within* each category. For example, we will rank the 50 states from lowest to highest in terms of their top personal income tax rate, and we will also rank the 50 states from lowest to highest in terms of the progressivity of their corporate income tax rates. We will explain the specific measures in more detail in the relevant sections below, but for now we want to explain the method we use to aggregate the individual rankings on the various component measures into a composite ranking.

For each category or component the variable of interest—such as total spending as a share of GSP, or the top personal income tax rate—is first converted into a score on a scale of 0.0 to 10.0. (Note that in this paper, since all the components measure undesirable items, we always reverse the measure, such that a score of 10.0 is always the best.) By using a cardinal score, rather than a simple ranking, we can more accurately capture the quantitative difference in states' performances on each measure.

In other words, the worst state would always have a cardinal score of 0.0 (or a rank of 50) while the best state would always have a cardinal score of 10.0 (or a rank of 1). But between those two extremes, our approach differs from a simple ranking because it allows clustering. For example, if most states had top personal income tax rates very close to one another, while one state had a much higher (or lower) rate, then our approach would assign similar scores to the clustered states, such as scores from 3.4 to 3.8. In contrast, no matter what the dispersion of the variable, in a simple ranking the score would always increase by one unit as we moved from the worst to the best state. (See the appendix for a numerical example that illustrates our scoring method.)

If only one variable were being measured, the takeaway message from the two approaches would be equivalent, since in the end we convert from our own cardinal score back to a ranking. However, because this report relies on several different measures of a state's tax burden and structure, it is important to retain the measure of dispersal before the various components are aggregated into a single score. In this way, if one state is head and shoulders above its peers in a particular category (such as low corporate income tax rates), it will benefit more in the final ranking than a state that ranks first in some category (such as total spending as a share of GSP), but which has barely eked out that victory ahead of 15 other states all clustered near the top. Therefore, our scoring approach ultimately yields a simple ranking of the states—from the worst at number 50 to the best at number 1—but the cardinal scores of 0.0 to 10.0 in the intermediate steps allow for a more accurate weighting of the states' performances on various measures.

Observations

South Dakota was the top-ranked state in this category (see table 3 and figure 1), with state and local spending representing 11.6 percent of GSP in 2007. Delaware ranked second, with state and local spending accounting for 12.0 percent of GSP. The other states in the top five were: Texas (12.1 percent), Louisiana (12.2 percent), and New Hampshire (13.2 percent).

At the other end of the spectrum, Alaska ranked 50th, with state and local government spending representing a little more than one-fifth (20.2 percent) of the state’s economy.⁷⁸ South Carolina ranked 49th, with 19.4 percent of its economy consumed by state and local government spending.

Two of the largest states, California and New York, came next. New York ranked 48th, with 18.4 percent of the state economy consumed by state and local government spending, while California ranked 47th (18.3 percent). New Mexico rounded out the list of lowest-ranked states; it came in 46th, with state and local governments consuming 17.9 percent of GSP.

Figure 1: State and Local Spending as Share of GSP (2007)

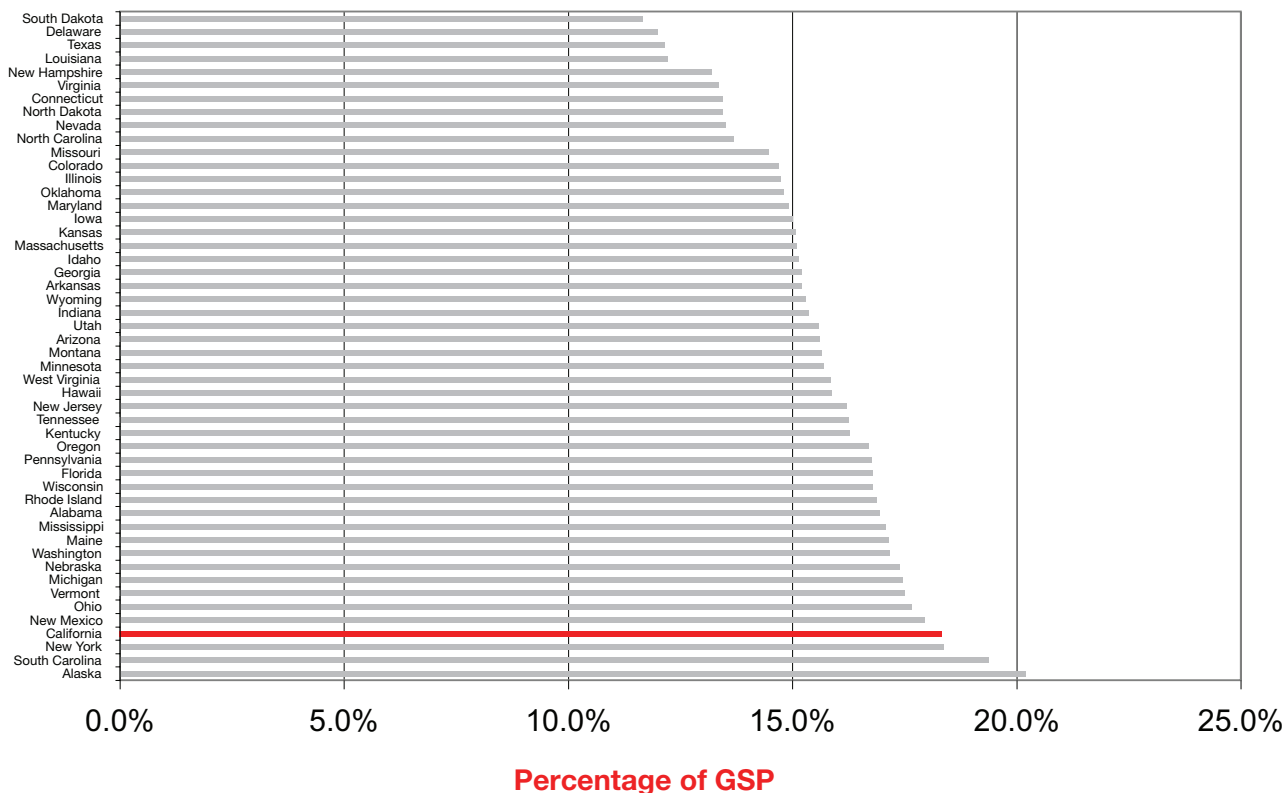


Table 3: Burden of Government

State	State and Local Government Spending as a Percentage of GSP (2007)	Score (Out of 10)	Rank
Alabama	16.9%	3.8	38
Alaska*	20.2%	0.0	50
Arizona	15.6%	5.4	25
Arkansas	15.2%	5.8	21
California	18.3%	2.2	47
Colorado	14.7%	6.4	12
Connecticut	13.4%	7.9	7
Delaware	12.0%	9.6	2
Florida	16.8%	4.0	35
Georgia	15.2%	5.9	20
Hawaii	15.9%	5.1	29
Idaho	15.1%	5.9	19
Illinois	14.7%	6.4	13
Indiana	15.3%	5.7	23
Iowa	15.0%	6.1	16
Kansas	15.1%	6.0	17
Kentucky	16.3%	4.6	32
Louisiana	12.2%	9.3	4
Maine	17.1%	3.6	40
Maryland	14.9%	6.2	15
Massachusetts	15.1%	6.0	18
Michigan	17.5%	3.2	43
Minnesota	15.7%	5.3	27
Mississippi	17.1%	3.7	39
Missouri	14.5%	6.7	11
Montana	15.6%	5.3	26
Nebraska	17.4%	3.3	42
Nevada	13.5%	7.8	9
New Hampshire	13.2%	8.2	5
New Jersey	16.2%	4.7	30
New Mexico	17.9%	2.6	46
New York	18.4%	2.1	48
North Carolina	13.7%	7.6	10
North Dakota	13.4%	7.9	8
Ohio	17.6%	3.0	45
Oklahoma	14.8%	6.3	14
Oregon	16.7%	4.1	33
Pennsylvania	16.8%	4.0	34
Rhode Island	16.9%	3.9	37
South Carolina	19.4%	1.0	49
South Dakota	11.6%	10.0	1
Tennessee	16.2%	4.6	31
Texas	12.1%	9.4	3
Utah	15.6%	5.4	24
Vermont	17.5%	3.1	44
Virginia	13.4%	8.0	6
Washington	17.2%	3.5	41
West Virginia	15.8%	5.1	28
Wisconsin	16.8%	4.0	36
Wyoming	15.3%	5.7	22

Sources for Table 3 and Figure 1

Census Bureau. <http://www.census.gov/govs/estimate/index.html>

State & Local Government Finance Data Query System. <http://www.taxpolicycenter.org/slf-dqs/pages.cfm>.

The Urban Institute and Brookings Institution Tax Policy Center. Data from U.S. Census Bureau, Annual Survey of State and Local Government Finances, Government Finances, Volume 4, and Census of Governments (Years).

Date of Access: (28-May-09 03:27 PM)

Bureau of Economic Analysis, U.S. Department of Commerce, <http://www.bea.gov/regional/gsp/>

* See footnote 78 for an explanation of the uniqueness associated with the State of Alaska.

A different way to think about the data in table 3 and figure 1, along with the discussion above, is the extent to which state and local governments are active allocators of resources in their jurisdictions' economies. The larger the share of the state economy consumed by state and local government spending, the larger the influence and effect of state and local politics on the state economy. States like South Dakota, Delaware, and Texas have minimized the influence and thus the burden of their state and local governments relative to their economies. On the other hand, states like Alaska, South Carolina, New York, and unfortunately California, have not restrained their state and local governments, which play a much larger role in their economies. Besides the important philosophical issues concerning the proper size of government, large public sectors are problematic because the political process tends to allocate resources less efficiently than competitive markets.⁷⁹

States like Alaska, South Carolina, New York, and unfortunately California, have not restrained their state and local governments, which play a much larger role in their economies.

III. Measuring Tax Structures

In the previous section, we ranked the 50 states on a single measure of state and local spending as a share of the state's economy. But as the scholarly research shows, it is a question not merely of the *amount* of resources extracted by the government, but also of *how* those resources are obtained.

In this section, we rank the 50 states based on the structure of five major taxes—personal income tax, corporate income tax, capital-based taxes, sales tax, and property tax. The ranking on the property tax consists of a single measure, while the other categories consist of two or more measures, combined to generate a composite ranking.

For example, to generate our overall ranking in the category of personal income tax, we look at three components: (a) top tax rate, (b) progressivity, and (c) effective rate (total receipts as a fraction of state personal income). For each of these components, we assign the states a score from 0.0 to 10.0 (as described in the appendix). Then we take the equally weighted average of these three scores in order to calculate each state's overall score for the category of personal income tax.

In the following subsections we will highlight the major findings within each category, and also mention some of the caveats that inevitably pertain to an aggregate ranking scheme such as this one.

1. Personal Income Tax

Personal income taxes are a major source of revenue for most states. On average, states derive more than 10 percent of their total (non-federal) revenues from personal income taxes at all levels, and eight states derive more than 15 percent of their total revenues from this single source. The personal income tax is also one of the more visible and well understood taxes for the average citizen. As noted, it also widely affects behavior. Workers, entrepreneurs, and even corporate shareholders are affected by personal income taxes, and adjust their behavior accordingly. For example, the higher the marginal income tax rate a worker, investor, or entrepreneur faces, the less incentive he has to work overtime

The best design of a personal income tax system would be one characterized by a single rate with limited deductions and tax credits.

(for workers), to start a new business (for entrepreneurs), or to invest in an established or new venture (for shareholders). These behavioral responses have real effects on the economy through less work, less entrepreneurship, and less investment.

For the personal income tax, as well as the corporate income tax and capital-based taxes, we examine three separate components to gauge the overall structure of a state's tax system. The first component is the top tax rate, meaning the tax rate applicable in the highest tax bracket.⁸⁰ The second component is progressivity, which we measure by subtracting the lowest tax rate from the highest tax rate.⁸¹ The third component is the total receipts from a given tax, divided by the pool of income

from which the tax is extracted. For the personal income tax, we compared total personal income tax receipts (state and local) with total state personal income to measure the fraction of (pre-tax) income the state and local governments diverted from individuals.

As with all of our measures, a state will achieve a higher score the *lower* its computed variable on a given component in the personal income tax category. For example, states that have no income tax or an income tax with only one bracket will receive a score of 10.0 on the progressivity component.⁸²

Each of the three measures examines the design of a state's personal income tax system in a different way. The first measure, the top personal income tax rate, simply records how high the personal income tax rates in each state reach. The second measure, progressivity, assesses how aggressively the state increases personal income tax rates as individuals earn more income. The final measure, personal income taxes as a share of personal income, measures the total burden of the personal income tax on the incomes of a state's citizens. In each case, our measures attempt to determine, based on past research of taxation, how best to design a personal income tax system.

Table 4: Personal Income Taxes

State	Data			Scores and Rankings		
	Top Statutory Rate	Bottom Statutory Rate	Progressivity (Percentage Points)	Effective Rate(1)	Top Statutory Rate: Score	Top Statutory Rate: Rank
Alabama	5.00%	2.00%	3.00%	2.04%	5.5	18
Alaska	0.00%	0.00%	0.00%	0.00%	10.0	1
Arizona	4.54%	2.59%	1.95%	1.80%	5.9	14
Arkansas	7.00%	1.00%	6.00%	2.54%	3.6	36
California	10.55%	1.25%	9.30%	3.51%	0.4	47
Colorado	4.63%	4.63%	0.00%	2.40%	5.8	15
Connecticut	5.00%	3.00%	2.00%	3.30%	5.5	18
Delaware	6.95%	2.20%	4.75%	3.10%	3.7	35
Florida	0.00%	0.00%	0.00%	0.00%	10.0	1
Georgia	6.00%	1.00%	5.00%	2.76%	4.5	26
Hawaii	11.00%	1.40%	9.60%	3.11%	0.0	49
Idaho	7.80%	1.60%	6.20%	2.96%	2.9	40
Illinois	3.00%	3.00%	0.00%	1.79%	7.3	10
Indiana	3.40%	3.40%	0.00%	2.48%	6.9	12
Iowa	8.98%	0.36%	8.62%	2.63%	1.8	44
Kansas	6.45%	3.50%	2.95%	2.71%	4.1	31
Kentucky	6.00%	2.00%	4.00%	3.10%	4.5	26
Louisiana	6.00%	2.00%	4.00%	2.09%	4.5	26
Maine	8.50%	2.00%	6.50%	3.04%	2.3	42
Maryland	6.25%	2.00%	4.25%	4.11%	4.3	30
Massachusetts	5.30%	5.30%	0.00%	3.60%	5.2	22
Michigan	4.35%	4.35%	0.00%	2.00%	6.0	13
Minnesota	7.85%	5.35%	2.50%	3.39%	2.9	41
Mississippi	5.00%	3.00%	2.00%	1.68%	5.5	18
Missouri	6.00%	1.50%	4.50%	2.59%	4.5	26
Montana	6.90%	1.00%	5.90%	2.62%	3.7	34
Nebraska	6.84%	2.56%	4.28%	2.57%	3.8	33
Nevada	0.00%	0.00%	0.00%	0.00%	10.0	1
New Hampshire(3)	0.98%	0.98%	0.00%	0.20%	9.1	9
New Jersey	10.75%	1.40%	9.35%	2.74%	0.2	48
New Mexico	4.90%	1.70%	3.20%	1.95%	5.5	17
New York	8.97%	4.00%	4.97%	4.74%	1.8	43
North Carolina	7.75%	6.00%	1.75%	3.47%	3.0	38
North Dakota	4.86%	1.84%	3.02%	1.38%	5.6	16
Ohio	5.93%	0.59%	5.34%	3.47%	4.6	25
Oklahoma	5.50%	0.50%	5.00%	2.20%	5.0	23
Oregon	11.00%	5.00%	6.00%	4.27%	0.0	49
Pennsylvania	3.07%	3.07%	0.00%	2.76%	7.2	11
Rhode Island	9.90%	3.75%	6.15%	2.59%	1.0	46
South Carolina	7.00%	0.00%	7.00%	2.36%	3.6	36
South Dakota	0.00%	0.00%	0.00%	0.00%	10.0	1
Tennessee(3)	0.97%	0.97%	0.00%	0.12%	9.1	8
Texas	0.00%	0.00%	0.00%	0.00%	10.0	1
Utah	5.00%	5.00%	0.00%	3.22%	5.5	18
Vermont	9.40%	3.55%	5.85%	2.50%	1.5	45
Virginia	5.75%	2.00%	3.75%	3.19%	4.8	24
Washington	0.00%	0.00%	0.00%	0.00%	10.0	1
West Virginia	6.50%	3.00%	3.50%	2.56%	4.1	32
Wisconsin	7.75%	4.60%	3.15%	3.12%	3.0	38
Wyoming	0.00%	0.00%	0.00%	0.00%	10.0	1

Scores and Rankings				Overall	
Progressivity: Score	Progressivity: Rank	Effective Rate: Score	Effective Rate: Rank	Overall Score(2)	Overall Rank
6.9	23	5.7	16	6.0	20
10.0	1	10.0	1	10.0	1
8.0	18	6.2	13	6.7	15
3.8	41	4.6	23	4.0	37
0.3	48	2.6	46	1.1	50
10.0	1	4.9	20	6.9	14
7.9	19	3.0	42	5.5	22
5.1	34	3.4	37	4.1	35
10.0	1	10.0	1	10.0	1
4.8	36	4.2	32	4.5	32
0.0	50	3.4	38	1.1	49
3.5	44	3.8	34	3.4	41
10.0	1	6.2	12	7.8	10
10.0	1	4.8	21	7.2	12
1.0	47	4.4	29	2.4	45
6.9	22	4.3	30	5.1	24
5.8	29	3.5	36	4.6	30
5.8	29	5.6	17	5.3	23
3.2	45	3.6	35	3.0	44
5.6	31	1.3	48	3.7	40
10.0	1	2.4	47	5.9	21
10.0	1	5.8	15	7.3	11
7.4	21	2.8	43	4.4	33
7.9	19	6.4	11	6.6	16
5.3	33	4.5	27	4.8	27
3.9	40	4.5	28	4.0	36
5.5	32	4.6	25	4.6	29
10.0	1	10.0	1	10.0	1
10.0	1	9.6	9	9.6	9
0.3	49	4.2	31	1.6	48
6.7	26	5.9	14	6.0	19
4.8	35	0.0	50	2.2	46
8.2	17	2.7	44	4.6	31
6.9	24	7.1	10	6.5	17
4.4	38	2.7	45	3.9	38
4.8	37	5.4	18	5.1	25
3.8	41	1.0	49	1.6	47
10.0	1	4.2	33	7.1	13
3.6	43	4.5	26	3.0	43
2.7	46	5.0	19	3.8	39
10.0	1	10.0	1	10.0	1
10.0	1	9.7	8	9.6	8
10.0	1	10.0	1	10.0	1
10.0	1	3.2	41	6.2	18
3.9	39	4.7	22	3.4	42
6.1	28	3.3	40	4.7	28
10.0	1	10.0	1	10.0	1
6.4	27	4.6	24	5.0	26
6.7	25	3.4	39	4.4	34
10.0	1	10.0	1	10.0	1

Notes and Sources for Table 4 and Figure 2

NOTES:

- 1 - Refers to the ratio of state and local personal income tax revenues for the most recent year available (2007) as a share of personal income. It is a measure of the total burden of personal income taxes relative to the base upon which they are assessed: personal income.
- 2 - Each of the three measures (top statutory rate, progressivity, and effective rate) are equally weighted to arrive at the composite or overall score.
- 3 - Note that Tennessee and New Hampshire's statutory rates have been adjusted downward because their personal income taxes only apply to dividend and interest income. Full explanation in the text.

SOURCES:

Tax Foundation, http://taxfoundation.org/taxdata/show/228.html#state_ind_income_rates-20090710
 State & Local Government Finance Data Query System. <http://www.taxpolicycenter.org/slf-dqs/pages.cfm>.
 The Urban Institute and Brookings Institution Tax Policy Center. Data from U.S. Census Bureau, Annual Survey of State and Local Government Finances, Government Finances, Volume 4, and Census of Governments (Years).
 Date of Access: (28-May-09)
 Census Bureau. <http://www.census.gov/govs/estimate/index.html>
 Regional Economic Information System. <http://www.bea.gov/regional/spi/default.cfm?selTable=summary>. Bureau of Economic Analysis. Date of Access: (4-June-09)
 Calculations by the authors.

Observations

(a) Top Personal Income Tax Rate

Seven states (Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming) tie for the top position on this measure, because they don't impose any personal income taxes, and thus the top rate is 0 percent. The top-ranked states among those that have personal income taxes are Tennessee and New Hampshire, which assess their income taxes only on dividends and capital gains.⁸⁴ Illinois, coming in 10th overall, ranks highest for this measure among those states that impose a broad-based personal income tax.

Hawaii and Oregon rank last on this measure, both with a top personal income tax rate of 11.0 percent. California ranked 47th, with a top personal income tax rate of 10.55 percent.

(b) Progressivity of Personal Income Tax Rates

Sixteen states tied for the top position on the measure of progressivity for personal income taxes. Specifically, these were the seven states that do not impose personal income taxes, plus nine states (Colorado, Illinois, Indiana, Massachusetts, Michigan, New Hampshire, Pennsylvania, Tennessee, and Utah) that impose a flat-rate personal income tax.

Hawaii ranked last on progressivity. California ranked 48th, outperforming only Hawaii and New Jersey. In other words, these three states, along with several others that trail them only narrowly, increase the personal income tax rates imposed on citizens as their income increases to a much greater degree than the other states.

(c) Personal Income Tax Receipts as a Share of Personal Income

As with the top personal income tax rate, the seven states with no personal income taxes ranked highest, followed by New Hampshire and Tennessee, which impose only a limited personal income tax. North Dakota ranked 10th on this measure but highest among the states that impose a broad-based personal income tax. Specifically, North Dakota extracted 1.4 percent of its citizens' personal income through personal income taxes.

New York ranked last on this measure, with 4.7 percent of personal income in the state extracted through personal income taxes, which is more than three times the percentage North

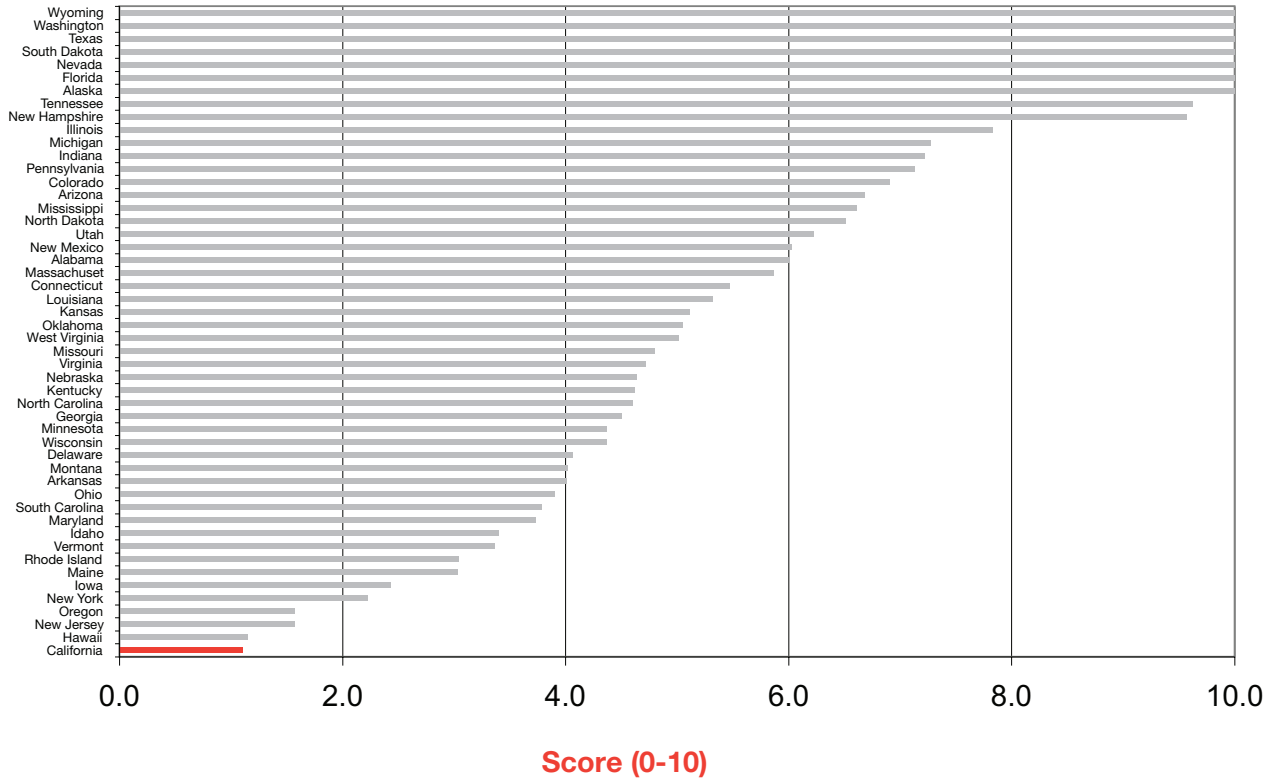
Dakota extracts. California ranked 46th on this measure, with a high amount of personal income (3.5 percent) extracted through personal income taxes compared to other states.

California ranked 46th on this measure, with a high amount of personal income (3.5 percent) extracted through personal income taxes compared to other states.

Overall

Not surprising, the seven states that do not impose personal income taxes tied for first place: Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming. California's combination of 47th on the top personal income tax rate, 48th on personal income tax progressivity, and 46th on the share of personal income collected in personal income taxes resulted in an overall ranking of 50th for personal income taxes. Indeed, the state received a score of only 1.1 out of a possible 10.0. If policy makers want to understand why the Golden State is lagging behind other states economically, the punitive and steeply progressive personal income tax code is a good place to start looking.

Figure 2: Personal Income Tax Scores (0-10)



2. Corporate Income Tax

Most states levy taxes on corporate income. As noted, corporate-based taxes impose large costs on society through the disincentives they create for investment. Nothing is certain in business; a corporation always runs the risk of losing money. As the government takes larger portions from successful operations, it reduces the likelihood that investors will undertake the risk in the first place. The research conclusively demonstrates that high rates of corporate taxation retard investment and economic growth.

For the corporate income tax, we rely on three separate measures that mirror those used for the personal income tax. Specifically, we look at each state's top corporate income tax rate, the progressivity in the corporate income tax rates, and finally total corporate income tax receipts (state and local) as a share of "gross operating surplus."⁸⁵

Gross operating surplus is our proxy for total corporate income. Unfortunately, because corporations that operate in many jurisdictions report income on a national or worldwide basis, we do not have measures of corporate income at the state level. The Bureau of Economic Analysis *does* have state-by-state breakdowns of gross operating surplus, however, which it defines in this way:

Gross operating surplus (GOS) consists of proprietors' income with inventory valuation adjustment (IVA) and capital consumption allowances (CCA), and other corporate capital charges. Other corporate capital charges consist of rental income of persons and CCA, corporate profits before tax with IVA and CCA, net interest, business transfer payments, nontax payments to general government agencies that are treated like taxes, and the current surplus of government enterprises.⁸⁶

Just as we measured how much of a state's personal income was collected in personal income tax receipts, we are also interested in how much of a state's gross operating surplus is collected in corporate income tax receipts. Gross operating surplus is not the same thing as corporate net income (i.e., corporate profits), but it is the closest measure available.

Table 5: Corporate Income Taxes

State	Data		Scores and Rankings			
	Top Statutory Rate	Bottom Statutory Rate	Progressivity (Percentage Points)	Effective Rate ¹	Top Statutory Rate: Score	Top Statutory Rate: Rank
Alabama	6.50%	6.50%	0.00%	0.88%	4.6	19
Alaska	9.40%	1.00%	8.40%	3.95%	2.2	46
Arizona	6.97%	6.97%	0.00%	1.10%	4.2	25
Arkansas	6.50%	1.00%	5.50%	1.04%	4.6	19
California	8.84%	8.84%	0.00%	1.66%	2.6	42
Colorado	4.63%	4.63%	0.00%	0.56%	6.1	7
Connecticut	7.50%	7.50%	0.00%	1.10%	3.8	29
Delaware	8.70%	8.70%	0.00%	0.91%	2.8	41
Florida	5.50%	5.50%	0.00%	0.93%	5.4	12
Georgia	6.00%	6.00%	0.00%	0.72%	5.0	13
Hawaii	6.40%	4.40%	2.00%	0.48%	4.7	18
Idaho	7.60%	7.60%	0.00%	0.96%	3.7	30
Illinois	7.30%	7.30%	0.00%	1.35%	3.9	28
Indiana	8.50%	8.50%	0.00%	1.10%	2.9	37
Iowa	12.00%	6.00%	6.00%	0.61%	0.0	50
Kansas	7.05%	4.00%	3.05%	1.27%	4.1	26
Kentucky	6.00%	4.00%	2.00%	2.15%	5.0	13
Louisiana	8.00%	4.00%	4.00%	0.77%	3.3	35
Maine	8.93%	3.50%	5.43%	1.16%	2.6	43
Maryland	8.25%	8.25%	0.00%	0.92%	3.1	36
Massachusetts	9.50%	9.50%	0.00%	1.93%	2.1	47
Michigan	4.95%	4.95%	0.00%	1.51%	5.9	8
Minnesota	9.80%	9.80%	0.00%	1.39%	1.8	48
Mississippi	5.00%	3.00%	2.00%	1.20%	5.8	9
Missouri	6.25%	6.25%	0.00%	0.51%	4.8	17
Montana	6.75%	6.75%	0.00%	1.37%	4.4	23
Nebraska	7.81%	5.58%	2.23%	0.67%	3.5	32
Nevada	0.00%	0.00%	0.00%	0.00%	10.0	1
New Hampshire	8.50%	8.50%	0.00%	3.19%	2.9	37
New Jersey	9.00%	6.50%	2.50%	1.89%	2.5	44
New Mexico	7.60%	4.80%	2.80%	1.54%	3.7	30
New York	7.10%	7.10%	0.00%	3.17%	4.1	27
North Carolina	6.90%	6.90%	0.00%	1.01%	4.3	24
North Dakota	6.50%	2.60%	3.90%	1.22%	4.6	19
Ohio	0.00%	0.00%	0.00%	0.76%	10.0	1
Oklahoma	6.00%	6.00%	0.00%	1.04%	5.0	13
Oregon	7.90%	6.60%	1.30%	0.73%	3.4	33
Pennsylvania	9.99%	9.99%	0.00%	1.24%	1.7	49
Rhode Island	9.00%	9.00%	0.00%	1.06%	2.5	44
South Carolina	5.00%	5.00%	0.00%	0.62%	5.8	9
South Dakota	0.00%	0.00%	0.00%	0.47%	10.0	1
Tennessee	6.50%	6.50%	0.00%	1.28%	4.6	19
Texas	0.00%	0.00%	0.00%	0.00%	10.0	1
Utah	5.00%	5.00%	0.00%	1.01%	5.8	9
Vermont	8.50%	6.00%	2.50%	1.07%	2.9	37
Virginia	6.00%	6.00%	0.00%	0.68%	5.0	13
Washington	0.00%	0.00%	0.00%	0.00%	10.0	1
West Virginia	8.50%	8.50%	0.00%	2.61%	2.9	37
Wisconsin	7.90%	7.90%	0.00%	1.16%	3.4	33
Wyoming	0.00%	0.00%	0.00%	0.00%	10.0	1

Scores and Rankings				Overall	
Progressivity: Score	Progressivity: Rank	Effective Rate: Score	Effective Rate: Rank	Overall Score2	Overall Rank
10.0	1	7.8	17	7.5	15
0.0	50	0.0	50	0.7	50
10.0	1	7.2	29	7.1	18
3.5	48	7.4	24	5.1	45
10.0	1	5.8	43	6.1	34
10.0	1	8.6	8	8.2	7
10.0	1	7.2	28	7.0	22
10.0	1	7.7	18	6.8	27
10.0	1	7.7	20	7.7	13
10.0	1	8.2	13	7.7	12
7.6	38	8.8	6	7.0	21
10.0	1	7.6	21	7.1	20
10.0	1	6.6	38	6.8	25
10.0	1	7.2	30	6.7	29
2.9	49	8.5	9	3.8	49
6.4	44	6.8	36	5.8	36
7.6	37	4.6	46	5.7	39
5.2	46	8.1	16	5.5	41
3.5	47	7.1	32	4.4	48
10.0	1	7.7	19	6.9	24
10.0	1	5.1	45	5.7	38
10.0	1	6.2	41	7.4	16
10.0	1	6.5	40	6.1	35
7.6	38	7.0	33	6.8	28
10.0	1	8.7	7	7.8	9
10.0	1	6.5	39	7.0	23
7.3	40	8.3	11	6.4	32
10.0	1	10.0	1	10.0	1
10.0	1	1.9	49	5.0	46
7.0	41	5.2	44	4.9	47
6.7	43	6.1	42	5.5	42
10.0	1	2.0	48	5.4	44
10.0	1	7.4	23	7.2	17
5.4	45	6.9	34	5.6	40
10.0	1	8.1	15	9.4	6
10.0	1	7.4	25	7.5	14
8.5	36	8.2	14	6.7	30
10.0	1	6.9	35	6.2	33
10.0	1	7.3	26	6.6	31
10.0	1	8.4	10	8.1	8
10.0	1	8.8	5	9.6	5
10.0	1	6.8	37	7.1	19
10.0	1	10.0	1	10.0	1
10.0	1	7.4	22	7.8	10
7.0	42	7.3	27	5.7	37
10.0	1	8.3	12	7.8	11
10.0	1	10.0	1	10.0	1
10.0	1	3.4	47	5.4	43
10.0	1	7.1	31	6.8	26
10.0	1	10.0	1	10.0	1

Notes and Sources on following page.

Notes and Sources for Table 5 and Figure 3

NOTES:

1 - Refers to the ratio of state and local corporate income tax revenues for the most recent year available (2007) as a share of gross operating surpluses. It is a measure of the total burden of corporate income taxes relative to the base upon which they are assessed: corporate income.

2 - Each of the three measures (top statutory rate, progressivity, and effective rate) are equally weighted to arrive at the composite or overall score.

SOURCES:

Tax Foundation: http://taxfoundation.org/taxdata/show/230.html#state_corp_income_rates-20090701

State & Local Government Finance Data Query System. <http://www.taxpolicycenter.org/slf-dqs/pages.cfm>. The Urban Institute and Brookings Institution Tax Policy Center. Data from U.S. Census Bureau, Annual Survey of State and Local Government Finances, Government Finances, Volume 4, and Census of Governments (Years). Date of Access: (28-May-09)

Census Bureau. <http://www.census.gov/govs/estimate/index.html>

Regional Economic Information System. <http://www.bea.gov/regional/gsp/>. Bureau of Economic Analysis. Date of Access: (4-June-09)

Calculations by the authors.

Observations

(a) Top Corporate Income Tax Rate

The six states that do not impose a corporate income tax tied for the top position on this measure: Nevada, Ohio, South Dakota, Texas, Washington, and Wyoming. Colorado, which ranked seventh, placed highest among the 44 states that levy a corporate income tax.

Iowa ranked last on this measure, with its top corporate income tax rate of 12.0 percent. California ranked 42nd, with a top corporate income tax rate of 8.8 percent.

(b) Progressivity of Corporate Income Tax Rates

Thirty-five states received perfect scores on this measure of corporate income taxes, because they do not impose differentiated or progressive corporate income tax rates. California was one of the 35.

Alaska ranked last, with a fairly significant progression in its corporate income tax rates, from 1.0 percent to 9.4 percent (table 5).

(c) Corporate Income Tax Receipts as a Share of Gross Operating Surplus

This final measure of corporate income taxes assesses the burden of actual revenues collected as a share of the underlying base (gross operating surplus) upon which the tax is assessed. Please note that the Census Bureau includes in this category several kinds of corporate taxes that we were unable to itemize. Thus, only four (Nevada, Texas, Washington, and Wyoming) of the six states that do not specifically use a corporate income tax received the top score for this measure. The other two states, Ohio and South Dakota, show positive corporate income tax revenues for technical reasons, even though their official statutory rate for this tax is 0 percent.⁸⁷

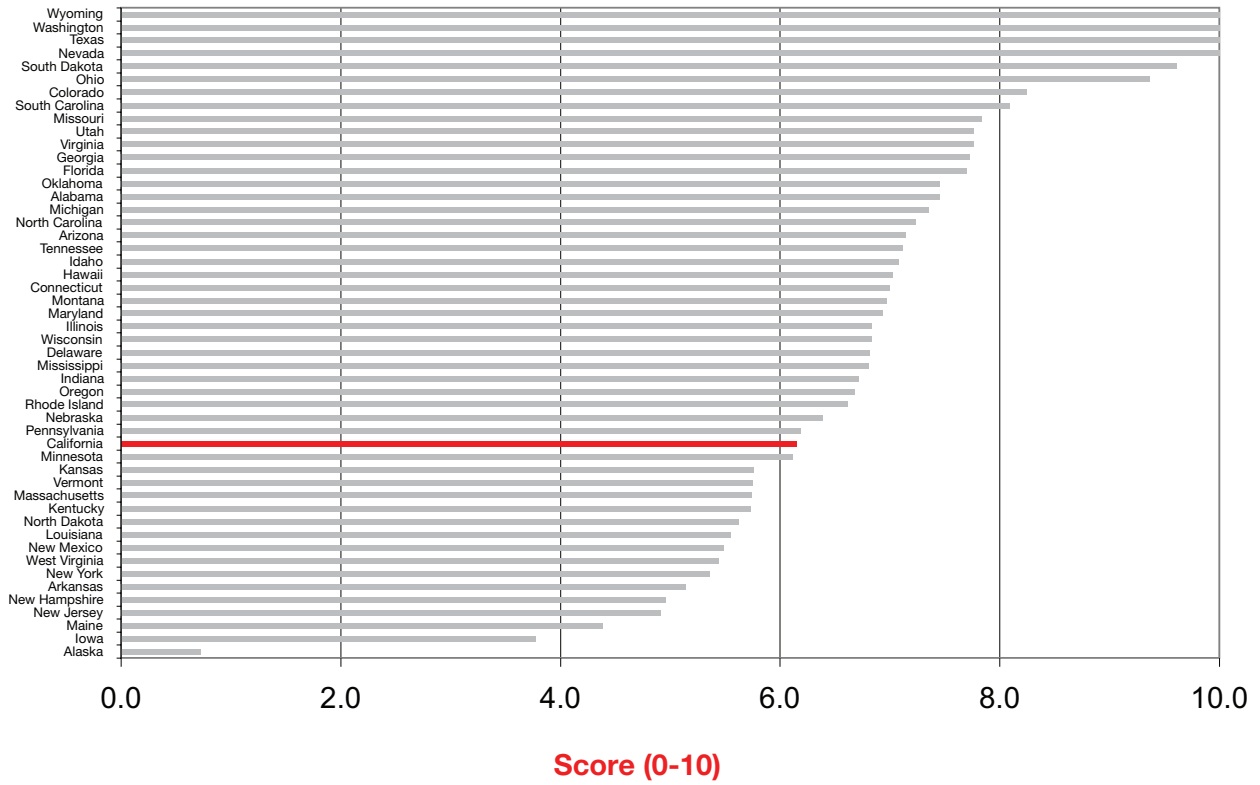
Alaska ranked last, with the highest proportion of gross operating surplus extracted in the form of corporate income taxes (3.95 percent). New Hampshire followed in 49th position, with 3.2 percent of gross operating surplus extracted in the form of corporate income taxes. California ranked 43rd, with 1.7 percent of gross operating surplus extracted in the form of corporate income taxes.

Overall

Overall, four states tied for the top position, because they do not use corporate income taxes: Nevada, Texas, Washington, and Wyoming. The lowest-ranked state was Alaska, which fared poorly because of its relatively high top corporate tax rate (46th), its steeply progressive corporate tax rates (50th), and its high effective corporate tax rate (50th).⁸⁸

California ranked 34th for corporate income taxes. That is a result of its 42nd place for top statutory rate, first place for progressivity, and low performance on its effective rate (43rd).

Figure 3: Corporate Income Tax Scores (0-10)



3. Capital-Based Taxes

Several states levy taxes on a firm's capital base, through a gross receipts tax or a direct tax on capital.⁸⁹ These are among the most economically destructive types of taxes, because they significantly reduce economic activity relative to the amount of revenue they generate for the government.

Unfortunately, it is difficult to derive homogeneous measures of capital-based taxes across the 50 states, since the specific details of each state's tax code can be quite nuanced. This is why most rankings of this nature omit this category altogether, focusing instead on more standardized types of corporate taxes such as the corporate income tax.

Despite the difficulties, we elected to include a component of capital-based taxes because their omission would present a few states in an unwarrantedly positive light. In particular, Texas raised almost \$4.5 billion in 2008 from its franchise tax, and Washington raised almost \$2.9 billion from its business and occupation tax. Neither of these states has a corporate income tax, giving them high marks on traditional measures of corporate tax burdens. If we failed to include Texas' franchise tax and Washington's business and occupation tax—both of which are gross receipts taxes—our ranking would be rewarding these (and other) states for achieving a low corporate income tax rate by levying relatively large (and equally or perhaps even more destructive) capital-based taxes.

To find a consistent compilation of capital-based state taxes, we relied on the Tax Foundation's notes on state corporate income tax codes.⁹⁰ Most of the capital-based taxes we included in our measure were gross receipts taxes (sometimes called just that, but also referred to as franchise taxes or business and occupation taxes) or explicit taxes on capital employed in the state.⁹¹

Our component measures for capital-based taxes are analogous to our treatment of the standard corporate income tax. That is, for each state we looked at the highest statutory rate of a capital-based tax, the progressivity of such taxes, and finally the total receipts from capital-based taxes as a share of gross operating surplus. Unfortunately, we could not complete the procedure for every state because of data limitations.

For some states, the capital-based tax receipts were included in the reported corporate income tax totals (this was not always perfectly clear), and we erred on the side of caution in *not* double-counting tax receipts in two different categories. This is why four states—Massachusetts, New York, Rhode Island, and West Virginia—have intermediate scores on capital-based top tax rates and progressivity, but perfect scores on receipts as a share of gross operating surplus. In reality these four states *did* take in capital-based tax revenues, but we set their values to zero to be sure not to double-count receipts that were already included in these states' corporate income tax measure.

Table 6: Capital-Based Taxes

STATE	DATA					
	Top Statutory Rate	Bottom Statutory Rate	Progressivity (Percentage Points)	Effective Rate(1)	Top Statutory Rate: Score	Top Statutory Rate: Rank
Alabama	0.0%	0.0%	0.0%	0.0%	10.0	1
Alaska	0.0%	0.0%	0.0%	0.0%	10.0	1
Arizona	0.0%	0.0%	0.0%	0.0%	10.0	1
Arkansas	0.0%	0.0%	0.0%	0.0%	10.0	1
California	0.0%	0.0%	0.0%	0.0%	10.0	1
Colorado	0.0%	0.0%	0.0%	0.0%	10.0	1
Connecticut(3)	0.310%	0.310%	0.0%	0.158%	10.0	1
Delaware	2.070%	0.104%	1.966%	0.016%	0.0	50
Florida	0.0%	0.0%	0.0%	0.0%	10.0	1
Georgia ⁴	0.0%	0.0%	0.0%	0.0%	10.0	1
Hawaii	0.0%	0.0%	0.0%	0.0%	10.0	1
Idaho	0.0%	0.0%	0.0%	0.0%	10.0	1
Illinois	0.0%	0.0%	0.0%	0.0%	10.0	1
Indiana	0.0%	0.0%	0.0%	0.0%	10.0	1
Iowa	0.0%	0.0%	0.0%	0.0%	10.0	1
Kansas(5)	0.031%	0.031%	0.0%	0.113%	9.8	36
Kentucky(6)	0.095%	0.095%	0.0%	0.191%	9.5	39
Louisiana(7)	0.300%	0.150%	0.150%	0.291%	8.6	46
Maine	0.0%	0.0%	0.0%	0.0%	10.0	1
Maryland	0.0%	0.0%	0.0%	0.0%	10.0	1
Massachusetts	0.260%	0.260%	0.0%	0.0%	8.7	44
Michigan	0.0%	0.0%	0.0%	0.0%	10.0	1
Minnesota	0.0%	0.0%	0.0%	0.0%	10.0	1
Mississippi	0.250%	0.250%	0.0%	0.514%	8.8	42
Missouri	0.033%	0.033%	0.0%	0.093%	9.8	37
Montana	0.0%	0.0%	0.0%	0.0%	10.0	1
Nebraska	0.0%	0.0%	0.0%	0.0%	10.0	1
Nevada	0.0%	0.0%	0.0%	0.0%	10.0	1
New Hampshire	0.0%	0.0%	0.0%	0.0%	10.0	1
New Jersey(8)	0.0%	0.0%	0.0%	0.0%	10.0	1
New Mexico	0.0%	0.0%	0.0%	0.0%	10.0	1
New York(9)	0.090%	0.090%	0.0%	0.0%	9.6	38
North Carolina	0.150%	0.150%	0.0%	0.344%	9.3	41
North Dakota	0.0%	0.0%	0.0%	0.0%	10.0	1
Ohio	0.260%	0.260%	0.0%	0.354%	8.7	44
Oklahoma	0.125%	0.125%	0.0%	0.082%	9.4	40
Oregon	0.0%	0.0%	0.0%	0.0%	10.0	1
Pennsylvania	0.0%	0.0%	0.0%	0.0%	10.0	1
Rhode Island	0.025%	0.025%	0.0%	0.0%	9.9	35
South Carolina	0.0%	0.0%	0.0%	0.0%	10.0	1
South Dakota	0.0%	0.0%	0.0%	0.0%	10.0	1
Tennessee	0.250%	0.250%	0.0%	0.670%	8.8	42
Texas	1.000%	0.0%	1.000%	0.668%	5.2	48
Utah	0.0%	0.0%	0.0%	0.0%	10.0	1
Vermont	0.0%	0.0%	0.0%	0.0%	10.0	1
Virginia	0.0%	0.0%	0.0%	0.0%	10.0	1
Washington	1.500%	0.471%	1.029%	2.652%	2.8	49
West Virginia	0.550%	0.550%	0.0%	0.0%	7.3	47
Wisconsin	0.0%	0.0%	0.0%	0.0%	10.0	1
Wyoming	0.0%	0.0%	0.0%	0.0%	10.0	1

SCORES AND RANKINGS				OVERALL	
Progressivity: Score	Progressivity: Rank	Effective Rate: Score	Effective Rate: Rank	Overall Score(2)	Overall Rank
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	9.4	42	9.8	38
0.0	50	9.9	38	3.3	49
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	9.6	41	9.8	37
10.0	1	9.3	43	9.6	40
9.2	47	8.9	44	8.9	46
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	9.6	41
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	8.1	47	9.0	45
10.0	1	9.7	40	9.8	36
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	9.9	35
10.0	1	8.7	45	9.3	42
10.0	1	10.0	1	10.0	1
10.0	1	8.7	46	9.1	43
10.0	1	9.7	39	9.7	39
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	34
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	7.5	49	8.8	47
4.9	48	7.5	48	5.9	48
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1
4.8	49	0.0	50	2.5	50
10.0	1	10.0	1	9.1	44
10.0	1	10.0	1	10.0	1
10.0	1	10.0	1	10.0	1

Notes and Sources for Table 7 and Figure 4

Notes:

- 1 - Refers to the ratio of state capital-based taxes, chiefly the gross receipts tax for the most recent year available (2007) as a share of gross operating surpluses. It is a measure of the total burden of the gross receipts tax compared to the base upon which they are assessed: corporate income.
- 2 - Each of the three measures (top statutory rate, progressivity, and effective rate) are equally weighted to arrive at the composite or overall score.
- 3 - Firms pay the higher of the corporate income tax or tax on capital of 0.31%.
- 4 - Georgia has a gross receipts tax on financial institutions only.
- 5 - For the 2010 tax year.
- 6 - Firms pay the lesser of 0.95% of gross receipts or 0.75% of gross profits.
- 7 - The higher tax rate on capital becomes effective at \$300,000 of capital employed in the state.
- 8 - Maintains an Alternative Minimum Assessment based on gross receipts that is reported in corporate income.
- 9 - Greater of income or capital tax plus an additional 0.09% tax on subsidiary capital.

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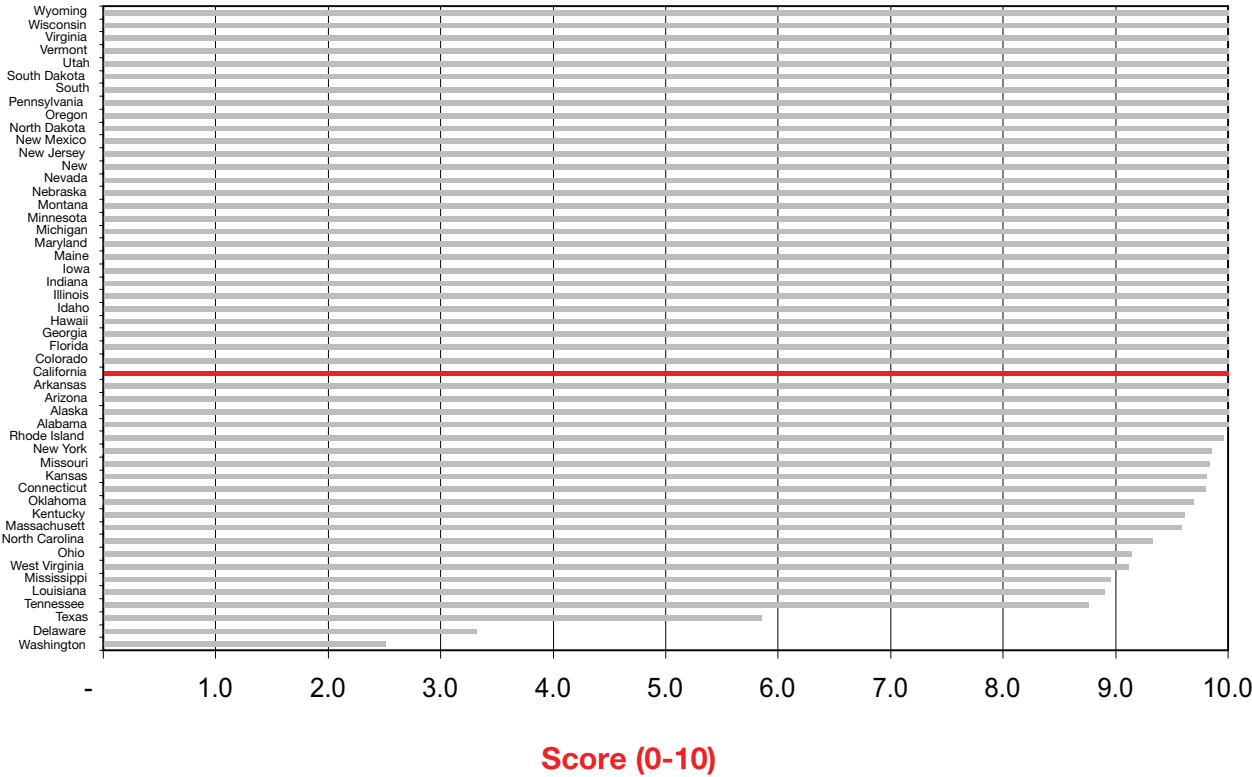
Observations

Unlike the analyses of personal and corporate income taxes, we have limited the observational discussion to the overall rankings based on the reality that so few states employ these types of taxes. The overwhelming majority of states tied for first place simply because they do not use such taxes.

The lowest-ranked state was Washington, which performed poorly in all three components. Delaware and Texas all ranked poorly on these measures.

California does not have a capital-based tax eligible for this category and so, like most states, received a 10.0.

Figure 4: Capital-Based Tax Scores (0-10)



4. Sales Tax

Sales taxes are often criticized for being regressive—that is, falling more heavily on lower- and middle-income groups. However, consumption taxes, of which sales taxes are one category, are actually among the most efficient (least costly) ways of raising revenue in terms of minimizing economic distortions.⁹² This is especially true if the sales tax base is broad (i.e., includes most items) and the tax rate is low. Put differently, relying on sales or consumption taxes more broadly to raise needed revenues imposes fewer economic costs on societies and allows for a more robust and prosperous state.

For sales taxes, we used only two components in our analysis, namely the general state sales tax rate and state and local sales tax receipts as a fraction of personal disposable income.⁹³ Personal disposable income (PDI) is the income available to citizens after personal income taxes have been deducted. The measure, therefore, examines the share of after-tax income extracted in the form of sales taxes by state and local governments.

Table 7: Sales Taxes								
STATE	DATA		SCORES AND RANKINGS				OVERALL	
	Statutory State Sales Tax Rate(1)	Effective Tax Rate(2)	Statutory Rate: Score	Statutory Rate: Rank	Effective Rate: Score	Effective Rate: Rank	Overall Score(3)	Overall Rank
Alabama	4.00%	3.00%	5.2	7	4.8	30	5.0	10
Alaska	0.00%	0.73%	10.0	1	8.7	5	9.4	5
Arizona	5.60%	5.08%	3.2	25	1.2	47	2.2	46
Arkansas	6.00%	4.93%	2.7	27	1.5	45	2.1	48
California	8.25%	3.21%	0.0	50	4.5	35	2.2	45
Colorado	2.90%	2.93%	6.5	6	4.9	28	5.7	6
Connecticut	6.00%	1.92%	2.7	27	6.7	10	4.7	16
Delaware(4)	0.00%	0.00%	10.0	1	10.0	1	10.0	1
Florida	6.00%	3.92%	2.7	27	3.2	40	3.0	41
Georgia	4.00%	3.54%	5.2	7	3.9	37	4.5	21
Hawaii	4.00%	5.80%	5.2	7	0.0	50	2.6	42
Idaho	6.00%	3.05%	2.7	27	4.7	33	3.7	33
Illinois	6.25%	1.99%	2.4	39	6.6	11	4.5	22
Indiana	7.00%	2.91%	1.5	45	5.0	27	3.3	38
Iowa	6.00%	2.50%	2.7	27	5.7	18	4.2	27
Kansas	5.30%	3.38%	3.6	21	4.2	36	3.9	32
Kentucky	6.00%	2.43%	2.7	27	5.8	16	4.3	26
Louisiana	4.00%	5.11%	5.2	7	1.2	48	3.2	40
Maine	5.00%	2.66%	3.9	17	5.4	21	4.7	17
Maryland	6.00%	1.55%	2.7	27	7.3	7	5.0	9
Massachusetts	6.25%	1.52%	2.4	39	7.4	6	4.9	14
Michigan	6.00%	2.59%	2.7	27	5.5	20	4.1	28
Minnesota	6.88%	2.47%	1.7	44	5.7	17	3.7	36
Mississippi	7.00%	4.15%	1.5	45	2.8	42	2.2	47
Missouri	4.23%	2.85%	4.9	14	5.1	26	5.0	11
Montana	0.00%	0.00%	10.0	1	10.0	1	10.0	1
Nebraska	5.50%	3.04%	3.3	23	4.8	32	4.0	29
Nevada	6.85%	3.96%	1.7	43	3.2	41	2.4	44
New Hampshire	0.00%	0.00%	10.0	1	10.0	1	10.0	1
New Jersey	7.00%	2.35%	1.5	45	5.9	13	3.7	34
New Mexico	5.38%	4.98%	3.5	22	1.4	46	2.4	43
New York	4.00%	2.94%	5.2	7	4.9	29	5.0	8
North Carolina	4.50%	2.67%	4.5	15	5.4	22	5.0	12
North Dakota	5.00%	2.74%	3.9	17	5.3	24	4.6	19
Ohio	5.50%	2.71%	3.3	23	5.3	23	4.3	25
Oklahoma	4.50%	3.02%	4.5	15	4.8	31	4.7	18
Oregon	0.00%	0.00%	10.0	1	10.0	1	10.0	1
Pennsylvania	6.00%	2.11%	2.7	27	6.4	12	4.5	20
Rhode Island	7.00%	2.38%	1.5	45	5.9	15	3.7	35
South Carolina	6.00%	2.75%	2.7	27	5.2	25	4.0	30
South Dakota	4.00%	3.74%	5.2	7	3.5	39	4.3	23
Tennessee	7.00%	4.54%	1.5	45	2.2	44	1.8	49
Texas	6.25%	3.19%	2.4	39	4.5	34	3.5	37
Utah	5.95%	3.69%	2.8	26	3.6	38	3.2	39
Vermont	6.00%	1.65%	2.7	27	7.2	8	4.9	13
Virginia	5.00%	1.70%	3.9	17	7.1	9	5.5	7
Washington	6.50%	5.53%	2.1	42	0.5	49	1.3	50
West Virginia	6.00%	2.36%	2.7	27	5.9	14	4.3	24
Wisconsin	5.00%	2.50%	3.9	17	5.7	19	4.8	15
Wyoming	4.00%	4.29%	5.2	7	2.6	43	3.9	31

Notes and Sources for Table 7 and Figure 5

NOTES:

- (1) - Includes state-only sales tax rate; ignores local sales tax rates.
- (2) - Refers to the ratio of state and local sales tax revenues for the most recent year available (2007) as a share of personal disposable income (income after direct taxes). It is a measure of the total burden of the state and local sales taxes compared to the base upon which they are assessed: personal disposable income.
- (3) - The two measures (top statutory rate and effective rate) are equally weighted to arrive at the composite or overall score.
- (4) - Delaware's sales tax rate was changed to 0.00 pursuant to discussions with the Census Bureau.

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Calculations by the authors.

Observations

(a) State Sales Tax Rate

Five states (Alaska, Delaware,⁹⁴ Montana, New Hampshire, and Oregon) tie for the top position, because they do not have a state sales tax. Interestingly, on the basis of the research summarized in the overview section, these five states have an opportunity to improve their economy by simply replacing more damaging and costly forms of taxation, such as personal and corporate income taxes, with a state sales tax.

To be clear, the existence of *any* tax—including a sales tax—distorts the economy and transfers resources from the private sector to the public sector. That’s why our ranking penalizes states that have a high sales tax. However, if a state is going to draw revenues away from its citizens to fund government programs, then it makes more sense to rely on low-rate, broad-based sales taxes as opposed to income or capital-based taxes.

California ranks last on this measure, with the highest state sales tax in the country, a full 8.25 percent. By itself, this poor performance would be tolerable, if it were the means by which California kept its *other* taxes low. Unfortunately, as we have discussed, this is not the case, since California ranks poorly on both personal and corporate income taxes.

(b) Sales Tax Revenues as a Share of Personal Disposable Income

Four of the five states with no state-level sales tax tied for first place: Delaware, Montana, New Hampshire, and Oregon. Alaska, the remaining state with no state-level sales tax, does collect sales taxes at the county and municipal levels.⁹⁵

Hawaii ranked last, with 5.8 percent of its personal disposable income extracted in the form of state and local sales taxes. California ranked 35th, with 3.2 percent of PDI extracted in local and state sales taxes.

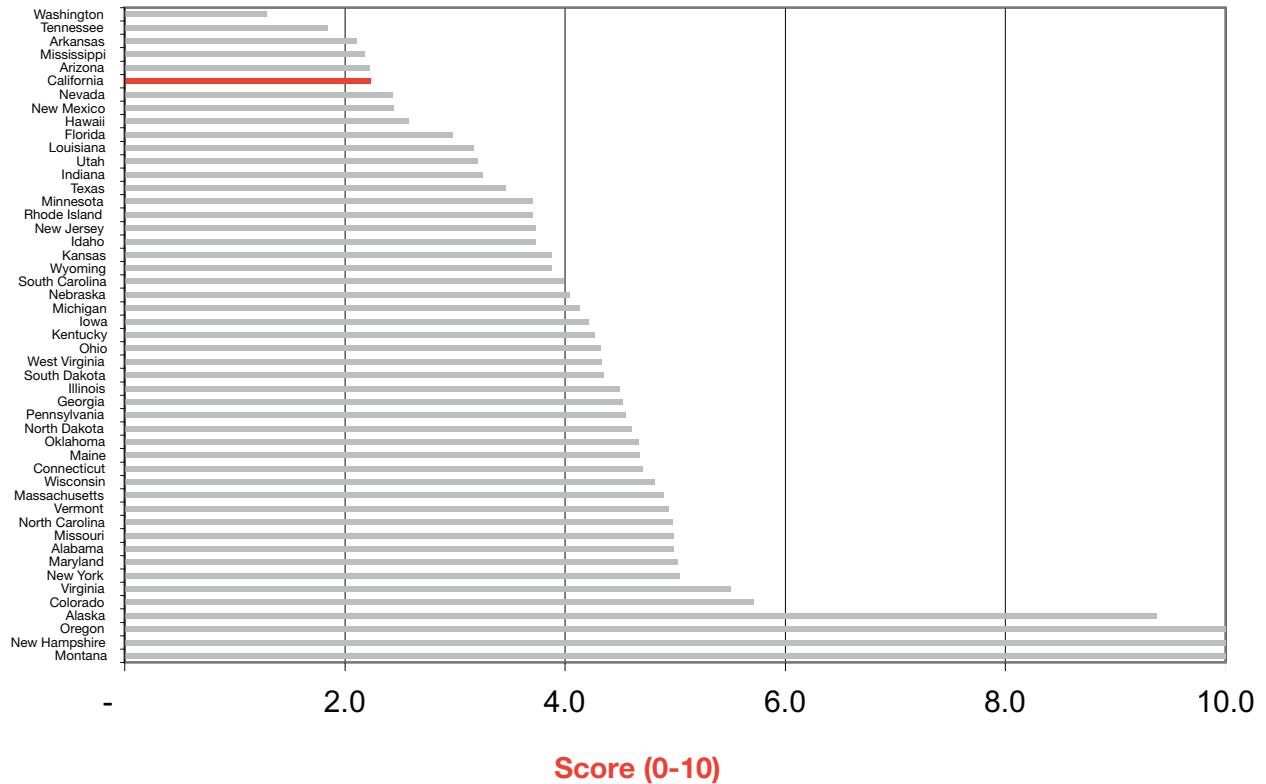
On the statutory rate, California came in dead last, because its sales tax rate of 8.25 percent is the highest in the country.

Overall

The four states with no sales tax at any level (Delaware, Montana, New Hampshire, and Oregon) received the highest overall ranking in this category. Washington was the lowest-ranked state, based on its 42nd-place ranking for its state sales tax rate (6.5 percent) coupled with its 49th-place ranking for state and local sales tax receipts as a percentage of personal disposable income (5.5 percent).

California performed poorly in this category, with an overall ranking of 45th. On the statutory rate, California came in dead last, because its sales tax rate of 8.25 percent is the highest in the country. Its sales tax receipts as a share of personal disposable income, at 3.2 percent, were more moderate, ranking 35th.

Figure 5: Sales Tax Scores (0-10)



5. Property Tax

Although Californians are politically sensitive to property taxes, as demonstrated by Proposition 13,⁹⁶ a property tax, depending on its design, can be a fairly efficient (low cost) type of tax. Although punitive taxes of any sort are destructive, relatively speaking property taxes do not distort economic behavior as much as income or capital-based taxes.⁹⁷ Whereas labor and machinery can leave high-tax jurisdictions, the land itself is immobile. Nonetheless, high property taxes can still retard economic growth, as they reduce the incentive to develop a site and thereby increase its assessed value.

A myriad of state and local property tax systems across the country make any detailed analysis quite prohibitive. Instead, this paper relies on a single measure: property tax receipts (state and local) divided by Gross State Product. We chose GSP as the denominator because property taxes fall on both commercial and residential properties.

Figure 6: Property Tax Scores (0-10)

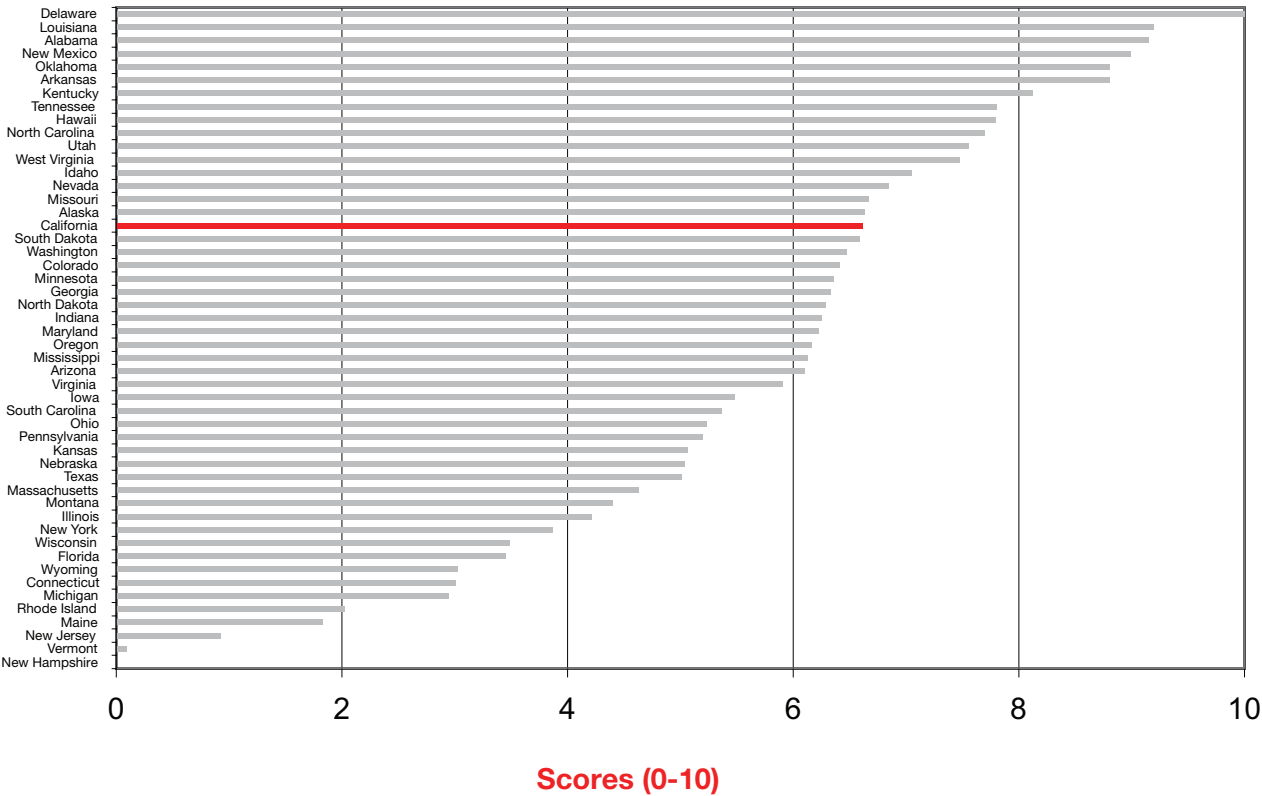


Table 8: Property Taxes			
State	Effective Rate(1)	Effective Rate: Score	Effective Rate: Rank
Alabama	1.27%	9.2	3
Alaska	2.31%	6.6	16
Arizona	2.53%	6.1	28
Arkansas	1.42%	8.8	6
California	2.32%	6.6	17
Colorado	2.40%	6.4	20
Connecticut	3.80%	3.0	44
Delaware	0.92%	10.0	1
Florida	3.62%	3.5	42
Georgia	2.43%	6.3	22
Hawaii	1.83%	7.8	9
Idaho	2.14%	7.0	13
Illinois	3.31%	4.2	39
Indiana	2.47%	6.2	24
Iowa	2.78%	5.5	30
Kansas	2.96%	5.1	34
Kentucky	1.70%	8.1	7
Louisiana	1.26%	9.2	2
Maine	4.28%	1.8	47
Maryland	2.48%	6.2	25
Massachusetts	3.14%	4.6	37
Michigan	3.83%	2.9	45
Minnesota	2.42%	6.4	21
Mississippi	2.52%	6.1	27
Missouri	2.30%	6.7	15
Montana	3.23%	4.4	38
Nebraska	2.97%	5.0	35
Nevada	2.22%	6.8	14
New Hampshire	5.04%	0.0	50
New Jersey	4.66%	0.9	48
New Mexico	1.34%	9.0	4
New York	3.45%	3.9	40
North Carolina	1.87%	7.7	10
North Dakota	2.45%	6.3	23
Ohio	2.89%	5.2	32
Oklahoma	1.42%	8.8	5
Oregon	2.50%	6.2	26
Pennsylvania	2.90%	5.2	33
Rhode Island	4.20%	2.0	46
South Carolina	2.83%	5.4	31
South Dakota	2.33%	6.6	18
Tennessee	1.83%	7.8	8
Texas	2.98%	5.0	36
Utah	1.93%	7.6	11
Vermont	5.00%	0.1	49
Virginia	2.61%	5.9	29
Washington	2.38%	6.5	19
West Virginia	1.96%	7.5	12
Wisconsin	3.60%	3.5	41
Wyoming	3.79%	3.0	43

Notes and Sources for Table 8 and Figure 6

NOTES:

1 - Refers to the ratio of state and local property tax revenues for the most recent year available (2006) as a share of gross state product. It is a measure of the total burden of state and local property taxes compared to the base upon which they are assessed: state GDP.

SOURCES

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Census Bureau. <http://www.census.gov/govs/estimate/index.html>
Regional Economic Information System. <http://www.bea.gov/regional/spi/default.cfm?selTable=summary>. Bureau of Economic Analysis. Date of Access: (4-June-09)
Calculations by the authors.

Observations

Delaware ranked highest on this measure, with 0.9 percent of its Gross State Product taken in the form of property taxes (state and local). The lowest-ranked state was New Hampshire, which took 5.0 percent of GSP through property taxes.

In an absolute sense, California did fairly well on this measure, ranking 17th in the nation. Given the legacy of Proposition 13, however, and the tremendous political battles that preceded and followed it, one would have expected California to score much better. The foes of Proposition 13 blame it for California's periodic budgetary crises, but, ironically, 16 states have smaller property tax burdens.⁹⁸

6. Overall Scores and Ranking for Tax Structure

In this final section we first combine the five component scores to achieve a composite score for a state's tax structure. Were it not for the capital-based tax component, we would have assigned a weight of 25 percent each to the personal income tax, corporate income tax, sales tax, and property tax scores, in order to calculate the composite score for a state's tax structure. Our decision to introduce the capital-based tax component presented us with a problem of weighting, because most of the states received a perfect 10.0 on the measure.

We decided to retain the spirit of our original equal-weighting approach across the four main tax vehicles. But for those states that derived a measurable fraction of their revenues from capital-based taxes, we allocated the total 25 percent weight assigned to the corporate income tax accordingly. For example, Connecticut's capital-based tax receipts were about 14.5 percent as large as its corporate income tax receipts. Therefore of the 25 percent weight intended for the corporate sector, we weighted the corporate income tax score at 21.8 percent and the capital-based tax score at the remaining 3.2 percent.

Figure 7: Overall Score for Structure of Taxes (0-10)

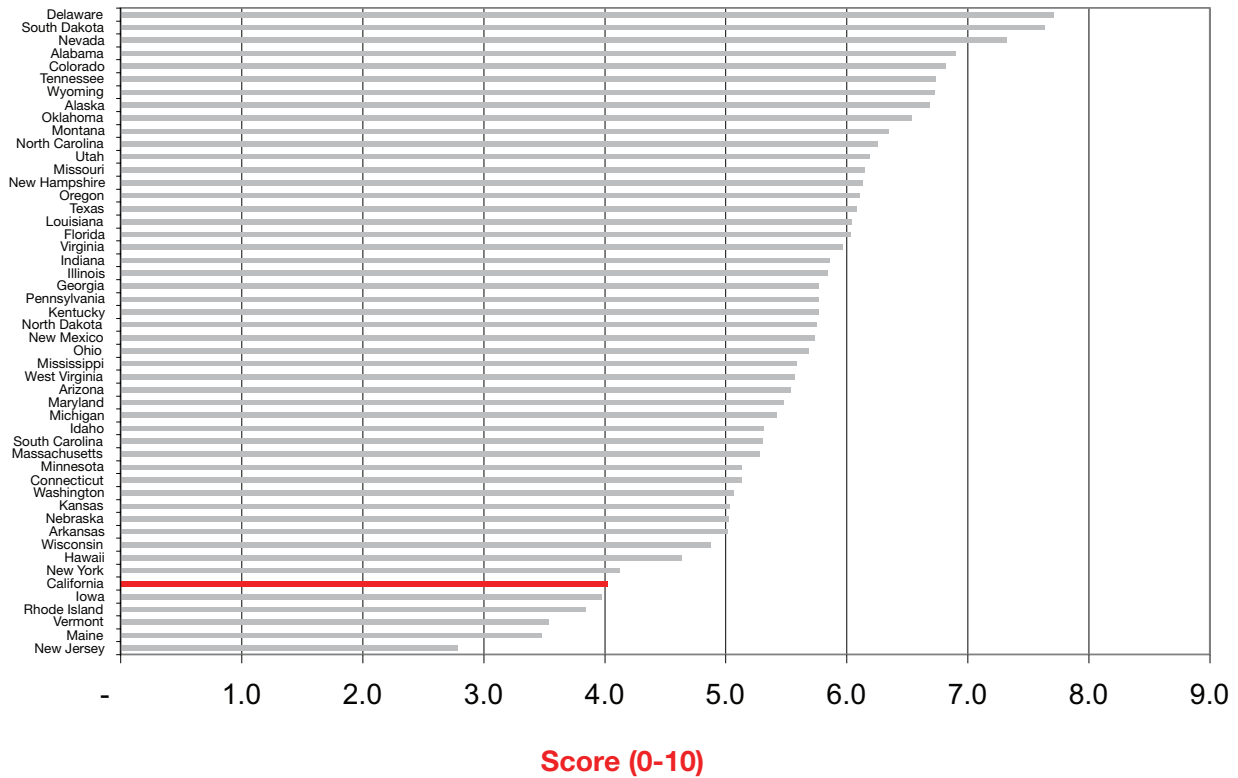


Table 9: Summary for Structure of Taxes

State	Personal Income Taxes (Score 0-10)	Corporate Income Taxes (Score 0-10)	Capital-Based Taxes (Score 0-10)	Sales Taxes (Score 0-10)	Property Taxes (Score 0-10)	Total (Score 0-10)	Rank
Alabama	6.0	7.5	10.0	5.0	9.2	6.9	4
Alaska	10.0	0.7	10.0	9.4	6.6	6.7	8
Arizona	6.7	7.1	10.0	2.2	6.1	5.5	30
Arkansas	4.0	5.1	10.0	2.1	8.8	5.0	41
California	1.1	6.1	10.0	2.2	6.6	4.0	45
Colorado	6.9	8.2	10.0	5.7	6.4	6.8	5
Connecticut	5.5	7.0	9.8	4.7	3.0	5.1	37
Delaware	4.1	6.8	3.3	10.0	10.0	7.7	1
Florida	10.0	7.7	10.0	3.0	3.5	6.0	18
Georgia	4.5	7.7	10.0	4.5	6.3	5.8	22
Hawaii	1.1	7.0	10.0	2.6	7.8	4.6	43
Idaho	3.4	7.1	10.0	3.7	7.0	5.3	33
Illinois	7.8	6.8	10.0	4.5	4.2	5.8	21
Indiana	7.2	6.7	10.0	3.3	6.2	5.9	20
Iowa	2.4	3.8	10.0	4.2	5.5	4.0	46
Kansas	5.1	5.8	9.8	3.9	5.1	5.0	39
Kentucky	4.6	5.7	9.6	4.3	8.1	5.8	24
Louisiana	5.3	5.5	8.9	3.2	9.2	6.0	17
Maine	3.0	4.4	10.0	4.7	1.8	3.5	49
Maryland	3.7	6.9	10.0	5.0	6.2	5.5	31
Massachusetts	5.9	5.7	9.6	4.9	4.6	5.3	35
Michigan	7.3	7.4	10.0	4.1	2.9	5.4	32
Minnesota	4.4	6.1	10.0	3.7	6.4	5.1	36
Mississippi	6.6	6.8	9.0	2.2	6.1	5.6	28
Missouri	4.8	7.8	9.8	5.0	6.7	6.1	13
Montana	4.0	7.0	10.0	10.0	4.4	6.3	10
Nebraska	4.6	6.4	10.0	4.0	5.0	5.0	40
Nevada	10.0	10.0	10.0	2.4	6.8	7.3	3
New Hampshire	9.6	5.0	10.0	10.0	0.0	6.1	14
New Jersey	1.6	4.9	10.0	3.7	0.9	2.8	50
New Mexico	6.0	5.5	10.0	2.4	9.0	5.7	26
New York	2.2	5.4	9.9	5.0	3.9	4.1	44
North Carolina	4.6	7.2	9.3	5.0	7.7	6.3	11
North Dakota	6.5	5.6	10.0	4.6	6.3	5.8	25
Ohio	3.9	9.4	9.1	4.3	5.2	5.7	27
Oklahoma	5.1	7.5	9.7	4.7	8.8	6.5	9
Oregon	1.6	6.7	10.0	10.0	6.2	6.1	15
Pennsylvania	7.1	6.2	10.0	4.5	5.2	5.8	23
Rhode Island	3.0	6.6	10.0	3.7	2.0	3.8	47
South Carolina	3.8	8.1	10.0	4.0	5.4	5.3	34
South Dakota	10.0	9.6	10.0	4.3	6.6	7.6	2
Tennessee	9.6	7.1	8.8	1.8	7.8	6.7	6
Texas	10.0	10.0	5.9	3.5	5.0	6.1	16
Utah	6.2	7.8	10.0	3.2	7.6	6.2	12
Vermont	3.4	5.7	10.0	4.9	0.1	3.5	48
Virginia	4.7	7.8	10.0	5.5	5.9	6.0	19
Washington	10.0	10.0	2.5	1.3	6.5	5.1	38
West Virginia	5.0	5.4	9.1	4.3	7.5	5.6	29
Wisconsin	4.4	6.8	10.0	4.8	3.5	4.9	42
Wyoming	10.0	10.0	10.0	3.9	3.0	6.7	7

Drawn from various sources as noted in the text, with calculations by the authors.

Observations

Delaware ranked first, with an overall score of 7.7 out of a possible 10.0 (table 9 and figure 7). Although Delaware performed poorly on its personal income and capital-based taxes, it did well on corporate taxes and came in first on the sales and property tax components. The other states in the top five were South Dakota (7.6), Nevada (7.3), Alabama (6.9), and Colorado (6.8). It's important to note, however, that none of these top-performing states had overly strong scores, as witnessed by Delaware's scoring only 7.7 out of a possible 10.0.

The lowest-ranked state was New Jersey (2.8), which performed poorly on every measure except capital-based taxes. Other low-ranking states were Maine (49th, with a score of 3.5), Vermont (48th, with a score of 3.5), Rhode Island (47th, with a score of 3.8), and Iowa (46th, with a score of 4.0).

California also performed poorly, with a score of 4.0 and a ranking of 45th in the nation. It ranked above average in the areas of property and corporate income taxes, but among the worst of all the states on sales taxes, and dead last (50th) on personal income taxes.

IV. Composite Rankings, Discussion, and Recommendations

As discussed above, there are two essential measures to the tax analysis undertaken in this study: the size of the tax burden and its structure. Table 10 contains the composite or combined scores and ranks for the states for both the size of their tax burden (burden of government) and the structure of the tax burden. For these results see figure 8.

Observations

Figure 8: Combined Overall Scores for Burden and Structure of Taxes (0-10)

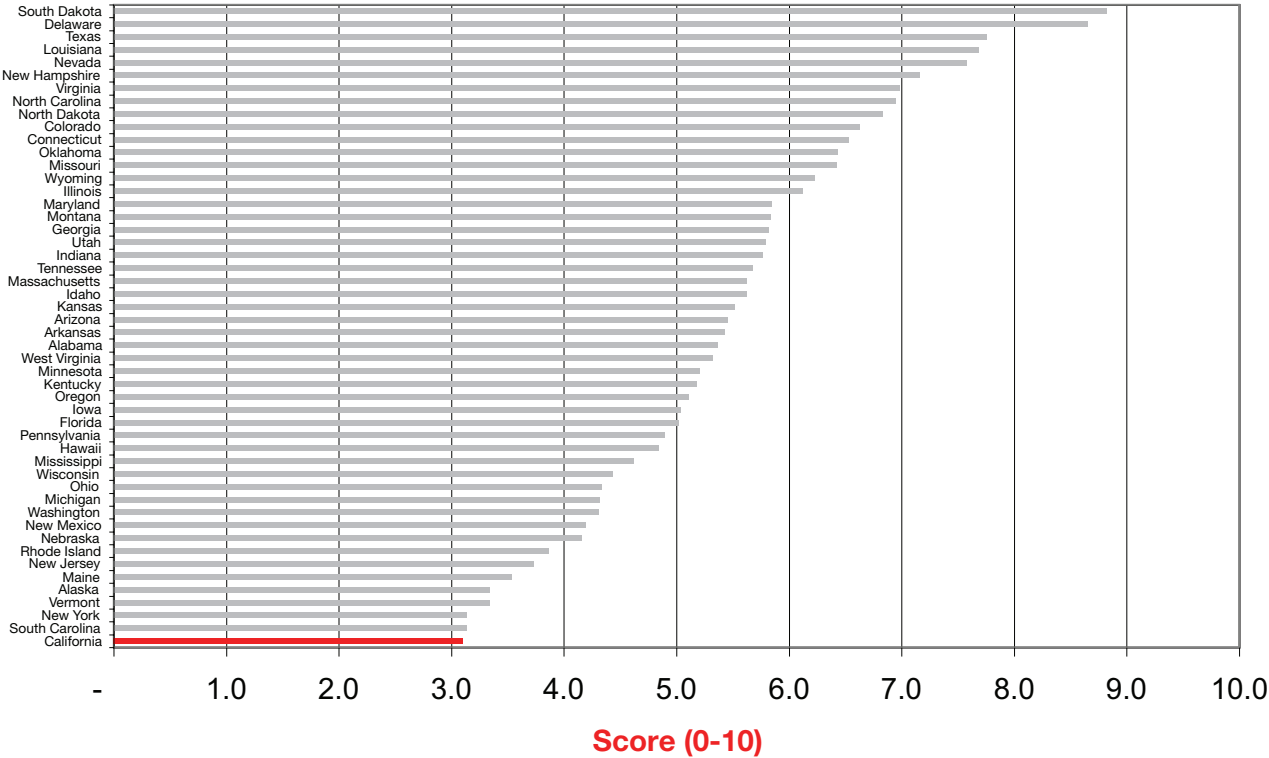


Table 10: Summary Scores						
	BURDEN OF GOVERNMENT		STRUCTURE OF TAX BURDEN		COMBINED SCORE	
STATE	State & Local Government Spending as a Percentage of GSP (2007) (Score 0-10)	Rank	Total (Score 0-10)	Rank	Score (0-10)	Rank
Alabama	3.8	38	6.9	4	5.4	27
Alaska	0.0	50	6.7	8	3.3	46
Arizona	5.4	25	5.5	30	5.5	25
Arkansas	5.8	21	5.0	41	5.4	26
California	2.2	47	4.0	45	3.1	50
Colorado	6.4	12	6.8	5	6.6	10
Connecticut	7.9	7	5.1	37	6.5	11
Delaware	9.6	2	7.7	1	8.6	2
Florida	4.0	35	6.0	18	5.0	33
Georgia	5.9	20	5.8	22	5.8	18
Hawaii	5.1	29	4.6	43	4.8	35
Idaho	5.9	19	5.3	33	5.6	23
Illinois	6.4	13	5.8	21	6.1	15
Indiana	5.7	23	5.9	20	5.8	20
Iowa	6.1	16	4.0	46	5.0	32
Kansas	6.0	17	5.0	39	5.5	24
Kentucky	4.6	32	5.8	24	5.2	30
Louisiana	9.3	4	6.0	17	7.7	4
Maine	3.6	40	3.5	49	3.5	45
Maryland	6.2	15	5.5	31	5.8	16
Massachusetts	6.0	18	5.3	35	5.6	22
Michigan	3.2	43	5.4	32	4.3	39
Minnesota	5.3	27	5.1	36	5.2	29
Mississippi	3.7	39	5.6	28	4.6	36
Missouri	6.7	11	6.1	13	6.4	13
Montana	5.3	26	6.3	10	5.8	17
Nebraska	3.3	42	5.0	40	4.2	42
Nevada	7.8	9	7.3	3	7.6	5
New Hampshire	8.2	5	6.1	14	7.2	6
New Jersey	4.7	30	2.8	50	3.7	44
New Mexico	2.6	46	5.7	26	4.2	41
New York	2.1	48	4.1	44	3.1	48
North Carolina	7.6	10	6.3	11	6.9	8
North Dakota	7.9	8	5.8	25	6.8	9
Ohio	3.0	45	5.7	27	4.3	38
Oklahoma	6.3	14	6.5	9	6.4	12
Oregon	4.1	33	6.1	15	5.1	31
Pennsylvania	4.0	34	5.8	23	4.9	34
Rhode Island	3.9	37	3.8	47	3.9	43
South Carolina	1.0	49	5.3	34	3.1	49
South Dakota	10.0	1	7.6	2	8.8	1
Tennessee	4.6	31	6.7	6	5.7	21
Texas	9.4	3	6.1	16	7.7	3
Utah	5.4	24	6.2	12	5.8	19
Vermont	3.1	44	3.5	48	3.3	47
Virginia	8.0	6	6.0	19	7.0	7
Washington	3.5	41	5.1	38	4.3	40
West Virginia	5.1	28	5.6	29	5.3	28
Wisconsin	4.0	36	4.9	42	4.4	37
Wyoming	5.7	22	6.7	7	6.2	14

Drawn from various sources as noted in the text, with calculations by the authors.

South Dakota ranked first, with an overall score of 8.8 out of a possible 10.0. It performed well on every measure of tax structure except sales taxes, where it was only slightly below average, and it maintained the smallest burden of government among the 50 states. The other states in the top five were Delaware (8.6), Texas (7.7), Louisiana (7.7), and Nevada (7.6).

The lowest-ranked state was California, with a dismal score of 3.1. It ranked above average in the areas of property and corporate income taxes, but in all other major areas California ranked among the worst of all the states. Indeed, it ranked last (50th) in personal income taxes and had the fourth-largest burden of government among the 50 states. Other poorly performing states were South Carolina (49th, with a score of 3.1), New York (48th, with a score of 3.1), Vermont (47th, with a score of 3.3), and Alaska (46th, with a score of 3.3).

Recommendations

Two sets of recommendations flow from this study. The first is general and can be applied to any jurisdiction. Governments should pursue tax policies that promote economic growth and prosperity, and they should avoid costly and damaging taxes. This requires using low-cost consumption taxes as the primary source of revenues for government, while avoiding or at least minimizing more costly personal and corporate income taxes and capital-based taxes.

Higher taxes—especially on income and capital—stifle entrepreneurship and lead to lower investment and slower economic growth.

In addition, those states that choose to use income taxes, whether personal or corporate, should do so in the least distortive manner, so as to minimize their economic impacts and costs. This requires that governments avoid multiple and increasing tax rates and use the broadest base possible upon which to

assess the tax, which means avoiding the use of tax credits, deductions, and other exemptions. Such a system allows for a single, low tax rate to be applied to a broad base of economic activity, thus minimizing the distortive effects of the tax.

More generally, we urge policy makers as well as the general public to consider the undeniable lesson: Higher taxes—especially on income and capital—stifle entrepreneurship and lead to lower investment and slower economic growth. Particularly during a severe recession, when states are struggling with low tax receipts and rising costs of social programs, there is a temptation to close budget deficits by ratcheting up tax rates that are already high.

Such a strategy is understandable, but by crippling a state's economic growth, tax hikes will only ensure that a depressed economy stays in the doldrums longer. Furthermore, they sow the seeds for the *next* budget crisis, by giving businesses an incentive to delay investments or even exit the state.

Rather than hike the rates on existing taxes, we recommend that cash-starved state governments reconsider the structure of their tax codes. By moving away from highly progressive taxes on income and capital, and placing more emphasis on low-rate broad-based taxes on consumption, states in principle can achieve both more revenue and greater economic growth for their citizens.

California-Specific Recommendations

The second set of recommendations is specific to California. After all, this series of studies is aimed at improving the economic performance and environment in the Golden State. The recommendations for California, however, flow from the same analysis and research as the general recommendations.

California's dismal performance in this study—the Golden State came in *dead last* in the nation—is a function of the reality that it extracts through taxation a large fraction of the state's total economic

output *and* that it raises these funds in a relatively inefficient manner. Not only is California a high-tax state—as everyone already knew—but it is also an *inefficient*-tax state, perhaps equally troubling.

From one point of view, though, California's rank of 45th on the tax structure side is *good* news. It means that through sensible tax reform, economic growth can be fostered along with job creation, without the need for sacrificing tax revenues to state and local governments. This means shifting from costly income taxes, both personal and corporate, to consumption taxes.⁹⁹ Of course, once the low-hanging fruit of efficient tax reform has been plucked, further incentives for private-sector growth will have to come through reductions in California's total tax burden, currently the fourth-highest in the nation. In other words, California should simultaneously pursue tax reform and tax reduction.

Our research and scoring suggest that one obvious candidate for immediate reform is California's personal income tax code, which has a top rate (10.55 percent) that is fourth-highest in the nation, and a progressivity (spread between top and bottom rates) that is third-highest in the nation. A 2008 PRI study estimated that a flat income tax of 3 percent (with no exemptions or deductions) would draw in the same revenue as California's current system of multiple brackets and loopholes, while giving incredible incentives to spur economic growth and job creation.¹⁰⁰

California should simultaneously pursue tax reform and tax reduction.

Perhaps the most salient lesson from our California Prosperity series is that the Golden State is on a dangerous downward path. Our first report, *Assessing the State of the Golden State*, showed that on a series of objective measures of state economic performance—none of which involved government policies per se—California ranked a very disappointing 38th in the nation. What the current paper shows is that the solution *can't* be more government spending and higher tax rates, since these are already among the highest in the nation.

Consistent with the extensive research we have summarized above, our recommendation is that policy-makers break out of the economic and fiscal rut *not* through temporary fixes, such as emergency tax hikes and other revenue gimmicks. Rather, they should pursue a genuine commitment to shrinking the size and scope of the state and local governments in the economy, which then allows for meaningful tax relief.

Appendix

In this section we illustrate this study's scoring method with two simple numerical examples. We first go through the conversion of a (small) sample of fictitious state scores for a hypothetical variable, to explain the construction of a score scaled from 0.0 to 10.0. The following table transforms the hypothetical values step by step in each column, as explained in the text below the table.

State	Raw Score	Subtract Minimum	Divide By Maximum	Score	Rank
Alabama	23.4	8.50	0.93	9.3	2
Alaska	18.5	3.60	0.40	4.0	8
Arizona	19.2	4.30	0.47	4.7	6
Arkansas	21.3	6.40	0.70	7.0	3
California	18.9	4.00	0.44	4.4	7
Colorado	15.2	0.30	0.03	0.3	9
Connecticut	14.9	0.00	0.00	0.0	10
Delaware	24.0	9.10	1.00	10.0	1
Florida	20.8	5.90	0.65	6.5	4
Georgia	20.6	5.70	0.63	6.3	5

In the table above, the first step shifts the data down so that the lowest value is 0.0. The next step then divides through by the largest value of the (shifted) data, so that each state's score is adjusted according to the total distance between the scores of the top and bottom states. In the table above, 9.10 is the highest value in the shifted data of the third column, and so the fourth column divides all the numbers by 9.10. Finally, the scores are multiplied by 10 to yield a more familiar range, and then are ranked from highest to lowest.

In the following table, we adjust the initial (and hypothetical) raw scores, in order to preserve the final ranking of the states but to give many of them different scores. Note that in this second table, the raw scores are clustered among high-scoring and low-scoring states. This information is retained in the scaled scoring, but it would be lost if we relied on a simple ordinal ranking from #1 to #10.

State	Raw Score	Subtract Minimum	Divide By Maximum	Score	Rank
Alabama	89.2	87.70	0.99	9.9	2
Alaska	11.8	10.30	0.12	1.2	8
Arizona	18.8	17.30	0.19	1.9	6
Arkansas	78.4	76.90	0.86	8.6	3
California	12	10.50	0.12	1.2	7
Colorado	10.5	9.00	0.10	1.0	9
Connecticut	1.5	0.00	0.00	0.0	10
Delaware	90.5	89.00	1.00	10.0	1
Florida	50.7	49.20	0.55	5.5	4
Georgia	19.2	17.70	0.20	2.0	5

Endnotes

- 1 Please see footnote 78 for a discussion regarding the unique characteristics of Alaska government spending.
- 2 Other important comparative tax studies rely on different methodologies but are nonetheless valuable in understanding the way taxes work in California and other U.S. states; for example, see Joshua Barro, *2009 State Business Tax Climate Index* (Washington, D.C.: The Tax Foundation, 2009), available at www.taxfoundation.org; and Arthur B. Laffer, Stephen Moore, and Jonathan Williams, *Rich States, Poor States* (Washington, D.C.: American Legislative Exchange Council, 2009), available at www.alec.org.
- 3 Robert P. Murphy and Jason Clemens, *Assessing the State of the Golden State* (San Francisco: Pacific Research Institute, 2009), available at <http://liberty.pacificresearch.org/publications/assessing-the-state-of-the-golden-state>.
- 4 This review of tax research relies, to some extent, on the summary of tax literature provided by Milagros Palacios and Kumi Harischandra in “The Impact of Taxes on Economic Behaviour,” in Jason Clemens, ed., *The Impact and Cost of Taxation in Canada* (Vancouver, B.C.: Fraser Institute, 2008).
- 5 It is important to recognize that much of the work cited in this study focuses on marginal tax rates. A marginal tax rate (MTR) is the tax rate that applies to the next (or incremental) dollar of income earned. The MTR determines the proportion of additional income earned that is retained by the individual or business after taxes are paid. It thus determines the rewards to individuals and businesses for undertaking marginal activities such as additional work effort, savings, investment, or entrepreneurship. Another important tax concept is the average tax rate (ATR). The ATR is the total taxes paid as a proportion of total taxable income. Put differently, an ATR indicates the average tax burden imposed on an individual, family, or business. See Duanjie Chen, *The Marginal Effective Tax Rate: The Only Tax Rate That Matters in Capital Allocation* (Toronto: C. D. Howe Institute, 2000), available at www.cdhowe.org.
- 6 Fabio Padovano and Emma Galli, “Tax Rates and Economic Growth in OECD Countries (1950–1990),” *Economic Inquiry*, vol. 39, no. 1 (January 2001), pp. 44–57; and Fabio Padovano and Emma Galli, “Comparing the Growth Effects of Marginal vs. Average Tax Rates and Progressivity,” *European Journal of Political Economy*, vol. 18, no. 3 (September 2002), pp. 529–544.
- 7 To get an idea of the long-run effect of such an apparently negligible reduction in the rate of economic growth, consider countries A and B, which start out with the same GDP of \$1 trillion. Country A grows at 3 percent per year, whereas country B grows at 3.23 percent. After 25 years, country A’s GDP will be \$2.09 trillion, whereas country B’s GDP will be substantially higher, at \$2.21 trillion. Thus the modest 23 basis points in excess growth leads in just 25 years to an economy that annually produces some \$100 billion (or almost 6 percent) more.
- 8 Reinhard B. Koester and Roger C. Kormendi, “Taxation, Aggregate Activity and Economic Growth: Cross-Country Evidence on Some Supply-Side Hypothesis,” *Economic Inquiry*, vol. 27, no. 3 (July 1989), pp. 367–386.
- 9 Elizabeth M. Caucutt, Selahattin Imrohoroğlu, and Krishna B. Kumar, “Does the Progressivity of Taxes Matter for Economic Growth?” Institute for Empirical Macroeconomics, Federal Reserve Bank of Minneapolis, Discussion Paper 138 (2000).
- 10 Frida Widmalm also found that tax progressivity was associated with low economic growth; Frida Widmalm, “Tax Structure and Growth: Are Some Taxes Better than Others?” *Public Choice*, vol. 107 (June 2001), pp. 199–219.

- 11 Christina D. Romer and David H. Romer, "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks," NBER Working Paper 13264 (Cambridge, MA: National Bureau of Economic Research, 2007).
- 12 John K. Mullen and Martin Williams, "Marginal Tax Rates and State Economic Growth," *Regional Science and Urban Economics*, vol. 24, no. 6 (December 1994), pp. 687–705.
- 13 Becci, using U.S. state data for the period 1960–1992, confirmed this result: higher marginal tax rates were associated with lower economic growth. See Zsolt Becci, "Do State and Local Taxes Affect Relative State Growth?" *Economic Review* (Federal Reserve Bank of Atlanta), vol. 81, no. 2 (March/April 1996), pp. 18–36.
- 14 An important study of subnational taxes was recently completed by professors Bev Dahlby and Ergete Ferede for British Columbia, Canada. The authors examined the effect of personal and corporate taxes on economic growth in Canada. They specifically focused on the effect of large-scale personal and corporate income tax cuts in the western province of British Columbia. They found that the 4.5-percentage-point reduction in corporate income tax rates increased per capita GDP by 18 percent compared to the level expected in the absence of tax cuts. Similarly, they concluded that the 5.0-percentage-point decrease in the top marginal personal income tax rate increased long-run per capita GDP by 7.6 percent. They concluded that corporate income tax relief had roughly twice the effect of personal income tax relief on per capita GDP growth. See Bev Dahlby and Ergete Ferede, *Assessing British Columbia's Incentive-Based Tax Cuts* (Vancouver, BC: Fraser Institute, 2008), available at <http://www.fraserinstitute.org/researchandpublications/publications/5162.aspx>.
- 15 Economic growth is a critical consideration; see Philippe Aghion and Peter Howitt, "Appropriate Growth Policy: A Unifying Framework," conference paper at the 20th Annual Congress of the European Economic Association, 2005, for a comprehensive and interesting discussion of economic growth.
- 16 Eric Engen and Jonathan Skinner, "Taxation and Economic Growth," *National Tax Journal*, vol. 49, no. 4 (December 1996), pp. 617–642.
- 17 The authors speculated that the presence of an inefficient tax system in the United States from 1960 to 1996 would have resulted in the potential loss of 6.4 percent of 1996 GDP, or about \$500 billion worth of goods and services.
- 18 For a non-technical discussion of marginal tax rates and labor supply, please see Martin Feldstein, "The Effect of Taxes on Efficiency and Growth," NBER Working Paper 12201 (Cambridge, MA: National Bureau of Economic Research, 2006), available at www.nber.org.
- 19 Edward C. Prescott, "Why Do Americans Work So Much More than Europeans?" *Federal Reserve Bank of Minneapolis Quarterly Review*, vol. 28, no. 1 (July 2004), pp. 2–13.
- 20 The author considered only hours worked in the taxed market sector. Paid vacations, sick leave, holidays, and time spent working in the underground economy or in the home sector were not counted.
- 21 Steven J. Davis and Magnus Henrekson, "Tax Effects on Work Activity, Industry Mix and Shadow Economy Size: Evidence from Rich-Country Comparisons," NBER Working Paper 10509 (Cambridge, MA: National Bureau of Economic Research, 2004).
- 22 "Underground economy" refers to non-market activities undertaken by individuals to avoid paying taxes. An increase in taxes would encourage market participants to channel their efforts away from productive but taxed activities to less productive but untaxed activities.
- 23 Emanuela Cardia, Norma Kozhaya, and Francisco J. Ruge-Murcia, "Distortionary Taxation and Labour Supply," *Journal of Money, Credit, and Banking*, vol. 35, no. 3 (June 2003), pp. 350–373.

- 24 Lee Ohanian, Andrea Raffo, and Richard Rogerson, “Long-Term Changes in Labour Supply and Taxes: Evidence from OECD Countries, 1956–2004,” NBER Working Paper 12786 (Cambridge, MA: National Bureau of Economic Research, 2006).
- 25 Martin Feldstein, “Behavioral Responses to Tax Rates: Evidence from the Tax Reform Act of 1986,” *The American Economic Review*, vol. 85, no. 2 (1995), pp. 170–174, and Martin Feldstein, “The Effect of Marginal Tax Rates on Taxable Income: A Panel Study of the 1986 Tax Reform Act,” *Journal of Political Economy*, vol. 103, no. 3 (1995), pp. 551–572.
- 26 James Ziliak and Thomas Kniesner, “The Effects of Income Taxation on Consumption and Labour Supply,” *Journal of Labour Economics*, vol. 23, no. 4 (2005), pp. 769–796.
- 27 Richard Blundell, Alan Duncan, and Costas Meghir, “Estimating Labor Supply Responses Using Tax Reforms,” *Econometrica*, vol. 66, no. 4 (July 1998), pp. 827–861.
- 28 Anders Klevmarken provided additional supporting work from Sweden. Using longitudinal data that included the 1991 Swedish tax reform (reduced marginal tax rates), he concluded that working women increased their hours worked by approximately 10 percent. See N. Anders Klevmarken, “Did the Tax Cuts Increase Hours of Work? A Statistical Analysis of a Natural Experiment,” *Kyklos*, vol. 53 (2000), pp. 337–362. For additional studies on Sweden, see Thomas Aronsson and Märten Palme, “A Decade of Tax and Benefit Reforms in Sweden: Effects on Labour Supply, Welfare and Inequality,” *Economica*, vol. 65 (1998), pp. 39–67; Marianne Sundstrom, “Part-Time Work in Sweden: Trends and Equality Effects,” *Journal of Economic Issues*, vol. 25, no. 1 (1991), pp. 167–178; and Charles E. Stuart, “Swedish Tax Rates, Labour Supply, and Tax Revenues,” *The Journal of Political Economy*, vol. 89, no. 5 (1981), pp. 1020–1038.
- 29 There is also some interesting research examining the impact of tax rates on specific groups of workers. For example, an analysis by Norman Thurston provided insights into how highly paid professionals (specifically doctors) responded to tax changes. The author found that physicians in states with higher taxes were likely to work fewer hours and more likely to control their work schedule than those in lower-taxed states. See Norman K. Thurston, “Physician Behavioural Responses to Variation in Marginal Income Tax Rates: Longitudinal Evidence,” *Applied Economics*, vol. 34, no. 10 (2002), pp. 2093–2104.
- 30 In addition, taxes have the potential to affect investment spending through their impact on the cost of capital. For further details, see Robert S. Chirinko and Andrew P. Meyer, “The User Cost of Capital and Investment Spending: Implications for Canadian Firms,” in Paul J. N. Halpern, ed., *Financing Growth in Canada* (Calgary: University of Calgary Press, 1997), pp. 17–69; Robert S. Chirinko, Steven M. Fazzari, and Andrew P. Meyer, “How Responsive Is Business Capital Formation to Its User Cost? An Exploration with Micro Data,” *Journal of Public Economics*, vol. 74 (1999), pp. 53–80; Jason G. Cummins, “Taxation and the Sources of Growth: Estimates from United States Multinational Corporations,” NBER Working Paper 6533 (Cambridge, MA: National Bureau of Economic Research, 1998); and Kenneth McKenzie and Aileen Thompson, “Taxes, the Cost of Capital, and Investment: A Comparison of Canada and the United States,” Working Paper 97-3, prepared for the Technical Committee on Business Taxation (1997).
- 31 Robert E. Hall and Dale W. Jorgenson, “Tax Policy and Investment Behavior,” *The American Economic Review*, vol. 57, no. 3 (1967), pp. 391–414.
- 32 The three major revisions were (1) the adoption of accelerated methods for computing depreciation for tax purposes in 1954; (2) the reduction of lifetimes used for calculating depreciation on equipment and machinery in 1962; (3) the investment tax credit for machinery and equipment of 1962.

- 33 Steven M. Fazzari, R. Glenn Hubbard, and Bruce C. Petersen, “Investment, Financing Decisions, and Tax Policy,” *The American Economic Review*, vol. 78, no. 2 (1988), pp. 200–205.
- 34 The term “financing constraints” refers to limits on the ability of firms to use external funds (equity and debt) to finance their capital investments. Small or less-established firms and firms operating in industries with new technology are more likely to face such constraints. Firms facing financing constraints usually rely on internal funds (profits) to finance investment.
- 35 Peter K. Clark, “Tax incentives and Equipment Investment,” *Brookings Papers on Economic Activity*, vol. 24, no. 1 (1993), pp. 317–339.
- 36 Jason G. Cummins, Kevin A. Hassett, and R. Glenn Hubbard, “A Reconsideration of Investment Behavior Using Tax Reforms as Natural Experiments,” *Brookings Papers on Economic Activity*, vol. 25, no. 2 (1994), pp. 1–74.
- 37 Jason G. Cummins, Kevin A. Hassett, and R. Glenn Hubbard, “Tax Reforms and Investment: A Cross-Country Comparison,” *Journal of Public Economics*, vol. 62, no. 1-2 (1996), pp. 237–273.
- 38 In the other two countries, changes in tax policy did not have any effect on investment levels.
- 39 Simeon Djankov, Tim Ganser, Caralee McLiesh, Rita Ramalho, and Andrei Shleifer, “The Effect of Corporate Taxes on Investment and Entrepreneurship” (fourth draft, 2009); unpublished, but available at <http://www.economics.harvard.edu/faculty/shleifer/files/tax.march.031209.pdf>; an earlier version of the paper, published through NBER, is available at <http://www.nber.org/papers/w13756>.
- 40 The study uses two measures of entrepreneurship: density and business formation (creation).
- 41 Robert Carroll, Douglas Holtz-Eakin, Mark Rider, and Harvey S. Rosen, “Entrepreneurs, Income Taxes, and Investment,” NBER Working Paper 6374 (Cambridge, MA: National Bureau of Economic Research, January 1998).
- 42 William M. Gentry and R. Glenn Hubbard, “Tax Policy and Entrepreneurial Entry,” *The American Economic Review*, vol. 90, no. 2 (2000), pp. 283–287.
- 43 See Keith Godin, Jason Clemens, and Niels Veldhuis, *Measuring Entrepreneurship: Conceptual Frameworks and Empirical Indicators* (Vancouver, BC: Fraser Institute, 2008), available at www.fraserinstitute.org, for a full discussion of different types of measurements of entrepreneurship and their pros and cons.
- 44 William M. Gentry and R. Glenn Hubbard, “Success Taxes, Entrepreneurial Entry, and Innovation,” NBER Working Paper 10551 (Cambridge, MA: National Bureau of Economic Research, 2004). This study explored the role of tax policy on entrepreneurship as measured by self-employment. The authors found that the level of the marginal tax rate and the progressivity of the tax discouraged entrepreneurship, and significantly so for some groups of households.
- 45 Donald Bruce and Mohammed Mohsin analyzed the effect of a number of taxes on entrepreneurship, including personal income-tax rates, capital gains taxes, and corporate income-tax rates. Donald Bruce and Mohammed Mohsin, “Tax Policy and Entrepreneurship: New Time Series Evidence,” *Small Business Economics*, vol. 26, no. 5 (2006), pp. 409–425. They found that a 1-percentage-point reduction in the capital-gains tax rate was associated with a 0.11- to 0.15-percentage-point increase in self-employment rates, which they used as a proxy for entrepreneurship.
- 46 Robert Carroll, Douglas Holtz-Eakin, Mark Rider, and Harvey S. Rosen, “Income Taxes and Entrepreneurs’ Use of Labor,” *Journal of Labor Economics*, vol. 18, no. 2 (April 2000), pp. 324–351.
- 47 Specifically, increasing the entrepreneur’s “tax price” (one minus the marginal tax rate) by 10 percent raised the average probability of hiring by roughly 12 percent.

- 48 Robert Carroll, Douglas Holtz-Eakin, Mark Rider, and Harvey S. Rosen, "Personal Income Taxes and the Growth of Small Firms," in James M. Poterba, ed., *Tax Policy and the Economy*, vol. 15 (Cambridge, MA: MIT Press, 2001).
- 49 The capital gains tax is a particularly interesting case of how taxes affect behavior, because of the rather small amount of revenue it generates compared to the costs that many scholars have argued are imposed by the tax. For example, a number of studies have shown how capital gains taxes impede the reallocation of capital from older, less profitable investments to newer ones with higher rates of return, referred to as the lock-in effect. An influential paper by Martin Feldstein and colleagues in 1980 provided empirical evidence of the lock-in effect. See Martin Feldstein, Joel Slemrod, and Shlomo Yitzhaki, "The Effects of Taxation on the Selling of Corporate Stock and the Realization of Capital Gains," *The Quarterly Journal of Economics*, vol. 94, no. 4 (1980), pp. 777–791. Specifically, the authors found that an increase of 10 percentage points in the marginal rate of the capital gains tax reduced the probability of selling a stock by 6.5 percentage points. Many other studies also provide empirical evidence of the existence of a lock-in effect; please see: Wayne R. Landsman and Douglas A. Shackelford, "The Lock-In Effect of Capital Gains Taxes: Evidence from the RJR Nabisco Leveraged Buyout," *National Tax Journal*, vol. 48, no. 2 (1995), pp. 245–259; Wayne R. Landsman, Douglas A. Shackelford, and Robert J. Yetman, "The Determinants of Capital Gains Tax Compliance: Evidence from the RJR Nabisco Leveraged Buyout," *Journal of Public Economics*, vol. 84 (2002), pp. 47–74; Douglas A. Shackelford, "Stock Market Reaction to Capital Gains Tax Changes: Empirical Evidence from the 1997 and 1998 Tax Acts," *Tax Policy and the Economy*, vol. 14 (2000), pp. 67–92; Jennifer L. Blouin, Jana Smith Raedy, and Douglas A. Shackelford, "Capital Gains Holding Periods and Equity Trading: Evidence from the 1998 Act," NBER Working Paper 7827 (Cambridge, MA: National Bureau of Economic Research, 2000); and Zhonglan Dai, Edward Maydew, Douglas A. Shackelford, and Harold H. Zhang, "Capital Gains Taxes and Asset Prices: Capitalization or Lock-In?" NBER Working Paper 12342 (Cambridge, MA: National Bureau of Economic Research, 2006). For a more detailed discussion of the economic costs of capital gains taxes see Niels Veldhuis, Keith Godin, and Jason Clemens, *The Economic Costs of Capital Gains Taxes*, Studies in Entrepreneurship and Markets, no. 4 (Vancouver, BC: Fraser Institute, 2007), available at www.fraserinstitute.org; and Stephen Moore and John Silvia, *The ABCs of the Capital Gains Tax*, Policy Analysis 242 (Washington, DC: Cato Institute, 1996), available at http://www.cato.org/pub_display.php?pub_id=1101.
- 50 James M. Poterba, "Venture Capital and Capital Gains Taxation," in Lawrence H. Summers, ed., *Tax Policy and the Economy* (Cambridge, MA: MIT Press, 1989).
- 51 A capital gain (or loss) generally refers to the difference between the price of an asset when it is sold and its purchase price. A capital gain occurs if the value of the asset at the time of sale is greater than the original purchase price.
- 52 Paul A. Gompers and Josh Lerner, "What Drives Venture Capital Fundraising?" *Brookings Papers on Economic Activity: Microeconomics* (1998), pp. 149–192.
- 53 Christian Keuschnigg and Søren Bo Nielsen, "Start-Ups, Venture Capitalists, and the Capital Gains Tax," *Journal of Public Economics*, vol. 88, no. 5 (2004), pp. 1011–1042.
- 54 Marco Da Rin, Giovanna Nicodano, and Alessandro Sembenelli, "Public Policy and the Creation of Active Venture Capital Markets," *Journal of Public Economics*, vol. 90, no. 8-9 (2006), pp. 1699–1723.
- 55 They also found that opening a new-venture stock market and reducing labor regulations positively affected the proportion of high-tech and early-stage ventures.

- 56 For a discussion of the economic costs of different types of taxes, see Jason Clemens, Niels Veldhuis, and Milagros Palacios, *Tax Efficiency: Not All Taxes Are Created Equal*, Studies in Economic Prosperity (Vancouver, BC: Fraser Institute, 2007), available at www.fraserinstitute.org.
- 57 The costs of taxation to society go well beyond the direct amount of taxation. There are three additional costs incurred by individuals and businesses: (1) efficiency, (2) compliance, and (3) administrative. The bulk of this study concerns itself with the efficiency costs of taxes. Compliance costs refer to the time and expenses incurred by individuals and businesses to maintain proper records, undertake tax planning, file necessary reports, and calculate necessary remittances, to name but a few. Put differently, these costs are all associated with conforming with tax regulations. The third cost borne by society is the administrative cost of taxation. These costs are incurred by governments in order to collect and enforce taxes, but they are ultimately paid by members of society. Taxpayers have to pay yet higher taxes to cover the cost of collecting taxes. It is the sum of these costs (tax liability, efficiency costs, compliance expenses, and government administrative costs) that constitute the total cost of taxation. For an excellent overview of the costs associated with taxation, see *Tax Policy: Summary of Estimates of the Costs of the Federal Tax System* (Washington, DC: U.S. Government Accountability Office, 2005), available at www.gao.gov.
- 58 Over the longer term, payroll taxes become part of the overall cost of labor in terms of compensation. In other words, payroll taxes are borne by workers through lower wage rates.
- 59 For information on the ultimate incidence of business taxes, please see Jason Clemens and Niels Veldhuis, “Who Pays Business Taxes? A Different View,” *Fraser Forum* (October 2003), available at www.fraserinstitute.org.
- 60 This is a particular area of concern for the United States. A number of studies, including a major structural analysis of economic policy by the OECD (*Going for Growth: Economic Policy Reforms*, 2005), have concluded that the United States requires a marked shift in tax policy away from taxing savings and towards taxing consumption.
- 61 Note that sales taxes do not distort inter-temporal consumption decisions if the tax rate is constant.
- 62 An efficiency loss or gain is not equivalent to an increase or decrease in output (GDP). The overall loss is the difference between the welfare loss under the current tax system and the potential loss under an alternative system that raises the same amount of revenue (i.e., is revenue neutral).
- 63 U.S. Government Accountability Office (GAO), *Tax Policy: Summary of Estimates of the Costs of the Federal Tax System* (2005), p. 16, available at www.gao.gov.
- 64 Other studies have looked more narrowly at specific taxes and economic growth. For example, Young Lee and Roger Gordon examined the effect of corporate taxes on economic growth. They used data covering 70 countries from 1970 to 1997. They concluded that increases in corporate tax rates resulted in lower economic growth. They suggested that a reduction in corporate tax rates of 10 percentage points increases annual economic growth rates by 1 to 2 percentage points. See Young Lee and Roger H. Gordon, “Tax Structure and Economic Growth,” *Journal of Public Economics*, vol. 89, no. 5-6 (2005), pp. 1027–1043.
- 65 Richard Kneller, Michael F. Bleaney, and Norman Gemmill, “Fiscal Policy and Growth: Evidence from OECD Countries,” *Journal of Public Economics*, vol. 74, no. 2 (1999), pp. 171–190.
- 66 Frida Widmalm, “Tax Structure and Growth.: Are some Taxes better than Others?” *Public Choice* 107, (2001), pp. 199-219.
- 67 See James A. Mirrlees, “An Exploration into the Theory of Optimal Income Taxation,” *Review of Economic Studies*, vol. 38, no. 2 (1971), pp. 175–208; James A. Mirrlees, “The Optimum Town,” *Swedish Journal of*

- Economics*, vol. 74 (1972), pp. 114–135; and Peter A. Diamond and James A. Mirrlees, “Optimal Taxation and Public Production,” *The American Economic Review*, vol. 6, no. 1 (1971), pp. 8–27 and 261–278.
- 68 It is critical to note that MECs are estimates of the cost of raising one additional dollar of revenue. They are, therefore, measures of marginal or incremental cost and should be used to evaluate the benefits of small or incremental tax shifts. MECs cannot be used to measure the total or even average cost of taxes. In other words, MECs should be used cautiously, if at all, when estimating the effects of large-scale tax shifts when the relationship between the tax rate and the efficiency cost is non-linear.
- 69 There are a number of important MEC studies based on the experience of other countries, although the bulk of MEC research has used U.S. data. For example, Maximilian Baylor and Louise Beauséjour estimated MECs for Canada in *Taxation and Economic Efficiency: Results from a Canadian CGE Model* (2004) for Canada’s federal Department of Finance. Similarly, professors Diewert and Lawrence estimated the MEC of selected taxes for New Zealand between 1971 and 1991. See W. Erwin Diewert and Denis A. Lawrence, “The Deadweight Costs of Taxation in New Zealand,” *Canadian Journal of Economics*, vol. 29, special issue (April 1996).
- 70 Dale W. Jorgenson and Kun-Young Yun. The Excess Burden of Taxation in the United States. *Journal of Accounting, Auditing, and Finance*, (1991). vol. 6, no. 4: 487-509.
- 71 For an interesting discussion of consumption taxes, and in particular consumption taxes on goods such as cigarettes and alcohol, please see James R. Hines Jr., “Taxing Consumption and Other Sins,” NBER Working Paper 12730 (Cambridge, MA: National Bureau of Economic Research, 2006).
- 72 Charles L. Ballard, John B. Shoven, and John Whalley. General Equilibrium Computations of the Marginal Welfare Costs of Taxes in the United States. *American Economic Review*, (1985). vol 75, no. 1, pp. 128-138.
- 73 Sales taxes were defined to exclude taxes on alcohol, tobacco, and gasoline.
- 74 Martin Feldstein, “The Effect of Taxes on Efficiency and Growth,” NBER Working Paper no. 12201 (Cambridge, MA: National Bureau of Economic Research, 2006), available at <http://www.nber.org/papers/w12201>. For those interested in further understanding the incentive effects of taxation, this paper is highly recommended.
- 75 N. Gregory Mankiw, Matthew Weinzierl, and Danny Yagan, “Optimal Taxation in Theory and Practice,” *Journal of Economic Perspectives*, vol. 23, no. 4 (Fall 2009), pp. 147–174.
- 76 This approach is rooted in what is called Ricardian equivalence, which is an important fiscal concept developed by the 19th-century political economist David Ricardo. For a brief overview of his theorem please see <http://oldfraser.lexi.net/publications/forum/1998/february/terminology.html>.
- 77 Our goal in this paper is to evaluate the tax system in each of the 50 states. Consequently, we want to isolate those policies over which state and local political officials have direct control. To this end, in our ranking of tax burdens we have adjusted the state and local spending figures to net out the monies flowing from the federal government. Specifically, we take the Census Bureau’s 2007 figure for “State and Local Direct Expenditures” and subtract outside revenues, which we calculate as the difference between the Census figures of “State and Local Total Revenues” and “State and Local Total Own Revenues.” Census data on state and local government finances are available at <http://www.census.gov/govs/estimate/index.html>.
- 78 Clarifying Alaska’s performance: Our measure of state and local spending relies on the Census Bureau’s tabulation, as described in the prior section. In table 3 we have placed an asterisk next to Alaska’s score because some analysts would consider its ranking to be misleading. The difficulty lies in the fact that

Alaska's state government enjoys significant revenues from state-owned oil fields, which in a sense are the property of the citizens of Alaska. The state government has established a "Permanent Fund," which is a pool of assets intended to gradually replace the declining revenue stream as the oil fields are depleted. Every year Alaska's state legislators must decide what to do with the income earned from the assets in the Permanent Fund. They can distribute a portion in equal lump-sum payments to all eligible state residents as a "Permanent Fund dividend." They can also reinvest some of the proceeds back into the Permanent Fund itself, so that that money becomes part of the principal. For the purposes of our study, the problem occurs with the treatment of Permanent Fund dividends and "inflation proofing." These are technically expenditures by the Alaska state government, and thus the Census Bureau includes them in its measure of state spending. Yet these expenditures are clearly not forms of government redistribution of wealth in the sense that, say, food stamps financed through personal income taxes would be. If we removed the Permanent Fund dividend and inflation-proofing expenditures, Alaska's ranking would improve from 50th to 33rd. Even though some analysts exclude Alaska's Permanent Fund dividends and contributions from their measures of state spending, we have retained them in our official rankings. Contrary to some interpretations, the Alaska state government is not merely a "pass through" entity, funneling "the people's" oil revenues into their pockets. The state legislators make purposeful decisions about the timing of payments from the earnings, rather than giving all of the earnings to individual citizens and letting them make the decision to consume or save for the future.

79 For example, see William L. Megginson and Jeffrey M. Netter, "From State to Market: A Survey of Empirical Studies on Privatization," *Journal of Economic Literature*, vol. 39 (June 2001), pp. 321–389. For those interested in additional reading on this subject, please see Madsen Pirie, *Privatization: Theory, Practice, and Choice* (Hants, England: Wildwood House Limited, 1988); Herbert Giersch, ed., *Privatization at the End of the Century* (Berlin and New York: Springer, 1997); and Cento Veljanovski, ed., *Privatization and Competition: A Market Prospectus* (London: Institute for Economic Affairs, 1989).

80 One reviewer of this study pointed out that state income taxes do not all have the same rate structure, and for this reason our focus on the top statutory rate could be misleading. For example, California's top rate of 10.55 percent is effective at a much higher level of income (\$1 million) than, say, Georgia's top rate of 6 percent, which is effective at \$7,000 in income. To assess the significance of this complication, we first calculated the equivalent of \$150,000 using each state's cost-of-living index as reported at this website: <http://www.top50states.com/cost-of-living-by-state.html>. We then looked at the applicable tax rate for that level of income; for example, California's personal income tax rate at \$202,650 is 9.55 percent, whereas Georgia's rate at \$136,350 is still 6 percent. Ranking the states in this fashion—according to the rate at which they tax someone making a cost-of-living-adjusted \$150,000—we found that the results were comparable to our simpler ranking. Only four states—Maryland, New Jersey, New York, and Wisconsin—saw their relative rankings move more than five units in either direction. New Jersey's ranking is particularly hurt by our technique, since it has a moderate rate of 6.37 percent on incomes just under \$400,000, but then its rates can reach 10.75 percent for people making \$1 million.

81 We obtained information on personal income tax rates for the 50 states from the Tax Foundation's compilation, available at http://taxfoundation.org/taxdata/show/228.html#state_individualincome_rates-20091123.

82 Note that a state with a flat income tax rate of, say, 50 percent would receive a perfect score on this particular component; it would of course come in last on the component looking at the top marginal tax rate.

- 83 For a comprehensive explanation of the economic rationale for a flat tax, see Robert E. Hall and Alvin Rabushka, *The Flat Tax*, 2nd ed. (Stanford: Hoover Institution Press, 2007), and Robert P. Murphy and Lawrence J. McQuillan, *Ending the Revenue Rollercoaster: The Benefits of a Three Percent Flat Income Tax for California* (San Francisco: Pacific Research Institute, 2008), available at http://liberty.pacificresearch.org/docLib/20080505_Flat_Tax.pdf.
- 84 We adjusted their statutory rates (6 percent for Tennessee and 5 percent for New Hampshire) downward to reflect the fact that they do not tax all forms of personal income. Using data from the Bureau of Economic Analysis, we calculated the fraction of personal income that was due to “dividends, interest, and rent,” and multiplied the statutory personal income tax rate accordingly. See <http://www.bea.gov/regional/sqpi/default.cfm?selTable=SQ4>.
- 85 We obtained corporate income tax rates for the 50 states from the Tax Foundation’s compilation, available at http://taxfoundation.org/taxdata/show/230.html#state_corp_income_rates-20090701.
- 86 See the Bureau of Economic Analysis, “Gross Domestic Product By State: Estimation Methodology,” page 7, available at <http://www.bea.gov/regional/pdf/gsp/GDPState.pdf#page=14>.
- 87 In 2005, Ohio began phasing in a tax on gross receipts called the “commercial activity tax” (CAT), which gradually replaced its franchise tax (i.e., corporate net income tax). For tax year 2010 the corporate income tax is fully phased out, which is why we list Ohio’s statutory rate at 0 percent. However, the Census figures for state and local receipts are available only through 2007, when Ohio was still collecting corporate income tax. Regarding Delaware, it does not have a general corporate income tax. However, banks are subject to a 6 percent tax on net income, which explains the positive receipts for this category in the Census figures.
- 88 As with our earlier measure of total tax burden, some might argue that Alaska’s corporate tax scores are being skewed by its heavy reliance on oil revenues. Nonetheless, those funds still *are* flowing through political channels year after year, whereas a full privatization of the assets would allow market forces to regulate the disposition of the region’s natural resources.
- 89 A gross receipts tax is proportional to the total receipts taken in by a firm, regardless of its expenses (and therefore net income).
- 90 The Tax Foundation’s notes on corporate tax codes are available at http://taxfoundation.org/taxdata/show/230.html#state_corp_income_rates-20090701. For some states we disagreed with the Tax Foundation’s classification. For example, it describes Michigan as having a “modified gross receipts tax (sales minus purchases from other firms) at a rate of 0.8 percent.” We did not count this as a capital-based tax, however, because it is a value-added tax (VAT) which is not economically the same thing. For consistency across states we did not include it in this category.
- 91 Please note that this study did *not* include taxes on financial institutions in this category.
- 92 There is an important caveat to this conclusion regarding sales taxes, which pertains to their design. Most sales taxes in the United States also apply to business inputs; in this case, they do not act as a tax on consumption but rather as a tax on investment (capital). One study, for example, found that on average, 41 percent of state revenues from sales taxes were revenues on producer inputs. Please see Raymond J. Ring Jr., “Consumers’ Share and Producers’ Share of the General Sales Tax,” *National Tax Journal* (March 1999), pp. 79–90.
- 93 For sales tax rates among the 50 states, we relied on the Tax Foundation’s compilation, available at http://taxfoundation.org/taxdata/show/245.html#state_various_sales_rates-20091006.

- 94 Note that according to the Tax Foundation's compilation, Delaware has a 2.07 percent general state sales tax. However, the Census Bureau reports zero sales tax receipts for Delaware. Upon closer study it appears that the Tax Foundation's number actually refers to the top rate of Delaware's *gross receipts* tax, which our report handled in the section on capital-based taxes. Therefore we manually changed Delaware's sales tax rate to 0 percent.
- 95 The Census Bureau reports that Alaska collected \$179 million in 2007 from general sales taxes at local levels, of which \$29 million is collected at the county level and the other \$149 million at the municipal level. See http://www2.census.gov/govs/estimate/0702aksl_2.txt.
- 96 Proposition 13 refers to a California ballot initiative passed in 1978. Officially called the People's Initiative to Limit Property Taxation, the measure placed a 1 percent cap on property taxes and imposed restrictions on how quickly assessed property values could rise. Proposition 13 also contained other limits on taxation and spending, and many viewed its passage as the beginning of a "taxpayer revolt," which culminated in the election of Ronald Reagan to the presidency. For more details see [http://en.wikipedia.org/wiki/California_Proposition_13_\(1978\)](http://en.wikipedia.org/wiki/California_Proposition_13_(1978)).
- 97 It is true that property taxes on commercial investments represent a tax on capital. Unfortunately, the data are aggregated, making it difficult to separate out the revenues from taxes on home property (closer to a tax on [durable] consumption) versus those from taxes on commercial property (closer to a tax on capital).
- 98 See for example Edmund L. Andrews, "The Curse of California's Proposition 13," *New York Times*, June 17, 1988, available at <http://www.nytimes.com/1988/06/17/opinion/the-curse-of-california-s-proposition-13.html?pagewanted=1>. More recently Paul Krugman blamed the current California deficit on the straitjacket imposed by Proposition 13, in "State of Paralysis," *New York Times*, May 24, 2009, available at <http://www.nytimes.com/2009/05/25/opinion/25krugman.html>. For an empirical analysis of Proposition 13, please see the recent academic paper Colin H. McCubbins and Mathew D. McCubbins, "Proposition 13 and the California Fiscal Shell Game," *California Journal of Politics and Policy*, vol. 2, no. 2 (2010).
- 99 Please see the report and research materials of California's *Commission on the Twenty-First Century Economy* (<http://www.cotce.ca.gov/>), which released its report and recommendations in late 2009. It too recommended a shift from income-based taxes to consumption-based taxes.
- 100 Robert Murphy and Lawrence McQuillan (2008), *Ending the Revenue Rollercoaster: The Case for a 3-Percent Flat Income Tax in California*, Pacific Research Institute, available at http://liberty.pacificresearch.org/docLib/20080505_Flat_Tax.pdf.

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