CORPORATE FRANCHISE AND INCOME TAXES

Trends in State Corporate Income Taxes Revisited (Again)

The state corporate income tax receives a great deal of attention from those interested in state and local public finance despite the fact that this revenue source provides a relatively small share of state tax revenues.

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This article updates the article that appeared in the Winter 2007 issue of the Multistate Tax Commission Review which, in turn, updated a similar article that appeared in the Fall 2000 issue of that Review. The previous article was written at a time when state corporate income taxes were growing at unprecedented rates. However, in the recent past, this revenue source has been growing much more slowly. This article shows the long-term decline in this revenue source in terms of its importance in state and local finance, of its decline relative to other state and local taxes initially imposed on businesses, and its decline relative to the base of the tax-corporate profits.

Introduction

The state corporate income tax receives a great deal of attention from those interested in state and local public finance despite the fact that this revenue source provides a relatively small share of state tax revenues, a relatively small share of state and local taxes initially imposed on businesses, and a declining ratio of corporate taxes to corporate profits. This article adds to the already voluminous literature on state corporate income taxes.

Until recently, most of the literature on state corporate income tax trends was devoted to the decline in this source of state tax revenue.[1] In contrast, a number of analysts of state corporate income taxes were noting its explosive growth. For example, Nicholas Jenny of the Rockefeller Institute of Government, in a 2006 report, shows that with the exception of the third quarter of 2002 and the third quarter of 2003, state corporate income taxes have grown at double digit rates between the third quarter of 2002 and the fourth quarter of 2005. Between the first quarter of 2004 and the first quarter of 2005, state corporate income taxes grew at a phenomenal rate of 61.6 percent.[2]

Harley Duncan, former Executive Director of the Federation of Tax Administrators, exclaimed at the Outlook in the States 2006 conference in Washington, hosted by *Governing* magazine: "In the 20 years I have been in this business, corporate income [tax] growth has never been as high as it has been for the last 12 months. This is the highest it has ever been. Nobody can figure out why."[3]

Indeed, state corporate income taxes, during that period, grew at a pace not seen in many years. The reason for this growth, as will be shown later in this article, was the extremely rapid growth in corporate profits. State corporate income taxes, on a National Income Product Accounts (NIPA) basis, grew from $41.7 billion in 2004 to $54.9 billion in 2005-a 31.7 percent increase.[4] Previously, the most rapid increase in state corporate income tax revenues was approximately 31.5 percent from 1975 to 1976-$7.3 billion to $9.6 billion. From the trough in 2001, to 2006, state corporate income taxes grew at an annual average rate of 15.4 percent.

This article examines trends in state and state and local taxes on corporate profits in relation to all state and state and local taxes, in relation to state and local business taxes, and in relation to corporate profits before taxes of domestic industries, excluding deposits of Federal Reserve Banks, on the NIPA basis.

The next section presents trends in the relative importance of corporate income taxes in state and state and local finance. The following section presents trends in the relationship between corporate income taxes and

corporate profits. Following these sections, there will be a discussion of the reasons for the relative decline in state corporate income taxes. A summary and conclusion will follow.

Relative Importance of State Corporate Income Taxes

Corporate income taxes generally constitute a relatively small portion of total state tax collections.

Corporate income taxes as percent of state taxes

In fiscal year 2013 state corporate income tax revenues, including Texas franchise taxes, were slightly less than $50 billion, or about 7.4 percent of all state tax collections. During the past 30 years, the relative importance of corporate income taxes to all state tax revenues has varied significantly but generally corresponding to economic cycles. However, the trend in the ratio of corporate income taxes to all state taxes is downward (see Exhibit 1).

All states. Between fiscal years 1984 and 1989 state corporate income tax revenues grew by slightly more than 52 percent-rising from 8.2 percent of all state tax collections to approximately 8.6 percent of total state tax collections. Corporate profits tax collections as a proportion of all state tax collections fell from about 8.6 percent in 1989 to about 6.8 in fiscal 1991. This was a sharp decline in this trend considering the mildness of the recession.

Again corporate profits taxes rose faster than total state taxes-rising to 7.7 percent of state tax revenues in fiscal 1995. Between fiscal years 1995 and 2002, state corporate income taxes, as a proportion of total state taxes, steadily declined. This decline in the relative importance of corporate income taxes to state tax collections came at a time of generally rising corporate profits.

In fiscal year 2002, a trough in collections resulted from the bursting of the "dot.com" bubble, and state corporate income tax receipts were $27.1 billion, or 5.1 percent of state tax collections. In fiscal year 2007, state corporate income tax receipts were $56.1 billion, an increase of 107 percent over the 2002 figure, and 7.4 percent of total state tax collections.

The relative importance of corporate income taxes rose fairly steadily from the trough in fiscal 2002 to the local peak in fiscal 2007 when this tax source accounted for 7.4 percent of state taxes. Since fiscal year 2007, corporate income taxes as a proportion of all state taxes have resumed the downward trend.[5]

By state. The proportion of state taxes on corporate income relative to all state tax collections for selected fiscal years 1983 to 2013, by state, is shown in Exhibit 2. Both the median and the unweighted mean (the sum of the proportion of tax revenues provided by corporate income taxes divided by the number of states)[6] ratios of corporate tax receipts have a downward trend, but, because of the volatility of corporate income tax revenues, the trends are not smooth.

For example, in fiscal year 1988, the median ratio of state corporate tax revenues to total state tax collections was about 6.5 percent. Twenty five years later, that ratio was slightly less than 4.0 percent. In fiscal 2013, the median ratio of state corporate tax collection to total tax collections was about 5.1 percent.

In addition, there is a wide range in the relative dependence on this source of revenue among the states. Generally, New Hampshire ranked highest among the states in the proportion of tax revenues provided by taxes on corporate income, except for fiscal year 1993 when Alaska took top honors with a 39.2 percent ratio of corporate income taxes to total taxes. For the other selected fiscal years, the top ratio ranged between 20 and 25 percent.

At the other end of the scale, between fiscal years 1993 and 2008, Hawaii held the honor for lowest proportion of state tax revenues coming from corporate income taxes, among the states imposing income taxes-generally less than 3.0 percent.

Corporate profits taxes in relation to taxes initially imposed on businesses

State and local governments impose a wide array of taxes that fall initially on business enterprises. These taxes include, but are not limited to: property taxes on business property, general sales taxes on business inputs, unemployment insurance, various excise taxes, individual income taxes on business income, business license taxes, public utility taxes, insurance premium taxes, severance taxes, and corporate income taxes.

In general, corporate income taxes have been a relatively small share of these taxes and the relative importance of corporate income taxes has generally been declining. This is also true when corporate income taxes are compared to all state and local tax revenues.

As shown in Exhibit 3, the trend of the ratio of state and local corporate income taxes to state and local taxes initially imposed on businesses (SLTIIB) is negatively sloped, with some exceptions. In fiscal year 1980, state and local governments combined collected $13.4 billion in corporate income taxes-approximately 13 percent of all SLTIIB and about 6.0 percent of all state and local tax revenues.

These ratios declined between fiscal year 1980 and fiscal year 2005. However, between fiscal years 2005 and fiscal 2007, state and local corporate income taxes as a proportion of all SLTIIB rose considerably. In 2005, corporate income tax receipts were $43.1 billion-8.5 percent of SLTIIB and 3.8 percent of all state and local taxes. In fiscal 2007, corporate profits tax revenues were $61.0 billion-10.1 percent of SLTIIB and 4.6 percent of all state and local tax revenues.

With the onset of the Great Recession in 2008, corporate income tax receipts fell to $44.5 billion in fiscal 2010-8.1 percent of SLTIIB and 3.4 percent of all state and local tax revenues. Although corporate profits tax revenues rose from the trough in fiscal 2010 to $53.3 billion in fiscal 2013, the share of SLTIIB provided by corporate income taxes declined to 7.6 percent in fiscal 2012 but rose slightly to 7.9 percent in fiscal year 2013.

Since fiscal year 2009, corporate income taxes accounted for about 3.5 percent of all state and local government tax revenues.[7] Exhibit 4 presents the relationship of state and local corporate income taxes to SLTIIB and all state and local income taxes from fiscal year 1980 through fiscal year 2013.

The preponderance of SLTIIB consists of property taxes imposed on business property-both real property and personal property-and general sales and use taxes imposed on business inputs. Since fiscal year 2000, these taxes have accounted for nearly 60 percent of all SLTIIB. During this period, corporate income taxes comprised the third largest SLTIIB-approximately 8 percent of all SLTIIB. See Exhibit 5.

Corporate profits taxes in relation to corporate profits

In the previous sections, we documented the secular decline in state and state and local revenues from taxes on corporate income relative to all state and state and local taxes and to all STLIIB.

All states. This section examines the relationship between corporate tax revenues and the tax base-corporate profits. Exhibit 6 and Exhibit 7 show the relationship between state and local corporate tax revenues and corporate profits. Corporate profit tax liability accruals estimate the taxes on profits currently earned, net of applicable credits. Domestic corporate profits before taxes are similar to book earnings and include capital gains and exclude deposits by Federal Reserve Banks and earnings of U.S. businesses in foreign countries. These data come from the Bureau of Economic Analysis (BEA) National Income and Products Accounts (NIPA).[8]

Casual inspection of Exhibit 6 shows a close relationship between state and local government corporate tax revenues and the profits of domestic industries, excluding the earnings of Federal Reserve Banks, over the

thirty-year time span 1984 to 2013. Between 1984 and 1997, state and local corporate income tax revenues and corporate profits rose together almost in lock step.

Corporate tax revenues continued rising despite the decline in corporate profits starting in 1997; both tax revenues and profits reached a trough in 2002. Both revenues and profits soared between 2002 and 2007 and declined together reaching the trough in 2009 as a result of the Great Recession.

Since the trough, both revenues and profits climbed together but revenues rose at a slower pace than did profits. Since the end of the Great Recession, corporate income tax revenues have not grown nearly as rapidly as the growth in corporate profits. This could be due to the fact that businesses that incurred losses during the downturn applied their net operating losses to their current profits to reduce their tax liabilities, or they had credits that they could not use if their tax liabilities were not sufficient.

Exhibit 7 shows the relationship between year-over-year percentage changes in both corporate tax revenues and profits. The relationship between annual percentage changes in both variables is not as close as the relationship between the levels of both variables. However, the coefficient of determination (r^2) between the annual percentage changes in corporate profits tax revenues and corporate profits is 0.49. That is, approximately 49 percent of the variance in the annual percent change in corporate profits taxes is explained by changes in the annual percentage change in corporate profits.

What is not shown in the previous two charts is the ratio of state and local corporate profits taxes to corporate profits which will be termed the effective average effective rate (ETR). Exhibit 8 presents the ETR from 1984 to 2013. After the rise in the ratio from 1984 to 1986, the ETR shows an almost constant downward trend-rising during recessions when tax liabilities do not fall as quickly as corporate profits. The ETR may fall when profits begin to rise as firms that have incurred losses during the recessions apply net operating loss carry forwards when incomes permit this write down of income. In 1986, the ETR was 10.7 percent and 3.2 percent in 2012 and 2013.

What is striking about the long-term downward trend in the ETR is that it comes at a time when corporate profits are rising. Corporate profits before taxes were approximately 8 percent of national income during the middle 1980s and early 1990s but around 13 percent in the latter part of the period studied.[9] Furthermore, the decline in the ETR is not limited to states; the federal ETR is also declining. These opposing trends are presented in Exhibit 9.

One of the shortcomings of using aggregate data is the influence of the large states on the averages; medians are not affected by the relative sizes of the states. This section provides estimates of the ETR, by

state, using three-year averages from 1999 to 2013. The three-year average reduces the high degree of volatility of both the base-corporate profits and corporate income tax collections.

Data on corporate income tax collections, by state, for fiscal years 2000 through 2013, are taken from the Bureau of the Census.[10] Estimates of corporate profits by state are derived by apportioning total corporate profits contained in the National Income and Products Accounts (Tables 6.17 Corporate Profits Before Taxes by Industry)[11] to the states by a method which was first developed by the former U.S. Advisory Commission on Intergovernmental Relations (ACIR) in 1962, through its Representative Tax System (RTS) and later revised.[12] This latter method was further modified by the Multistate Tax Commission. The exposition of this method can be found in the Winter 2010 issue of the Multistate Tax Commission Review.[13] One benefit of using this base is that it is independent of the corporate profits tax policies actually implemented in each state.

Exhibit 10 presents the ratio of corporate tax collections for each fiscal year (third and fourth quarter of one year and first and second quarter of the following year) from 2000 to 2013 divided by the estimate of corporate profits by state for the preceding calendar year. As mentioned previously, the estimates are three-year averages (the three-year sum of state corporate tax collections divided by the three-year sum of apportioned corporate profits) in order to mitigate the volatility of both tax collections and corporate profits.

With the exceptions of Delaware, Kansas, and Vermont, the ratio of corporate tax collections to corporate profits was lower in the 2011-2013 period than in the 1999-2001 period. Elissa Braunstein of the University of Massachusetts, Amherst, Political Economy Research Institute, using a somewhat different approach, found that for 41 of the 42 states studied during the 1991 to 2001 period, the average decline in the effective corporate income tax rate (ECITR) was 4.6 percent per year.[14] Therefore, the long-term decline in state corporate taxes is *not* due to tax changes in large states overwhelming the changes occurring in small states but an almost universal decline in the effective rate of tax.

Exhibit 11 presents the annual median effective rate and the weighted means. Again, both the trends of the weighted means and the median ratios of corporate tax revenues to profits are downward sloping.

A number of possible explanations for this phenomenon have been advanced. However, there is no one cause that seems to explain this widespread, long-term decline in this revenue source.

Discussion

The decline in the profits tax rate since 1986 is both simple to explain and difficult to explain. The basic reason for declining effective tax rates is that states are in competition with each other and with other nations for business investment and jobs. Tax rates on business income is one of the main policy tools by which state and local policy makers can balance their objectives of attracting new investment and retaining existing businesses while maintaining revenues from taxes on corporate income.

It is somewhat difficult to explain because there are at least four non-mutually exclusive factors that caused the effective rate of profits tax to fall and three of these factors are outside of the purview of state and local policy makers. Obviously, the actions of state policy makers can affect effective tax rates. The factors, other than the actions of state policy makers, that can have a significant impact on effective tax rates are 1) measurement errors, 2) changes in the federal corporate tax base, and 3) growth of more aggressive and sophisticated tax planning.[15]

A recent article by Christopher Davis, while not breaking any new ground, provides a fairly good review of the more problematic aspects of state corporate income taxes and offers some possible solutions.[16] Below are some of the explanations for the long-term decline in corporate income taxes.

Errors in measurement

A partial explanation for the decline in the effective rate of state corporate profits taxes is the growing use of "pass-through" entities (Subchapter S corporations, limited liability partnerships, and limited liability companies). The net income of these entities is classified in the National Income and Products Accounts as corporate profits. However, the net income of these entities is taxed at the shareholder level and the resulting revenues are therefore considered individual income taxes. The growing share of corporate profits taxed as individual income taxes reduces the measured effective corporate profits tax rate.[17]

Changes in federal tax base

As noted by Fox and Luna, most state corporate income taxes are tied to the federal definition of taxable income with some additions and subtractions. Changes in the federal tax base, for whatever reasons, will result in changes in the same direction in state corporate income tax bases. State corporate income tax

revenues will, therefore, rise or fall with changes in the federal tax base, unless states change their tax rates or broaden their bases to counteract the federal policy actions.

In some instances, states have counteracted federal tax actions that reduced the tax base such as bonus depreciation and liberalization of expensing by decoupling their tax codes from the Internal Revenue Code. Conversely, when these temporary measures end, state corporate tax bases are positively affected giving states the opportunity to cut taxes without adversely affecting revenues.

Corporate tax planning

Part of the decline in the ratio of corporate income tax revenues to corporate profits can be attributed to more sophisticated tax planning by businesses. Many firms have used the non-uniformity in nexus rules and the definition of business and non-business income among states to minimize their state tax liabilities. In addition, some firms use the separate reporting laws of the majority of the states imposing corporate income taxes to shift income to states with no taxes or very low taxes on certain types of income.

A study by the Multistate Tax Commission in 2003 estimated the loss in state corporate income tax revenue resulting from tax sheltering in 2001 was between $8.3 billion and $12.4 billion.[18] However, Professor J. Richard Harvey of the Villanova University School of Law and Graduate Tax Program believes that corporations are generally less tax aggressive currently than they were in the early 2000s. Professor Harvey attributes the declining tax aggressiveness to:

- The enactment of Sarbanes-Oxley;
- Increased transparency through reportable transactions, Schedule M-3, Schedule UTP, and FIN 48;
- The IRS whistleblower program;
- Increased reputational risk resulting from news articles, reports by nongovernmental organizations, accusations by whistleblowers, and high-profile governmental hearings;
- IRS success in winning several economic substance cases; and
- Successful litigation against several tax shelter promoters.[19]

State policy actions

The decline in the effective rate of corporate income taxes, as measured by the ratio of corporate income tax collections to corporate profits, is due, in part, to a number of state tax policies that reduce the effective

rate of tax (ETR) while keeping the basic structure (bases, exemptions, deductions, etc.) of their corporate income taxes. The ETR for the aggregate of all states has declined from 10.7 percent in 1986 to 3.2 percent in 2013. Conversely, a number of states have acted to increase their tax bases by closely examining their tax structures and eliminating ineffective special deductions and the aggregate legislated increases in corporate income tax revenues totaled approximately $3.3 billion between fiscal years 1990 and 2014.[20]

Increasing tax rates in the face of growing interstate competition for attracting new businesses and retaining existing businesses does seem counterintuitive. However, other state policy actions have mitigated these legislated tax increases. Among all state policy actions that work to reduce the ETR are the three presented here:

Tax concessions and incentives. Tax concessions and incentives are the most visible policy actions that states have used to attract new businesses to their state, or to keep existing business from leaving. Often these concessions take the form of negotiated tax abatements with specific businesses. Other incentives, such as credits against tax liability, are less visible because they are embedded within the state tax code. However, both the highly visible and less visible tax incentives act to reduce effective tax rates on business income.

Increasing the weight of the sales factor in income apportionment formulas. States use a formula based on sales, payroll, and property to apportion the income of multistate firms among the states in which the firms do business. The formula adopted in 1957 by the Uniform Division of Income for Tax Purposes Act (UDITPA) weighted each factor equally. Over time, a number of states have adopted other formulas that place a heavier weight on the sales factor.

As of February 2014, of the 47 states and the District of Columbia that levy corporate income taxes, only 10 states use the equally weighted three factor apportionment formula (with some exceptions), 19 states weight the sales factor at 50 percent or higher, and 18 states use only the sales factor as the apportionment weight.[21]

Overweighting the sales factor in the apportionment formula reduces the weights given to the payroll and property factors (the sum of the factor weights must equal one) thereby reducing the tax liabilities of firms with relatively large payroll and property within a state but relatively low sales. Conversely, firms with little payroll and/or property within a state but with relatively high sales volume will incur greater tax liabilities.

Recognition of limited liability companies (LLCs) and other pass-through business entities. This state tax policy option, which to some extent can be considered as an error of measurement, provides a

mechanism for multistate corporations to legally shift income from the state in which it was earned to a state which imposes either no tax on income derived from the ownership of intangible assets, or a very low rate of tax.

For example, a C corporation in a given state subject to that state's corporate income tax creates an LLC in which it holds a 1 percent ownership share. The other 99 percent is owned by an out-of-state corporation which does not tax income derived from the ownership of intangible assets (ownership of the LLC qualifies as an intangible asset). A simple business structure such as the one described here can effectively shift 99 percent of the income earned in a state to another state in which that income is not taxed. Fox and Luna have shown that the growth of LLCs has been an important factor in the decline in corporate tax revenues.[22]

The four factors briefly described here, and possibly others, partially explain the long-run decline in the ETR of state corporate income taxes. The relative importance of each of the factors in explaining this trend has not yet been determined.

A major question is: Will the decline in the effective rate of corporate income taxes revenues continue? Given the volatility of both the base of the tax and the revenues derived from that base (see Exhibit 7), it is extremely difficult to forecast the trend in corporate income revenues. In contrast to the seemingly steady long-run growth trends shown in Exhibit 6, the year-to-year percentage changes in both profits and corporate income tax revenues are erratic.

Annual increases in corporate profits have reached 30 percent or more in 1987, and 25 percent or more in 1976, 2003, 2010, and 2012; annual declines of 15 percent and 25 percent were experienced in 1982, 2001, and 2008 respectively. Similarly, annual increases in state corporate income tax revenues of 27 and 32 percent were experienced in 1968 and 1976 respectively, and declined by 9 percent and 15 percent in 1982, 2001, and 2008 respectively.

Summary and Conclusion

State corporate income taxes have resumed their decline relative to all other state and local taxes, all state and local taxes initially imposed on businesses, and relative to corporate profits after the upticks in the early 2000s and again after 2008. The future of this revenue source is difficult to predict because the volatility of the base results in high volatility of tax revenues. Because policy makers believe that corporate tax rates are an effective tool in business attraction and retention, it is difficult to predict an upward trend in effective tax rates in the future. However, the rate of decline in effective tax rates may slow because of state and local

government revenue needs.

Future research on this topic could include determining the effects of changes in the distribution of corporate profits before tax among industries, and changes in the increasing weight of the sales factor on apportionment formulas on the long-term trend of the effective tax rates.

Exhibit 1. State Taxes on Corporate Income as Percent of State Tax Revenues, Fiscal Years 1983 to 2013
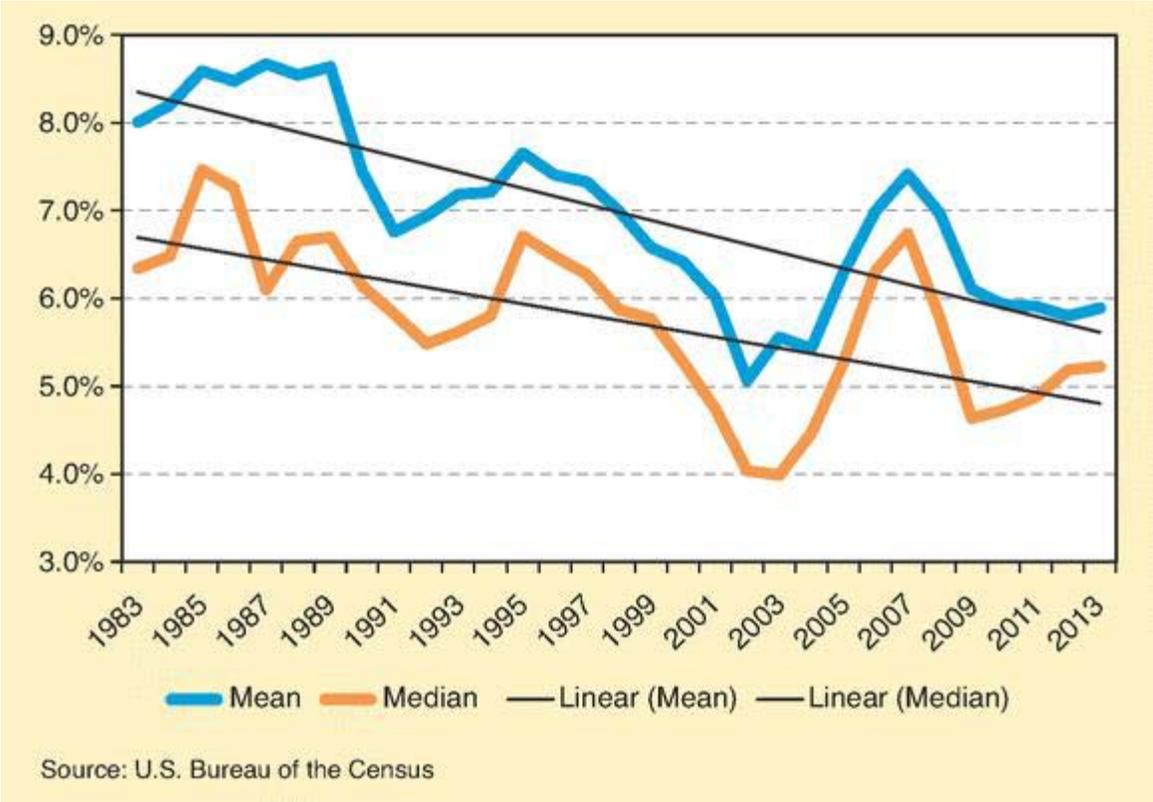

Source: U.S. Bureau of the Census

Exhibit 2. State Taxes on Corporate Profits as Percent of All State Taxes, Selected Fiscal Years 1983 to 2013

State	1983	1988	1993	1998	2003	2008	2013
U.S.	8.01%	8.54%	7.18%	7.00%	5.56%	6.97%	5.89%
Alabama	5.71	5.27	4.08	4.25	3.78	5.79	4.12
Alaska	13.02	14.50	39.16	23.25	18.49	14.86	12.29
Arizona	7.79	3.98	4.64	7.60	4.48	5.96	4.91
Arkansas	6.50	5.75	5.23	6.23	3.44	4.55	4.69
California	11.47	13.26	9.57	8.25	8.59	10.10	5.60
Colorado	3.21	5.38	3.64	4.60	3.01	5.28	5.80
Connecticut	14.08	13.75	10.69	5.69	3.62	4.33	3.55
Delaware	4.66	11.98	8.49	10.36	9.84	10.53	9.25
Florida	5.97	5.43	4.61	5.65	4.55	6.14	5.99
Georgia	6.82	8.28	5.78	6.38	3.61	5.22	4.48
Hawaii	1.91	3.83	1.93	1.94	0.86	2.05	2.03
Idaho	5.02	6.77	4.91	5.72	3.99	5.21	5.60
Illinois	8.14	8.79	7.57	9.92	5.82	6.22	11.53
Indiana	4.38	4.92	9.49	10.18	6.50	6.02	4.62
Iowa	6.88	5.55	4.28	4.10	2.84	5.04	5.12
Kansas	9.03	8.00	6.63	6.56	2.49	7.37	5.05
Kentucky	6.62	6.98	4.78	4.69	4.44	5.31	5.98
Louisiana	10.61	5.82	5.62	5.91	2.67	6.39	2.74
Maine	4.24	5.63	4.25	4.52	3.38	4.87	4.43
Maryland	4.28	5.37	3.63	4.12	3.45	4.67	5.25
Massachusetts	12.81	12.54	9.24	9.35	7.59	9.88	7.90
Michigan	14.30	17.65	14.33	11.48	8.10	7.18	3.59
Minnesota	5.88	6.65	6.26	6.55	4.27	5.68	6.48
Mississippi	4.47	4.52	5.73	5.76	5.78	5.70	5.62
Missouri	4.49	5.09	3.52	4.35	2.38	3.52	3.39
Montana	6.97	6.46	7.53	5.87	2.97	6.58	6.47
Nebraska	5.23	5.49	5.19	5.40	3.33	5.51	5.84
Nevada	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Hampshire	22.45	24.98	12.70	23.42	20.22	27.31	23.34
New Jersey	10.84	12.11	7.27	7.55	12.02	9.21	7.85
New Mexico	5.30	2.76	3.64	5.04	2.82	7.74	5.14
New York	8.28	8.30	8.43	8.65	4.94	7.72	6.68
North Carolina	7.61	9.25	7.29	7.21	5.67	5.29	5.41
North Dakota	5.82	6.29	6.48	7.65	4.75	7.00	4.26
Ohio	6.16	5.83	5.30	4.34	3.85	2.89	0.96
Oklahoma	3.94	2.66	3.47	4.20	1.77	4.32	6.58
Oregon	7.01	7.91	5.60	5.58	3.95	6.37	5.02
Pennsylvania	9.85	8.85	8.82	7.58	5.13	6.82	6.50
Rhode Island	5.84	7.05	4.87	3.83	2.97	5.28	4.91
South Carolina	6.07	5.93	4.11	3.76	2.74	3.71	4.43
South Dakota	0.79	5.53	4.78	4.59	4.34	5.29	2.42
Tennessee	9.08	9.13	6.44	8.68	6.96	8.72	10.16
Texas	6.34	7.10	6.70	8.14	7.32	9.83	9.33
Utah	3.24	4.47	3.80	5.28	3.75	6.46	5.22
Vermont	7.09	7.25	4.11	4.79	2.67	3.33	3.67
Virginia	5.16	5.45	4.83	4.23	2.53	4.30	4.02
Washington	0.00	0.00	0.00	0.00	0.00	0.00	0.00
West Virginia	3.07	10.13	7.23	7.35	5.07	11.04	4.51
Wisconsin	7.91	7.68	6.18	6.10	4.35	5.79	5.78
Wyoming	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Median: All States	6.12	6.37	5.45	5.74	3.90	5.74	5.13
Unweighted mean: All States	6.73	7.33	6.46	6.53	4.84	6.37	5.57
Median: (excluding NV, WA, and WY)	6.16	6.46	5.60	5.76	3.95	5.79	5.14
Unweighted mean (excluding NV, WA, and WY)	6.86	7.48	6.59	6.67	4.94	6.50	5.68

Source: U.S. Bureau of the Census

Exhibit 3. State and Local Corporate Net Income Taxes as Percent of State and Local Taxes Initially Imposed on Business and as Percent of All State and Local Taxes, Selected Fiscal Years 1980 to 2013

Fiscal Year	State and Local Corporate Net Income Taxes (billions)	State and Local Taxes Initially Imposed on Business (billions)	Total State and Local Taxes (billions)	Corporate Income Taxes as Percent of	
				State and Local Taxes Initially Imposed on Business	Total State and Local Taxes
1980	$13.4	$104.5	$223.5	12.8%	6.0%
1985	19.3	163.5	350.4	11.8	5.5
1990	23.7	229.1	501.6	10.3	4.7
1995	31.7	303.1	660.6	10.5	4.8
2000	36.4	386.0	892.6	9.4	4.1
2005	43.1	505.7	1,130.0	8.5	3.8
2006	53.3	548.2	1,242.1	9.7	4.3
2007	61.0	602.2	1,319.1	10.1	4.6
2008	57.7	615.0	1,362.1	9.4	4.2
2009	46.8	593.7	1,309.3	7.9	3.6
2010	44.5	592.1	1,307.3	8.1	3.4
2011	48.7	625.7	1,381.2	7.8	3.5
2012	49.1	643.4	1,425.1	7.6	3.4
2013	53.3	670.8	1,495.2	7.9	3.6

Source: Ernst & Young Quantitative and Statistics Practice and Council On State Taxation

Exhibit 4. State/Local Corporate Tax Revenues as Percent of State/Local Taxes Initially Imposed on Business and as Percent of All State/Local Tax Revenues, Selected Fiscal Years 1980 to 2013
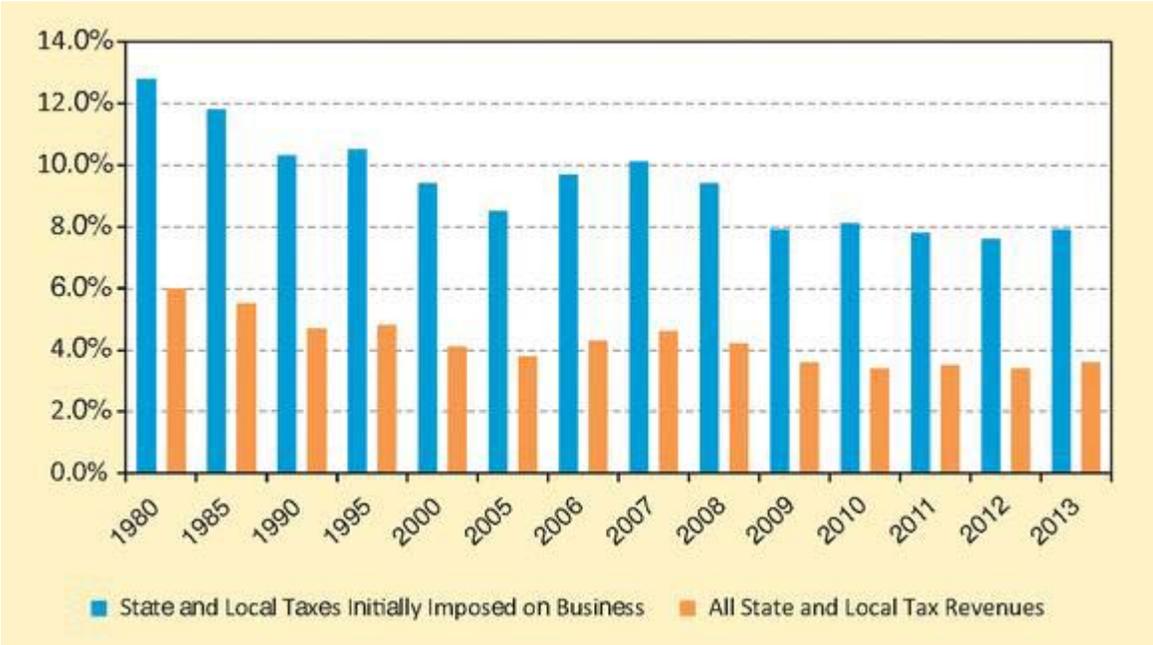
Exhibit 5. State/Local Taxes Initially Imposed on Business: Fiscal Years 2000 to 2013

Public utility taxes 5%

Other business taxes 7%

Individual income tax on business income 5%

Busines excise tases 5%

Business license taxes 5%

Unemployment compensation 6%

Corporate net income 8%

Property tax on business property 37%

General sales and us tax on inputs 22%

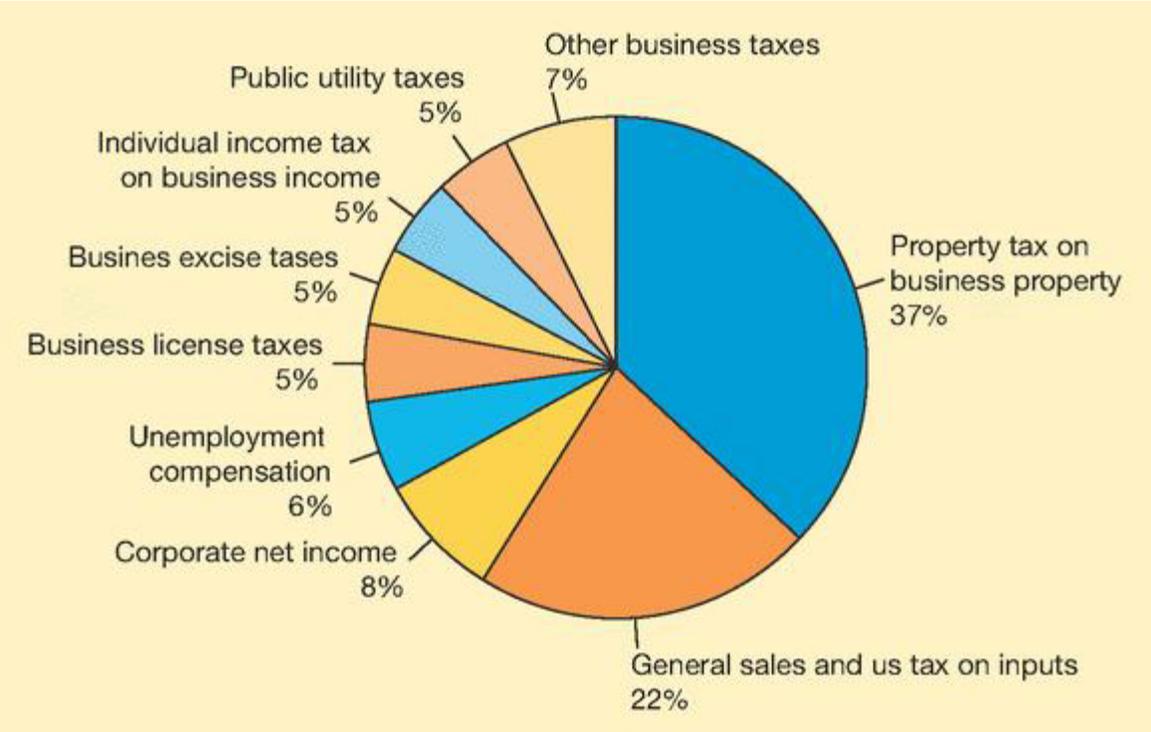**Exhibit 6. Corporate Profits Before Tax of Domestic Industries and State and Local Taxes on Corporate Income: 1984 to 2013, Billions of Dollars**
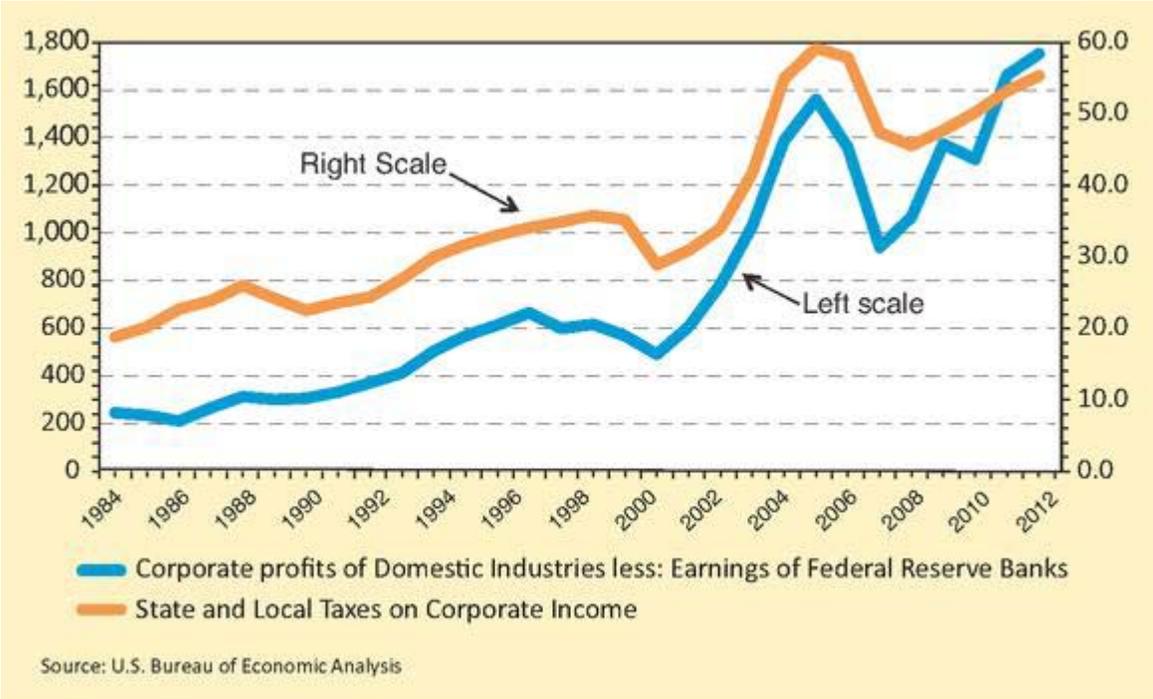

Source: U.S. Bureau of Economic Analysis

Exhibit 7. Year-Over-Year Percentage Change in Corporate Profits and State/Local Corporate Profits Tax Receipts, 1984 to 2013

Year-Over-Year Pecent Change in Corporate Profits
Year-Over-Year Percent Change in Corporate Pofits Tax Receipts

Source: U.S. Bureau of Economic Analysis

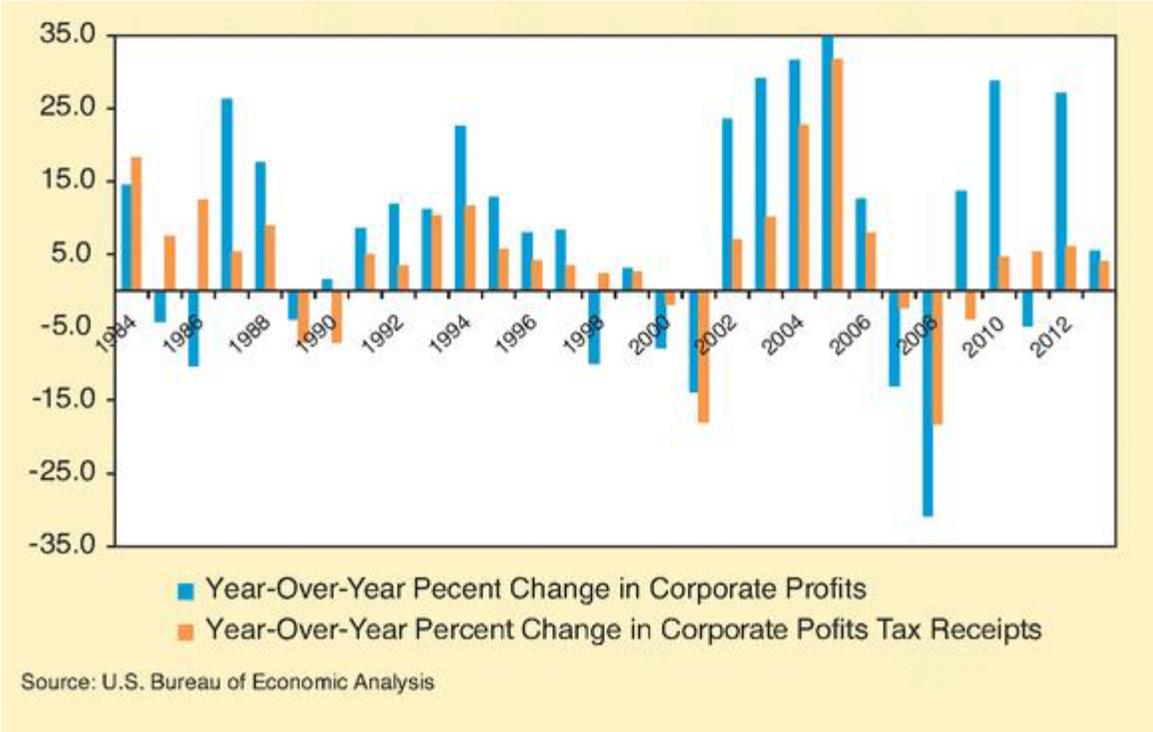**Exhibit 8. State and Local Taxes on Corporate Income as Percent of Corporate Profits of Domestic Industries: Fiscal Years 1984 to 2013**

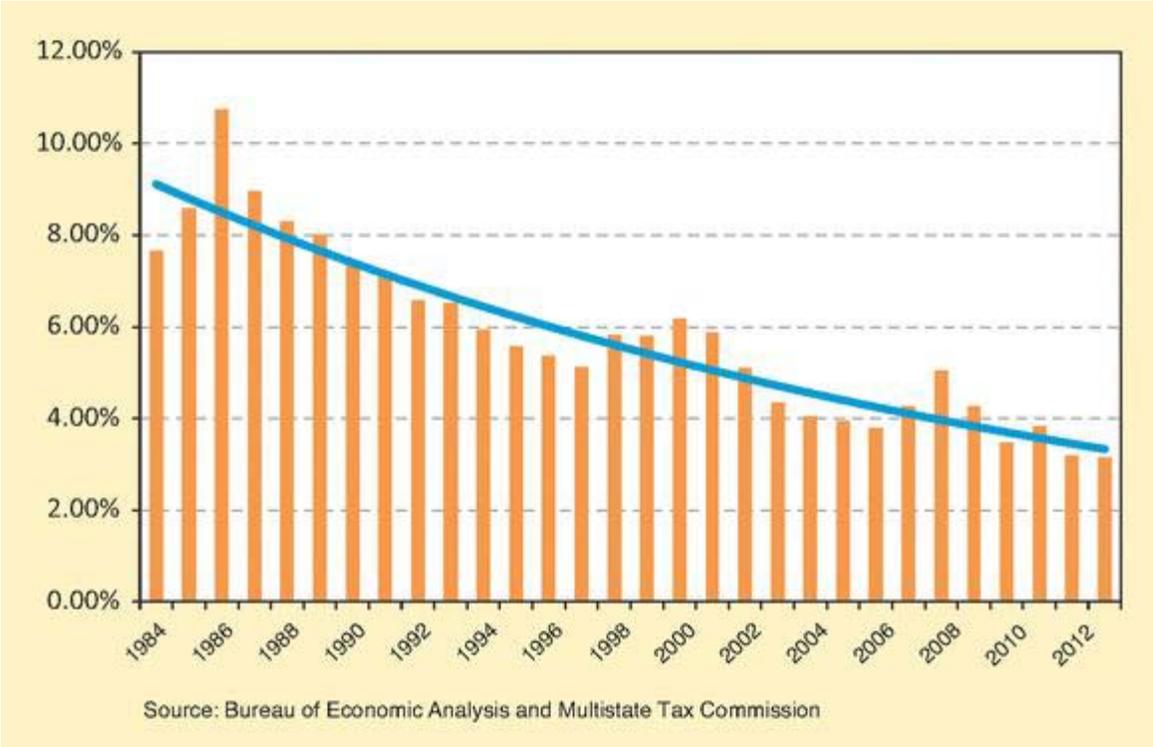Source: Bureau of Economic Analysis and Multistate Tax Commission

Exhibit 9. Corporate Profits as Percent of National Income and Taxes on Corporate Profits as Percent of Corporate Profits: 1984 to 2013
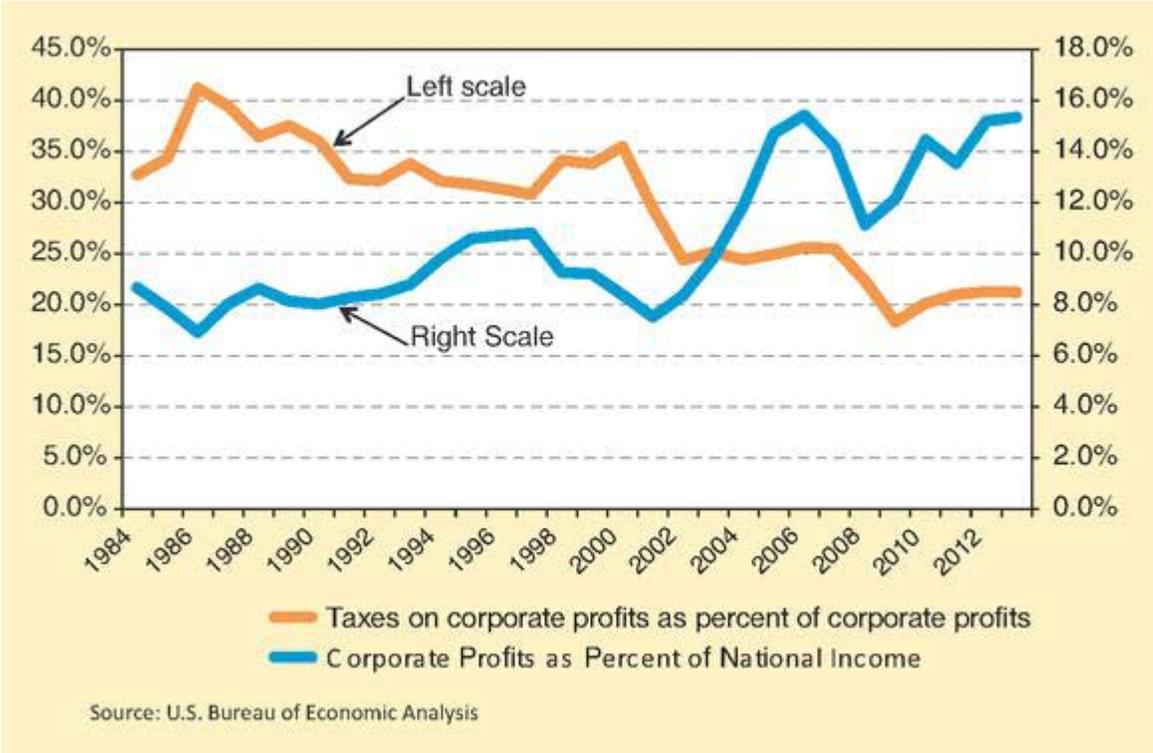

Source: U.S. Bureau of Economic Analysis

Exhibit 10. State Taxes on Corporate Income as Percent of Corporate Profits

	Average of Fiscal Years				
	1999-01	2002-04	2005-07	2008-10	2011-13
United States[1]	6.12%	5.44%	4.34%	4.91%	3.56%
United States (all States)	5.96%	5.29%	4.21%	4.75%	3.44%
Alabama	3.01	4.30	3.21	3.37	2.14
Alaska	27.51	19.50	21.12	26.61	17.99
Arizona	6.03	4.64	4.54	3.07	2.65
Arkansas	4.88	4.83	3.76	4.19	3.59
California	9.19	9.31	6.59	6.78	4.42
Colorado	3.53	2.24	1.97	1.99	2.10
Connecticut	4.19	2.63	3.13	2.79	2.79
Delaware	3.89	3.02	2.36	5.49	6.25
District of Columbia	16.43	9.91	9.44	6.62	5.71
Florida	5.32	4.76	4.04	3.49	3.02
Georgia	4.18	3.09	2.35	2.41	1.73
Hawaii	3.86	2.73	3.61	2.23	1.96
Idaho	5.98	4.68	4.28	3.39	3.61
Illinois	7.33	4.62	4.09	3.92	5.61
Indiana	6.73	6.22	3.58	3.42	2.37
Iowa	2.54	1.26	1.58	2.29	2.44
Kansas	4.66	2.79	3.28	4.14	2.42
Kentucky	4.32	5.40	5.80	4.27	3.72
Louisiana	3.24	3.00	2.59	3.47	1.16
Maine	6.58	4.93	4.16	4.31	4.22
Maryland	4.58	4.22	3.83	3.76	2.87
Massachusetts	7.67	6.42	4.83	6.37	4.70
Michigan	10.11	9.16	4.04	3.38	2.03
Minnesota	5.90	4.40	3.84	4.01	4.05
Mississippi	5.81	7.39	4.25	4.62	4.41
Missouri	2.12	2.08	1.35	1.76	1.41
Montana	8.67	5.25	5.76	5.52	4.44
Nebraska	3.81	3.83	2.98	2.90	2.31
Nevada	0.00	0.00	0.00	0.00	0.00
New Hampshire	11.68	15.83	10.11	10.86	8.56
New Jersey	5.97	7.61	5.31	6.64	4.47
New Mexico	7.33	4.74	6.29	4.24	4.14
New York	9.30	6.35	7.52	12.05	5.97
North Carolina	5.76	5.31	4.13	3.59	2.90
North Dakota	7.32	5.04	4.74	5.55	5.22
Ohio	2.68	3.80	2.40	1.47	0.46
Oklahoma	3.34	2.51	2.77	2.61	3.21
Oregon	5.47	4.17	3.50	2.84	2.16
Pennsylvania	5.76	5.00	3.61	4.81	3.61
Rhode Island	3.86	2.86	3.90	3.57	3.08
South Carolina	3.13	2.87	2.02	1.82	1.72
South Dakota	3.76	3.52	2.38	1.97	1.05
Tennessee	5.60	6.06	4.22	4.58	4.41
Texas	4.23	3.93	2.42	4.37	3.41
Utah	4.41	3.63	3.68	3.39	2.38
Vermont	3.97	4.63	3.50	4.31	4.05
Virginia	3.32	2.66	2.63	2.54	2.15
Washington	0.00	0.00	0.00	0.00	0.00
West Virginia	9.55	8.49	9.05	8.05	4.11
Wisconsin	4.54	4.78	3.27	3.83	3.45
Wyoming	0.00	0.00	0.00	0.00	0.00
MEDIAN: All States	4.66	4.62	3.68	3.59	3.08
MEDIAN[1]	5.32	4.64	3.83	3.83	3.41

1. Excludes Nevada, Washington, and Wyoming.

Exhibit 11. State Corporate Income Tax as Percent of Apportioned Corporate Profits, by State, Fiscal Years 1999 to 2013
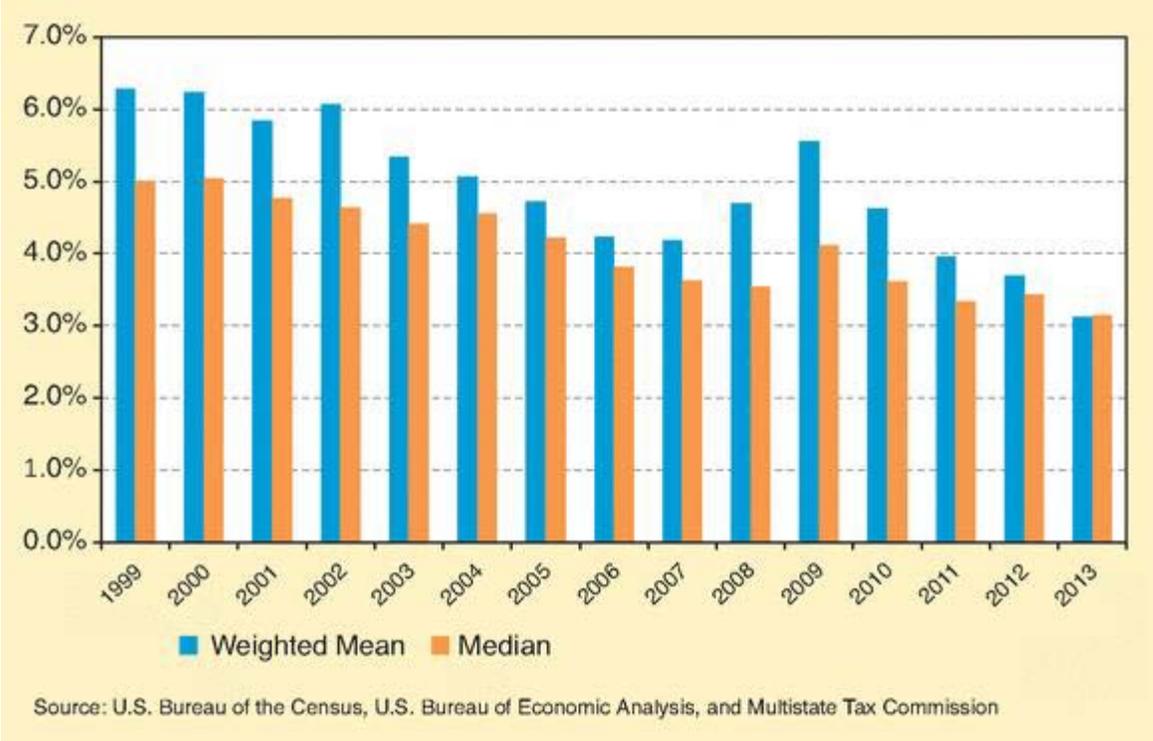

Source: U.S. Bureau of the Census, U.S. Bureau of Economic Analysis, and Multistate Tax Commission

Exhibit 12. Appendix

General Apportionment Formula

$$\Pi_{ijt} = \Pi_{it} \bullet \{\acute{\alpha}_{jt}\,(S_{ijt}/S_{it}) + \beta_{it}\,(L_{ijt}/L_{it}) + \gamma_{it}\,(P_{ijt}/P_{it})\}$$

Where:

Π_{ijt} are the profits of industry sector (i) in state (j) at time (t)

Π_{it} is the profits of industry sector (i) at time (t)

$\acute{\alpha}_{jt}$ is the weight of apportionment factor for sales in state (j) at time (t)

S_{ijt}/S_{it} is the ratio of the sales of industry sector (i) in state (j) at time (t) to total sales of industry sector (i) at time (t)

β_{it} is the weight of the apportionment factor for payroll in state (j) at time (t)

L_{ijt}/L_{it} is the ratio of the payroll of industry sector (i) in state (j) at time (t) to total payroll of industry sector (i) at time (t)

γ_{it} is the weight of the apportionment factor for property in state (j) at time (t)

P_{ijt}/P_{it} is the ratio of the property of industry sector (i) in state (j) at time (t) to the total property of industry sector (i) at time (t)

$$\acute{\alpha}_{jt} + \beta_{it} + \gamma_{it} = 1$$

However, since we do not have data on the property factor by state, the apportionment formula used here is:

$$\Pi_{ijt} = \Pi_{it} \bullet \{\acute{\alpha}_{jt}\,(S_{ijt}/S_{it}) + (1 - \acute{\alpha}_{jt})\,(L_{ijt}/L_{it})\}$$

Derivation of Sales by Industry by State, 1999 through 2012

Because corporate sales by destination are unlikely to mirror either payroll or retail sales, neither of these proxies was used to estimate the sales factor in the formula. The Economic Census, published every five years by the U.S. Bureau of the Census, contains data on sales by industry by state, but these data represent shipments from the state, i.e., sales by state of origin. The apportionment of corporate income is based on sales by state of destination. Estimates of sales by industry by state on a destination basis were derived using a method very similar to the ACIR method found in the September 1993 publication cited previously. As shown below, a proxy for sales by destination was derived through use of Gross State Product by industry by state and annual national input-output tables for 1999-2012 according to the following procedure:

Let:

$Tab1_{i,\,c}$ = the percentage of the dollar value of industry i's output that is commodity c. The distribution of commodity outputs is based on the "Make of Commodities" table (Table 1) in the US input-output tables.

$Tab2_{c,\,j}$ = the percentage of the total dollar value of commodity c used as an input in industry j. Where c is not used as an intermediate input, but is purchased by all final users, Gross Domestic Product (GDP) of each state constitutes a 15th industry. The distribution of commodities to industries is based on the "Use of Commodities" table (Table 2) in the US input-output tables.

Then:

Where $A_{i,j} = \sum\limits_{i=1}^{14} \sum\limits_{c=1}^{14} (Tab1_{i,c} \,{}^{*}\, Tab2_{c,j})$ the percentage of industry i's output purchased by industry j.

When j is GDP, $A_{i,j}$ is the amount of industry i's output that is sold as final goods.

Now let:

$GDP_{j,s}$ = the percentage of industry j's Gross Domestic Product located in state s. Where industry j is final use expenditures, the cell value represents that state's share of total sales.

Then:

$$Sales_{i,s} = \sum\limits_{j=1}^{14} (A_{i,j} \,{}^{*}\, GDP_{j,s})$$

Where $Sales_{i,s}$ =   the share of industry i's output sold in each state s.

Thus, $Sales_{i,s}$ is used as a proxy for the sales-by-destination factor in the three-factor formula.

Sources:

Corporate Profits by Industry (1999-2013): http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=232&ViewSeries=NO&Java=no&Request3Place=N&3Place=N&FromView=YES&Freq=Year&FirstYear=2001&LastYear=2007&3Place=N&Update=Update&JavaBox=no

Payroll (1999-2013): http://www.bea.gov/regional/spi/default.cfm?selTable=SA07N&selSeries=NAICS

Input-Output Tables (1999-2012): http://www.bea.gov/industry/iotables/table_list.cfm?anon=98817

Gross Domestic Product by Industry (1999-2012): http://www.bea.gov/regional/index.htm#gsp

[1] See, for example, Elliott Dubin, "Recent Trends in State Corporate Income Taxes," *Multistate Tax Commission Review,* Volume XX, No.1, Winter 2007, pp. 7-15; Peter Fisher, "Tax Incentives and the Disappearing State Corporate Income Tax," *State Tax Notes*, March 4, 2002, pp. 767-774; William Fox and LeAnn Luna, "State Corporate Tax Revenue Trends: Causes and Possible Solutions*," National Tax Journal*, Vol. LV, No. 3, September 2002, pp. 491-509; Steven Maguire, "Average Effective Corporate Tax Rates: 1959 to 2002," Updated September 5, 2003, *CRS Report for Congress*, Order Code RL30469, pp. 6-7; and Gary Cornia, Kelly Edmiston, David Sjoquist, and Sally Wallace, "The Disappearing State Corporate Income Tax," National Tax Journal, Vol. LVIII, No. 1, March 2005, pp115-138.

[2] Nicholas Jenny, "A Blip? State Revenue Growth Weakens in the Fourth Quarter," *State Revenue Report* No. 63, The Nelson A. Rockefeller Institute of Government, Fiscal Studies Program, March 2006, p.2.

[3] Karen Setze, "Governing Conference Topics Include State Revenue Growth, Toll Roads," *State Tax Notes*, Tax Analysts, Inc., Arlington, VA, February 6, 2006, Doc 2006-2106.

[4] http://www.bea.gov/bea/dn/nipaweb/csv/NIPATable.csv. Revised September 13, 2014.

[5] http://www.census.gov/govs/statetax/historical_data.html.

[6] Medians and unweighted means are used to eliminate the influence of the larger states on the overall trend.

[7] Phillips, Sallee, Ballard, and Sufranski, *Total State and Local Business Taxes State-by-State Estimates for Fiscal Year 2013*, op. cit.

[8] U.S. Bureau of Economic Analysis, http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&903=249 and http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&903=250

[9] National Income is defined as: the sum of all incomes, net of consumption of fixed capital (CFC), earned in production. It includes both factor incomes and nonfactor charges. Bureau of Economic Analysis.

[10] U.S. Census Bureau, Annual Survey of State Government Tax Collections (1951-2013).

[11] http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&903=241

[12] Marcia Howard, *RTS 1991, State Revenue Capacity and Effort,* U.S. Advisory Commission on Intergovernmental Relations, M-187, September 1993.

[13] See Elliott Dubin, "Changes in State Corporate Income Tax Apportionment Formulas and Changes in State Corporate Income Tax Bases," *Multistate Tax Commission Review*, Winter 2010, pp.5-14. http://www.mtc.gov/uploadedFiles/Multistate_Tax_Commission/Resources/Publications/MTC_Review/Winter%202010%20Final.pdf

[14] Elissa Braunstein, *Declining Corporate Income Taxes in the 1990s: A State-by-State Analysis of Effective Tax Rates*, University of Massachusetts Amherst, Political Economy Research Institute, Working Paper Series Number 91, 2004.

[15] For a more thorough discussion of these factors, see Fox and Luna, *op. cit.*, pp. 495-501.

[16] Christopher Davis, "Reforming the State Corporate Income Tax," Tax Analysts Special Report, June 25, 2012, Tax Analysts Inc., Falls Church, VA, pp. 901-909.

[17] Martin A. Sullivan, "News Analysis-Shelter Fallout? Corporate Taxes Down, Profits Up," *Tax Notes Today*, DOC 1999-25781, Tax Analysts, Arlington, VA, July 30, 1999, p.4.

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