Tax Expenditure Implications of Changes in State Corporate Income Tax Apportionment Formulas

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Abstract

This paper examines the impact of changes in the income apportionment formula on changes in apportioned state corporate income tax base levels. The paper employs a state-level panel comprising all states plus the District of Columbia and spans 2001 to 2008 to estimate the effect of changes in the apportionment weights. The estimates suggest that increases in the sales factor weight are generally associated with lower apportioned corporate income tax base; but this is not always the case.

Corporate income tax capacity is defined in this article, as the standardized corporate income tax base that would result from apportioning corporate profits before taxes for each of 14 major industrial sectors, measured on the National Income and Products Accounts basis, to each of the fifty states and the District of Columbia using two of the apportionment factors used by states – sales within the state relative to total sales and wages and salaries within the state relative to all wages and salaries. Corporate income tax capacity is the sum of the apportioned net income of the 14 industrial sectors. The use of a uniform standardized base to measure revenue capacity allows comparison of states' abilities to raise revenues independent of the policies actually implemented in each state.

I. Introduction

States generally apportion the total net income of a multistate business to their state use a three-factor formula. The most commonly used three-factor formula multiplies the total net income of the firm by the proportion of the firm's sales in the state to total sales and multiplies by that ratio by a weighting factor plus the ratio of the firms payroll in the state by that factor's weight plus the ratio of the firm's property in the state by the property factor weight. The sum of the weights must equal one (1) in order to neither over apportion nor under apportion the firm's net income to each state in which the firm does business. Algebraically, the apportionment formula may be written as:

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

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)

 $\dot{\alpha}_{jt}$ 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)

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

In recent years, some states have increased the weight of the sales factor; and, decreased the concomitant weights of the payroll and property factors, in the apportionment formula. Simafranca provides two reasons why states would adopt this policy. First, increasing the weight of the sales factor reduces the production costs for in-state firms relative to their out-of state competitors, which over time, and assuming other states do not follow suit, would provide an incentive for these firms to expand their production facilities and hire more workers. Second, it encourages out-of-state businesses to locate their facilities in the state.¹ When a state increases the sales factor weight, its corporate income tax revenues are expected to decline in the short-run. . However, in the longer-run, it is expected that the increased economic activity induced by this policy will result in higher individual income tax revenues, higher business property tax revenues, higher sales tax revenues, and possibly higher business income tax revenues.²

This paper adds to the already large body of literature that examines the impact of the state policy of changing the weight of the sales factor on state economic development measured by changes in state corporate income tax revenues and/or bases, changes in employment, and changes in business investment. Here, we estimate the impact of changes in the weight of the sales factor on the corporate income tax base as measured by the capacity of state and local governments to raise revenue from the corporate income tax. The measure of corporate income tax capacity was first developed by the former U.S. Advisory Commission on Intergovernmental

Relations (ACIR) in 1962, through its Representative Tax System (RTS), to more accurately reflect the amount of revenue from each tax source that is potentially available to each state in a given year. Those estimates were continued with changes to the methodology and the addition of ACIR's Representative Expenditure System (RES). ³Since the ACIR was disbanded, the Federal Reserve Bank of Boston has continued publishing these estimates.⁴

The RTS is essentially the average tax system of all the states applied to each state's potential tax base. That is, the RTS provides an estimate of the tax yield that would result from applying a standard, representative set of tax rates to standard definitions of tax bases. The representative tax rate for a particular tax is sum of all state and local tax collections of that tax divided by sum of all state and local uniformly defined tax bases for that particular tax. The *tax capacity* of a state is the taxes the state, and its constituent local governments, would have collected if it were to apply the *representative tax rates* as defined previously to the standard tax bases in the state. ⁵ The *standard base* is the base that is potentially taxable; it includes the value (or volume) of all economic stocks or flows that the state and local governments would have been able to tax, in the absence of nonstandard exemptions, exclusions, deductions, and other tax preferences and tax relief items. The use of a standardized base to measure revenue capacity allows comparison of states' abilities to raise revenues from any particular tax or revenue source independent of the policies actually implemented in each state.

For the most part, the data show that increasing the weight of the sales factor increases measured tax capacity which is not to be expected as the payroll and property factors are taxed more lightly following the usual change in apportionment formulas; i.e., increasing the weight of the sales factor. However, this is not true in all cases. In addition, we find that the change in corporate income tax capacity remains after the increase in the weight of the sales factor. This implies that the corporate income tax base does not necessarily increase as expected, but remains depressed. Conversely, in those states in which the corporate tax base increases when the weight of the sales factor is increase, the upward change also remains. This does not necessarily imply that increasing the weight of the sales factor results in a reduced rate of economic growth.

The next section presents a brief description of the method used to derive the estimates of state corporate tax capacity and a comparison to the ACIR estimates. The third section presents estimates of the impact of changes in the apportionment weights on the estimates of state corporate income tax capacity. The last section is the summary and conclusions.

II. State Corporate Income Tax Capacity

A. Derivation of the Estimates of State Tax Capacity Measures

Ideally, the measure of state corporate tax capacity would be the sum of every corporation's net income attributable to their economic activity in each state. This information is not available; and, even if that measure is not truly objective because, to a large extent, each multistate corporation determines its own net income. The measure of state corporate tax capacity used in this paper is an estimate of the National Income and Products Accounts (NIPA) measure of corporate profits before taxes of domestic industries, for each of 14 industrial sectors⁶ apportioned to each state by using a variant of the apportionment formula presented earlier in this paper. The estimated apportioned earnings of each industrial sector are then summed to derive an estimate of total corporate tax capacity. A state-level panel comprising all states plus the District of Columbia and spans 2001 to 2008 was chosen because it is the only period that contains consistent data based on the North American Industrial Classification System (NAICS). In addition, the earnings from international trade are disregarded because almost all states limit their jurisdiction to "waters edge." The earnings of Federal Reserve Banks are also disregarded because states cannot legally impose their taxes on these institutions.

The NIPA measure of Profits Before Taxes is used as the base for state corporate income taxes because this measure of profits reflects the inventory and depreciation accounting practices used for Federal income tax returns and is sometimes referred to as "book profits." ⁷. Most of the states that impose corporate net income taxes use federal net income, with some adjustments, as the basis for apportioning a multistate corporation's net income. Furthermore, the problem of endogeneity does not exist because the measure of corporate profits (tax capacity) is independent of state tax policies such as tax rates, credits, "throwback" or "throwout" of sales.

The apportionment formula employs the actual apportionment formula used by each state in any year rather than the traditional, equally weighted three factor apportionment formula – sales, payroll, and property.⁸ According to the Federation of Tax Administrators, as of January 1, 2008, only twelve states use the traditional, equally weighted three factor formula; and, eleven (11) states use only one factor (sales) and Indiana and Minnesota will use only the sales factor to apportion income in 2011 and 2013 respectively.⁹ The apportionment formula used to estimate corporate income tax capacity for Nevada, Washington, and Wyoming, the three states without any corporate income tax, is 50% sales, 25% payroll, and 25% property.

The lack of data on the distribution of property by industry by state by year necessitated a further modification of the method to apportionment industry profits to the states. The algebraic expression of the apportionment formula as shown previously has been modified to account for the doubling of the weight of the payroll factor. The algebraic expression to apportion an industrial sector's total net income to a state can be written as:

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

Before proceeding any further, a concern should be addressed. The lack of data on the property factor on a state by state basis may impart some unknown bias into the estimates of state corporate tax capacity. The two factor apportionment formula used in this article implicitly assumes that the payroll and property factors are distributed among the states in a similar manner. There is no way of knowing whether this assumption is valid; or if it is not valid, how much error is imparted to the estimates.

B. Data Sources

The sales factor in the apportionment formula is based on industry sales in a particular state relative to total U.S. sales; that is, sales on a destination basis. The quinquennial Economic Census published by the Census Bureau publishes sales by industry by state on an origin basis. In this paper, estimates of sales by industry by state were derived by using the ACIR method to estimate sales on a destination basis within a state. Briefly, annual U.S. input/output make table

and use table were manipulated to derive an estimate of industry to industry sales for the U.S. Sales for final uses were weighted by each state's share of Gross Domestic Product. A detailed exposition of the sources and methods is contained in the Appendix.

Sales factor apportionment weights were provided by research of Commerce Clearing House personnel from CCH archives. Profits Before Taxes (PBT) comes from the interactive data of the U.S. Department of Commerce, Bureau of Economic Analysis; Table 6.17D (see Table 1 below).¹⁰ Data on salaries and wages by state were obtained from the Department of Commerce, Bureau of Economic Analysis SA07 series.¹¹

Table 1 here

III. Results

Table 2 below presents estimates of corporate tax capacity by state for 2001 through 2008. The annual fluctuations in state corporate tax capacity are due to variations in the level of national corporate profits before taxes, changes in the composition of corporate profits by industry changes in apportionment weights for the sales and the concomitant change in the weight of the

Table 2 here.

payroll factor and changes in the distributions of sales and salaries and wages by industry by state.¹² These changes result in wide annual fluctuations in corporate tax capacity for each state. Fore example, between 2003 and 2004 and between 2004 and 2005 U.S. tax capacity rose by 40.0 percent and 36.8 percent respectively and fell by 24.4 percent between 2007 and 2008. Among the individual states the annual percentage changes in corporate tax capacity are much greater. For example, in Idaho, corporate tax capacity fell by 63.8 percent in Idaho between 2007 and 2007 and 2008.

Table 3 below contains estimates of corporate tax capacity by state for 2001 through 2008 with the distribution of profits among industries and national total of profits before taxes unconstrained but, the apportionment weights used by the states constrained to their 2001 levels. That is, the estimates of corporate income tax capacity are the same as those in the previous table with only the apportionment weights held constant at the 2001 values. Constraining the apportionment weights to those used in 2001 permits one to isolate the impact of changes in the apportionment weights on the corporate income tax capacity by state.

Table 3 here

The bold entries signify the 18 states which have changed the weight of sales factor apportionment weight at least once during the 2001 to 2008 time span. In each case, increasing weight was placed on the sales factor.

The change in state corporate tax capacity due to changes in apportionment weights only is shown in Table 4 below. Each entry in Table 4 is the percentage difference between the corresponding entries in Tables 3 and 2. For example, the entry for New Jersey in 2003 in Table

Table 4 here

4 is the percentage difference between the entry for New Jersey in 2003 in Table 3 and the corresponding entry in 2003 in Table 2. That is, when New Jersey changed the weight of the sales factor in its apportionment formula from (1/3) in 2002 to $(\frac{1}{2})$ in 2003, its corporate tax base fell by 1.5 percent. For states that did not change their apportionment weights during this period, for example, Arkansas, the annual percentage change in corporate tax base is constrained to equal zero (0) in order to avoid confusion. These states will have very small positive or negative calculated changes for a given year because the sum of total profits before tax for all states for each year will be invariant regardless of changes in any states apportionment formula.

IV Discussion of the Results

As noted earlier, corporate tax capacity fluctuates widely from year to year for each state and in total primarily because of cyclical changes in aggregate corporate profits as well as changes in the distribution of profits by industry, and changes in the distributions of sales and salaries and wages by industry by state. Changes in state apportionment factor weights also exert some influence on the changes in state corporate income tax capacity.

It was assumed that the increased weight placed on the sales factor by the 18 states that did alter their apportionment formula during the 2001 to 2008 period was done so to spur economic development. That is, initially states expect to collect *less* corporate income tax revenue from their from in-state firms; i.e., those firms with property and/or payroll in the state but a relatively small proportion of their sales in that state. Conversely, the greater weight placed on the sales factor would perhaps increase somewhat more revenue from out-of-state firms with in-state sales but relatively little or no property or payroll in the state.¹³ Over time, however, the lower weights on property and payroll supposedly, are expected to induce other firms locate within the states borders thereby boosting the local economy and providing additional revenues from corporate income taxes, property taxes, sales taxes and individual income taxes.¹⁴

In this analysis, reducing the weight of the payroll apportionment factor would lower corporate tax capacity if this theory holds. The experience of most of the states that increased the weight of the sales factor in their apportionment formula is *not* the expected one. Of the nineteen states that increased the weight of the sales factor during this period, thirteen experienced increased corporate income tax capacity in the year of the change in the apportionment weights and thereafter (see Table 4.) Only three states, New Jersey, New York, and Wisconsin, experienced reduced corporate tax capacity following a change in the sales factor apportionment weight. Three states, Arizona, Minnesota, and Virginia had mixed results. The states in which corporate tax capacity rose following a change in their sales factor apportionment weights could be characterized as "market" states while the other states could be characterized as "production" states. Edmiston found that "market" economies tended to gain revenues when the weight of the sales factor was increased (corporate tax capacity increased) and the converse is true in the "production" states (corporate tax capacity decreased).¹⁵ Seven states – Colorado, Illinois,

Mississippi, New Hampshire, Ohio, Pennsylvania, and Tennessee – increased their sales factor apportionment weight prior to 2001. It is not possible to characterize Colorado, New Hampshire, Ohio, or Tennessee as either "market" or "production" states because there was no subsequent change in their sales factor apportionment weight to predict what would happen to corporate tax capacity following a change in the weight of the sale factor in the apportionment formula.

For the majority of the states that changed their apportionment formula during this period, the resulting change in their respective corporate tax capacity was quite small. However, a there were a number of notable exceptions. When Louisiana changed the sales factor apportionment weight from 0.5 to 1.0 in 2006, corporate tax capacity rose by 15.7 percent, 15.6 percent, and 8.4 percent in 2006, 2007, and 2008 respectively. Similar changes in the weight of the sales apportionment factor resulted in increased of more than 9.0 percent in Mississippi, approximately 5.0 and 7.0 percent in Oregon, and about 4.3 percent in South Carolina respectively. Corporate tax capacity rose by more than 8 percent in 2002 in South Dakota and by more than 3 percent in subsequent years following a change in the weight of its sales factor from one-third to one-half in 2002.

New York increased the sales factor apportionment weight from 0.5 to 0.6 in 2006 and from 0.6 to 1 the following year. Corporate tax capacity in New York fell by 1.9 percent between 2005 and 2006 and another 8.6 percent between 2006 and 2007 following that change in apportionment weight. Corporate income tax capacity fell by 8.4 percent between 2007 and 2008

When states reduce the apportionment weights of the payroll and property factors, the corporate tax base declines in the year of the change and in the following years, as expected for production states while the converse is true for market states. The theory also predicts that the lower apportionment weights on the payroll and property factors should induce firms to expand their operations or to relocate in those states which have lowered the apportionment weights on payroll and property. The results shown in Table 4 cannot neither support nor rebut those theoretical arguments.

V. Conclusions

The purpose of this paper is to observe how changes in the apportionments weights affect state corporate income tax capacity. The simple method used here shows that increasing the weight of the sales factor in the apportionment formula generally results in an increased corporate tax base. However, there may other factors not taken into account that could have produced similar results. For, example, if data for a larger number, or smaller number of industrial sectors were used the results could have been different. If a longer time frame with consistent NAICs data were available, the results could have been different since there were a significant number of states that changed their apportionment formula prior to 2001. Thus, despite the large amount of literature on this subject, there is no definitive answer regarding the long-term impact of changes in the weights of the apportionment factors. More work is needed in this area.

APPENDIX

Derivation of Sales by Industry by State, 2001 through 2007

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 2001-2007 according to the following procedure:

Let:

 $Tabl_{i,c}$ = 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:

14 14

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

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

Now let:

 $\mathbf{GDP}_{\mathbf{j},\mathbf{s}}$ = 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:

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

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 (2001-2007):

http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=232&ViewSeries=NO&Java=no&R equest3Place=N&3Place=N&FromView=YES&Freq=Year&FirstYear=2001&LastYear=2007&3Place= N&Update=Update&JavaBox=no

Payroll (2001-2008):

http://www.bea.gov/regional/spi/default.cfm?selTable=SA07N&selSeries=NAICS

Input-Output Tables (2001-2007): http://www.bea.gov/industry/iotables/table_list.cfm?anon=98817

Gross Domestic Product by Industry (2001-2008): http://www.bea.gov/regional/index.htm#gsp

ENDNOTES

³ Marcia Howard, *RTS 1991, State Revenue Capacity and Effort U.S.* Advisory Commission on Intergovernmental Relations, M-187, September 1993.

⁴ Yesim Yilmaz, Sonya Hoo, Matthew Nagowski, Kim Rueben, and Robert Tannenwald, *Measuring Fiscal Disparity Across the U.S. States: A Representative Revenue System/Representative Expenditure System Approach, Fiscal Year 2002.* A Joint Report of the Tax Policy Center and the New England Public Policy Center at the Federal Reserve Bank of Boston, November 2006.

⁵ *Ibid* p.12.

⁶ Agriculture, forestry, fishing, and hunting; mining; utilities; construction; manufacturing; wholesale trade; retail trade; transportation and warehousing; information; finance insurance, real estate, leasing, and management of enterprises; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodations, and food services; and other services, except government.

 ⁷ Kenneth A. Petrick, "Corporate Profits: Profits Before Tax, Profits Tax Liability, and Dividends: Methodology Paper," U.S. Department of Commerce, Bureau of Economic Analysis, September 2002, page 4.
⁸ Marcia Howard, PTS 1001, State Provide Committee 1100, 11000, 1100, 1100, 1100, 1100, 1100, 1100, 1100, 1100, 1100, 1100

⁸ Marcia Howard, *RTS 1991, State Revenue Capacity and Effort U.S.* Advisory Commission on Intergovernmental Relations, M-187, September 1993, p124-126.

⁹ Federation of Tax Administrators, http://www.taxadmin.org/fta/rate/corp_app.html

¹⁰http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=232&ViewSeries=NO&Java=no& Request3Place=N&SPlace=N&FromView=YES&Freq=Year&FirstYear=1998&LastYear=2007&3Place =N&Update=Update&JavaBox=no#Mid

¹¹ http://www.bea.gov/regional/spi/default.cfm?selTable=SA07N&selSeries=NAICS

¹² All states that changed their apportionment formula during this period increase the weight of the sales factor.

¹³ The questions of nexus will not be discussed here.

¹⁴ Sanjay Gupta, Jared Moore, Jeffrey Gramlich, and Mary Ann Hoffman, *op. cit.*.

¹⁵ Edmiston, Kelly, "Strategic Apportionment of the State Corporate Income Tax: An Applied General Equilibrium Analysis," *National Tax Journal* 55 No. 2 (June 2002) 239-262.

¹ Ryan Simafranca, ""The Double-Weighted Sales Formula – A Plague on Interstate Commerce," *Tax Notes Today*, Dec 4, 1995, p. 1263. Tax Analysts, Inc., Falls Church, VA, 95-TNT 236-60.

² Sanjay Gupta, Jared Moore, Jeffrey Gramlich, and Mary Ann Hoffman, "Empirical Evidence on the Revenue Effects of State Corporate Income Tax Policies," *National Tax Journal*, Vol. LXII, No. 2, June 2009, p.243.

| Table 1: Corporate Profits of Domestic Industries, Before Taxes | | | | | | | | | | |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|--------------|--------------|--------------|--------------------------|--|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Average 2001-2008 | |
| Industry | | | | | (millions of d | lollars) | | | | |
| Domestic industries (less deposits of Federal Reserve Banks) | \$514,146 | \$583,944 | \$717,643 | \$1,004,341 | \$1,374,148 | \$1,532,043 | \$1,388,936 | \$1,049,849 | \$1,020,631 | |
| Agriculture, forestry, fishing, and hunting | 1,257 | 181 | 2,159 | 3,156 | 4,504 | 4,729 | 6,031 | 3,672 | 3,21 | |
| Mining | 15,637 | 5,585 | 16,071 | 24,043 | 43,277 | 57,015 | 56,985 | 67,766 | 35,79 | |
| Utilities | 24,773 | 12,514 | 12,477 | 19,803 | 30,534 | 53,722 | 49,308 | 40,351 | 30,43 | |
| Construction | 44,226 | 40,836 | 39,757 | 56,763 | 84,512 | 84,582 | 72,353 | 61,060 | 60,51 | |
| Manufacturing | 46,934 | 48,385 | 75,041 | 173,448 | 260,260 | 326,742 | 296,228 | 192,393 | 177,42 | |
| Wholesale trade | 48,413 | 51,736 | 59,652 | 81,659 | 100,755 | 114,024 | 118,213 | 85,502 | 82,49 | |
| Retail trade | 70,893 | 80,655 | 89,004 | 99,249 | 127,695 | 136,458 | 128,137 | 84,461 | 102,06 | |
| Transportation and warehousing | 917 | 126 | 7,543 | 14,688 | 29,500 | 42,137 | 30,795 | 10,173 | 16,98 | |
| Information | -24,693 | -4,575 | 4,311 | 45,224 | 81,358 | 92,750 | 90,637 | 85,528 | 46,31 | |
| Finance, insurance, and real estate ¹ | 207,245 | 251,577 | 302,518 | 355,970 | 445,809 | 439,210 | 348,505 | 248,483 | 324,91 | |
| Professional, scientific, and technical services ² | 20,072 | 31,077 | 41,052 | 52,141 | 65,854 | 72,746 | 84,110 | 75,658 | 55,33 | |
| Health care, educational services, and social assistance | 34,715 | 40,303 | 44,241 | 48,444 | 59,404 | 63,255 | 65,395 | 61,497 | 52,15 | |
| Arts, entertainment, and recreation ³ | 14,942 | 17,554 | 15,881 | 21,479 | 28,943 | 31,394 | 28,392 | 22,836 | 22,67 | |
| Other services, except government | 8,815 | 7,990 | 7,936 | 8,274 | 11,743 | 13,279 | 13,847 | 10,469 | \$10,29 | |
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Average 2001-2008 | |
| Industry | | | | | (Percent of | total) | | | | |
| Domestic industries (less deposits of Federal Reserve Banks) | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | |
| Agriculture, forestry, fishing, and hunting | 0.24 | 0.03 | 0.30 | 0.31 | 0.33 | 0.31 | 0.43 | 0.35 | 0.3 | |
| Mining | 3.04 | 0.96 | 2.24 | 2.39 | 3.15 | 3.72 | 4.10 | 6.45 | 3.5 | |
| Utilities | 4.82 | 2.14 | 1.74 | 1.97 | 2.22 | 3.51 | 3.55 | 3.84 | 2.9 | |
| Construction | 8.60 | 6.99 | 5.54 | 5.65 | 6.15 | 5.52 | 5.21 | 5.82 | 5.9 | |
| Manufacturing | 9.13 | 8.29 | 10.46 | 17.27 | 18.94 | 21.33 | 21.33 | 18.33 | 17.3 | |
| Wholesale trade | 9.42 | 8.86 | 8.31 | 8.13 | 7.33 | 7.44 | 8.51 | 8.14 | 8.0 | |
| Retail trade | 13.79 | 13.81 | 12.40 | 9.88 | 9.29 | 8.91 | 9.23 | 8.05 | 10.0 | |
| Transportation and warehousing | 0.18 | 0.02 | 1.05 | 1.46 | 2.15 | 2.75 | 2.22 | 0.97 | 1.6 | |
| Information | -4.80 | -0.78 | 0.60 | 4.50 | 5.92 | 6.05 | 6.53 | 8.15 | 4.5 | |
| | | | 42.15 | 35.44 | 32.44 | 28.67 | 25.09 | 23.67 | 31.8 | |
| Finance, insurance, and real estate ¹ | 40.31 | 43.08 | 42.13 | 55.11 | | | | | | |
| Finance, insurance, and real estate ¹ Professional, scientific, and technical services ² | 3.90 | 43.08 5.32 | 42.13 5.72 | 5.19 | 4.79 | 4.75 | 6.06 | 7.21 | 5.4 | |
| | | | | | | 4.75 4.13 | 6.06 4.71 | 7.21 5.86 | | |
| Professional, scientific, and technical services ² | 3.90 | 5.32 | 5.72 | 5.19 | 4.79 | | | | 5.1 | |
| Professional, scientific, and technical services ² Health care, educational services, and social assistance | 3.90 6.75 | 5.32 6.90 | 5.72 6.16 | 5.19 4.82 | 4.79 4.32 | 4.13 | 4.71 | 5.86 | 5.4 5.1 2.2 1.0 | |
| Professional, scientific, and technical services ² Health care, educational services, and social assistance Arts, entertainment, and recreation ³ | 3.90 6.75 2.91 | 5.32 6.90 3.01 | 5.72 6.16 2.21 | 5.19 4.82 2.14 | 4.79 4.32 2.11 | 4.13 2.05 | 4.71 2.04 | 5.86 2.18 | 5.1 2.2 | |

3. Includes accommodation and food services

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

| Table 2 State Corporate Income Tax Capacity: Current Year Distribution of Profits and Current Year Apportionment Weights | | | | | | | | | | | |
|---|-----------------------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|--|--|--|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | | | |
| State | (millions of dollars) | | | | | | | | | | |
| United States | \$514,146 | \$583,944 | \$717,643 | \$1,004,341 | \$1,374,148 | \$1,532,043 | \$1,388,936 | \$1,049,849 | | | |
| Alabama | 5,891 | 6,455 | 8,098 | 11,784 | 16,476 | 18,745 | 17,040 | 12,804 | | | |
| Alaska | 1,342 | 1,237 | 1,680 | 2,368 | 3,473 | 4,072 | 3,776 | 3,376 | | | |
| Arizona | 8,322 | 9,405 | 11,665 | 16,158 | 22,996 | 26,309 | 23,742 | 17,709 | | | |
| Arkansas | 3,427 | 3,825 | 4,771 | 6,946 | 9,540 | 10,736 | 9,901 | 7,476 | | | |
| California | 63,708 | 73,506 | 90,752 | 129,036 | 178,225 | 197,679 | 178,680 | 133,507 | | | |
| Colorado | 8,643 | 9,878 | 10,298 | 14,798 | 20,852 | 23,627 | 21,759 | 18,973 | | | |
| Connecticut | 9,571 | 10,793 | 13,032 | 17,805 | 23,890 | 26,056 | 23,672 | 17,291 | | | |
| Delaware | 2,273 | 2,644 | 3,182 | 4,164 | 5,719 | 6,004 | 5,131 | 3,771 | | | |
| District of Columbia | 2,325 | 2,872 | 3,540 | 4,906 | 6,546 | 7,194 | 6,784 | 5,183 | | | |
| Florida | 24,388 | 28,807 | 35,525 | 48,987 | 68,548 | 75,618 | 67,046 | 49,127 | | | |
| Georgia | 14,734 | 16,735 | 20,387 | 28,830 | 39,689 | 43,789 | 40,101 | 29,566 | | | |
| Hawaii | 1,849 | 2,157 | 2,610 | 3,558 | 4,842 | 5,313 | 4,792 | 3,508 | | | |
| Idaho | 1,724 | 1,913 | 4,408 | 6,785 | 9,678 | 11,040 | 10,179 | 3,689 | | | |
| Illinois | 24,520 | 27,472 | 33,800 | 46,535 | 62,159 | 68,543 | 62,407 | 47,409 | | | |
| Indiana | 10,131 | 11,213 | 14,026 | 20,568 | 27,724 | 30,628 | 27,685 | 20,930 | | | |
| Iowa | 4,878 | 5,570 | 6,963 | 10,220 | 13,727 | 15,354 | 14,230 | 11,125 | | | |
| Kansas | 4,166 | 4,693 | 5,795 | 8,320 | 11,526 | 13,326 | 12,330 | 9,435 | | | |
| Kentucky | 5,761 | 6,326 | 7,964 | 11,364 | 15,697 | 17,733 | 16,153 | 12,187 | | | |
| Louisiana | 6,949 | 7,046 | 9,219 | 13,210 | 19,455 | 26,501 | 24,786 | 18,309 | | | |
| Maine | 1,837 | 2,109 | 2,550 | 3,536 | 4,614 | 5,008 | 4,772 | 3,645 | | | |
| Maryland | 9,380 | 11,085 | 13,197 | 18,103 | 24,603 | 26,702 | 24,208 | 18,668 | | | |
| Massachusetts | 15,888 | 18,138 | 21,564 | 29,401 | 38,391 | 41,804 | 38,308 | 28,745 | | | |
| Michigan | 17,438 | 19,757 | 24,133 | 32,326 | 42,701 | 45,153 | 40,140 | 29,623 | | | |
| Minnesota | 10,217 | 11,691 | 14,346 | 20,148 | 26,825 | 29,211 | 26,644 | 20,129 | | | |
| Mississippi | 3,155 | 3,465 | 4,276 | 6,061 | 8,322 | 9,549 | 9,504 | 7,190 | | | |
| Missouri | 9,738 | 11,095 | 13,247 | 18,136 | 24,633 | 26,767 | 24,073 | 18,235 | | | |

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| Table 2 State Corporate Income Tax Capacity: Current Year Distribution of Profits and Current Year Apportionment Weights | | | | | | | | | | | |
|---|---------------|-----------------------|--------|--------|---------|---------|---------|--------|--|--|--|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | | | |
| State | | (millions of dollars) | | | | | | | | | |
| Montana | 1,093 | 1,155 | 1,448 | 2,007 | 2,883 | 3,321 | 3,110 | 2,580 | | | |
| Nebraska | 2,785 | 3,148 | 4,006 | 5,615 | 7,575 | 8,510 | 7,878 | 6,272 | | | |
| Nevada | 3,970 | 4,467 | 5,586 | 8,115 | 11,668 | 12,986 | 11,757 | 8,896 | | | |
| New Hampshire | 2,380 | 2,740 | 3,349 | 4,710 | 6,311 | 6,956 | 6,202 | 4,628 | | | |
| New Jersey | 18,825 | 22,261 | 26,570 | 35,739 | 47,379 | 51,757 | 46,573 | 34,964 | | | |
| New Mexico | 2,338 | 2,438 | 3,131 | 4,375 | 6,188 | 7,093 | 6,595 | 5,596 | | | |
| New York | 47,861 | 54,001 | 63,851 | 85,904 | 114,964 | 125,204 | 106,502 | 79,919 | | | |
| North Carolina | 14,060 | 15,899 | 19,740 | 27,899 | 38,722 | 43,974 | 40,179 | 29,230 | | | |
| North Dakota | 973 | 1,028 | 1,291 | 1,815 | 2,527 | 2,920 | 2,741 | 2,298 | | | |
| Ohio | 19,524 | 22,109 | 27,052 | 37,987 | 51,008 | 55,391 | 49,713 | 36,703 | | | |
| Oklahoma | 4,724 | 4,836 | 6,313 | 8,911 | 12,775 | 15,683 | 14,420 | 12,420 | | | |
| Oregon | 5,558 | 6,348 | 7,871 | 11,582 | 15,629 | 18,616 | 17,081 | 12,874 | | | |
| Pennsylvania | 21,415 | 24,280 | 29,991 | 41,160 | 55,650 | 61,564 | 55,998 | 42,167 | | | |
| Rhode Island | 1,714 | 2,056 | 2,582 | 3,494 | 4,596 | 4,991 | 4,435 | 3,232 | | | |
| South Carolina | 5,711 | 6,346 | 7,889 | 11,039 | 15,090 | 16,991 | 16,091 | 12,215 | | | |
| South Dakota | 973 | 1,210 | 1,623 | 2,233 | 2,998 | 3,316 | 3,068 | 2,301 | | | |
| Tennessee | 8,756 | 10,123 | 12,629 | 18,110 | 24,470 | 27,323 | 24,641 | 18,316 | | | |
| Texas | 39,281 | 43,769 | 54,701 | 78,982 | 110,982 | 127,886 | 119,498 | 95,264 | | | |
| Utah | 3,527 | 3,938 | 4,799 | 6,741 | 9,623 | 11,302 | 10,719 | 8,230 | | | |
| Vermont | 925 | 1,032 | 1,262 | 1,787 | 2,454 | 2,705 | 2,462 | 1,840 | | | |
| Virginia | 12,847 | 15,110 | 18,864 | 26,437 | 36,505 | 39,651 | 35,746 | 26,985 | | | |
| Washington | 9,848 | 11,770 | 14,633 | 20,779 | 29,025 | 32,814 | 30,784 | 23,598 | | | |
| West Virginia | 2,194 | 2,171 | 2,882 | 4,109 | 5,858 | 6,714 | 6,081 | 5,045 | | | |
| Wisconsin | 9,541 | 10,828 | 13,174 | 18,820 | 25,443 | 28,209 | 25,356 | 19,459 | | | |
| Wyoming | 1,069 | 992 | 1,376 | 1,936 | 2,970 | 3,708 | 3,462 | 3,207 | | | |
| Source: Table 1 and Bu | ureau of Econ | omic Analy | vsis | | | | | | | | |

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| Table 3: State Corporate Income Tax Capacity: Current Year Distribution of Profits and 2001Apportionment Weights | | | | | | | | | | | |
|--|-----------------------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|--|--|--|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2,008 | | | |
| State | (millions of dollars) | | | | | | | | | | |
| United States | \$514,146 | \$583,944 | \$717,643 | \$1,004,341 | \$1,374,148 | \$1,532,043 | \$1,388,936 | \$1,049,849 | | | |
| Alabama | 5,891 | 6,456 | 8,096 | 11,785 | 16,476 | 18,782 | 17,024 | 12,785 | | | |
| Alaska | 1,342 | 1,237 | 1,682 | 2,372 | 3,478 | 4,082 | 3,820 | 3,435 | | | |
| Arizona | 8,322 | 9,407 | 11,661 | 16,157 | 22,992 | 26,365 | 23,677 | 17,649 | | | |
| Arkansas | 3,427 | 3,825 | 4,769 | 6,946 | 9,538 | 10,755 | 9,886 | 7,466 | | | |
| California | 63,708 | 73,518 | 90,711 | 129,029 | 178,189 | 197,909 | 177,896 | 132,921 | | | |
| Colorado ¹ | 8,643 | 9,879 | 10,295 | 14,801 | 20,854 | 23,663 | 21,756 | 18,955 | | | |
| Connecticut | 9,571 | 10,795 | 13,026 | 17,803 | 23,883 | 26,071 | 23,456 | 17,141 | | | |
| Delaware | 2,273 | 2,644 | 3,180 | 4,163 | 5,717 | 6,005 | 5,078 | 3,732 | | | |
| District of Columbia | 2,325 | 2,872 | 3,539 | 4,906 | 6,545 | 7,198 | 6,737 | 5,148 | | | |
| Florida | 24,388 | 28,811 | 35,507 | 48,980 | 68,528 | 75,673 | 66,639 | 48,806 | | | |
| Georgia | 14,734 | 16,737 | 20,378 | 28,827 | 39,680 | 43,611 | 39,526 | 28,960 | | | |
| Hawaii | 1,849 | 2,157 | 2,609 | 3,558 | 4,840 | 5,315 | 4,764 | 3,488 | | | |
| Idaho | 1,724 | 1,914 | 4,406 | 6,784 | 9,676 | 11,061 | 10,192 | 3,679 | | | |
| Illinois ² | 24,520 | 27,476 | 33,786 | 46,536 | 62,151 | 68,627 | 62,156 | 47,238 | | | |
| Indiana | 10,131 | 11,214 | 14,022 | 20,570 | 27,722 | 30,696 | 27,534 | 20,414 | | | |
| Iowa | 4,878 | 5,571 | 6,961 | 10,221 | 13,727 | 15,378 | 14,202 | 11,114 | | | |
| Kansas | 4,166 | 4,694 | 5,793 | 8,321 | 11,525 | 13,350 | 12,314 | 9,423 | | | |
| Kentucky | 5,761 | 6,327 | 7,963 | 11,366 | 15,699 | 17,769 | 16,153 | 12,196 | | | |
| Louisiana | 6,949 | 7,047 | 9,221 | 13,219 | 19,466 | 22,911 | 21,433 | 16,892 | | | |
| Maine | 1,837 | 2,110 | 2,549 | 3,536 | 4,613 | 5,014 | 4,535 | 3,430 | | | |
| Maryland | 9,380 | 11,087 | 13,191 | 18,102 | 24,597 | 26,726 | 24,074 | 18,567 | | | |
| Massachusetts | 15,888 | 18,141 | 21,553 | 29,398 | 38,380 | 41,839 | 38,027 | 28,531 | | | |
| Michigan | 17,438 | 19,760 | 24,125 | 32,327 | 42,697 | 45,222 | 40,062 | 29,524 | | | |
| Minnesota | 10,217 | 11,693 | 14,340 | 20,147 | 26,820 | 29,246 | 26,604 | 20,182 | | | |
| Mississippi ³ | 3,155 | 3,466 | 4,275 | 6,062 | 8,322 | 9,567 | 8,697 | 6,626 | | | |
| Missouri | 9,738 | 11,097 | 13,241 | 18,135 | 24,628 | 26,800 | 23,966 | 18,145 | | | |
| Montana | 1,093 | 1,156 | 1,448 | 2,008 | 2,885 | 3,327 | 3,119 | 2,592 | | | |
| Nebraska | 2,785 | 3,149 | 4,005 | 5,615 | 7,574 | 8,522 | 7,855 | 6,253 | | | |

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2,008 |
|--|---------------|--------------|--------------|--------|-------------|---------|---------|-------|
| State | 2001 | 2002 | 2003 | | of dollars) | 2000 | 2007 | 2,000 |
| Nevada | 3,970 | 4,467 | 5,585 | 8,117 | 11,669 | 12,999 | 11,719 | 8,87 |
| New Hampshire ³ | 2,380 | 2,741 | 3,347 | 4,710 | 6,309 | 6,965 | 6,177 | 4,60 |
| New Jersey | 18,825 | 22,265 | 26,972 | 36,141 | 47,962 | 52,311 | 46,670 | 34,84 |
| New Mexico | 2,338 | 2,438 | 3,131 | 4,378 | 6,193 | 7,108 | 6,625 | 5,53 |
| New York | 47,861 | 54,011 | 63,816 | 85,892 | 114,931 | 127,664 | 116,511 | 87,28 |
| North Carolina | 14,060 | 15,901 | 19,732 | 27,899 | 38,714 | 44,038 | 40,043 | 29,12 |
| North Dakota | 973 | 1,029 | 1,291 | 1,815 | 2,528 | 2,925 | 2,744 | 2,30 |
| Ohio ³ | 19,524 | 22,112 | 27,042 | 37,987 | 51,001 | 55,478 | 49,562 | 36,59 |
| Oklahoma | 4,724 | 4,837 | 6,315 | 8,919 | 12,787 | 15,723 | 14,517 | 12,56 |
| Oregon | 5,558 | 6,349 | 7,782 | 11,245 | 15,343 | 17,727 | 16,183 | 12,01 |
| Pennsylvania ³ | 21,415 | 24,284 | 29,980 | 41,160 | 55,643 | 61,644 | 55,804 | 42,04 |
| Rhode Island | 1,714 | 2,056 | 2,581 | 3,494 | 4,595 | 4,996 | 4,405 | 3,20 |
| South Carolina | 5,711 | 6,347 | 7,887 | 11,039 | 15,087 | 17,020 | 15,429 | 11,50 |
| South Dakota | 973 | 1,119 | 1,572 | 2,150 | 2,896 | 3,217 | 2,965 | 2,16 |
| Tennessee ¹ | 8,756 | 10,124 | 12,623 | 18,109 | 24,464 | 27,366 | 24,574 | 18,25 |
| Texas | 39,281 | 43,776 | 54,686 | 78,996 | 110,991 | 128,082 | 119,302 | 95,22 |
| Utah | 3,527 | 3,939 | 4,798 | 6,742 | 9,624 | 11,252 | 10,661 | 8,23 |
| Vermont | 925 | 1,032 | 1,262 | 1,787 | 2,411 | 2,675 | 2,430 | 1,81 |
| Virginia | 12,847 | 15,112 | 18,856 | 26,436 | 36,499 | 39,691 | 35,572 | 26,85 |
| Washington | 9,848 | 11,772 | 14,626 | 20,777 | 29,018 | 32,857 | 30,679 | 23,50 |
| West Virginia | 2,194 | 2,172 | 2,883 | 4,113 | 5,864 | 6,730 | 6,119 | 5,09 |
| Wisconsin | 9,541 | 10,830 | 13,169 | 18,820 | 25,438 | 28,373 | 25,551 | 19,62 |
| Wyoming | 1,069 | 992 | 1,377 | 1,940 | 2,976 | 3,719 | 3,512 | 3,27 |
| 1. Increased sales factor | apportionment | weight in 19 | 99. | | | | | |
| | | - | | | | | | |
| Increased sales factor | apportionment | weight in 19 | 99 and 2000. | | | | | |

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|-------------------------------|-------|-------|-------|------------|-------------|-------|-------|-------|
| State | | | | (Percent I | Difference) | | 1 | |
| United States | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.009 |
| Arizona | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.21 | 0.27 | 0.3 |
| Colorado ¹ | 0.00 | -0.02 | 0.03 | -0.02 | -0.01 | -0.16 | 0.01 | 0.1 |
| Georgia | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 1.45 | 2.0 |
| (llinois ² | 0.00 | -0.02 | 0.04 | 0.00 | 0.01 | -0.12 | 0.40 | 0.3 |
| Indiana | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.55 | 2.5 |
| Louisiana | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 15.67 | 15.64 | 8.3 |
| Maine | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.23 | 6.2 |
| Michigan | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.3 |
| Minnesota | 0.00 | -0.02 | 0.04 | 0.00 | 0.02 | -0.12 | 0.15 | -0.2 |
| Mississippi ³ | 0.00 | -0.01 | 0.03 | -0.01 | 0.00 | -0.19 | 9.28 | 8.5 |
| New Hampshire ³ | 0.00 | -0.01 | 0.04 | 0.01 | 0.02 | -0.13 | 0.41 | 0.4 |
| New Jersey | 0.00 | 0.00 | -1.49 | -1.11 | -1.22 | -1.06 | -0.21 | 0.3 |
| New Mexico | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.0 |
| New York | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -1.93 | -8.59 | -8.4 |
| Ohio ³ | 0.00 | -0.02 | 0.04 | 0.00 | 0.01 | -0.16 | 0.30 | 0.3 |
| Oregon | 0.00 | 0.00 | 1.14 | 2.99 | 1.86 | 5.01 | 5.55 | 7.1 |
| Pennsylvania ³ | 0.00 | -0.02 | 0.04 | 0.00 | 0.01 | -0.13 | 0.35 | 0.2 |
| South Carolina | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.29 | 6.1 |
| South Dakota | 0.00 | 8.06 | 3.28 | 3.86 | 3.50 | 3.06 | 3.50 | 6.4 |
| Fennessee ¹ | 0.00 | -0.01 | 0.04 | 0.01 | 0.03 | -0.16 | 0.28 | 0.3 |
| U tah | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 0.54 | 0.0 |
| Vermont | 0.00 | 0.00 | 0.00 | 0.00 | 1.76 | 1.12 | 1.29 | 1.2 |
| Virginia | 0.00 | -0.02 | 0.04 | 0.00 | 0.02 | -0.10 | 0.49 | 0.4 |
| Wisconsin | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -0.58 | -0.76 | -0.8 |

2. Increased sales factor apportionment weight in 1999 and 2000.

3. Increased sales factor apportionment weight in 2000.

Source: Tables 2 and 3..