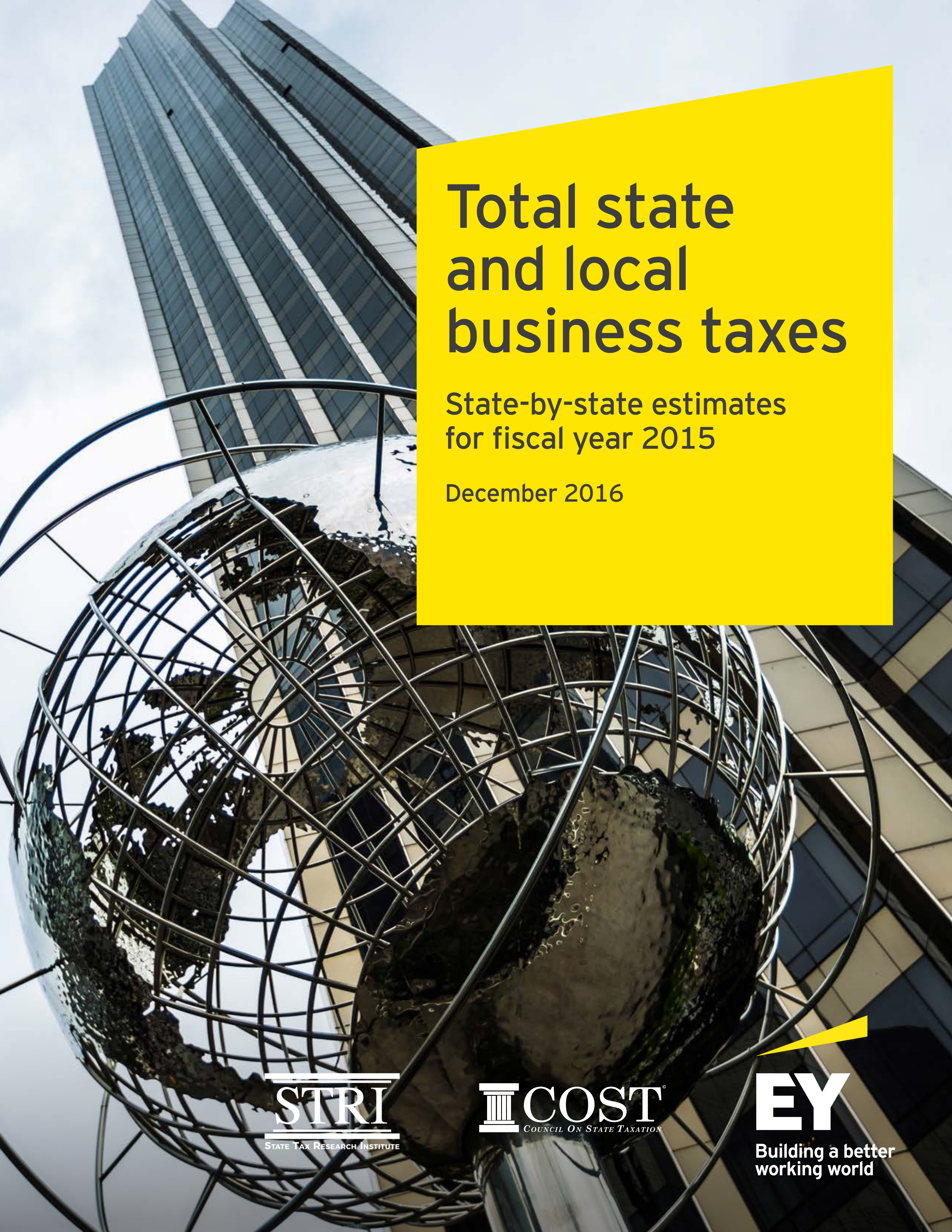

Total state and local business taxes

State-by-state estimates for fiscal year 2015

December 2016

STRI
State Tax Research Institute

COST
Council On State Taxation

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Executive summary

This study presents detailed state-by-state estimates of the state and local taxes paid by businesses for FY15. It is the 14th annual report prepared by Ernst & Young LLP in conjunction with the Council On State Taxation (COST) and the State Tax Research Institute (STRI).

Businesses paid more than $707.5 billion in state and local taxes in FY15, an increase of 1.9% from FY14. State business taxes grew less quickly than local taxes, with state taxes growing 1.0% compared with local tax growth of 2.9%. In FY15, business tax revenue accounted for 44.1% of all state and local tax revenue. The business share has been within one percentage point of 45% since FY03.

The state and local business tax estimates presented in this study reflect tax collections from July 2014 through June 2015 in most states.[1] These include business property taxes; sales and excise taxes paid by businesses on their input purchases and capital expenditures; gross receipts taxes; corporate income and franchise taxes; business and corporate license taxes; unemployment insurance taxes; individual income taxes paid by owners of noncorporate (pass-through) businesses; and other state and local taxes that are the statutory liability of business taxpayers.

Key findings of the study include:

- Revenue from state and local business taxes increased from FY14 to FY15. Overall state and local business tax revenue increased 1.9%, with state business tax revenue growing by 1.0% and local business tax revenue growing 2.9%.
- Business property tax revenue increased 2.8% in FY15, a gain of $7.0 billion. Property taxes remain by far the largest state and local tax paid by businesses, accounting for 36.5% of the total.
- General sales taxes on business inputs and capital investment totaled $150.6 billion, or 21.3% of state and local business taxes. Overall sales taxes paid by business increased 4.9%.
- In FY15, state and local corporate income and business gross receipts tax revenue was $67.3 billion, or 9.5% of all state and local business taxes. FY15 marked the fifth consecutive year of corporate income and business gross receipts tax growth. Overall corporate income and business gross receipts tax revenues increased by 4.1%.
- Individual income taxes on pass-through business income accounted for 5.5% of total state and local business tax revenue. Individual income tax revenue on business income increased by 4.1% in FY15.
- Severance taxes decreased from $18.0 billion in FY14 to $12.8 billion in FY15, a decline of almost 29%.
- On average, business taxes are equal to 4.6% of private-sector gross state product (GSP), which measures the total value of a state's annual private-sector production of goods and services. The data reflect a substantial variation, with ratios ranging from 3.4% to 9.9%.
- On average, businesses continue to pay more in state and local taxes than they receive in benefits from governmental spending. Businesses paid $3.07 for every dollar of government spending benefiting businesses, on average, assuming that education spending does not benefit local businesses. An alternate assumption, that half of education spending benefits local businesses, results in businesses paying $1.12 for every dollar of government spending benefiting businesses.

Total state and local business taxes in FY15

Businesses paid $707.5 billion in total state and local taxes in FY15, as presented in Table 1.[2] This section describes the business taxes in more detail and highlights the key results.

- As shown in Table 1 and Figure 1, property taxes on real and personal property owned by businesses account for the largest share of total state and local business tax revenue, 36.5% or $258.1 billion in FY15. Business property tax revenue increased 2.8% in FY15. Additionally, Figure 2 shows business property tax revenue as a share of total property tax revenue in 2015. Of the $482.8 billion of total property tax revenue, 53% ($258.1 billion) of the collections were taxes on business property.
- General sales and use tax revenue derived from businesses on purchases of inputs, including capital equipment, totaled $150.6 billion, or 21.3% of all state and local business taxes. General sales and use tax revenue derived from business increased 4.9% overall. Sales and use taxes collected on sales to final consumers are excluded; only the taxes paid on businesses' operating inputs and capital equipment purchases are included in the total business tax estimates.[3] Figure 2 displays general sales tax revenue on business inputs as a share of total state and local general sales tax revenue. In 2015, 42% of total sales tax revenue was from sales tax on business inputs.
- State and local corporate income and business gross receipts tax revenue was $67.3 billion in FY15, an increase of 4.1% from FY14. FY15 was the fourth consecutive year of rising state and local corporate income and gross receipts taxes, which includes Ohio's Commercial Activity Tax, Texas' Margin Tax, and Washington's Business & Occupation Tax. These are based on gross receipts and constitute the primary business entity tax in each state, none of which imposes a traditional corporate income tax.
- Employer contributions to unemployment insurance (unemployment taxes) were $45.9 billion in FY15, a decrease of $2.8 billion or 5.8% from FY14. This is the second year that unemployment tax collections have declined since FY08. Maximum taxable earnings and tax rates on employers decreased in some states, easing the burden on employers and lowering collections. Declining unemployment tax revenues in Florida, Illinois and Minnesota accounted for over $1 billion of the cumulative $2.8 billion decrease. These states all saw reductions in taxable earnings or employer tax rates.
- Excise taxes paid by business were an estimated $40.6 billion in FY15. Excise taxes attributed to business include a portion of motor fuel taxes and other excise taxes, such as taxes on hotel and rental car expenditures by business, as well as health care provider taxes on the revenue of hospitals and other providers of health services.

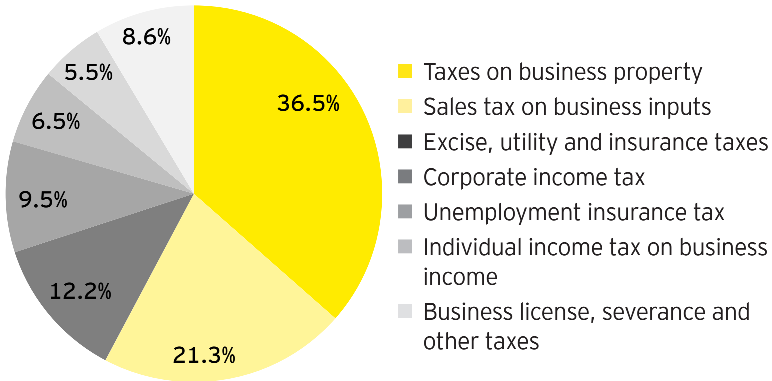
Table 1. Total state and local business taxes, FY15 ($billions)

Business tax	FY14*	FY15	% of total FY15 business taxes	One-year change
Property taxes on business property	$251.1	$258.1	36.5%	2.8%
General sales taxes on business inputs	143.6	150.6	21.3%	4.9%
Corporate income tax**	64.6	67.3	9.5%	4.1%
Unemployment insurance	48.7	45.9	6.5%	-5.8%
Excise taxes	38.9	40.6	5.7%	4.5%
Individual income tax on business income	37.1	38.6	5.5%	4.1%
Business and corporate license	34.0	34.4	4.9%	1.4%
Public utility taxes	26.7	25.8	3.7%	-3.1%
Insurance premium taxes	18.8	19.9	2.8%	5.6%
Severance taxes	18.0	12.8	1.8%	-28.8%
Other business taxes	13.0	13.4	1.9%	3.1%
Total state and local business taxes	**$694.5**	**$707.5**	**100.0%**	**1.9%**

Note: Amounts may not sum due to rounding.
**FY14 tax estimates are revised from the COST FY14 study due to newly released data from the U.S. Census Bureau.*
***Includes business entity gross receipts taxes in selected states*
See Appendix for more information.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

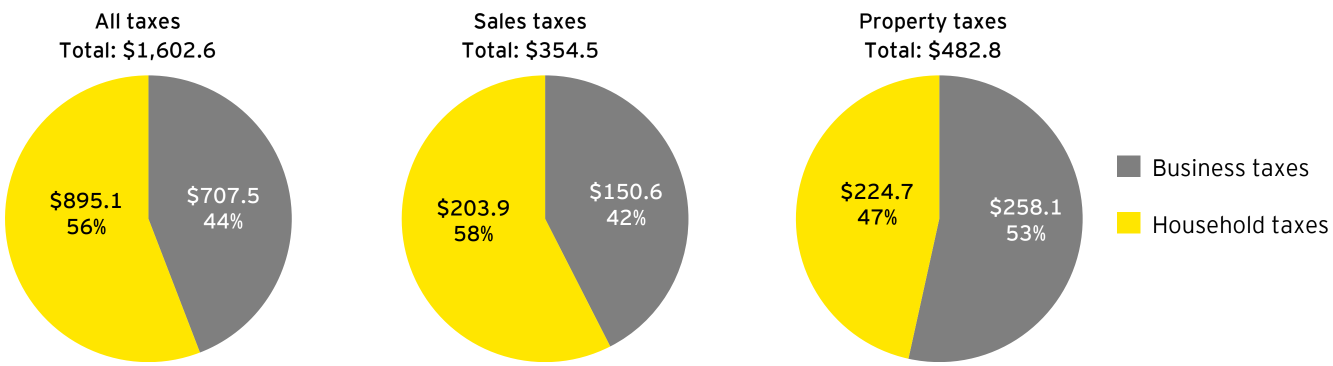
- Business and corporate license tax revenue totaled $34.4 billion, an increase of 1.4% from FY14. In FY15, business and corporate license tax revenue constituted 4.9% of total state and local business tax collections.
- Individual income tax revenue derived from owners of pass-through entities (e.g., partnerships, sole proprietorships, limited liability companies and S-corporations) totaled an estimated $38.6 billion in FY15. Individual income tax revenue from pass-through business income represents 5.5% of total state and local business taxes, equivalent to 57% of corporate income tax collections in FY15. State and local collections of individual income tax revenue from pass-through business grew by 4.1% in FY15. The FY15 growth represents a change from FY14, in which individual income taxes on pass-through business income decreased by 4.8% due to policy changes in a few states. The estimated share of income allocated as pass-through business income increased between FY14 and FY15.
- Public utility tax revenue decreased by 3.1% to $25.8 billion in FY15, the third consecutive year of decline. These taxes are generally based on business gross receipts, and because they are often levied in lieu of property or corporate income taxes, they are allocated solely to business.
- Taxes on insurance premiums totaled $19.9 billion in FY15, an increase of 5.6%.
- State and local severance taxes fell by 28.8% in FY15, the largest decrease by far of all business taxes. The $5.2 billion overall decrease in severance taxes was driven primarily by a $2.4 billion (96%) decrease in state severance tax collections in Alaska. Decreased severance tax collections in North Dakota, Texas and Oklahoma accounted for an additional $2.6 billion of the overall decrease.
- Other business taxes, such as motor vehicle license tax and documentary and stock transfer tax, among others, totaled $13.4 billion in FY15, a 3.1% increase from the previous year.

Figure 1. Composition of total state and local business taxes — FY15



Note: Figures do not sum due to rounding.
Source: Ernst & Young LLP estimates based on from the U.S. Census Bureau, state and local government finances.

Figure 2. State and local business taxes as a share of total tax collections, FY15 ($billions)



Classifying business taxes

This study generally defines business taxes as those that are the legal liability of businesses. Certain taxes collected by business, such as excise taxes on tobacco and alcohol and sales taxes on household purchases, are not included. In addition, individual income tax on pass-through business income is included as a legal tax liability of business owners. The business taxes included in this analysis are:

- Property taxes paid by business on real and personal property; taxes on income-generating, residential rental property are treated as business taxes
- General sales taxes paid by businesses on purchases of goods and services used in production; sales taxes on final goods paid by consumers are not included
- A portion of excise taxes, such as business' share of motor fuel taxes
- Corporate income taxes, including general business entity gross receipts taxes
- Taxes on insurance premiums and utility gross receipts, which are in some cases levied in lieu of other business entity taxes
- Individual income taxes on pass-through business income; taxes withheld on employee earnings are not considered business taxes
- Unemployment insurance (UI) tax paid by employers
- Business licenses, including general business licenses, specific industry and occupational licenses, and commercial motor vehicle licenses
- Severance taxes on mining, natural gas, oil and other natural resources

In most states, the corporate income tax is the primary tax levied specifically on business entities, but other types of taxes are used in several states. Ohio, Texas, Nevada (effective FY16) and Washington levy a tax based on gross receipts in place of a traditional corporate income tax. In addition, New Hampshire's Business Enterprise Tax is levied on a value-added base rather than income. This analysis includes general business entity gross receipts and value-added business entity taxes in the corporate income tax category since the taxes act as an alternative to the corporate income tax in these states. Many states also levy franchise taxes based on the capital stock or net worth of a business, which is generally included in the corporation license category. As shown in previous tables, businesses pay more in property and sales taxes than they do in specific corporate income, franchise, or gross receipt taxes.

State vs. local business taxes in FY15

State and local business tax revenues both grew between FY14 and FY15, with local tax revenue growing at a faster rate than state tax revenues. Tables 2-A and 2-B provide dollar amounts, percentage distributions and growth rates in FY15 for total business taxes at the state and local levels of government.

Total state and local business tax revenues from FY14 increased by $13.0 billion in FY15, after growing by $15.0 billion in the prior fiscal year. State and local business tax revenues grew 1.0% and 2.9%, respectively. The largest local tax — business property taxes — remained relatively flat between FY09 and FY12, increasing by $7.0 billion in FY14 and $6.5 billion in FY15. While local public utility tax revenue fell, the increase in property tax revenue alone more than offset that decline in revenue. Local excise and other business tax revenue rose 4.4% and 4.7%, respectively.

At the state level, there was little overall change in collections from FY14. Some state taxes declined, such as state unemployment insurance taxes, public utilities taxes, and state severance taxes. The increase in state business taxes was primarily due to increases in general sales and use and corporate income tax collections.

Tables 2-A and 2-B show that the composition of state business taxes differs significantly from business taxes at the local level. Table 2-A shows the percentage distribution of state business taxes by tax type; Table 2-B shows the distribution of local business taxes. While state business tax revenues draw on a relatively broad set of sources, local governments rely heavily on property tax revenue, which makes up 75.7% of local business taxes. The largest business tax at the state level, the sales and use tax, accounts for 30.8% of state business tax revenue. The degree to which states impose sales and use taxes on business purchases, and the implications of proposals to increase this leading component of state business taxes, are detailed in the 2013 Ernst & Young LLP/COST study, "What's Wrong with Taxing Business Services? Adverse Effects from Existing and Proposed Sales Taxation of Business Investment and Services." (Available at www.cost.org.)

Table 2-A. State business taxes, FY15 ($billions)

Business tax	State business taxes, FY14	State business taxes, FY15	% total state business taxes	One-year growth, state business taxes
General sales and use tax on business inputs	$111.7	$117.2	30.8%	4.9%
Corporate net income	$56.6	$58.9	15.5%	4.0%
Unemployment insurance	$48.7	$45.9	12.1%	-5.8%
Individual income tax	$33.9	$35.2	9.3%	3.9%
Excise taxes on business inputs	$32.5	$34.0	8.9%	4.5%
Business license tax	$22.8	$22.8	6.0%	0.0%
Insurance premium tax	$18.1	$19.1	5.0%	5.7%
Public utility tax	$14.2	$13.6	3.6%	-4.4%
Severance taxes	$17.8	$12.6	3.3%	-29.2%
Property tax on business property	$9.6	$10.1	2.6%	4.6%
Other business taxes	$10.3	$10.6	2.8%	2.8%
Total state business taxes	**$376.3**	**$379.9**	**100.0%**	**1.0%**

Note: Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Table 2-B. Local business taxes, FY 2014 ($billions)

Business tax	Local business taxes, FY14	Local business taxes, FY15	% total local business taxes	One-year growth, local business taxes
Property taxes on business property	$241.5	$248.0	75.7%	2.7%
General sales taxes on business inputs	$31.9	$33.4	10.2%	4.7%
Public utility taxes	$12.4	$12.2	3.7%	-1.6%
Excise taxes on business inputs	$6.4	$6.7	2.0%	4.4%
Other business taxes*	$26.0	$27.2	8.3%	4.7%
Total local business taxes	**$318.2**	**$327.6**	**100.0%**	**2.9%**

Note: Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.
**Includes local corporate income taxes.*

State-by-state business tax collections

Figure 3 shows the state-by-state change in total state and local business taxes between FY14 and FY15. States with significant tax changes in FY15 and trends in business tax collections are described below.

- In 2015, business property taxes increased by 2.8% over 2014. The $7.0 billion in increased property tax revenue was driven largely by gains in five large states: California, Florida, Georgia, New York, and Texas. Nationally, property tax revenue increased 2.8%, but 30 states grew at a slower rate than the national average. Texas had the largest dollar increase in business property tax revenue for the third year in a row, collecting $1.3 billion more than in 2014. The District of Columbia had the highest growth rate for business property tax revenue, increasing 8.7%.
- Alaska saw the single largest decline in business tax revenue, driven by a 96% drop in severance tax revenue in FY15. Severance taxes are no longer the largest business tax in Alaska, accounting for only 6.8% of Alaska's state and local business tax revenue in FY15, a significant drop from 59% in FY14. Other states, including North Dakota, also saw a significant drop in severance tax revenue. Due to the base of the tax (e.g., operator's net income in Alaska and gross value in North Dakota), lower prices and production led to lower severance tax receipts in most states.
- On the other end of the spectrum, Delaware had the largest increase in state and local business tax revenue due to an increase in corporate franchise tax and entity taxes collected from partnerships and limited liability companies.
- Business tax revenue derived from individual income grew by 4.1% in 2015, following a decrease of 4.8% in 2014. California was responsible for more than half of the growth in tax revenue in this category due to rapid growth of the tax base. Other states, such as Illinois, saw revenue decline due to reductions in the tax rate.
- Gains in state sales tax collections were concentrated in Ohio and Texas, with each experiencing sales tax increases of approximately $1 billion due to growth in the sales tax base. Of the 45 states with a state sales tax, all 45 experienced sales tax collection increases.

Table 3 presents business tax collections by tax type and state. The results show that states vary widely in the composition of their business tax structures, producing implications for revenue growth and stability in each state. Appendix Table A-3 presents the percentage composition by tax type for each of the 50 states and the District of Columbia.

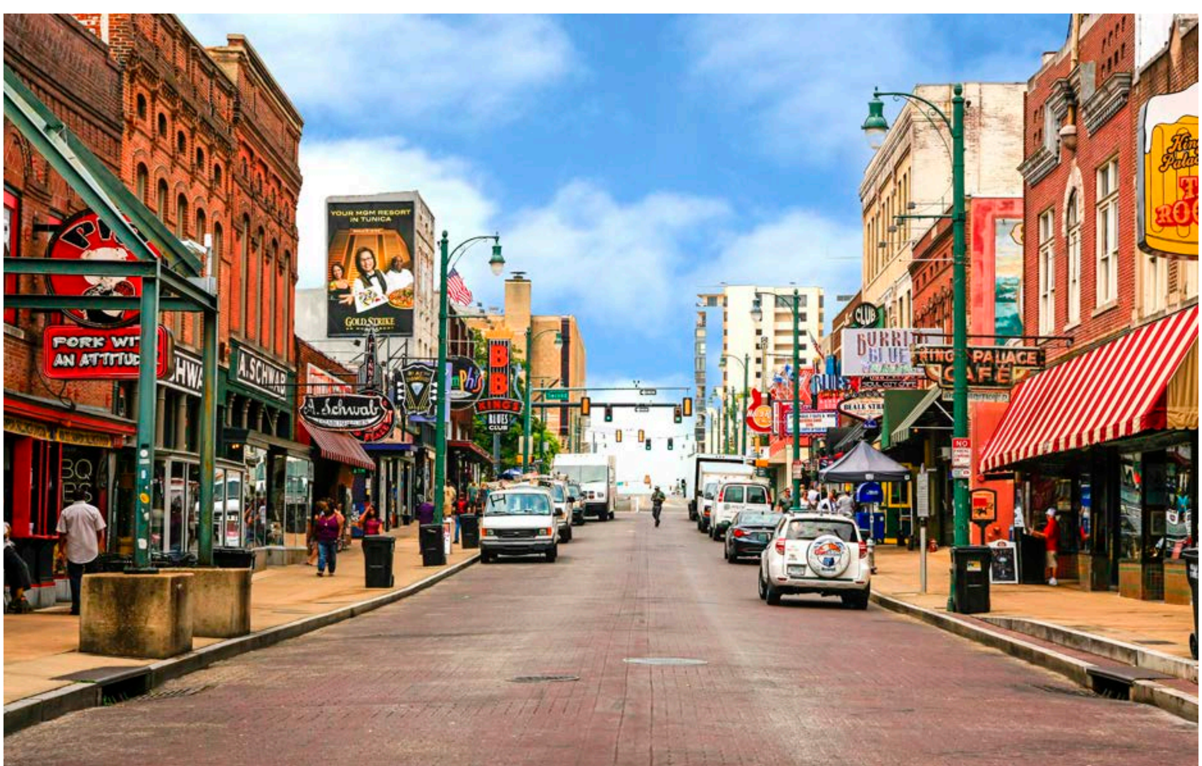
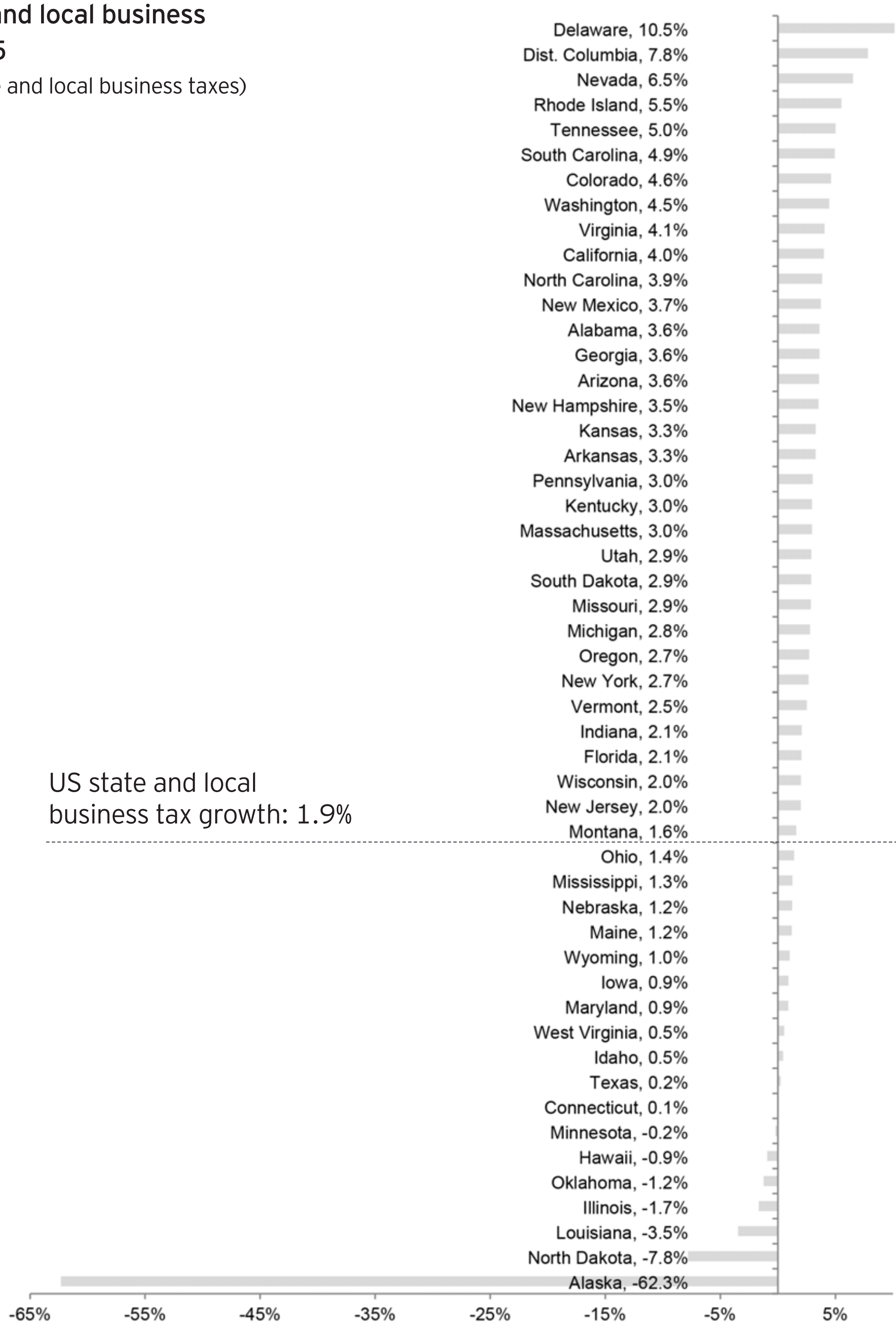


Figure 3. Change in state and local business taxes by state, FY14–FY15

(Percentage change in total state and local business taxes)



Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Table 3. State and local business taxes by type, FY15 ($billions)

State	Property tax	Sales tax	Excise tax including public utilities and insurance	Corporate income tax*	Unemployment insurance tax	Individual income tax on business income	License and other taxes**	Total business taxes
Alabama	$2.0	$1.6	$1.6	$0.5	$0.3	$0.4	$0.9	$7.5
Alaska	0.8	–	0.1	0.2	0.2	–	0.2	1.6
Arizona	5.0	3.9	1.1	0.7	0.5	0.4	0.5	12.0
Arkansas	1.1	1.6	0.5	0.5	0.4	0.3	0.4	4.7
California	29.6	19.4	11.2	9.0	6.2	8.7	9.2	93.4
Colorado	5.1	3.0	1.1	0.7	0.7	0.7	0.8	12.1
Connecticut	2.5	1.6	1.0	0.7	0.8	0.9	0.3	7.9
Delaware	0.4	–	0.3	0.4	0.1	0.2	1.4	2.7
Florida	15.2	8.2	7.1	2.2	1.8	–	2.6	37.1
Georgia	6.4	4.2	1.6	1.0	0.9	0.9	0.6	15.6
Hawaii	1.0	1.2	0.8	0.1	0.3	0.2	0.2	3.7
Idaho	0.9	0.5	0.2	0.2	0.2	0.2	0.2	2.5
Illinois	13.8	4.1	5.2	4.1	2.6	1.4	1.7	32.8
Indiana	4.5	2.4	1.4	0.9	0.7	0.7	0.3	10.8
Iowa	3.0	1.7	0.3	0.5	0.5	0.4	0.5	6.8
Kansas	3.0	1.6	0.6	0.5	0.4	–	0.4	6.5
Kentucky	2.1	1.6	1.4	0.9	0.5	0.5	0.6	7.7
Louisiana	3.0	2.8	1.1	0.3	0.2	0.5	1.2	9.0
Maine	1.8	0.5	0.3	0.2	0.2	0.1	0.2	3.2
Maryland	2.5	1.9	2.3	1.0	0.7	1.3	1.1	10.8
Massachusetts	6.6	2.8	1.1	2.2	1.8	1.3	1.1	16.9
Michigan	5.7	3.3	1.4	1.2	1.5	0.8	0.9	14.8
Minnesota	4.3	2.6	2.0	1.5	1.0	0.9	0.9	13.4
Mississippi	2.1	1.4	0.7	0.5	0.2	0.2	0.5	5.7
Missouri	3.4	2.3	0.8	0.5	0.6	0.7	0.8	9.1
Montana	0.9	–	0.3	0.2	0.2	0.1	0.5	2.1
Nebraska	2.0	1.0	0.3	0.3	0.1	0.4	0.3	4.4
Nevada	1.5	2.1	1.0	–	0.7	–	1.3	6.6
New Hampshire	1.3	–	0.4	0.6	0.1	0.0	0.2	2.7
New Jersey	11.2	4.0	2.2	2.6	2.8	1.3	1.2	25.5
New Mexico	0.9	2.1	0.4	0.2	0.2	0.1	1.2	5.1
New York	28.3	11.6	7.0	12.5	3.6	6.0	2.9	71.9
North Carolina	4.0	3.9	1.7	1.3	1.4	1.0	1.4	14.7
North Dakota	0.6	0.8	0.3	0.2	0.1	0.1	3.0	5.0
Ohio	6.9	5.1	2.7	2.0	1.2	1.4	1.8	21.2
Oklahoma	1.5	2.3	0.8	0.4	0.4	0.7	1.1	7.2
Oregon	2.4	–	0.9	0.7	1.0	0.7	1.0	6.7
Pennsylvania	9.2	4.3	3.8	2.9	3.0	1.9	2.4	27.6
Rhode Island	1.2	0.4	0.4	0.2	0.3	0.1	0.1	2.6
South Carolina	3.8	1.5	0.8	0.4	0.5	0.3	0.9	8.2
South Dakota	0.7	0.8	0.2	0.0	0.0	–	0.2	1.9
Tennessee	3.2	3.5	1.6	1.4	0.4	0.1	1.5	11.7
Texas	29.3	19.0	7.9	4.7	2.3	–	6.1	69.3
Utah	1.8	1.0	0.6	0.4	0.3	0.4	0.3	4.8
Vermont	1.1	0.2	0.3	0.1	0.1	0.1	0.1	2.0
Virginia	6.6	2.0	2.3	0.8	0.7	1.0	1.7	15.2
Washington	4.7	7.0	2.8	3.4	1.4	–	1.2	20.4
West Virginia	1.2	0.5	0.7	0.2	0.2	0.2	0.9	3.9
Wisconsin	5.0	2.2	1.2	1.0	1.1	0.6	0.7	11.8
Wyoming	1.0	0.6	0.1	–	0.1	–	1.0	2.7
District of Columbia	1.9	0.6	0.3	0.4	0.2	0.3	0.1	3.9
United States	**$258.1**	**$150.6**	**$86.4**	**$67.3**	**$45.9**	**$38.6**	**$60.7**	**$707.5**

Note: "–" indicates zero collections; "0.0" indicates collections of less than $50 million.
**Corporate income tax includes gross receipts taxes levied in Ohio, Texas and Washington, and the Business Enterprise Tax (BET) in New Hampshire.*
***"License and other taxes" include documentary and stock transfer taxes, severance taxes and local gross receipts taxes. Certain Ohio localities impose a net profits tax, which is included in the "Corporate income tax" column. The small amount of corporate profits taxes at the local level in Michigan is included in "License and other taxes."*
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Comparing state business tax levels

A state's business tax burden can be measured in many ways, including the level of business taxes compared with the level of economic activity that is subject to taxation and the final incidence of business taxes, after they have been shifted to consumers or owners of factors of production, including workers.[4] State and local business taxes are imposed on a variety of tax bases, including net income, input purchases, payroll, property and other tax bases. Therefore, a broad measure of a state's overall economic activity should be used to determine the measure of aggregate business tax burden that can be compared across states.

Table 4 presents state-by-state estimates of state and local business and total taxes, as well as the total effective business tax rate (TEBTR) imposed on business activity by state and local governments. The TEBTR is measured as the ratio of state and local business taxes to private-sector GSP, the total value of a state's annual production of goods and services by the private sector. The average TEBTR across all states is 4.6%; Connecticut had the lowest TEBTR at 3.45%, while North Dakota had the highest at 9.9%.

TEBTRs provide a starting point for comparing burdens across states, but they do not provide sufficient information to evaluate a state's competitiveness. States with relatively low TEBTRs that derive most of their business taxes from origin-based taxes such as property taxes and sales taxes are not as competitive as states with higher TEBTRs that rely on taxes that have a larger impact on out-of-state businesses. TEBTRs also do not indicate the economic incidence of a tax.

When a tax can be passed on to consumers, the tax is not a burden in the same way as taxes for which the economic incidence, not just the legal liability, falls on the owners of a business. This is particularly likely in some of the states with the highest TEBTRs, such as North Dakota, Wyoming and Vermont. North Dakota and Wyoming rely on severance taxes (included in the "Other taxes" category in this analysis) which are imposed on businesses but are likely passed on to consumers, many of whom are located outside the state.[5]

Furthermore, two states with similar TEBTRs may vary in the manner in which they tax certain industries. For example, some states may levy relatively high taxes on capital-intensive manufacturers and relatively low taxes on labor-intensive service industries. When the state and local tax structure imposes disparate burdens by industry, economic decisions may be distorted due to disincentives facing highly taxed industries. It is also important to note that the TEBTR is a measure of the average tax burden on existing businesses in a state rather than a measure of the marginal tax that would be borne by a company investing in a new facility. For this reason, the TEBTR provides one metric that can be used to evaluate a state's business tax structure, but is not a clear indicator of the competitiveness of a state's business tax system in terms of attracting new investment.

Several of the states with high TEBTRs derive a significant share of their tax revenue from natural resources. Natural resource severance tax revenues account for more than 30% of total revenues in North Dakota and Wyoming, and more than 15% of revenues in New Mexico and West Virginia. The high tax burden on the extractive industries in these states largely accounts for their high level of business taxes per dollar of GSP.

On the other end of the spectrum, Connecticut, Alaska, North Carolina, Oregon and Indiana have low ratios of tax collections to GSP.

- Connecticut is home to several high-output industries, including insurance, financial services and aerospace. Connecticut's economy generates a large amount of GSP and gross operating surplus per worker, meaning that while Connecticut imposes higher-than-average taxes on a per-worker basis, its business taxes are significantly below the national average when measured per dollar of GSP. These results should not be interpreted to mean that Connecticut is a low-tax environment overall.
- Alaska ranks among the two lowest states in terms of TEBTR on GSP due to its recent decrease in state severance tax collections, which have decreased by 96% from FY14. In FY14 Alaska had the second-highest ratio of tax collection to GSP at 8.9%.
- North Carolina's effective tax rates on GSP are among the lowest due partially to the significant share of revenue that North Carolina derives from the individual income tax.
- Oregon ranks among the lowest states in terms of TEBTR on GSP due to its lack of a sales tax, which accounts for more than 21.3% of state and local business taxes nationwide. If sales tax revenue is excluded from TEBTR on GSP calculation for all states, Oregon's TEBTR stays at 3.6% but moves from the 6th-lowest TEBTR to the 26th-lowest rate.
- Indiana also ranks among the lowest states in terms of TEBTR on GSP. Indiana's business taxes as a share of GSP are below the state average in every tax category, although they are the lowest in only one tax category —licenses and other.

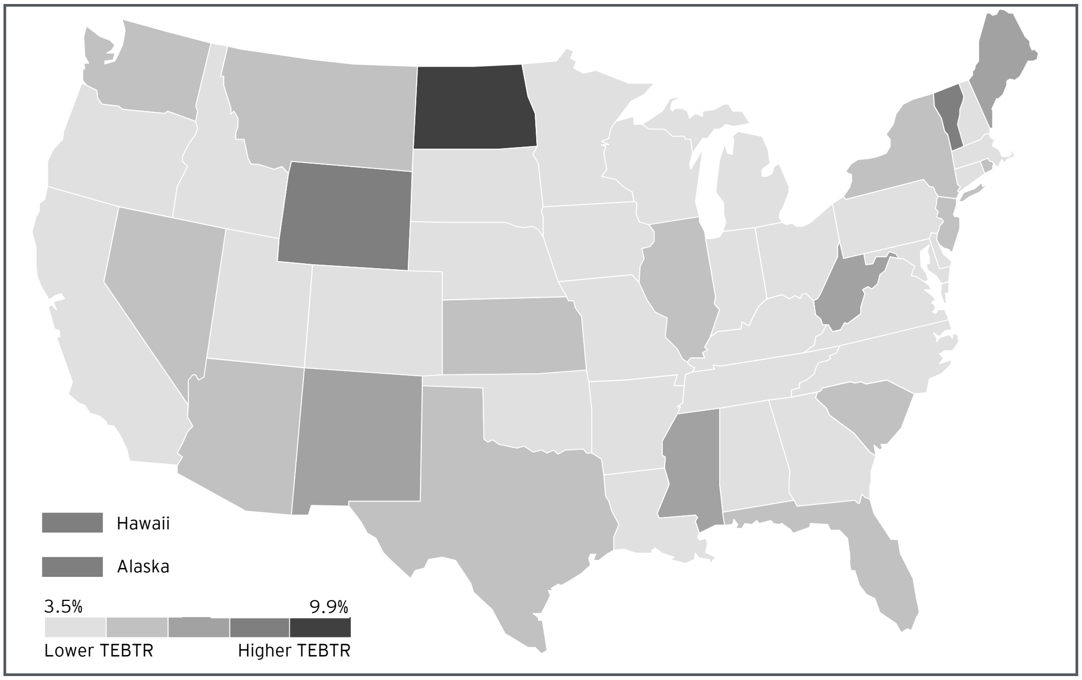
Table 4. Business taxes as a share of state, local and total taxes and private sector GSP, FY15 ($billions)

State	State taxes		Local taxes		State and local taxes		TEBTR*	Business taxes per employee ($thousands)**
	Business	Total	Business	Total	Business	Total		
Alabama	$4.3	$10.1	$3.2	$5.8	$7.5	$15.9	4.5%	$4.6
Alaska	0.8	1.1	0.8	1.5	$1.6	$2.6	3.5%	6.0
Arizona	6.1	14.5	6.0	9.4	$12.0	$23.9	4.9%	5.3
Arkansas	3.8	9.5	1.0	2.1	$4.7	$11.7	4.4%	4.6
California	53.5	157.4	39.9	77.2	$93.4	$234.6	4.5%	6.5
Colorado	4.7	13.5	7.4	12.9	$12.1	$26.4	4.4%	5.6
Connecticut	5.3	17.1	2.6	10.2	$7.9	$27.3	3.5%	5.3
Delaware	2.3	3.7	0.4	1.0	$2.7	$4.6	4.5%	7.1
Florida	17.4	39.0	19.7	33.0	$37.1	$71.9	4.9%	5.1
Georgia	6.9	20.6	8.7	15.9	$15.6	$36.5	3.7%	4.3
Hawaii	2.4	6.8	1.3	2.0	$3.7	$8.8	6.1%	7.2
Idaho	1.5	4.2	1.0	1.6	$2.5	$5.8	4.5%	4.5
Illinois	16.3	41.9	16.5	31.4	$32.8	$73.3	4.8%	6.2
Indiana	5.9	18.1	4.9	8.7	$10.8	$26.8	3.6%	4.1
Iowa	3.6	9.6	3.2	5.5	$6.8	$15.2	4.5%	5.1
Kansas	3.2	8.3	3.3	5.5	$6.5	$13.7	5.1%	5.6
Kentucky	5.1	12.1	2.7	5.0	$7.7	$17.1	4.7%	4.8
Louisiana	4.0	10.0	5.0	8.5	$9.0	$18.4	4.1%	5.3
Maine	1.4	4.2	1.8	2.6	$3.2	$6.8	6.7%	6.2
Maryland	6.9	20.5	3.9	15.6	$10.8	$36.1	3.8%	4.9
Massachusetts	9.9	28.8	6.9	15.0	$16.9	$43.8	4.1%	5.4
Michigan	9.6	28.5	5.2	12.9	$14.8	$41.4	3.6%	4.0
Minnesota	9.2	25.5	4.2	8.5	$13.4	$34.0	4.5%	5.4
Mississippi	3.5	8.1	2.2	2.8	$5.7	$10.9	6.4%	6.2
Missouri	4.1	12.6	5.0	9.9	$9.1	$22.5	3.6%	3.8
Montana	1.3	3.0	0.8	1.3	$2.1	$4.3	5.4%	5.5
Nebraska	1.9	5.2	2.4	4.3	$4.4	$9.5	4.4%	5.2
Nevada	4.3	8.2	2.3	4.1	$6.6	$12.3	5.4%	5.9
New Hampshire	1.5	2.6	1.2	3.4	$2.7	$6.0	4.2%	4.7
New Jersey	14.0	34.4	11.5	28.0	$25.5	$62.4	5.1%	7.4
New Mexico	3.5	6.2	1.6	2.6	$5.1	$8.9	7.1%	8.0
New York	26.6	81.9	45.3	90.9	$71.9	$172.8	5.8%	9.1
North Carolina	9.3	26.5	5.5	13.0	$14.7	$39.4	3.5%	4.1
North Dakota	4.3	5.9	0.7	1.2	$5.0	$7.1	9.9%	13.3
Ohio	12.1	29.5	9.1	24.3	$21.2	$53.8	4.0%	4.5
Oklahoma	4.4	9.8	2.8	4.9	$7.2	$14.7	4.6%	5.4
Oregon	3.5	11.6	3.2	6.3	$6.7	$17.9	3.6%	4.3
Pennsylvania	15.9	39.2	11.7	27.2	$27.6	$66.4	4.5%	5.3
Rhode Island	1.4	3.5	1.3	2.6	$2.6	$6.1	5.4%	6.2
South Carolina	3.5	10.1	4.7	7.0	$8.2	$17.1	5.0%	4.9
South Dakota	1.0	1.7	0.9	1.5	$1.9	$3.2	4.7%	5.4
Tennessee	7.1	13.1	4.6	9.0	$11.7	$22.0	4.3%	4.6
Texas	34.3	57.4	35.0	55.3	$69.3	$112.7	4.8%	6.8
Utah	2.4	7.0	2.4	4.1	$4.8	$11.1	3.8%	4.0
Vermont	1.6	3.2	0.4	0.5	$2.0	$3.7	7.7%	7.4
Virginia	6.0	21.3	9.2	16.2	$15.2	$37.5	4.0%	4.8
Washington	13.5	22.0	6.9	13.3	$20.4	$35.3	5.5%	7.6
West Virginia	2.5	5.8	1.4	1.9	$3.9	$7.7	6.3%	6.8
Wisconsin	6.6	18.2	5.2	11.7	$11.8	$29.9	4.4%	4.7
Wyoming	1.9	2.5	0.9	1.2	$2.7	$3.7	8.1%	12.3
District of Columbia	3.9	7.2	0.0	0.0	$3.9	$7.2	5.0%	7.4
United States	**$379.9**	**$962.3**	**$327.6**	**$640.4**	**$707.5**	**$1,602.6**	**4.6%**	**$5.8**

Note: TEBTR equals taxes as a percent of GSP.
**Average of calendar year 2014 and calendar year 2015 private industry GSP. This is the TEBTR on economic activity occurring within the state.*
***Business taxes per employee calculated using 2015 private-sector employment from Bureau of Labor Statistics Quarterly Census of Employment and Wages and FY15 total state and local business tax collections.*
Note: Amounts may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances

Figure 4. TEBTR by state, FY15

(state and local business taxes divided by private sector GSP in each state)



Source: Ernst & Young LLP estimates based on data from the Bureau of Economic Analysis and the U.S. Census Bureau, state and local government finances.

Table 5 summarizes the share of taxes paid by business in each state. Business taxes accounted for 44.1% of total state and local taxes in FY13. Business taxes accounted for a smaller share of state taxes (39.5%) than local taxes (51.1%). The share of local taxes paid by business is higher than the state share because businesses pay 53% of local property taxes, which account for 75.7% of total (business and household) local tax collections, while state governments rely most heavily on sales taxes, the majority of which are paid by households.

The business share of total state and local taxes has remained relatively stable over the past five years, as shown in Appendix Table A-1. Additionally, the business share has been within one percentage point of 45% every year since 2003. Although some individual income taxes are imposed on business income, the vast majority falls on households. Individual income taxes on nonbusiness income accounted for 18.5% of total state and local tax revenue in FY11 and 20.7% in 2015.

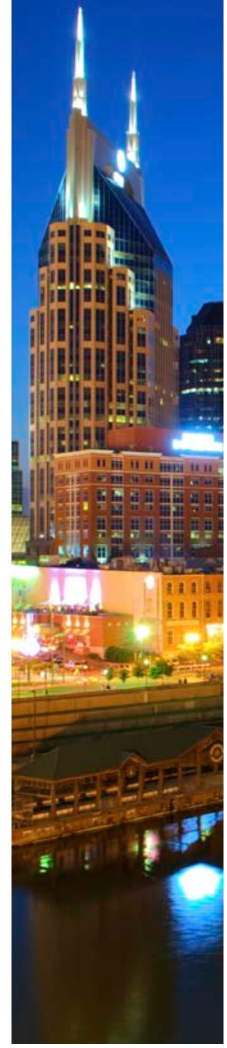
A high share of total state and local taxes paid by business does not necessarily translate into a high effective business tax rate on economic activity. States without individual income taxes generally derive a larger share of their total tax revenue from business taxes, even though business taxes in these states may not be significantly higher than average. The business tax burden would not increase if household taxes were cut and no new taxes were imposed on businesses, but the business share of total taxes would increase. For instance, 58.6% of taxes in Delaware are paid by business (32.8% above average) but the TEBTR is 4.5% (1.7% below average). In the case of Delaware, the high business share is largely attributable to the corporation license tax, which generates substantial revenue due to the significant number of businesses incorporated in Delaware.

Connecticut and Maryland generate the smallest share of their overall tax receipts from business taxes. In both states, the structure of the states' economies play a significant role in generating this result. In Connecticut, significant income earned by high-income taxpayers contributes to individual income tax receipts that outweigh business tax collections. In Maryland, the state receives a low share of its total tax revenue from business taxes (29.9% compared with the US average of 44.1%) because the state relies heavily on the individual income tax to generate tax revenue from employment related to the significant nontaxable federal government and nonprofit activity in the state. Maryland generates 42.0% of its state tax revenue from individual income taxes, compared with 36.8% nationwide. This increased reliance on individual income tax increases business income taxes on pass-through income, but reduces the overall business share and TEBTR.

Table 5. Business share of total state and local taxes, FY15

State	Business share of state taxes	Business share of local taxes	Business share of total state and local taxes
Alabama	42.7%	55.7%	47.4%
Alaska	73.6%	52.1%	61.0%
Arizona	41.7%	63.5%	50.3%
Arkansas	39.4%	45.9%	40.6%
California	34.0%	51.6%	39.8%
Colorado	34.6%	57.7%	45.8%
Connecticut	31.1%	24.7%	28.7%
Delaware	62.3%	45.1%	58.6%
Florida	44.7%	59.7%	51.6%
Georgia	33.7%	54.7%	42.8%
Hawaii	36.0%	64.6%	42.6%
Idaho	36.0%	61.1%	43.1%
Illinois	38.9%	52.5%	44.7%
Indiana	32.6%	56.7%	40.4%
Iowa	37.5%	58.1%	45.0%
Kansas	39.2%	60.2%	47.5%
Kentucky	41.7%	53.7%	45.2%
Louisiana	40.6%	58.6%	48.8%
Maine	33.3%	69.8%	47.2%
Maryland	33.7%	24.9%	29.9%
Massachusetts	34.5%	46.2%	38.5%
Michigan	33.8%	40.1%	35.7%
Minnesota	36.0%	49.0%	39.3%
Mississippi	43.1%	76.3%	51.8%
Missouri	32.2%	50.7%	40.3%
Montana	43.8%	60.0%	48.6%
Nebraska	37.3%	57.1%	46.2%
Nevada	52.2%	56.3%	53.6%
New Hampshire	57.2%	35.4%	44.9%
New Jersey	40.6%	41.0%	40.8%
New Mexico	56.6%	60.3%	57.7%
New York	32.5%	49.9%	41.6%
North Carolina	35.1%	42.1%	37.4%
North Dakota	73.4%	62.2%	71.5%
Ohio	41.0%	37.5%	39.4%
Oklahoma	45.4%	56.6%	49.1%
Oregon	29.9%	50.7%	37.2%
Pennsylvania	40.5%	43.0%	41.5%
Rhode Island	39.4%	48.4%	43.3%
South Carolina	34.7%	66.8%	47.9%
South Dakota	58.9%	60.2%	59.5%
Tennessee	54.3%	51.2%	53.0%
Texas	59.8%	63.3%	61.5%
Utah	34.0%	57.8%	42.8%
Vermont	49.9%	69.0%	52.7%
Virginia	28.1%	56.9%	40.5%
Washington	61.5%	51.7%	57.8%
West Virginia	42.9%	74.7%	50.8%
Wisconsin	36.3%	44.5%	39.5%
Wyoming	75.4%	72.2%	74.3%
District of Columbia	54.4%	n/a	54.4%
United States	**39.5%**	**51.1%**	**44.1%**

Note: District of Columbia taxes are treated as state taxes in this analysis.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.



Governmental benefits received by businesses vs. taxes paid

In addition to the TEBTR, the business tax burden can be evaluated by comparing business taxes paid to benefits received by businesses due to government spending. Because government spending can reduce businesses' nontax costs, if two businesses pay the same amount of taxes but one receives larger benefits from government spending, the true burden of taxes is not the same for both businesses. Calculating the business tax-benefit ratio estimates the extent to which businesses are "getting what they paid for" from their tax dollars.

Figure 5 shows FY15 total estimated state and local government spending by category (net of user charges and other nontax revenue) for both households and businesses. Using a methodology developed by economists at the Federal Reserve Bank of Chicago, expenditures in the major categories shown in Figure 5 were allocated between households and businesses to reflect the extent to which each group benefits from each type of expenditure.[6] Certain expenditures, such as health and human services, were assigned entirely to households while other categories, such as public safety and highway infrastructure costs (transportation category), were split evenly between businesses and households. The tax-benefit ratio was calculated by dividing business taxes in each state by estimated government expenditures benefiting business.

Since education spending is by far the largest category of net state and local expenditures, estimates of the tax-benefit ratio for businesses are sensitive to the allocation of education expenditures between businesses and households. While economic theory suggests that individuals are the primary beneficiaries of education due to higher wages, business owners can benefit if an educated workforce generates higher returns to capital.

Returns to capital would increase if workers do not completely capture productivity gains through higher wages or if an educated workforce improves the productivity of capital (e.g., an educated or trained worker may know how to use machines in production more efficiently, resulting in fewer breakdowns or work stoppages). A review of the literature finds that a 1% increase in the share of workers with a college education in a city increases output by 0.5 to 0.6 percentage points.[7] If businesses are able to capture some or all of the additional productivity from increased education, they are deriving benefits from this type of government spending.

Education can increase profits through indirect channels as well. For example, increasing education may reduce property crime, lowering business costs and increasing the return to capital. One estimate of the social returns of an educated workforce is that social benefits, in the form of lower government spending for police services and incarceration costs, are equal to 14% to 26% of the private return of education (higher wages) that accrues to individuals.[8]

Since the benefit of education to households and businesses is unknown, and the tax-benefit ratio is sensitive to this assumption, this analysis presents a range of estimates for the share of educational expenditures that benefit local business. The ratio is estimated assuming 0%, 25% and 50% of education spending benefits businesses.[9]

Calculating tax-benefit ratios using net government spending can yield different results than using gross spending. Net government spending subtracts nontax revenue and estimates tax-funded state and local government spending.

While taxes are the largest source of state and local government revenue, more than 60% of total revenue was derived from other sources in FY2011, the last year for which complete state and local government finances data from the U.S. Census Bureau is available. A state could maintain the same level of business taxation and gross spending from one year to the next, but its tax-benefit ratio would still differ if its level of nontax revenue changed.

Figure 6 and Table 6 summarize the results using the three educational share assumptions for FY15. Assuming that education spending does not directly benefit local business, the ratio of business taxes paid to government services received by business is 3.1, indicating that businesses are taxed $3.07 per dollar of government services they receive (i.e., a ratio of 3.1 to 1). The ratio drops to 1.6 when one-quarter of education spending is assumed to benefit business and 1.1 when half of education spending is assumed to benefit local business. Under these three educational assumptions, the business share of total net state and local government expenditures of $1.5 trillion is 16% with zero educational benefit, 29% with one-quarter of educational spending benefiting businesses, and 43% if half of educational expenditures are assumed to benefit business.

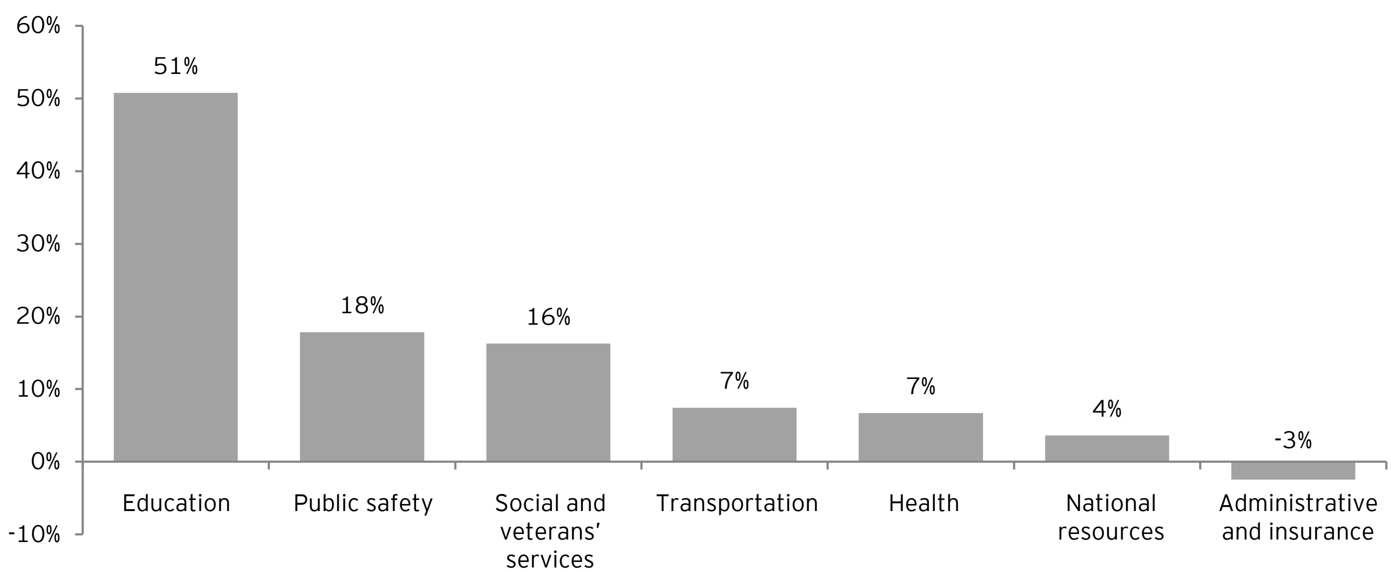
While net government expenditures have increased in the past two years, the level of expenditures benefiting business has remained stable. Increased spending by state and local governments on some infrastructure and public safety items were offset by reductions in other government services, such as improvements to sewage and solid waste systems, and government administration. That has resulted in a lower business share of total net state and local government expenditures in FY15.

Wyoming has the highest tax-benefit ratios due in large part to the state's reliance on severance taxes. In Wyoming, the ratio of business taxes to expenditures benefiting local businesses is 9.2, assuming education benefits households only. Eleven additional states have tax-benefit ratios above 4.0, assuming educational expenditures do not benefit business. Excluding Alaska (ratio of 1.5), every other state has a ratio between 2.0 and 4.0, meaning that under the assumption that all education benefits accrue to households, businesses pay at least twice as much in state and local taxes as they receive in tax-funded benefits from state and local governments.

If educational expenditures are evenly split between households and businesses, the tax-benefit ratios are fairly similar across states, with all states except North Dakota and Wyoming having tax-benefit ratios between 0.6 and 1.7.

Figure 5. Net state and local government expenditures by category, FY15

(for both households and businesses)[10]



Source: Ernst & Young LLP estimates of tax-funded revenue based on data from the U.S. Census Bureau, state and local government finances, and the National Association of State Budget Officers.

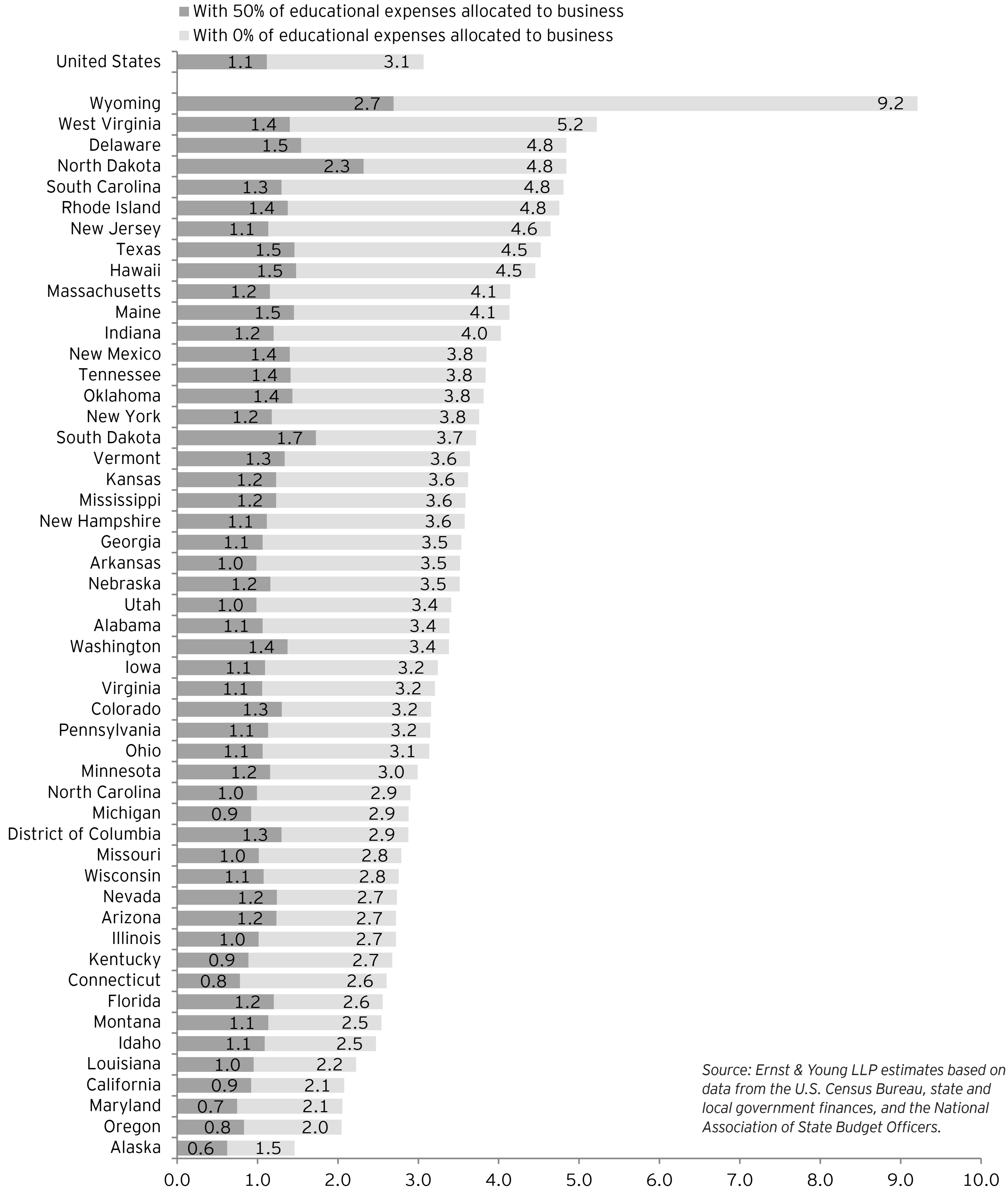
Table 6. Business taxes per dollar of state and local government expenditures benefiting businesses, FY15 ($billions)

		0% of education spending benefiting business		25% of education spending benefiting business		50% of education spending benefiting business	
State	State and local business taxes	Total state and local spending benefiting business	Tax-benefit ratio	Total state and local spending benefiting business	Tax-benefit ratio	Total state and local spending benefiting business	Tax-benefit ratio
Alabama	$7.5	$2.2	3.4	$4.6	1.6	$7.1	1.1
Alaska	1.6	1.1	1.5	1.8	0.9	2.5	0.6
Arizona	12.0	4.4	2.7	7.1	1.7	9.7	1.2
Arkansas	4.7	1.3	3.5	3.1	1.5	4.8	1.0
California	93.4	45.0	2.1	73.3	1.3	101.6	0.9
Colorado	12.1	3.8	3.2	6.6	1.8	9.3	1.3
Connecticut	7.8	3.0	2.6	6.5	1.2	10.0	0.8
Delaware	2.7	0.6	4.8	1.2	2.3	1.8	1.5
Florida	37.1	14.5	2.6	22.7	1.6	30.8	1.2
Georgia	15.6	4.4	3.5	9.5	1.6	14.7	1.1
Hawaii	3.7	0.8	4.5	1.7	2.2	2.5	1.5
Idaho	2.5	1.0	2.5	1.6	1.5	2.3	1.1
Illinois	32.8	12.0	2.7	22.2	1.5	32.4	1.0
Indiana	10.8	2.7	4.0	5.9	1.8	9.0	1.2
Iowa	6.8	2.1	3.2	4.2	1.6	6.2	1.1
Kansas	6.5	1.8	3.6	3.6	1.8	5.3	1.2
Kentucky	7.7	2.9	2.7	5.8	1.3	8.7	0.9
Louisiana	9.0	4.0	2.2	6.7	1.3	9.4	1.0
Maine	3.2	0.8	4.1	1.5	2.2	2.2	1.5
Maryland	10.8	5.2	2.1	9.8	1.1	14.4	0.7
Massachusetts	16.9	4.1	4.1	9.3	1.8	14.6	1.2
Michigan	14.8	5.1	2.9	10.6	1.4	16.0	0.9
Minnesota	13.4	4.5	3.0	8.0	1.7	11.5	1.2
Mississippi	5.7	1.6	3.6	3.1	1.8	4.6	1.2
Missouri	9.1	3.3	2.8	6.1	1.5	8.9	1.0
Montana	2.1	0.8	2.5	1.3	1.6	1.8	1.1
Nebraska	4.4	1.2	3.5	2.5	1.7	3.8	1.2
Nevada	6.6	2.4	2.7	3.8	1.7	5.3	1.2
New Hampshire	2.7	0.7	3.6	1.6	1.7	2.4	1.1
New Jersey	25.5	5.5	4.6	14.0	1.8	22.4	1.1
New Mexico	5.1	1.3	3.8	2.5	2.1	3.7	1.4
New York	71.9	19.2	3.8	40.1	1.8	61.1	1.2
North Carolina	14.7	5.1	2.9	10.0	1.5	14.8	1.0
North Dakota	5.0	1.0	4.8	1.6	3.1	2.2	2.3
Ohio	21.2	6.8	3.1	13.3	1.6	19.9	1.1
Oklahoma	7.2	1.9	3.8	3.5	2.1	5.0	1.4
Oregon	6.7	3.3	2.0	5.6	1.2	8.0	0.8
Pennsylvania	27.6	8.8	3.2	16.6	1.7	24.4	1.1
Rhode Island	2.6	0.6	4.8	1.2	2.1	1.9	1.4
South Carolina	8.2	1.7	4.8	4.0	2.0	6.3	1.3
South Dakota	1.9	0.5	3.7	0.8	2.4	1.1	1.7
Tennessee	11.7	3.0	3.8	5.7	2.1	8.3	1.4
Texas	69.3	15.3	4.5	31.4	2.2	47.4	1.5
Utah	4.8	1.4	3.4	3.1	1.5	4.8	1.0
Vermont	2.0	0.5	3.6	1.0	2.0	1.5	1.3
Virginia	15.2	4.7	3.2	9.6	1.6	14.4	1.1
Washington	20.4	6.0	3.4	10.4	2.0	14.8	1.4
West Virginia	3.9	0.7	5.2	1.8	2.2	2.8	1.4
Wisconsin	11.8	4.3	2.8	7.6	1.6	11.0	1.1
Wyoming	2.7	0.3	9.2	0.7	4.2	1.0	2.7
District of Columbia	3.9	1.4	2.9	2.2	1.8	3.0	1.3
United States	**$707.5**	**$230.8**	**3.07**	**$432.2**	**1.64**	**$633.5**	**1.12**

Note: Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances, and the National Association of State Budget Officers.

Figure 6. Business taxes per dollar of net government spending that benefits businesses, FY15

(values shown are equal to business taxes divided by government spending that benefits businesses)



Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances, and the National Association of State Budget Officers.

Conclusion

Businesses paid more than $707 billion in state and local taxes in FY15, representing a 1.9% increase from the previous year. Growth in tax revenue from business was concentrated in property taxes, sales taxes and corporate income taxes. The largest decline in business taxes was from lower severance tax receipts due to lower production, prices and operator profits.

The share of tax revenue derived from business declined slightly from 45.0% in FY14 to 44.1% in FY15, continuing the trend of modestly declining business share since 2007. On average, businesses paid 4.6% of GSP in state and local taxes. Government spending that benefits business increased between 2014 and 2015, while overall net state and local expenditures grew at a slower rate, meaning that businesses received a slightly larger share of the benefit of government spending in 2015.

Appendix

Table A-1. Total state and local business taxes, 2011–15 ($billions)

State and local taxes	2011	2012	2013	2014	2015
Total business taxes	$628.6	$655.9	$683.5	$694.5	$707.5
Individual income taxes on nonbusiness income	255.7	275.1	302.2	305.5	331.8
Other taxes	500.6	510.2	529.0	544.1	563.4
Total state and local taxes	**$1,384.8**	**$1,441.2**	**$1,514.8**	**$1,544.2**	**$1,602.6**

Composition of state and local taxes	2011	2012	2013	2014	2014
Total business taxes	45.4%	45.5%	45.1%	45.0%	44.1%
Individual income taxes on nonbusiness income	18.5%	19.1%	20.0%	19.8%	20.7%
Other taxes	36.1%	35.4%	34.9%	35.2%	35.2%
Total state and local taxes	**100%**	**100%**	**100%**	**100%**	**100%**

Note: Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Table A-2. Composition of state and local business taxes, 2011–15 ($billions)

Business tax	2011	2012	2013	2014	2015
Property tax on business property	$233.5	$238.0	$245.1	$251.1	$258.1
General sales and use tax on inputs	130.7	134.0	138.4	143.6	150.6
Corporate net income	57.0	58.7	63.0	64.6	67.3
Unemployment compensation	41.2	48.4	50.8	48.7	45.9
Business license tax	30.2	31.2	32.5	34.0	34.4
Excise taxes	35.0	35.3	38.6	38.9	40.6
Public utility tax	28.8	29.0	29.0	26.7	25.8
Individual income tax	29.5	33.6	38.3	37.1	38.6
Severance taxes	13.9	17.7	16.9	18.0	12.8
Insurance premium tax	17.1	17.5	18.2	18.8	19.9
Other business taxes	11.7	12.4	12.8	13.0	13.4
Total business taxes	**$628.6**	**$655.9**	**$683.5**	**$694.5**	**$707.5**

Note: Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances

Table A-3. Composition of state and local business taxes by type, FY15

State	Property tax	Sales tax	Excise tax	Corporate income tax	Unemployment insurance tax	Individual income tax on pass-through income	License and other taxes*	Total business taxes
Alabama	26.9%	21.7%	21.9%	7.1%	4.6%	5.7%	12.1%	100.0%
Alaska	52.6%	–	7.7%	14.5%	12.7%	–	12.5%	100.0%
Arizona	41.6%	32.6%	8.9%	5.7%	3.8%	2.9%	4.4%	100.0%
Arkansas	23.8%	33.3%	10.5%	10.0%	7.5%	6.6%	8.2%	100.0%
California	31.7%	20.8%	12.0%	9.6%	6.7%	9.3%	9.9%	100.0%
Colorado	42.0%	24.4%	9.2%	5.6%	6.0%	6.1%	6.7%	100.0%
Connecticut	31.6%	20.3%	13.3%	8.8%	10.5%	11.6%	4.0%	100.0%
Delaware	14.7%	–	9.4%	14.9%	5.1%	5.6%	50.2%	100.0%
Florida	40.8%	22.2%	19.1%	6.0%	4.7%	–	7.0%	100.0%
Georgia	41.2%	26.8%	10.2%	6.4%	5.6%	5.9%	3.9%	100.0%
Hawaii	26.1%	33.4%	21.0%	1.9%	7.2%	4.9%	5.5%	100.0%
Idaho	37.7%	19.5%	9.6%	8.7%	7.4%	8.3%	8.8%	100.0%
Illinois	42.0%	12.4%	16.0%	12.4%	7.9%	4.2%	5.2%	100.0%
Indiana	41.9%	21.7%	12.7%	8.3%	6.7%	6.1%	2.5%	100.0%
Iowa	43.5%	24.9%	5.1%	6.8%	6.7%	6.5%	6.6%	100.0%
Kansas	46.4%	25.1%	9.8%	7.0%	6.1%	–	5.6%	100.0%
Kentucky	27.7%	20.8%	18.5%	11.5%	7.0%	7.0%	7.5%	100.0%
Louisiana	33.3%	31.1%	12.0%	2.8%	2.7%	5.0%	13.1%	100.0%
Maine	56.5%	14.3%	9.1%	5.3%	4.9%	4.5%	5.4%	100.0%
Maryland	23.6%	17.7%	21.6%	9.3%	6.1%	12.1%	9.7%	100.0%
Massachusetts	39.1%	16.3%	6.7%	13.2%	10.6%	7.7%	6.5%	100.0%
Michigan	38.4%	22.3%	9.7%	8.0%	10.3%	5.3%	6.0%	100.0%
Minnesota	32.5%	19.6%	14.9%	11.0%	7.8%	7.0%	7.1%	100.0%
Mississippi	37.4%	24.0%	12.0%	9.4%	3.2%	4.4%	9.5%	100.0%
Missouri	37.3%	25.5%	8.4%	5.6%	7.0%	7.4%	8.9%	100.0%
Montana	43.4%	–	12.3%	8.1%	7.3%	6.5%	22.3%	100.0%
Nebraska	44.6%	22.2%	7.0%	7.9%	2.6%	8.8%	6.9%	100.0%
Nevada	22.7%	32.1%	15.3%	–	10.1%	–	19.8%	100.0%
New Hampshire	48.9%	–	15.8%	21.5%	4.2%	0.4%	9.2%	100.0%
New Jersey	44.0%	15.9%	8.7%	10.1%	11.2%	5.2%	4.9%	100.0%
New Mexico	17.1%	41.0%	7.4%	4.9%	4.5%	2.6%	22.5%	100.0%
New York	39.4%	16.1%	9.7%	17.4%	5.1%	8.4%	4.0%	100.0%
North Carolina	27.3%	26.4%	11.5%	9.0%	9.6%	6.9%	9.4%	100.0%
North Dakota	11.8%	16.2%	5.7%	3.7%	2.4%	1.1%	59.2%	100.0%
Ohio	32.7%	24.2%	12.8%	9.3%	5.5%	6.8%	8.7%	100.0%
Oklahoma	21.0%	31.5%	11.4%	5.4%	5.1%	10.1%	15.4%	100.0%
Oregon	35.9%	–	13.9%	10.3%	15.5%	10.1%	14.3%	100.0%
Pennsylvania	33.3%	15.5%	13.8%	10.5%	11.0%	7.0%	8.8%	100.0%
Rhode Island	46.7%	14.6%	13.4%	6.7%	10.1%	4.7%	3.7%	100.0%
South Carolina	46.7%	18.7%	9.4%	4.6%	5.8%	4.0%	10.9%	100.0%
South Dakota	33.8%	42.3%	10.3%	0.2%	2.3%	–	11.2%	100.0%
Tennessee	27.3%	30.3%	13.6%	12.0%	3.2%	0.5%	13.2%	100.0%
Texas	42.3%	27.5%	11.4%	6.7%	3.3%	–	8.8%	100.0%
Utah	37.9%	20.6%	12.8%	7.7%	6.7%	7.4%	6.8%	100.0%
Vermont	54.6%	9.9%	15.8%	5.7%	7.3%	3.6%	3.0%	100.0%
Virginia	43.4%	13.1%	15.4%	5.4%	4.8%	6.4%	11.5%	100.0%
Washington	22.9%	34.2%	13.5%	16.7%	6.7%	–	6.1%	100.0%
West Virginia	29.8%	13.8%	19.1%	4.8%	5.5%	4.7%	22.4%	100.0%
Wisconsin	42.0%	18.3%	10.3%	8.7%	9.6%	4.9%	6.2%	100.0%
Wyoming	35.0%	21.4%	3.9%	–	4.2%	–	35.5%	100.0%
District of Columbia	49.7%	14.6%	8.6%	11.5%	4.1%	7.8%	3.6%	100.0%
United States	**36.5%**	**21.3%**	**12.2%**	**9.5%**	**6.5%**	**5.5%**	**8.6%**	**100.0%**

Note: Figures may not sum due to rounding. "–" indicates 0; "0.0%" indicates less than 0.05%.
**Taxes categorized under "license and other" include documentary and stock transfer taxes, severance taxes and local gross receipts taxes plus license taxes.*
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Endnotes

1 States that follow a different fiscal year are Alabama (ends September 30), Michigan (ends September 30), New York (ends March 31) and Texas (ends August 31). Data presented in this study is for each state's fiscal year.

2 The general methodology used to estimate state and local business taxes is described in detail in the Appendix to the Ernst & Young/COST FY2005 50-State Business Tax study published in March 2006 (available at www.cost.org). Note that business tax estimates for prior years have been revised from those published in earlier editions of this study due to the use of newly released U.S. Census Bureau data and refinements to the estimation of individual income taxes. All references to business taxes in prior fiscal years refer to the updated estimates included in this study, rather than the previously published estimates.

3 Robert Cline, Andrew Phillips and Tom Neubig, *What's Wrong with Taxing Business Services? Adverse Effects from Existing and Proposed Sales Taxation of Business Investment and Services*, prepared for the Council On State Taxation, 4 April 2013.

4 For an analysis of the incidence of state and local taxes on business, see Robert Cline, Andrew Phillips, Joo Mi Kim and Tom Neubig, "The Economic Incidence of Additional State Business Taxes," *State Tax Notes, Tax Analysts*, 11 January 2010.

5 Robert Cline, Andrew Phillips, Joo Mi Kim and Tom Neubig, "The Economic Incidence of Additional State Business Taxes," *State Tax Notes*, 11 January 2010.

6 Richard H. Mattoon and William A. Testa, "How Closely Do Business Taxes Conform to the Benefits Principle?" presentation at the Future State Business Tax Reforms: Perspectives from the Business, Government and Academic Communities conference, Federal Reserve Bank of Chicago (17 September 2007). The authors distributed state and local government expenditures between businesses and households. Services benefiting business include shares of expenditures for transportation, water and sewer infrastructure, police and fire protection, general government "overhead" (e.g., legislative, administrative and judicial services), interest and regulatory activities. The methodology used is described in detail in William H. Oakland and William A. Testa, "State-Local Business Taxation and the Benefits Principle," *Economic Perspectives* (January/February 1996). The authors also note that selective excise taxes, such as the severance tax, impact a small portion of businesses and could be removed from the business tax numerator to provide a measure of the tax-benefit ratio generally applicable to most firms. Ernst & Young LLP added in expenditure categories to the analysis not included in the 2007 data.

7 Evidence is reviewed in Enrico Moretti, "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions," *The American Economic Review*, June 2004.

8 An example of work related to the social benefits of education is Lance Lochner and Enrico Moretti, "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports," *NBER Working Paper 8605*, November 2001.

9 The tax-benefit ratios shown in this study were constructed in the following way: Ernst & Young LLP followed the general methodology used by Mattoon and Testa that allocates expenditures net of user charges and federal transfers to businesses and households. Like Mattoon and Testa, Ernst & Young LLP identified major categories of state and local spending. Using data from the U.S. Census Bureau's 2010 State and Local Government Finances, expenditures, charges, federal transfers, and other category-specific nontax revenue were assigned to each category. These items were used to calculate the net expenditures for each category. The net expenditures were then allocated to businesses and households in an identical manner to the Rick Mattoon, William A. Testa allocation for all categories included in their analysis. For new categories, Ernst & Young LLP followed Mattoon and Testa's general principles in allocating net expenditures. Using data from the National Association of State Budget Officers' *State Expenditure Report* (2012), the 2010 amounts were adjusted to 2012 using the All Funds growth rate. For the District of Columbia, Ernst & Young LLP used data from the Statistical Section of the District of Columbia's 2012 *Comprehensive Annual Financial Report* to grow state and local net expenditures.

10 Administrative and insurance share is negative because nontax revenue from investments, interest and other sources exceed total outlays.

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