

Chapter 5

Connecticut Fiscal Comparisons

A Report Prepared for the Connecticut Tax Panel
Presented September 30, 2015

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The views expressed here are those of the authors and not of the Georgia State University

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Executive Summary

This report contains two parts. The first section examines Connecticut's state and local revenue and expenditure portfolio, comparing Connecticut to neighboring states, as well as to selected other states around the country for fiscal years 2002, 2005, 2009 and 2012. The analysis uses U.S. Census Bureau data to compare revenues and expenditures on a per capita basis, and as a share of personal income. The second part of the report assesses Connecticut's rank on several key business climate and tax indices produced by national non-profit and advocacy organizations.

Part I

Key takeaways from the first part of the analysis: Depending on whether per capita or personal income measures are used, Connecticut is either a high- or low-spending and revenue state compared to others. The state has the highest personal income per capita in the country, which affects its rank when using personal income metrics. The state ranked 6th (highest) when measuring general revenues per capita but 45th (a low rank) when measuring general revenues as a percentage of personal income.

Even with its high wealth, the state was 8th in *tax revenue* as a percentage of personal income. The difference between the *general revenue* and *tax revenue* ranking can be explained by the state's relatively limited receipt of federal funds (48th in federal funds as a percentage of personal income), and the state's limited reliance on charges and other forms of non-tax revenues (50th in charges and miscellaneous general revenue as a percentage of personal income). Many states increasingly rely on user fees and charges, and this may be an area that warrants further investigation.

Connecticut's state and local revenue portfolio is dominated by the property tax and the individual income tax, which make up 46.5 percent of the state's total governmental revenues. In contrast, nationally, these two revenue sources make up around 30 percent of overall state and local government revenues. Connecticut ranks in the top ten states when considering these taxes on a per capita basis and also ranks in the top ten when considering these two tax types as a percentage of personal income. While almost all of Connecticut's neighboring states also derive significant revenues per capita from property taxes, there is substantially more variation in income tax receipts.

In terms of expenditures, a national concern is the pressure that health care, debt and long-term liabilities are placing on state budgets, potentially crowding out investment in physical and human capital. Based on the U.S. Census data, public welfare, a category dominated by Medicaid, does appear to be putting pressure on Connecticut's overall state and local expenditures; it grew by 45 percent on a real per capita basis between 2002 and 2012. At the same time, the state has continued to make significant investments in education and to some degree in infrastructure. Education expenditures grew by 22 percent (real per capita), and highway spending grew by eight percent on a real per capita basis, with a noticeable jump in investment between 2009 and 2012. Meanwhile, a number of other smaller segments of the state and local expenditure portfolio have seen declines in real per capita terms. Connecticut is also notable for carrying some of the

largest per capita unfunded long-term liabilities in the country – an issue that is not fully captured in the U.S. Census’ survey numbers.

Part II

Part II examines five tax and economic competitiveness indices, four of which are efforts to measure and compare states’ business climates, and one of which compares tax fairness across the income distribution. While the tax and economic competitiveness rankings often receive considerable media attention, to date, there is no research-based evidence that these indices actually predict economic growth in a state.

The Ernst & Young partnership with the Council on State Taxation (EY/COST) produces several metrics that measure tax revenues collected from businesses relative to the state’s private-industry gross state product or business tax base. The EY/COST report also looks at the services provided to businesses relative to the taxes paid. In general, Connecticut ranks quite low on their total effective business tax rate – 49th.

The state has a low effective tax rate in part because of its high private sector gross state product, which is highly correlated with the state’s overall wealth. The state also has a low effective tax rate because it collects a small share of tax revenues from businesses relative to individuals or households. This is particularly notable with respect to property taxes, where the EY/COST report finds that only 30 percent of the state’s property tax revenues come directly from businesses. By way of contrast, 40 percent of Massachusetts’ and 38 percent of New York’s property tax revenues come from businesses.

The Tax Foundation’s State Business Tax Climate Index (SBTCI) focuses on specific features of a state’s tax structure rather than aggregate taxes paid. In many respects, the index is heavily concerned with distortions in behavior that might be caused by a tax system. Recognizing that tax-induced distortions are inevitable, the authors propose a tax system that minimizes instances where (private) economic decisions are influenced, micromanaged, or even dictated by the tax system. The authors state that the “more riddled a tax system is with politically motivated preferences, the less likely it is that business decisions will be made in response to market forces.”¹ Such a principle is consistent with the Panel’s adopted principle of broad based, low rate taxation.

However, the SBTCI index is not without controversy. This controversy is particularly evident in the way the Tax Foundation construct its personal income tax measure. Here, the SBTCI identifies three aspects as likely to be distortionary: the top marginal tax rate, a graduated statutory rate structure, and standard exemptions, which are treated as a zero percent bracket. Whether or not these are distortionary is the subject of some debate in the research literature. Additionally, under this approach, states that do not impose an individual income tax will have a perfect income tax score, and states with a flat, low rate tax with no deductions and exemptions will also receive a “high” score. This perfect score on a particular tax applies to other tax components that make up the final index score. With respect to the personal income tax, Connecticut’s rank is 32nd, which is well ahead of New York and New Jersey at 48th and 49th respectively, but also well below the

non-income tax states such as Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming.

When the income tax score is combined with the other tax components (corporate income, sales, property, and unemployment insurance), Connecticut is in the bottom 10 of the SBTCI rankings, meaning the state has a less favorable business tax climate. The individual income, corporate income and sales tax component rankings place the state in the bottom 20, and the state's very low score on the property tax component causes Connecticut to drop into the bottom ten. The property tax component incorporates property taxes as a percentage of personal income and per capita, and unlike EY/COST it does not distinguish between the tax revenue collected from businesses versus individuals.

The Small Business and Entrepreneurship Council produces a small business tax index and Connecticut typically scores in the bottom ten states on this index as well. A low rank indicates a state that is less supportive of small business compared to other states. This score is heavily influenced by the top marginal personal (and corporate) income tax rates, regardless of the income level at which it is levied. This feature of the tax system makes up 63 percent of Connecticut's overall score.

The Beacon Hill Institute State Competitiveness Index (SCI) measures substantially more than tax competitiveness, capturing government and fiscal policy, as well as security, infrastructure, human resources, technology, business incubation, openness, and environmental policy. Connecticut was 40th lowest (a low rank means the state is less competitive) on this index in 2014. However, in other years, going back to at least 2006, the state was in the middle of the pack, scoring 24th in 2006 and 27th in 2013. Connecticut has very bifurcated rankings across the sub-indices. The state scores in the top ten states in terms of openness (5th), technology (8th) and security (6th), and in the upper ranks in human resources (15th). The state has a low rank on government and fiscal policy (47th), business incubation capacity (50th), infrastructure (41st), and environmental policy (42nd). The recent decline in rank appears to be driven in part by a change in the state's infrastructure rank.

Last, the Institute for Tax and Economic Policy's Tax Inequality Index ranks the distributional impact of Connecticut's tax structure – or the extent to which income inequality has narrowed or grown after the application of the state and local tax system. Here, some of the features that count against the state in the Tax Foundation's SBTCI index and the small business tax index, now count as positives. Connecticut is in the middle of the pack based on this index, ranking 26th. The state's progressive income tax structure helps offset the regressivity of its sales and property taxes.

Introduction

This report reviews a series of fiscal comparisons for the state of Connecticut. Specifically, this report examines:

- 1) Connecticut's state and local revenue and expenditure portfolio, as measured by the U.S. Census survey of state and local government finances. These fiscal measures are presented in per capita terms, as a percentage of personal income, relative to national averages, relative to other selected states, as well as across time.
- 2) The report then goes on to examine some commonly referenced tax-related indices, particularly the Ernst & Young/Council on State Taxation (EY/COST) report on total state and local business taxes, the State Business Climate Tax Index (SBCTI) developed by the Tax Foundation, and the Institute on Taxation and Economic Policy Tax Inequality Index (TII).

State policy-makers often express concern about a state's rank on a particular index; however, these metrics are typically only one part of a much bigger story. The very features that may cause a state to rank poorly on one index may cause it to rank highly on another. In general, this type of analysis can raise questions and indicate areas for further investigation but does not provide any definitive answers about a state's tax competitiveness.

Part I: Connecticut's Expenditure and Revenue Portfolio

Background

The analysis in this section reviews basic dimensions of Connecticut's expenditure and revenue portfolio using data collected annually by the U.S. Census Bureau in their *Survey of State and Local Finances*. Data on state and local expenditures and revenues are provided for Connecticut, the national average, and a selected number of other states. These comparison states include seven neighboring or northeastern "peers" such as Massachusetts and New York, three southern states, two natural resource-rich states, and a mid-Atlantic and mid-western industrial state.

Most tables provide information for a selected set of fiscal years (FY): 2002, 2005, 2009 and 2012, to display trends over time. These years reflect some key national shifts in state and local fiscal health since 2000. 2002 reflects the impact of the 2001 economic recession, which lasted from March through November of 2001. 2005 represents a period of economic growth for most states, while FY2009 captures the impact of the Great Recession. Finally, FY2012 is the most recent U.S. Census Bureau fiscal data available for state and local governments at the time research for this report was completed. To some extent, 2012 reflects a period of recovery from the recession; however, a confounding factor is that most states faced a fiscal shortfall in 2012 as the last of the federal funds administered through the American Recovery and Reinvestment Act of

2009 evaporated. The loss of federal funds might affect both the expenditure and revenue analysis as states made a series of policy adjustments to replace these funds.

Importantly, this analysis reviews the state *and local* expenditure and revenue portfolio. Because states often divide responsibilities differently between state and local governments, and states may have a variety of revenue sharing or redistributive policies, it is important to consider state and local spending and revenues together. That being said, local spending and revenues may vary significantly in different regions of a state with extremely wealthy or poor areas often skewing the statewide averages. An obvious regional example is the impact of New York City on New York state averages. Average state and local rankings thus need to be interpreted with caution.

Last, this section of the analysis is grounded in metrics of taxes per capita, as well as taxes as percentage of personal income. These metrics are important for different reasons. Personal income reflects the general wealth of a state and thus the resources available to support governmental services.² Wealth is also associated with increased *demand* for public services. For instance, wealthy neighborhoods tend to demand better schools and may want more public amenities, such as parks. Wealth, however, is not evenly distributed, and most state and local tax systems in this country are not particularly progressive.³ Looking at taxes per capita can give another snapshot of the impact of taxes as experienced by citizens in one state versus another, setting aside the overall wealth of a state. A weakness of both of these metrics is that they do not indicate the extent to which the impact of state and local taxes is exported to other states through mechanisms such as resource taxation or taxes on tourists.

Overall

Table 1 and 2 provide an overview of Connecticut's real direct expenditures and general revenue in 2002 and 2012. Table 1 examines the per capita numbers while table 2 assesses the measures as a percentage of personal income. Both tables include Connecticut's rank among the 50 states and the comparable average national numbers.⁴ Direct expenditures in these tables include all public sector expenditures, including utilities, liquor stores, and insurance trust expenditures, as well as debt financed activities. General revenues include all revenues except public enterprise revenues and debt.

Table 1 shows that on a real (inflation adjusted) per capita basis, Connecticut appears to be a high spending and high revenue state, and has been throughout the time period covered in this analysis. The state is 6th in per capita revenues and expenditures. On the revenue side, this rank is driven by the state's per capita taxes, which are ranked 4th highest in the nation, 57 percent above the national average. The state ranks 32nd in terms of receipt of federal grant-in-aid per capita, which likely reflects the somewhat redistributive nature of federal funds and the relative wealth of the state. The state ranks 50th in charges and miscellaneous general revenue per capita, an item worthy of some further exploration, given that many state and local governments increasingly rely on these kinds of revenues.

Table 1. Summary of State and Local General Revenue and Expenditure per Capita (2012 dollars)

State and Local (Real Per Capita)	CT per capita FY2002	Rank	National Average in FY2002	% Below/Above	CT per capita FY2012	Rank	National Average in FY2012	% Below/Above	% Change CT 2002- 2012	% Change National 2002-2012
				National Average in FY2002				National Average in FY2012		
Direct Expenditure	\$9,865	7	\$8,802	12%	\$11,560	6	\$10,027	15%	17%	14%
General Revenue	\$8,154	6	\$7,245	13%	\$10,059	6	\$8,276	22%	23%	14%
from Federal	\$1,444	32	\$1,550	-7%	\$1,782	32	\$1,862	-4%	23%	20%
from Own-Source	\$6,710	5	\$5,694	18%	\$8,277	5	\$6,414	29%	23%	13%
Taxes	\$5,408	2	\$3,892	39%	\$6,953	4	\$4,422	57%	29%	14%
Charges and Misc. Revenues	\$1,302	49	\$1,803	-28%	\$1,323	50	\$1,992	-34%	2%	11%

Sources: U.S. Census Bureau Annual Surveys of State and Local Government Finances and U.S. Census Bureau annual population estimates for applicable fiscal years.

Table 2. Summary of State and Local General Revenue and Expenditure as a Percentage of Personal Income

State and Local (As Percent of Personal Income)	Connecticut FY2002	Rank	National Average in FY2002	Connecticut FY2012	Rank	National Average in FY2012
Direct Expenditure	18%	47	22%	19%	47	23%
General Revenue	15%	49	18%	17%	45	19%
from Federal	3%	46	4%	3%	48	4%
from Own-Source	13%	48	14%	14%	36	15%
Taxes	10%	13	10%	12%	8	10%
Charges and Misc. Revenues	2%	50	5%	2%	50	5%

Sources: U.S. Census Bureau Annual Surveys of State and Local Government Finances and U.S. Census Bureau annual population estimates for applicable fiscal years; personal income is from the Bureau of Economic Analysis.

Table 2 shows expenditures and revenues relative to personal income. Connecticut ranks first in the nation in terms of personal income per capita at \$60,247 (see table 3), which causes the state's rank for its expenditures as a percentage of personal income to drop to the bottom of the pack (47th), and ensures a similar effect for its own source revenues as a percentage of personal income (36th) in 2012. By this measure the state is a low spending, low revenue state; however, in 2012, the state ranked 8th in taxes as a percentage of personal income. The differential rank between own source revenues and taxes reflects the state's relatively high reliance on taxes as revenue source as compared to federal funds or charges and miscellaneous general revenues. The state has also increased its reliance on taxes over the period of this analysis, moving from 13th in 2002, with taxes at ten percent of personal income, to 8th, with taxes at 12 percent of personal income. Meanwhile, Connecticut's reliance on charges and miscellaneous revenues has declined.

Comparing Connecticut's Expenditures

Expenditures Overview

Tables 3, 4, 5, and 6 provide data on state and local direct general expenditures relative to comparison states. Note that this measure of expenditures includes capital outlays, education services, social services, transportation, public safety, environment and housing, governmental administration, and interest on general debt obligations. However, unlike direct expenditures reported previously, this measure *excludes* utility and liquor store expenditures, as well as insurance trust fund outlays. Expenditures include those financed by debt and federal funds.

Direct expenditures also do not capture a state's long-term obligations or unfunded liabilities. A state might rank low in terms of expenditures as a percentage of personal income or expenditures per capita, but the state may have a significant debt burden, an unfunded pension or long term benefits liability, as well as practice other forms of fiscal cost shifting that can skew its ranking.⁵ This caveat is particularly important for Connecticut policy-makers to consider given that Connecticut is widely identified as having some of the most significant unfunded debt, pension, and health benefit liabilities in the country.⁶

Expenditures as Share of State Wealth

Table 3 provides insight into state and local government direct expenditures relative to the overall wealth of a state. The first part of the table compares expenditures as a percentage of personal income in Connecticut relative to other states and to the national average over time (2002, 2005, 2009 and 2012). Connecticut state and local direct general expenditures are also displayed as an index showing expenditures as a percentage of personal income relative to the national average (the US average is 100), which should give a sense of the magnitude of spending differences across the states. The second part of the table identifies personal income per capita in 2012, how other states compare to Connecticut in terms of wealth, and it shows expenditures per capita and unfunded pension liabilities. The rankings of personal income per capita suggest that Connecticut's

neighboring states are all relatively wealthy. With the exception of Vermont and Delaware, all of the neighboring states rank in the top 15 for personal income per capita.

The expenditure table shows that Connecticut state and local governments spend a lower percentage of the state's personal income than both the national average and almost all other states in all of the examined fiscal years. The state ranked 48th in 2012 on this metric. Of the comparison states, only New Hampshire and Virginia (both high wealth states) rank lower. Note, as discussed earlier, this low rank is somewhat influenced by the state's relatively low receipt of federal funds, and subsequent low expenditures on federal programs.

The share of personal income that Connecticut state and local governments spend has dropped somewhat between 2002 and 2012. Connecticut ranked 46th out of all states in state and local direct general expenditures as a percentage of personal income in 2002, while it ranked 48th in 2012. Its level of expenditures as a percentage of personal income has declined from 16.2 to 15.9 percent over the course of this decade. By this metric, when compared to the national average, Connecticut has remained a relatively stable low-spending state.

Some quick contrasts: New Jersey and Massachusetts have a similar profile, ranking high in wealth and low in expenditures as a percentage of wealth. Note, they both also rank high in terms of spending per capita – spending amounts almost identical to Connecticut's per capita outlays. In contrast, New York is both a high income and high per capita spending state, and it spends much more relative to its wealth, ranking 6th in spending as a percentage of personal income. On average, New York state and local governments spend 27 percent more per capita than Connecticut.

At the other end of the spectrum, states such as Virginia and New Hampshire have lower expenditures as a percentage of personal income. These states also rank relatively high in terms of personal income per capita (10th and 8th respectively), but have much more modest levels of per capita spending – ranking 30th and 32nd. In 2012, Virginia spent 20 percent less per capita than Connecticut. Like Connecticut, Virginia also received some of the lowest amounts of federal funds per capita of any state (49th). Virginia's taxes as a percentage of personal income rank 45th (see tables 8 and 9). As such, Virginia has a similar income profile, a similar federal funds profile, but a different own source revenue and tax profile from Connecticut.

Table 3: CT State and Local Direct General Expenditure as a Percent of Personal Income and Indexed with US Average = 100.0
Compared With Selected States, 2002, 2005, 2009, 2012

State	Expenditures in \$m in 2012	2002		2005		2009		2012		2012 %PI Rank	Personal Income Per Capita	Rank	Expenditures Per Capita	Rank	UAAL for State Pensions Per Capita for 2011
		% of PI	Index	% of PI	Index	% of PI	Index	% of PI	Index						
United States	\$2,587,317	18.9%	100	18.9%	100	20.7%	100	18.6%	100	****	\$44,194	****			
CONNECTICUT	\$34,372	16.2%	85.5	15.1%	79.8	16.7%	81.0	15.9%	85.2	48	\$60,247	1	\$9,574	7	\$5,885
Neighboring															
Delaware	\$9,043	19.0%	100.5	21.1%	111.6	22.5%	108.9	22.4%	120.1	8	\$44,029	22	\$9,860	6	\$870
Massachusetts	\$63,393	16.6%	87.8	17.0%	89.8	18.1%	87.8	16.8%	90.2	44	\$56,706	2	\$9,538	8	\$2,589
New Hampshire	\$10,034	14.1%	74.5	15.4%	81.3	16.2%	78.3	15.2%	81.3	50	\$50,091	8	\$7,597	32	\$3,252
New Jersey	\$83,030	15.7%	82.9	17.3%	91.6	18.6%	89.8	17.0%	91.4	40	\$54,952	4	\$9,367	9	\$4,786
New York	\$237,735	23.3%	122.9	23.1%	122.3	24.0%	116.2	22.4%	120.4	6	\$54,115	5	\$12,148	3	\$814
Rhode Island	\$9,292	19.4%	102.5	20.2%	106.8	20.5%	99.2	19.1%	102.5	24	\$46,258	15	\$8,847	15	\$4,230
Vermont	\$6,237	20.2%	106.9	22.0%	116.3	23.0%	111.5	22.4%	120.2	7	\$44,439	21	\$9,963	5	\$1,909
Southern															
Florida	\$134,653	16.8%	88.7	17.5%	92.5	19.9%	96.2	17.0%	91.1	42	\$41,048	28	\$6,970	44	\$1,024
North Carolina	\$70,264	18.8%	99.0	18.5%	97.6	19.9%	96.5	18.7%	100.3	26	\$38,523	38	\$7,205	40	\$311
Virginia	\$62,781	15.7%	82.8	15.4%	81.4	16.6%	80.6	15.7%	84.4	49	\$48,720	10	\$7,669	30	\$2,707
Resource Rich															
North Dakota	\$7,210	22.4%	118.5	21.3%	112.5	20.6%	99.5	18.3%	97.9	30	\$56,449	3	\$10,305	4	\$1,061
Wyoming	\$7,721	24.6%	129.7	25.1%	132.5	30.8%	148.9	25.5%	136.8	2	\$52,489	7	\$13,394	2	\$2,486
Other															
Ohio	\$91,423	19.7%	103.8	20.8%	109.7	21.8%	105.4	19.7%	105.5	20	\$40,261	30	\$7,919	28	\$1,496
Pennsylvania	\$107,002	18.5%	97.7	19.5%	103.2	19.7%	95.4	18.4%	98.6	27	\$45,581	19	\$8,383	20	\$3,264
Connecticut Rank		46		49		48		48							

Note: Direct General Expenditures include expenditures on Current Operations, Capital Outlays, Assistance and Subsidies, Interest on Debt, and Insurance Benefits and Repayments. Expenditures from Intergovernmental grants are excluded, as well as Utility, Liquor Store and Insurance Trust expenditures. The Bureau of Economic Analysis (BEA) defines Personal Income as the sum of net earnings by place of residence, property income, and personal current transfer receipts. UAAL or Unfunded Actuarial Accrued Liability is the difference between the actuarial value of assets and the actuarial accrued liabilities in a retirement plan. Source: U.S. Census, State and Local Finances; Bureau of Economic Analysis (Personal Income); Morningstar Rating (UAAL).

Distribution of Expenditures

Table 4 shows real per capita expenditures and their distribution across all major spending categories in Connecticut. A current pressing issue nationally is the extent to which expenditures on health care, debt, pensions, and other long-term liabilities are crowding out government investment in human and physical capital. While the Census data does not capture some of these dimensions, the pressure from Medicaid is evident in Table 4. While the distribution of expenditure shares only shows small changes overall between 2002 and 2012, spending on public welfare increased by 4.5 percentage points, reflecting a 45 percent real per capita increase. Medicaid vendor payments dominate this Census expenditure category, which also includes regular welfare, foster care, and food stamps.

More in depth analysis of Connecticut's Medicaid and other social welfare programs would be required to understand cost drivers. However, a quick peek at the underlying numbers (Table 5) suggests that Medicaid growth has perhaps affected Connecticut somewhat more than other states. Of total spending on public welfare in Connecticut in 2012, 80 percent was on vendor payments for Medicaid. Meanwhile Connecticut has shifted in rank from 20th in the nation in per capita spending on public welfare to 11th. Spending on vendor payments has grown by 57 percent in real per capita dollars, changing the state's rank from 17th to 14th. While understanding the particular drivers of Medicaid spending in the state would require more analysis; nationally, the growth in Medicaid over the decade actually reflects growth in caseload more than growth in health care expenditures.⁷ Notably, "other public welfare" programs have also grown substantially in Connecticut as well, and the state went from 37th to 14th in per capita rank, while cash payments have declined by 50 percent, dropping the state's rank from 10th to 21st.

The shift towards public welfare has come at the expense of a number of other spending areas, including highways. Notably, in Connecticut, education spending continued to grow as a share of overall expenditures, with 22 percent real per capita growth – and a 3.2 percentage point growth in share. Connecticut's per capita spending on education has increased more than the national increase of 8 percent.

Table 4: CT Per Capita State and Local Direct General Expenditures and Percent Distribution by Functional Category
Selected Fiscal Years: 2002, 2005, 2009, 2012 (2012 Dollars, GDP)

Function	2002		2005		2009		2012		% Change: 2002- 2012	Percentage point change
	\$ per Capita	% Distribution	\$ per Capita	% Distribution	\$ per Capita	% Distribution	\$ per Capita	% Distribution		
Education	\$2,808	32.4%	\$2,975	35.3%	\$3,452	36.5%	\$3,413	35.7%	22%	3.2%
Highways	\$438	5.1%	\$413	4.9%	\$434	4.6%	\$474	4.9%	8%	-0.1%
Public Welfare	\$1,241	14.3%	\$1,416	16.8%	\$1,669	17.6%	\$1,801	18.8%	45%	4.5%
Health and Hospitals	\$680	7.9%	\$571	6.8%	\$666	7.0%	\$579	6.0%	-15%	-1.8%
Police and Fire	\$419	4.8%	\$412	4.9%	\$440	4.7%	\$470	4.9%	12%	0.1%
Sewage and Sanitation	\$229	2.6%	\$234	2.8%	\$262	2.8%	\$271	2.8%	18%	0.2%
Local Parks and Recreation	\$108	1.2%	\$92	1.1%	\$77	0.8%	\$79	0.8%	-27%	-0.4%
Financial Administration and General Control	\$191	2.2%	\$175	2.1%	\$176	1.9%	\$155	1.6%	-19%	-0.6%
Interest on General Debt	\$511	5.9%	\$471	5.6%	\$523	5.5%	\$531	5.5%	4%	-0.4%
Other Expenditure	\$2,027	23.4%	\$1,674	19.8%	\$1,763	18.6%	\$1,801	18.8%	-11%	-4.6%
TOTAL	\$8,653	100.0%	\$8,436	100.0%	\$9,464	100.0%	\$9,574	100.0%	11%	0.0%

Note: U.S. data excludes Washington DC. Sewage and Sanitation includes Sewerage and Solid Waste Management. Other Expenditure includes Employment Security, Veterans Services, Airports, Parking facilities, Sea and inland port facilities, Corrections, Protective inspection and regulation, Natural resources, Housing and community development, Judicial and legal, General public buildings, other governmental administration, and General expenditure. Source: US Census Bureau: Census of Governments (Expenditures), Population

Table 5. Connecticut's Public Welfare Real Expenditure per Capita

	2002			2012			% Change 2002-2012
	Expenditures per Capita	Rank	Share	Expenditures per Capita	Rank	Share	
Public welfare	\$1,241	20	****	\$1,801.26	11	****	****
Cash assistance payments	\$115	10	9%	\$57.50	21	3%	-50%
Vendor payments	\$924	17	74%	\$1,446.79	14	80%	57%
Other public welfare	\$202	37	16%	\$296.97	14	16%	47%

Source: U.S. Census Bureau

Functional Spending Comparisons

Table 6 examines Connecticut's functional expenditures expressed in an index where 100 equals the United States state and local per capita expenditure average. The story is much the same as previous. The state's education score of 109.8 for 2002 thus means that the state and its local governments spent 9.8 percent more per capita on education than the national average. The data show how Connecticut's spending has changed over time, as compared with the national average. It is important to note that Connecticut's per capita income increased by just 0.4 percent more than the US average between 2002 and 2012, so any growth in expenditures relative to the national average in this decade are not due to faster per capita income growth in the state.

Connecticut's numbers show a substantially higher investment in selected policy areas, most notably in education and public welfare. The state moved from 9.8 percent above the national average in education to 23 percent above, a 13.5 percentage point change. The state also saw a 14 percentage point increase in its investment in public welfare relative to the national average. Meanwhile the state also saw a decline in investment in health and hospitals, as well as in local parks and recreation. Both of these categories are often idiosyncratic to state and local governance arrangements and further analysis would be required to understand the implications of these shifts.

Table 7 examines how the share of education and public welfare expenditures have changed in Connecticut relative to the comparison states. Some observations: growth in expenditures per capita in Connecticut has been less than its regional peers over the decade, but is very much in alignment with the national average. Connecticut's per capita expenditure growth is greater than in states such as Florida and North Carolina.

Connecticut's share of spending on education grew by 3.2 percentage points; greater than the national share, which declined by 0.7 percentage points, and greater than all comparison states. Connecticut's neighboring states spent on average around 35 percent of direct expenditures on education and Connecticut has moved from below the regional average to above it. Meanwhile Connecticut's 4.5 percentage point growth in share of spending on public welfare is large relative to the 2.5 percent national growth in share, but is surpassed by several neighboring states including Massachusetts (10 percentage point growth), Delaware (7.8) and New Jersey (5.8). However, at 18.8 percent of total spending, Connecticut's overall share of spending on public welfare remains modest compared to peer states. Compared to southern states, particularly Florida and Virginia, this share is high.

Most of the state's spending goes into education and public welfare (largely Medicaid). In 2012: 54.5 percent of state and local spending was on these categories, and since 2002, these areas have grown at the expense of other parts of the state and local expenditure portfolio. Notably, spending on local parks and recreation, financial administration, and on health and hospitals have actually declined on a real per capita basis over the decade, while spending on highways has only grown by 8 percent over the period.

Untangling some of the underlying issues in this funding shift would require further analysis. In particular, the shift away from hospitals often reflects the closing of public general or mental health hospitals and the transfer of patients to community settings (in the case of developmental disability or mental health) or to private hospitals. Such shifts can simply reflect a shift in where the funding “hits” the state budget – away from hospitals and towards the vendor payments coming out of the Medicaid system. Assuming that the decline in health and hospitals does simply reflect a shift over to Medicaid, we can deduct the decline in health and hospitals from the change in public welfare spending. The 2002-12 (net) growth in public welfare would be still be significant - 37 percent as compared to 45 percent previously - in real per capita dollars even if all of the change in health and hospitals were attributable to a shift to Medicaid and subsequently the public welfare category.⁸

Table 6: CT Per Capita State and Local Direct General Expenditure Indices
 Indexed with US Average = 100.0
 Selected Fiscal Years: 2002, 2005, 2009, 2012

Function	2002	2005	2009	2012
Education	109.8	111.7	118.2	123.3
Local Schools	120.5	120.6	127.6	139.0
Higher Education	82.5	90.2	91.8	87.7
Other	105.2	103.2	138.5	130.9
Highways	88.3	84.5	82.1	93.8
Public Welfare	102.7	101.5	112.6	116.4
Health and Hospitals	107.6	86.7	87.0	75.7
Police and Fire	107.7	101.6	94.5	105.8
Sewage and Sanitation	105.8	104.6	101.8	112.1
Local Parks and Recreation	83.2	74.8	54.4	66.4
Financial Administration and General Control	136.3	123.5	126.7	124.9
Interest on General Debt	157.8	150.2	146.0	152.6
Other Expenditure	149.5	123.9	117.8	130.6
TOTAL	116.2	108.6	110.6	116.2

Note: U.S. data excludes Washington DC. Sewage and Sanitation includes Sewerage and Solid Waste Management. Other Expenditure includes Employment Security, Veterans Services, Airports, Parking facilities, Sea and inland port facilities, Corrections, Protective inspection and regulation, Natural resources, Housing and community development, Judicial and legal, General public buildings, other governmental administration, and General expenditure. Source: Census of Governments (Expenditures)

Table 7: A Comparison of Connecticut Direct General Expenditures per Capita, and the share of spending on Education and Public Welfare Compared With Selected States, 2002, 2005, 2009, 2012

State	2002			2005			2009			2012		
	Total Expenditures per Capita	% Spent on Education	% Spent on Public Welfare	Total Expenditures per Capita	% Spent on Education	% Spent on Public Welfare	Total Expenditures per Capita	% Spent on Education	% Spent on Public Welfare	Total Expenditures per Capita	% Spent on Education	% Spent on Public Welfare
All States (US)	\$6,023	34.3%	16.2%	\$6,793	34.3%	18.0%	\$8,136	34.1%	17.3%	\$8,242	33.6%	18.8%
CONNECTICUT	\$6,996	32.4%	14.3%	\$7,378	35.3%	16.8%	\$8,998	36.5%	17.6%	\$9,574	35.7%	18.8%
Neighboring												
Delaware	\$6,643	36.2%	13.1%	\$8,098	35.5%	16.4%	\$9,190	35.8%	18.4%	\$9,860	36.9%	20.9%
Massachusetts	\$6,596	31.8%	13.5%	\$7,581	31.1%	20.8%	\$9,129	30.6%	21.8%	\$9,538	31.0%	23.6%
New Hampshire	\$4,998	38.5%	16.2%	\$6,047	36.9%	20.7%	\$7,090	37.4%	20.6%	\$7,597	38.3%	19.1%
New Jersey	\$6,359	37.8%	12.2%	\$7,762	39.6%	16.7%	\$9,325	38.7%	16.3%	\$9,367	37.9%	18.0%
New York	\$8,419	29.6%	20.2%	\$9,623	29.2%	23.2%	\$11,514	31.1%	20.1%	\$12,148	30.1%	21.4%
Rhode Island	\$6,338	32.3%	24.7%	\$7,388	31.9%	26.4%	\$8,465	32.9%	23.7%	\$8,847	33.7%	24.3%
Vermont	\$6,183	38.4%	19.9%	\$7,601	40.3%	23.8%	\$9,112	39.9%	23.9%	\$9,963	38.1%	24.0%
Southern												
Florida	\$5,217	29.6%	14.4%	\$6,351	28.3%	15.6%	\$7,421	28.5%	14.4%	\$6,970	27.8%	17.0%
North Carolina	\$5,349	34.3%	17.2%	\$5,964	35.9%	17.4%	\$6,963	35.5%	16.8%	\$7,205	33.7%	18.0%
Virginia	\$5,389	38.6%	11.9%	\$6,142	37.8%	14.5%	\$7,334	38.7%	15.0%	\$7,669	36.9%	16.1%
Resource Rich												
North Dakota	\$6,090	33.7%	17.1%	\$6,729	36.8%	16.4%	\$8,238	34.9%	15.7%	\$10,305	32.6%	13.3%
Wyoming	\$7,707	33.2%	9.9%	\$9,831	31.1%	11.0%	\$13,379	32.8%	9.8%	\$13,394	32.6%	10.1%
Other												
Ohio	\$5,877	35.2%	18.3%	\$6,802	35.3%	19.6%	\$7,736	35.3%	20.0%	\$7,919	35.6%	21.9%
Pennsylvania	\$5,945	33.1%	19.8%	\$7,016	34.6%	23.4%	\$8,011	34.0%	22.5%	\$8,383	33.0%	23.0%

Note: Direct General Expenditures include expenditures on Current Operations, Capital Outlays, Assistance and Subsidies, Interest on Debt, and Insurance Benefits and Repayments. Expenditures from Intergovernmental grants are excluded, as well as Utility, Liquor Store and Insurance Trust expenditures. Source: Census of Governments: State and Local Government Finances (Revenues); Population

Comparing Connecticut's Revenues

Revenue Mix

Table 8 presents data on the share of each revenue source relative to total state and local general revenue for Connecticut. These shares are compared to the comparison states and the national average. The percentage indicates the share of a particular source of revenue relative to total general revenue, the index number allows for a comparison of magnitude of dependence relative to the national average (the US average equals 100), and the ranking on the bottom row of the table is a rank of relative dependence on a particular revenue source relative to the 49 other states. Table 9 shows a different snapshot of the same data with per capita revenues from each source, and Connecticut's rank relative to peer states. Both tables tell a similar story and are useful to discuss simultaneously.

The tables show that the state and local governments in Connecticut rely heavily on the property tax. The state ranked 3rd in its reliance on this tax, with 26 percent of revenue originating from this source, compared to slightly over 17 percent nationally. Just two other states; New Jersey and New Hampshire, rely on the property tax to a greater extent, at 30.7 and 36.2 percent respectively. While other neighboring states are not necessarily as reliant on the property tax as Connecticut, all neighboring states (with the exception of Delaware) have high property taxes relative to the rest of the nation – all rank in the top ten. That being said, there are some significant differences in this range. Connecticut is 28 percent higher in property taxes per capita than Massachusetts (ranked 9th).

Connecticut also relies heavily on individual income taxation. Only Maryland relies on the income tax to a greater extent, at 22.3 percent of its general revenue. In Connecticut, 20.4 percent of state and local government revenue is derived from the individual income tax, compared to just 11.8 percent nationally. Again, the differences at the top are notable. Connecticut collects 14 percent more income taxes per capita than Massachusetts (ranked 4th) and 63 percent more than New Jersey (ranked 9th).

As the wealthiest state in the union, Connecticut receives a relatively small amount of its state and local general revenue in intergovernmental transfers from the federal government. Connecticut's state and local governments rely on federal aid for just 17.7 percent of total general revenues, compared to a national average of 22.5 percent. Federal aid forms a smaller share of total revenues in just two other states: New Jersey (17.2 percent) and Virginia (17.6 percent). That being said, New York, also one of the wealthiest states as measured by income per capita, is one of the top states in terms of federal aid per capita. Vermont, Rhode Island, and Massachusetts also are significant beneficiaries of federal funding according to this measure.

Another notable finding is Connecticut's relatively limited reliance on user fees and other charges - just 11.3 percent of total state and local general revenue, versus 22.1 percent nationally. This is particularly interesting in light of a three-decade long trend between the 1970's and 2000's, in which local governments have increasingly come to rely on

Table 8: Percentage Distribution of State and Local General Revenue by Source
 Indexed with US Average = 100
 Compared With Selected States, Fiscal Year: 2012

State	Federal Aid		Property Taxes		General Sales Tax		Selective Sales Tax		Individual Income Taxes		Corporate Income Taxes		Other Taxes		Interest Earnings		Charges and Miscellaneous General Revenue		Motor Vehicle License	
	%	Index	%	Index	%	Index	%	Index	%	Index	%	Index	%	Index	%	Index	%	Index	%	Index
All States (US)	22.5%	100.0	17.2%	100.0	12.1%	100.0	6.2%	100.0	11.8%	100.0	1.9%	100.0	3.3%	100.0	2.0%	100.0	22.1%	100.0	0.9%	100.0
CONNECTICUT	17.7%	78.8	26.1%	152.0	10.5%	86.5	8.1%	129.6	20.4%	172.6	1.7%	92.3	1.7%	53.6	1.8%	93.3	11.3%	51.2	0.6%	61.7
Neighboring																				
Delaware	21.5%	95.5	7.9%	46.1	0.0%	0.0	5.7%	92.3	14.2%	120.0	3.0%	161.1	16.3%	497.7	1.9%	97.9	28.9%	130.6	0.6%	60.1
Massachusetts	22.6%	100.6	21.3%	123.8	7.9%	65.2	4.0%	63.5	18.6%	157.3	3.1%	165.1	2.2%	68.3	3.0%	151.3	16.8%	75.8	0.6%	62.4
New Hampshire	19.6%	87.1	36.2%	210.9	0.0%	0.0	9.3%	149.3	0.9%	7.3	5.5%	293.2	3.1%	93.4	4.5%	228.5	20.0%	90.3	1.0%	106.4
New Jersey	17.2%	76.3	30.7%	178.8	9.6%	79.3	4.8%	77.6	13.2%	111.6	2.3%	121.2	2.5%	77.4	1.6%	79.8	17.4%	78.8	0.7%	76.5
New York	21.7%	96.5	18.7%	108.8	9.8%	80.8	5.2%	83.1	18.6%	157.6	4.1%	218.9	2.5%	77.8	2.0%	102.4	16.7%	75.6	0.6%	65.5
Rhode Island	25.3%	112.6	23.8%	138.6	8.5%	70.5	6.7%	107.7	11.0%	92.7	1.2%	66.2	1.2%	36.7	3.8%	192.5	17.9%	80.8	0.6%	61.8
Vermont	31.5%	140.0	21.8%	126.9	5.6%	45.8	10.0%	161.2	9.5%	79.9	1.5%	80.9	1.4%	44.2	2.0%	103.0	15.7%	70.9	1.0%	108.3
Southern																				
Florida	20.4%	90.8	18.4%	107.4	15.9%	131.4	8.6%	138.5	0.0%	0.0	1.5%	79.6	3.0%	91.4	1.6%	83.9	29.5%	133.3	1.0%	104.2
North Carolina	24.1%	107.3	12.4%	72.1	10.9%	89.8	5.9%	94.9	14.5%	122.2	1.7%	90.0	1.8%	53.9	1.2%	63.7	26.7%	120.6	0.9%	93.0
Virginia	17.6%	78.1	18.5%	107.7	7.4%	61.3	6.1%	98.5	16.7%	140.8	1.4%	72.5	3.1%	93.4	2.5%	126.0	25.9%	117.0	1.0%	103.5
Resource Rich																				
North Dakota	19.0%	84.3	7.6%	44.3	12.3%	101.7	4.7%	76.2	4.2%	35.1	2.1%	109.8	31.8%	972.3	2.3%	116.9	15.1%	68.1	1.0%	108.7
Wyoming	26.6%	118.2	15.0%	87.4	13.7%	112.8	1.8%	29.6	0.0%	0.0	0.0%	0.0	12.3%	375.4	7.6%	388.3	22.1%	99.9	0.9%	99.9
Other																				
Ohio	25.1%	111.7	14.7%	85.4	10.9%	90.2	5.5%	87.9	14.5%	122.8	0.4%	20.1	3.8%	116.2	1.6%	81.2	22.6%	102.3	0.9%	94.5
Pennsylvania	22.7%	100.8	16.5%	96.1	9.5%	78.3	8.3%	132.9	13.8%	116.9	2.1%	109.8	4.1%	127.0	1.9%	98.4	20.3%	91.8	0.8%	86.3
Connecticut Rank	48		3		30		12		2		18		40		28		50		43	

Note: Charges and Miscellaneous General Revenue do not include Interest Earnings, which are in a separate column. Selective Sales taxes include Motor Fuels, Alcoholic Beverages, Tobacco Products, Public Utilities, and 'Other Selective Sales'.

Source: Census of Governments: State and Local Government Finances (Revenues)

Table 9: Per Capita Distribution of State and Local General Revenue by Source and Ranking of Selected States, Fiscal Year: 2012

State	Federal Aid		Property Taxes		General Sales Tax		Selective Sales Tax		Individual Income Taxes		Corporate Income Taxes		Other Taxes		Interest Earnings		Charges and Miscellaneous General Revenue		Motor Vehicle License	
	Per Capita	Ranking	Per Capita	Ranking	Per Capita	Ranking	Per Capita	Ranking	Per Capita	Ranking	Per Capita	Ranking	Per Capita	Ranking	Per Capita	Ranking	Per Capita	Ranking	Per Capita	Ranking
All States (US)	\$1,862	***	\$1,421	***	\$1,003	***	\$515	***	\$979	***	\$156	***	\$270	***	\$162	***	\$1,830	***	\$78	***
CONNECTICUT	\$1,782	32	\$2,626	2	\$1,054	18	\$811	4	\$2,053	2	\$175	12	\$176	31	\$184	20	\$1,139	50	\$58	35
Neighboring																				
Delaware	\$2,061	18	\$759	45	\$0	47	\$551	18	\$1,361	8	\$292	6	\$1,559	4	\$184	19	\$2,769	3	\$54	39
Massachusetts	\$2,187	15	\$2,055	9	\$764	38	\$382	43	\$1,799	4	\$301	5	\$216	26	\$287	8	\$1,619	33	\$57	36
New Hampshire	\$1,398	48	\$2,583	3	\$0	47	\$663	12	\$62	42	\$395	3	\$218	25	\$319	5	\$1,424	44	\$71	26
New Jersey	\$1,632	40	\$2,920	1	\$914	26	\$459	29	\$1,255	9	\$218	8	\$240	20	\$149	30	\$1,657	31	\$68	28
New York	\$2,826	4	\$2,431	4	\$1,274	12	\$673	10	\$2,427	1	\$538	2	\$331	12	\$261	9	\$2,177	7	\$80	20
Rhode Island	\$2,378	11	\$2,234	6	\$802	34	\$629	14	\$1,029	19	\$117	29	\$113	45	\$354	3	\$1,677	29	\$54	38
Vermont	\$3,184	3	\$2,202	7	\$561	44	\$1,014	1	\$956	23	\$154	17	\$146	38	\$204	14	\$1,585	34	\$103	11
Southern																				
Florida	\$1,411	47	\$1,273	27	\$1,099	16	\$595	15	\$0	44	\$104	32	\$206	29	\$113	39	\$2,035	15	\$68	29
North Carolina	\$1,778	33	\$912	39	\$802	33	\$435	35	\$1,065	17	\$125	25	\$130	40	\$92	44	\$1,964	18	\$64	32
Virginia	\$1,317	49	\$1,385	17	\$557	45	\$459	28	\$1,248	10	\$102	34	\$229	23	\$185	17	\$1,939	21	\$73	24
Resource Rich																				
North Dakota	\$2,820	5	\$1,132	30	\$1,833	4	\$705	7	\$618	37	\$308	4	\$4,723	2	\$341	4	\$2,240	6	\$152	4
Wyoming	\$4,057	2	\$2,290	5	\$2,086	1	\$281	50	\$0	44	\$0	47	\$1,871	3	\$1,161	1	\$3,371	2	\$143	6
Other																				
Ohio	\$2,013	20	\$1,175	29	\$875	29	\$438	33	\$1,163	13	\$30	46	\$304	13	\$128	34	\$1,812	26	\$71	27
Pennsylvania	\$1,838	30	\$1,337	25	\$769	36	\$670	11	\$1,121	14	\$168	14	\$336	11	\$156	26	\$1,645	32	\$66	31

Note: Charges and Miscellaneous General Revenue do not include Interest Earnings, which are in a separate column. Selective Sales taxes include Motor Fuels, Alcoholic Beverages, Tobacco Products, Public Utilities, and Other Selective Sales'.
Source: Census of Governments: State and Local Government Finances (Revenues)

user fees and charges, ultimately replacing the property tax as the premier source of revenue.⁹ For instance, charges and fees are the single largest source of revenue in the southern comparison states of Florida, North Carolina and Virginia. Connecticut also significantly lags its peer states in the northeast for this revenue category.

Charges and miscellaneous general revenue are a tricky category because they are a grab bag of many different types of revenue sources, some of which are hard to change. Current charges make up 72 percent of the charges and miscellaneous revenue category for Connecticut. Table 10 provides a quick overview of current charges per capita for Connecticut versus the national average. Nationally, tuition, fees and other charges associated with higher education make up 23 percent of the category, hospital charges make up 29 percent, and a generic “other charges” category makes up 28 percent. Connecticut’s spending per capita on tuition and fees is at the national average, and the state ranks 32nd overall. However, its hospital charges, as well as its “other charges” are low compared to other states. As noted earlier with the expenditures category on hospitals, the hospital charges are likely a function of the number of publicly run hospitals in the state relative to other states and so may not be therefore not particularly amenable or desirable to change. However, the “other charges” category may bear further investigation.

Tax Impact

Table 11 and 12 display two distinct measures that allow for a comparison between state tax systems; per capita and per personal income. The former is a commonly used measure that controls for population, the latter for a state’s level of prosperity, and each carries benefits and disadvantages.

The data displayed in table 11 show that Connecticut levies a relatively high amount of taxes on a per capita basis; 39 percent greater than the national average in 2002, and 57 percent higher than that average in 2012. Connecticut’s taxes per capita have consistently ranked among the highest in the nation since 2002, although it has declined somewhat; from 2nd to 4th. The state’s 2012 taxes per capita were surpassed only by New York, Alaska and North Dakota, the latter two of which are energy-producing states, and thus rely heavily on severance taxes (which is exported in large part to residents in other states).

Between 2002 and 2012, per capita tax collection increased by 59 percent in nominal terms, and by 28.6 percent when adjusted for inflation, compared to 40.5 percent nominal and 13.6 percent inflation-adjusted growth nationally. Connecticut’s state and local per capita tax burden is heavier than almost all other northeastern peer states, with the exception of New York, where the tax burden was 11.5 percent higher in 2012. Connecticut’s tax burden has also grown faster than its peer states, with the exceptions of Vermont and New York. In contrast, growth in tax collections per capita has been much more gradual in other areas of the country, like the south and the Midwestern states. Additionally, resource rich states have experienced very strong growth in their tax collections as a result of increased oil and gas production. If these are left out of the

Table 10. Connecticut State and Local Charges Compared with the National Average

	United States	Share	Per Capita	Connecticut	Share	Per Capita	Rank	Above/Below National Average
Current charges	\$426,127,960		\$1,357	\$2,931,703				
Institutions of higher education	\$99,135,188	23%	\$316	\$1,125,942	38%	\$314	32	-1%
School lunch sales (gross)	\$6,308,120	1%	\$20	\$117,724	4%	\$33	6	63%
Hospitals	\$123,389,520	29%	\$393	\$315,758	11%	\$88	43	-78%
Highways	\$13,285,811	3%	\$42	\$1,883	0%	\$1	49	-99%
Sewerage	\$47,013,334	11%	\$150	\$377,451	13%	\$105	38	-30%
Solid waste management	\$16,584,206	4%	\$53	\$242,735	8%	\$68	13	28%
Other charges*	\$120,411,781	28%	\$384	\$750,210	26%	\$209	N/A	-46%

*This is a composite, but a large portion of this is generic "other charges," which make up about 15 percent of the national total. CT ranks 46th in reliance on these other charges.

national growth average, the differential between Connecticut's tax burden growth and the national average would be even more significant.

Table 12 displays Connecticut's tax revenues as a percentage of the state's personal income. Since this measure accounts for the state's high personal income level, it shows the state and local tax impact in a different light. Between 2002 and 2012, Connecticut increased its taxes as a share of personal income by 1.4 percentage points – an amount only matched by New York over this period. However, since other areas of the country, particularly in the south and the rust belt reduced the taxes as a share of personal income, Connecticut moved up in rank on this metric from 13 in 2002 (see Appendix) to 8 in 2012. Again, resource rich states warp the national average. Sharp growth in oil and gas production in recent years has led to strong revenue growth for those states, and thus large increases in their taxes as a share of personal income.

Table 11: Per Capita State and Local Tax Revenue
 Indexed with US Average = 100
 Compared With Selected States, Fiscal Years: 2002, 2005, 2009, 2012

State	Collections in \$m in 2012		2002		2005		2009		2012		Change 2002-2012	2012 Rank Per Capita
	\$	\$ per Capita	\$	Index	\$	Index	\$	Index	\$	Index	***	***
All States (US)	\$30,207											
CONNECTICUT	\$24,963	\$4,373	139.0		\$5,388	145.0	\$5,977	143.0	\$6,953	157.2	59.0%	4
Neighboring												
Delaware	\$4,196	\$3,333	105.9		\$3,878	104.3	\$4,055	97.0	\$4,575	103.5	37.3%	17
Massachusetts	\$37,042	\$3,724	118.3		\$4,494	120.9	\$4,971	118.9	\$5,573	126.0	49.7%	7
New Hampshire	\$5,271	\$2,836	90.1		\$3,318	89.3	\$3,825	91.5	\$3,991	90.2	40.7%	26
New Jersey	\$53,851	\$4,049	128.7		\$5,071	136.4	\$5,884	140.8	\$6,075	137.4	50.0%	6
New York	\$151,733	\$4,644	147.6		\$5,848	157.3	\$7,075	169.3	\$7,753	175.3	66.9%	3
Rhode Island	\$5,229	\$3,398	108.0		\$4,213	113.3	\$4,539	108.6	\$4,978	112.6	46.5%	13
Vermont	\$3,215	\$3,193	101.5		\$4,145	111.5	\$4,715	112.8	\$5,136	116.2	60.9%	11
Southern												
Florida	\$64,614	\$2,689	85.5		\$3,352	90.2	\$3,664	87.7	\$3,345	75.6	24.4%	44
North Carolina	\$34,451	\$2,711	86.2		\$3,137	84.4	\$3,387	81.0	\$3,533	79.9	30.3%	36
Virginia	\$33,177	\$3,037	96.5		\$3,650	98.2	\$3,965	94.9	\$4,053	91.7	33.4%	25
Resource Rich												
North Dakota	\$6,627	\$2,709	86.1		\$3,283	88.3	\$4,998	119.6	\$9,472	214.2	249.7%	2
Wyoming	\$3,846	\$3,637	115.6		\$5,146	138.4	\$7,268	173.9	\$6,672	150.9	83.5%	5
Other												
Ohio	\$46,828	\$3,170	100.7		\$3,639	97.9	\$3,827	91.6	\$4,056	91.7	28.0%	24
Pennsylvania	\$57,034	\$3,051	97.0		\$3,696	99.4	\$4,124	98.7	\$4,469	101.1	46.4%	18
Connecticut Rank			2		2		4		4		****	

Source: Census of Governments (Expenditures); Population

Table 12: CT State and Local Tax Revenue as a
Percent of Personal Income and Indexed with US Average = 100
Compared With Selected States, 2002, 2005, 2009, 2012

State	Collections in \$m in 2012		2002		2005		2009		2012		2012 Rank
			% of PI	Index	% of PI	Index	% of PI	Index	% of PI	Index	
All States (US)	\$1,388,155		% of PI	Index	% of PI	Index	% of PI	Index	% of PI	Index	***
CONNECTICUT	\$29,713		10.1%	102.3	11.0%	106.5	11.1%	104.7	11.5%	115.3	8
Neighboring											
Delaware	\$6,904		9.5%	96.5	10.1%	97.7	9.9%	93.5	10.4%	103.8	15
Massachusetts	\$49,710		9.4%	94.8	10.1%	97.3	9.9%	93.1	9.8%	98.2	23
New Hampshire	\$7,574		8.0%	80.9	8.4%	81.5	8.7%	82.3	8.0%	79.6	48
New Jersey	\$69,862		10.0%	101.0	11.3%	109.4	11.7%	110.3	11.1%	110.5	10
New York	\$199,440		12.8%	129.8	14.1%	135.8	14.8%	139.0	14.3%	143.2	3
Rhode Island	\$7,362		10.4%	105.1	11.5%	111.3	11.0%	103.5	10.8%	107.6	14
Vermont	\$4,335		10.5%	105.6	12.0%	115.9	11.9%	112.3	11.6%	115.5	7
Southern											
Florida	\$106,123		8.7%	87.5	9.2%	89.3	9.8%	92.4	8.1%	81.4	47
North Carolina	\$54,498		9.5%	96.1	9.7%	93.8	9.7%	91.3	9.2%	91.6	35
Virginia	\$50,562		8.8%	89.4	9.2%	88.5	9.0%	84.8	8.3%	83.1	45
Resource Rich											
North Dakota	\$8,432		10.0%	100.9	10.4%	100.3	12.5%	117.6	16.8%	167.7	2
Wyoming	\$6,458		11.6%	117.2	13.1%	126.8	16.7%	157.5	12.7%	127.0	4
Other											
Ohio	\$69,216		10.6%	107.2	11.1%	107.3	10.8%	101.5	10.1%	100.7	18
Pennsylvania	\$80,030		9.5%	95.9	10.3%	99.4	10.1%	95.6	9.8%	98.0	24
Connecticut Rank			13		13		12		8		****

Source: Census of Governments (Expenditures); Bureau of Economic Analysis (Personal Income)

Part II: Tax and Economic Climate Indices

The next section reviews a series of popularly reported fiscal and economic capacity indices, including:

- Total State and Local Business Taxes: Ernst & Young/COST Index
- State Business Tax Climate Index: Tax Foundation
- Tax Inequality Index: Institute on Taxation and Economic Policy (ITEP)
- Small Business Policy Index (2012-2015)
- State Competitiveness Index: Beacon Hill Institute

Caveats and Considerations

With the exception of the ITEP tax inequality measure, these indices are for the most part implicitly or explicitly intended to inform policy-makers about a state's competitiveness in attracting or growing businesses or jobs. Before venturing into a discussion of these indices an important note of caution should be made. Despite the time and effort invested in developing many tax and economic competitiveness indices, to date no empirical research has found that any of these indices actually predict economic growth (Anderson 2012). However, they may be of value in so far as they illuminate different elements of a state's tax structure and economy.

Total State and Local Business Taxes: EY/COST Index

The Council on State Taxation (COST) and Ernst and Young LLP (EY) jointly produce an annual report on the state and local business tax climate, which focuses on estimates of the state and local taxes that businesses pay each fiscal year. This report compares states on business tax composition, business tax revenue generation, business's taxation relative to public sector benefits provided, and the total effective tax rate for businesses across the states.¹⁰

What is Included as a Business Tax?

The EY/COST report defines business taxes as including: business or commercial property taxes, general sales taxes on business inputs, corporate and individual income taxes on business income, unemployment insurance, excise taxes including public utilities and insurance premium taxes, business and corporate licenses, severance taxes, and a collection of other smaller taxes including gift and estate taxes.

Business property taxation is estimated based on state and county data, and includes taxation of residential rental property, and state-level taxation of intangible property. Business sales tax collections include general sales tax, motor fuel taxes, and some types of excise and gross receipts taxes. EY/COST computes the impact of the general sales tax on businesses using a 50-state model that estimates total taxable business input, business investment, and personal consumption purchases. Individual income taxes on business income, namely income of pass-through entities is estimated using IRS statistics of income data and is distributed across states using BEA data on proprietorship income.

Business license taxes include business and motor vehicle license taxes - the latter of which was only distributed to businesses if it includes a fee by weight, as well as motor carrier and other truck fees.¹¹

How Does Connecticut Compare?

Total Effective Business Tax Rate

The EY/COST study has a number of metrics that are worth considering. Perhaps the most widely reported is the ‘Total Effective Business Tax Rate’ (TEBTR) measure, which is the ratio of each state’s state and local business taxes to its private sector Gross State Product (GSP). Much as with the personal income measures, Connecticut has typically ranked in the bottom 10 states for this measure of business tax burden. In the FY2013 TEBTR index, Connecticut ranked 49th lowest out of 50 states plus the District of Columbia, similar to North Carolina, and higher only than Oregon, which has no sales tax (Phillips et al. 2014).

According to the EY/COST calculations in FY2013, nationally, property taxes made up 36 percent of total state and local business taxes, by far the largest business contributor to overall state and local tax revenues. Sales taxes made up 21 percent of business tax contributions, while corporate income and individual income taxes, only made up around 13.4 percent (8 percent corporate, and 5.4 percent individual income) of overall state and local business tax payments.¹²

The analysis in Part I of this report found that Connecticut had some of the highest property taxes and income taxes per capita and as a percentage of personal income. One would therefore expect the state to rank poorly in the EY/COST index, since property taxes make up such a significant part of business taxes. However, the EY/COST analysis suggests that individuals, rather than businesses, are responsible for the majority of property tax revenues in Connecticut, and this significantly influences Connecticut’s overall ranking. Of the total business tax contributions, Connecticut collects just 30.3 percent from business property taxes, ranking 36th nationally in dependence.

Further, according to the EY/COST measurements, just 28.9 percent of total state and local tax revenue in Connecticut is raised from business taxation, the lowest share out of all states, and significantly below the 45 percent national average. Most notable is the business share of local taxes in Connecticut at 25 percent, the lowest share in the nation (the national average is 51.4 percent). However, the business share of state taxes is also one of the lowest in the nation at 31 percent, well below the national average of 41 percent (only Oregon and Virginia were lower in FY2013). The state also appears to benefit from its relatively limited reliance on general sales taxes, as well as on “other taxes.”¹³

Table 13: EY/COST Estimates of Business Taxation Shares

Tax Type	US Average Share	Connecticut Share	Connecticut Rank	US Average Share of Private Sector GDP	Connecticut Share of Private Sector GDP	Connecticut Rank
Property Tax on Business Property	36.1%	30.3%	36	1.7%	1.0%	46
General Sales Taxes on Business Inputs	20.9%	18.4%	31	1.0%	0.6%	43
Corporate Income Tax	8.0%	7.9%	22	0.4%	0.3%	34
Unemployment Insurance	7.6%	11.8%	8	0.4%	0.4%	20
Excise Taxes, Public Utility and Ins. Premium	12.3%	17.1%	7	0.6%	0.6%	19
Individual Income Tax on Business Income	5.4%	11.8%	1	0.3%	0.4%	7
All Other	9.8%	4.0%	47	0.5%	0.1%	49
Total	100.0%	100.0%	***	4.7%	3.4%	***

Note: Totals might not add up to 100 due to rounding. Rank out of 51.

Sources: Table 1. Total state and local business taxes, FY2013 (\$billions) (Phillips, 2014 p. 662)

Business Tax Revenue Growth

In FY2013, many states saw significant increases in business property tax revenues, as well as increases in business taxes on individual income. Connecticut, however, only experienced very modest growth. Average state and local business tax revenue growth was 4.3 percent while Connecticut's only grew 1.1 percent, one of the lowest growth rates in the nation. The preceding analysis suggests that some of this may be attributable to Connecticut's tax mix, which is not strongly reliant on business tax revenues.¹⁴

Business Tax to Benefit Ratio

Another highlight of the EY/COST analysis is the business tax-to-benefit ratio. This measure attempts to capture the degree to which companies benefit from public expenditures which would offset some of the business tax burdens. Arguably, this presents a more accurate picture of state business tax burdens, as a company in a certain state might well face a lower direct tax amount, but could be receiving significantly less in public benefits, making a competitor in a neighboring higher business tax state better off. Using a methodology developed by the Federal Reserve Bank of Chicago, the report assigns percentages to spending categories to indicate to what extent they benefit businesses relative to households. For instance, fire protection, police, and corrections are split 50-50 between both groups.

The report goes into some detail with respect to education, since it represents a large share of public expenditures. Because the exact extent to which education spending benefits business is unknown, the report provides a range of three estimates: zero percent education spending benefit to business, 25 percent, and 50 percent. These allocations in turn produces three separate tax-benefit ratios. The report additionally estimates net government spending, which subtracts non-tax revenue. Non-tax revenue includes federal funding and user charges, and accounts for 60 percent of total government expenditures on average. The final index indicates for each state the number of dollars businesses pay in taxes for each dollar they receive in public services. The lower the ratio, the more attractive the business tax burden.

Connecticut's business tax-benefit ratio, assuming a 50 percent split in education benefits between households and businesses, is comparably low. For every dollar of public services Connecticut businesses receive, they are taxed just \$0.80, versus a national average of \$1.20. Connecticut and Maryland have one of the most favorable ratios for business among the states. When education is assumed to hold no benefits for businesses, Connecticut ranks 6th (again one of the most favorable business tax-benefit ratios) with businesses paying \$2.70 dollars in taxes for every dollar in public benefits they receive, versus a national average of \$3.30.¹⁵

Considerations

The EY/COST metrics have some important caveats. First, in some places the metrics themselves are rough estimates, with the expenditure measures appearing to be particularly problematic. For instance, the benefits of some expenditure types to

businesses are simply split 50-50. While most indices rely on similar back of the envelope approximations, it is worth noting that these are not particularly precise.

Additionally, the metrics capture only the legal responsibility for taxation, as opposed to the actual economic actor who pays the tax (tax incidence). Most economists would agree that economic tax incidence is likely quite different from legal responsibility. EY/COST analysts themselves note that this assumption significantly affects states that are heavily dependent on severance taxes. States such as Alaska and North Dakota have very high TEBTR's, 12 and 9.9 percent respectively; yet, the burden of these taxes is not entirely born by the businesses in the state. Quite possibly a significant portion is passed on to consumers in other states, or even other countries.¹⁶ The issue of incidence is important for other reasons. The indices try to distinguish between taxes legally born by businesses and those born by households, but it is not entirely clear in reality which economic actor truly bears the costs of a tax. For instance, individual income taxes, although legally the responsibility of an individual, may affect the cost of labor, which in turn may affect a company's bottom line.

The EY/COST measures also do not measure the marginal tax rate a company faces when making decisions on new investments in a particular state. The TBETR doesn't assess whether the burden of taxation falls disproportionately on capital- or labor-intensive industries, which may have distortionary economic effects.¹⁷ Another critique, offered by the Connecticut Business and Industry Association, is that the report does not take into account non-tax expenses that reflect costs to business, such as high costs for labor, energy, and transportation.¹⁸ Along these lines, the measures also do not capture many of the user fees increasingly imposed by state and local governments.

Last, there are a number of distortionary effects from how taxes are actually administered by states that are not reflected in this index. The index only measures aggregate taxes estimated to be attributable to a particular business, and this is then assessed relative to an estimate of the aggregate tax base. However, tax revenues are heavily affected by a host of tax preferences or tax expenditures that may be embedded in a tax code or tax policy, including exemptions, tax credits, and abatements.¹⁹ If widely used, these types of tax benefits can have a significant distortionary effect on the tax system. Such benefits may occur on the expenditure side as well, with some industries heavily benefitting from direct government capital investment, or from investment in other benefits such as job training type activities.

Tax Foundation: State Business Tax Climate Index

The Tax Foundation's State Business Tax Climate Index (SBTCI) is an effort to provide a single relative measure that ranks a state's business tax climate against other states. Where the EY/COST index captures actual revenues collected from businesses, the SBTCI attempts to measure and compare features of a state's tax base and tax rates across five major tax areas: income tax, sales tax, corporate income tax, property tax, and unemployment insurance tax. Unlike the EY/COST index, the SBTCI does not focus on business taxes *per se*, but focuses on the entire tax system. For instance, in constructing

the income tax index, states score points for avoiding a marriage penalty, as well as for avoiding double taxation of LLCs and S Corps revenues.

For the most part, the SBTCI focuses on the potential distortionary effects of a tax system. Distortionary effects occur when a tax system interferes with private choices by firms or households. For example, if capital is heavily taxed, a company might choose a more labor intensive mode of production – in this case a distortion in the allocation (use) of economic resources. Recognizing that all taxes are potentially distortionary, the goal of the SBTCI is to give a high score to tax systems that relies on a broad base and a low tax rate. The SBTCI also penalizes states that have a high number of selective carve outs or tax credits, exemptions and deductions in their tax systems – most notably in their personal and corporate income taxes and in their sales taxes.

A number of tax policies associated with a progressive tax system, such as a highly differentiated set of tax brackets with a high top marginal tax rate in the income tax or carve outs in the sales tax for food, are features that the SBTCI authors believe create a more distortionary tax system. So it is likely that a tax system that incorporates these kinds of elements of progressivity will score poorly on this type of index.

What is included in the index?

The Tax Foundation’s SBTCI builds a series of component indices around each of the five tax types listed above. Each component is measured by developing two sub-indices that capture different features of the tax base and tax rate for each component type. The index is explicitly geared to assess a variety of features that the authors believe lead to a desirable business climate. These features include establishing a broad base and low rate across tax types, avoiding forms of compounding or double taxation (particularly on businesses), as well an assortment of other characteristics that the authors argue penalize businesses.

The SBTCI index weights the different tax components based on interstate variation within the component measure. In the 2015 report, the components of the index and their weights are: the Individual Income Tax (32.1%), the Sales Tax (21.6%), the Corporate Income Tax (20.6%), the Property Tax (14.6%), and the Unemployment Insurance Tax (11.1%). The authors argue that larger variability increases the importance of certain taxes in business location decision-making.²⁰

The effect of this weighting system combined with the emphasis on a “non-distortionary” tax system means that states with high reliance on individual and corporate income taxes and with highly progressive income tax structures are likely to rank low on the SBTCI measures. Another issue is that states lacking a particular tax type, for instance states that do not levy an income tax, receive a “perfect score” on this component. The authors argue that having a zero tax rate is perfectly neutral with respect to the making of economic decisions; however, because of the weighting system, this usually means that a state without a tax type will rank highly on the overall index, particularly if they do not have an income tax, regardless of the pressure put on other parts of their revenue systems.

Income Tax: The individual income tax rate sub-index is constructed by using the top marginal tax rate, the top tax bracket threshold, the number of brackets, width of brackets, income recapture, and the standard deductions and personal exemptions for each state. The base is determined by marriage penalties, capital gains taxation, and several other factors, including whether states have adopted the federal government's definition of income. According to the authors, states that score well on this metric have a single low flat rate, and a base that avoids higher taxation of married couples and recognizes LLCs and S Corp revenues appropriately.

Sales Tax: The sales tax component is determined by the sales tax rate, base, and by excise taxes. The rate is constructed by combining the statewide rate with a weighted average of county and municipal rates. The base is computed by examining whether the sales tax extends to business inputs (negative effect), services (positive), gasoline, and groceries (positive). States that score well have a low combined state and local tax rate, and have a base that is broad, focuses on consumer goods and services, has few exemptions, and carefully excludes business inputs.

Corporate Income Tax: The authors construct the corporate income tax rate sub-index through the top tax rate, the income level of the highest marginal rate, and the number of brackets. The base sub-index measures whether states allow deductions of Net Operating Losses (NOL), the number of years, and caps that apply to carrybacks and carry-forwards, and whether states tax gross receipts. Additionally, it measures whether states use the same base ACRS and MACRS depreciation schedules as the federal government, allow a deduction for depletion, levy an Alternative Minimum Tax, allow a deduction for taxes paid, index brackets for inflation, and have throwback rules. The presence of investment, job, and research and development tax credits lower the corporate tax component scores. As with the income tax, states that score well have a low flat tax that captures the first dollar of taxable income, but accommodates several types of deductions such as depreciation that are intended to smooth the variability of corporate income over time.

Property Tax: The property tax rate is determined by using property tax collections per capita (weighted 40%), property tax collections as a share of personal income (40%), and the capital stock tax rate (20%). The base is measured by whether states have implemented the following: taxes on intangible property, inventory tax, and asset transfer taxes such as estate, inheritance and gift taxes. The SBTCI's treatment of property taxes differs from the EY/COST report, as it does not differentiate between the effective property tax impact on residential property versus that on businesses. States that score well have low property tax revenues per capita and as a percentage of personal income and avoid many of the other types of property taxation such as estate and gift taxes.

Unemployment Insurance Tax: The unemployment insurance tax component consists of a rate, which is constructed with both statutory and effective rates, and a base that includes experience tax formula, solvency taxes, and the option to submit voluntary contributions in exchange for lower rates. States that score well have low minimum and

maximum tax rates and have simple experience formulas for adjusting the charges to businesses. Additionally, these states do not have add-ons or surcharges.

How Does Connecticut Compare?

Not surprisingly, as a state with heavy reliance on the income tax and with a very progressive tax structure, Connecticut scores poorly on the overall index. Connecticut's low performance is also heavily affected by its property tax score. Overall, Connecticut's State Business Tax Climate ranks 42nd out of all states, with a score of 4.47. In general, northeastern states have similar tax structures and Connecticut's scores are quite similar to its neighbors including New Jersey (50th), New York (ranked 49th), Rhode Island (ranked 45th), and Vermont (ranked 46th). In contrast, Massachusetts fares pretty well, ranking 24th, while New Hampshire ranks 7th, and Delaware is 14th.

Looking at the component parts of the index, Connecticut's individual income tax standing has slipped between 2012 and 2015. The state's ranking declined from 31st to 34th, as its score dropped by 0.06 points or 1.3 percent, from 4.62 to 4.56. The state's individual income tax component score fares better than New York, New Jersey, Rhode Island and Vermont, and also better than Virginia, North Dakota and Ohio, but it performs slightly worse than Delaware (ranked 33rd), and is strongly outperformed by Massachusetts (13th) and (obviously) New Hampshire (9th) which has a very limited form of income tax.

In corporate taxation, Connecticut ranked 32nd in fiscal year 2015, with a score of 4.86. Between 2012 and 2015, the state's corporate tax climate worsened slightly, dropping 0.09 points or 1.8 percent, from 4.95, and its rank dropped by one spot. However, Connecticut performs significantly better on this major tax component than neighboring northeastern states, with the exception of New York (ranked 20th in 2015).

Connecticut ranks 31st on the sales tax component. While this rank is higher than the other major tax categories, the Tax Foundation singles out the state as having a sales tax base sub-index that includes "too many business inputs, exclud[es] too many consumer goods and services, and impos[es] excessive rates of excise taxation".²¹

The state ranks 49th in property taxation - only New Jersey ranked lower. That being said, Connecticut's neighboring states, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont all make up the bottom ten in the nation in terms of the property tax.

Last, Connecticut is in the middle of the pack, at 20th in terms of the competitiveness of its unemployment insurance taxes. The state actually performs considerably better than most of its peer states on this component, and has improved substantially from its rank of 29th in 2012.

Table 14. 2015 State Business Tax Climate Index and Components

States	Index Score	Overall Rank	Corporate Tax Score	Corporate Tax Rank	Individual Income Tax Score	Individual Income Tax Rank	Sales Tax Score	Sales Tax Rank	Unemployment Insurance Tax Score	Unemployment Insurance Tax Rank	Property Tax Score	Property Tax Rank
CONNECTICUT	4.47	42	4.86	32	4.56	34	4.66	31	5.21	20	2.89	49
Neighboring												
Delaware	5.53	14	3.1	50	4.61	33	8.96	1	6	2	5.54	13
Massachusetts	5.08	24	4.74	37	6.49	13	4.98	21	3.67	48	3.69	45
New Hampshire	6.01	7	3.89	48	6.97	9	8.93	2	4.08	44	4.02	43
New Jersey	3.43	50	4.48	41	2.57	48	3.45	48	4.8	32	2.76	50
New York	3.62	49	5.31	20	1.88	49	4	40	4.81	31	3.61	46
Rhode Island	4.14	45	4.39	43	4.07	38	4.75	26	3.48	49	3.56	47
Vermont	4.11	46	4.41	42	3.21	44	5.1	16	5.37	17	3.27	48
Southern												
Florida	6.91	5	5.47	14	10	1	5.17	12	5.97	3	5.45	16
North Carolina	5.44	16	5.18	25	6.37	15	4.54	33	5.66	11	4.96	29
Virginia	5.03	27	5.84	6	4.06	39	5.92	6	4.53	37	5.1	26
Resource Rich												
North Dakota	5.08	25	5.33	19	4.18	36	4.99	20	5.45	16	6.56	2
Wyoming	7.58	1	10	1	10	1	5.13	13	4.65	34	4.72	35
Other												
Ohio	4.41	44	5.14	26	2.94	47	4.59	32	5.87	5	5.24	20
Pennsylvania	4.89	34	4.28	46	6.19	17	4.89	24	3.35	50	4.03	42

Considerations

While a detailed evaluation of the methodology for this index is beyond the scope of this report, suffice it to say that the development of these indices is enormously complex and is permeated by a host of judgment calls about which features of a tax system are important, how to measure these features, as well as the relative weights that should be assigned to each part of a tax system.

For instance, some features are simply assigned a one or zero, and are then combined with features of a tax system that are measured on a scale from one to ten. The one and zero variable are then only counted toward 20 percent of a particular sub-index score, while the scalar items are weighted at 80 percent – a relatively arbitrary assignment of weights for each type of variable. Another example: when developing the income tax base sub-index, the marriage penalty and the double taxation of capital income are each weighted at 33 percent, and then all other tax issues associated with the income tax base are weighted at 33 percent. Does a business experience a state’s marriage penalty as one of the most influential components of the individual income tax base when choosing to invest or expand? There is very little empirical evidence to support the claim one way or the other. Even if it were an important consideration, its not clear that 33 percent is the right weight. Such compounding of inexact weights can raise questions of construct validity.

A similar concern is that states without a particular tax type receive a perfect 10 for that tax component, which means they will rank much higher on their final score than other states that have a more balanced tax system.²² The claim is that a zero tax rate creates perfect tax neutrality. However, Fisher points out that while a state without a corporate income tax might score well on this index, if this is replaced by a higher property tax, this hurts “capital intensive but low-profit businesses,”²³ which might have behavioral implications and might actually negatively affect tax neutrality.

The SBTCI leaves out severance taxation, which, in resource rich states, forms a significant share of the business tax burden. Also, as with the EY/COST index, this index doesn’t capture many of the other revenue sources such as user fees that increasingly make up a significant portion of state and local revenue portfolios. Unlike the EY/COST study, the SBTCI doesn’t attempt to account for the benefits that businesses receive through governmental expenditures (nor do the authors make any claim to); however, arguably certain types of expenditure are an important part of business climate.

Finally, even though the index focuses on the carve outs that create economic distortions when considering the income and sales tax, the property tax component is measured more like the EY/COST metric capturing an aggregate effective tax rate - or total tax amounts relative to the base, personal income in this case, as opposed to the various exemptions and special carve outs associated with that tax.²⁴

ITEP: Tax Inequality Index

ITEP's Tax Inequality Index (TII) provides a distributional analysis of state tax systems, as opposed to economic development and improving a state's business climate. Because ITEP focuses on individual income inequality, the analysis only evaluates income, sales and property taxes. While the efficiency of a tax system and its relative progressivity do not have to be mutually exclusive, in practice many of the tax structures and policies associated with a progressive tax system do create economic distortions. As a result, many of the features that would cause a state to score well on SBTCI cause them to score poorly on the ITEP index.

What is in the TII Index?

To develop this index, ITEP uses a microsimulation model and a variety of detailed datasets to assess the impact of income, sales, and property tax structures on households at different income levels in each state. In particular, the analysis focuses on calculating the effective tax rates on family incomes (excluding elderly people) per income quintile and for the top one percent of earners.

The index number is constructed by subtracting the average of several ratios from 1:

- The share of after-tax to pretax income for the wealthiest 1 percent of income earners divided by that same ratio for the poorest 20 percent.
- The share of after-tax to pre-tax income for the wealthiest 1 percent of income earners divided by that same ratio for the middle 60 percent of income earners.
- The share of after-tax to pre-tax income for the wealthiest 20 percent of income earners divided by that same ratio for the poorest 40 percent, half-weighted.

The resulting index number indicates the progressivity of a state's system of taxation. The more positive the number, the greater the progressivity of a state's tax structure; meaning incomes in the various income quintiles become more similar after state and local taxation. Alternatively, the more negative the index number, the more regressive a state's system of taxation; meaning it furthers income inequality.²⁵

Unlike the SBTCI, states with a flat income tax rate generally score poorly on the ITEP index. However, they can have tax credits, such as the earned income tax credit, or other policies that address progressivity without creating an explicitly progressive set of tax brackets. States that rely more heavily on income taxes tend to fare better in the ITEP ranking than those without an income tax or with low reliance on income taxes because income taxes rates tend to set so that those at higher incomes pay a higher tax rate.

The ITEP analysis identifies sales taxes as the most regressive tax, since low-income families spend proportionately more of their income on consumer goods and services. Whereas the SBTCI views a sales tax exemption on food negatively since it makes the tax base smaller and is poorly targeted, ITEP's index has the effect of penalizing such a policy since it makes the sales tax even more regressive.

ITEP finds that the property tax is regressive, albeit not as regressive as the sales tax. The report notes that the fact that businesses pay a substantial share of property taxes, around 40 percent, helps offset some of the regressive nature of the tax. Additionally, homestead exemptions, circuit breakers and other tax forms of property tax relief for low to moderate income families will raise a state's score. Notably, this would create a disadvantage in the EY/COST ranking, since these measures often have the effect of shifting the tax burden to businesses.²⁶

How does Connecticut compare?

Connecticut's tax inequality index number is -5 percent, ranking 26th, so in the middle of the pack of all US states and Washington DC (number 1 being most unequal, number 51 being most equal). For comparison, the highest ranking or most unequal state, Washington, has an index number of -12.6 percent, and the lowest, least unequal state, Delaware, has an inequality index number of -0.5 percent.

Connecticut's tax structure is slightly more effective at equalizing incomes than neighboring Rhode Island (-5.2%, ranked 23rd), Massachusetts (-5.2%, ranked 24th), and New Hampshire (-5.2%, ranked 25th), but less so than New Jersey (-2.9%, ranked 39th), New York (-2.7%, ranked 41st), and Vermont (-1.7%, ranked 46th). Not surprisingly, the state's ranking is affected by the regressivity of its property and sales taxes, and the relative progressivity of its income taxes does not overcome these effects.

State and local taxes make up 10.5 percent of family income for Connecticut's bottom 20 percent income earners, 8.9 percent for the second quintile, 10.7 percent for the middle 20 percent income earners, 10.5 percent for the fourth quintile, 9.2 percent for the next 15 percent of income earners, 7.6 percent for the next four percent, and 5.3 percent for the top one percent of income earners.

For those top one percent of earners, Connecticut ranks 29th in their taxable income share, with Wyoming ranking 1st with just 1.2 percent of their incomes going to state and local taxation. Most neighboring/northeastern states impose heavier tax burdens on their top one percent income families, including Rhode Island (6.3%), New Jersey (7.1%), Vermont (7.7%), and New York (8.1%).

The state has a relatively high burden of taxation on its bottom 20 percent of income earners, ranking 32nd, with 10.5 percent of family incomes going to state and local taxes. Compared to neighboring states, Connecticut is surpassed only by New Jersey (10.7%, ranked 35th), and Rhode Island (12.5%, ranked 45th). Other Northeastern states have lower tax burdens on low-income families, including Vermont (8.9%, ranked 15th), New Hampshire (8.3%, ranked 8th), and Delaware (5.5 %, ranked 1st).

Finally, for the middle 60 percent of income earners, the middle-class, Connecticut again has a comparably high tax burden. 10 percent of the state's middle-class family income is taken up by state and local taxes, and Connecticut ranks 40th out of all states and DC. New York is the only other Northeastern state to carry a higher tax burden on the middle-

Table 15: Taxes as a Share of Family Income

	Index Number	Rank	Lowest 20%	Middle 60%	Top 1%	Top 1% Rank	Lowest 20% rank	Middle 60% rank
CONNECTICUT	-5.0%	26	10.5%	10.0%	5.3%	29	32	40
Neighboring								
Delaware	-0.5%	51	5.5%	5.3%	4.8%	21	1	2
Massachusetts	-5.2%	24	10.4%	9.2%	4.9%	24	27	23
New Hampshire	-5.2%	25	8.3%	6.7%	2.6%	7	8	6
New Jersey	-2.9%	39	10.7%	9.1%	7.1%	46	35	21
New York	-2.7%	41	10.4%	11.4%	8.1%	50	27	51
Rhode Island	-5.2%	23	12.5%	9.9%	6.3%	38	45	37
Vermont	-1.7%	46	8.9%	9.8%	7.7%	49	15	34
Southern								
Florida	-9.5%	2	12.9%	8.3%	1.9%	4	48	13
North Carolina	-3.9%	31	9.2%	9.1%	5.3%	29	19	21
Virginia	-3.6%	35	8.9%	8.3%	5.1%	26	15	13
Resource Rich								
North Dakota	-5.7%	20	9.3%	7.4%	3.0%	9	21	7
Wyoming	-6.1%	14	8.2%	5.8%	1.2%	1	7	3
Other								
Ohio	-5.8%	18	11.7%	10.2%	5.5%	32	41	44
Pennsylvania	-7.3%	6	12.0%	10.1%	4.2%	13	43	41

Source: (Davis et al. 2015, p. 133-135)

class (11.4 percent, ranked 51st), although others, such as Massachusetts (9.2%, ranked 23rd), Vermont (9.8%, ranked 34th) and Rhode Island (9.9%, ranked 37th) are similar.

Considerations

One major critique of the inequality index is that it only focuses on *tax* equality, and thus leaves out spending or benefits, a crucial part of redistribution efforts. For instance, income supplements, which are administered through the state budget are not included in this ranking. A state with a relatively ‘unfair’ tax system, such as Washington, might spend a much greater share on its lowest income families, creating a more equal outcome than a state with a ‘fair’ taxation system, but where expenditures mostly flow towards middle and higher incomes.²⁷

Just as the SBTCI relies on arbitrary assumptions, so does the ITEP index. For instance, the “cut points” in the income distribution that denote high versus low incomes are based on a judgment call. Critics point out that while just taking the top versus the bottom quintile still produces a regressive aggregate state and local tax system, the regressivity becomes less pronounced than in the various cut points chosen by ITEP.²⁸

As with the EY/COST index, the metrics only look at the legal responsibility for a tax rather than tax incidence, which may actually make the tax structure look *more* regressive. Further, they do not account for the related issue of “tax exporting” outside of a state’s boundaries, which may reduce the regressivity of the tax structure.²⁹

The report leaves out several taxes, such as severance taxes, business license and gross receipt taxes, which have significant implications for the distributional nature of the tax system in certain states. For instance severance taxes make up the majority of the state and local taxes for Alaska. These taxes are more likely to fall on businesses and are exported outside the state which has implications for the relative tax burden on households.³⁰ Presumably, accounting for high severance taxes would make a state appear more progressive. Along the same lines, the report leaves out user fees and other non-tax sources of revenues, which also have significant distributional implications – typically they are more regressive.

Small Business Tax Index (SBTI)

The small business tax index is annually produced by the Small Business and Entrepreneurship Council and to some degree functions as a much more basic version of the Tax Foundation’s SBTCI. Connecticut has consistently performed poorly on this index, largely because of its top personal and corporate income tax rates.³¹

What is included in the index?

The SBTI is an additive index of tax rates, ranges, and various policies that count as demerits, ranging from 1-5, against a state’s rank. Specifically, the index adds up top personal and corporate income tax rates and then repeats this measure for capital gains for both tax types and dividend interest for personal income. The index then adds in the range of rates (top rate less bottom rate), tallies up any additional special tax rates on LLCs, S-Corps, etc., adds property and sales tax revenues as a proportion of personal

income, and adds unemployment, gas tax, and communication tax rates. States then receive additional demerits for having an inheritance tax (5 points, regardless of the rate or level at which it is imposed), an individual or corporate alternative minimum tax, failure to index the personal income tax rate brackets to inflation, an internet access tax, a remote seller tax, and failure to have legislation that caps tax increases.

How Does Connecticut Compare?

In 2015, Connecticut ranked 41st on this index. By far the majority of the score is accounted for in the repeated addition of the top personal and corporate income tax rates. Connecticut's score was 60.787, and 38 points (63% of the score) are derived from the income and corporate income tax. Other states with a high top individual or corporate income tax rate obviously also rank poorly, including Delaware, New York, New Jersey and Vermont, while states with no income tax tend to rank quite highly.

Considerations

The index purports to capture the costs to small business of doing business in a state. However, notably, the index fails to account for deductions, exemptions or credits, or more generally the breadth of the tax base. As far as a small business is concerned, there may be a significant difference between tax burden (at least the burden associated with the legal liability for the tax) and the index. For instance, in an ironic twist, Kansas, which recently eliminated the income tax on "pass through" revenues for small businesses, is still measured based on its 4.6 percent top income tax rate.

As noted above, by far the majority of the score is derived from the repeated addition of the top personal and corporate income tax rates. So, 60 percent of Connecticut's score is related to the top personal and corporate income tax rates. In contrast, these taxes are weighted much lower by both EY/COST and the SBTCI. Meanwhile, property taxes, measured as property tax revenues as a proportion of personal income, only account for a minor part of the score (around 7 percent). This differs sharply from the EY/COST estimates that suggest property taxes make up over one third of the total taxes paid by business.

In sum, it's not entirely clear what aspects of a tax system this metric is intended to capture, but it neither captures the efficiency of the tax system with the same level of rigor as the Tax Foundation index, nor does it capture the direct impact of taxes on businesses burden as effectively as the EY/COST index.

Beacon Hill Institute: State Competitiveness Index

The Beacon Hill Institute State Competitiveness Index (SCI) measures substantially more than tax competitiveness. The SCI captures index different dimensions of economic competitiveness, only one of which encompasses government and fiscal policy. The remaining dimensions are: security (largely crime rates), infrastructure, human resources, technology, business incubation, openness, and environmental policy.

The dimensions are based on the World Economic Forum's Global Competitiveness Report, which has a similar range of measures that attempt to capture not only business costs, but also human and physical capital and capacity for innovation.³²

What is included in the index?

The index is composed of eight sub-indices with a variety of metrics in each. Each dimension comprises of factors Beacon Hill refers to as "competitive advantages" and "competitive disadvantages," which count positively or negatively towards a state's sub-index score. The following sections summarize some of the major component parts of each sub-index.

Government and fiscal policy

The competitive advantage measures in the Government and Fiscal Policy sub-index include a state's bond rating, budget deficit (as a percentage of the GSP), the average weekly payment to insured unemployed individuals, and the ratio of state and local taxes per capita to per capita income. The measures that lower this sub-index score include the number of full-time government employees per 100 residents, and worker's compensation premium rates.

Security

The security sub-index solely contains disadvantage measures, including a crime and murder index measure per 100,000 inhabitants, the percentage change in crime index in the preceding two years, and the Better Government Association Integrity Index.

Infrastructure

This sub-index includes mobile phones and high speed lines per 1,000 residents, air passengers per capita, average travel times to work, electricity prices and the average rent of a 2 bedroom apartment.

Human Resources

This sub-index includes a variety of education, labor participation and health metrics, including high school graduation rates, college enrollment and students at or above proficiency in mathematics in Grade 4, unemployment rates, as well as population without health insurance, doctors per 100,000 inhabitants, and infant mortality.

Technology

This sub-index includes measures of support for science investment as well as overall employment in the industry. Some key indicators are funding for R&D and funding from the National Institutes of Health (NIH), the number of patents, science and engineering graduates and degrees awarded, as well as individuals employed in science, engineering and high tech industry as a percentage of overall labor force.

Business Incubation

This sub-index includes both capital available for investment in business start-ups, labor costs, including minimum wage (and union involvement) and labor costs adjusted for educational attainment, as well as actual business creation data.

Openness

This sub-index includes exports per capita, employment in majority owned US affiliates in the state, and the percentage of the population born abroad.

Environmental Policy

The sub-index includes a variety of measures of pollution and environmental contamination, including air quality and greenhouse gas emissions.

How Does Connecticut Compare?

Connecticut was 40th lowest (a poor score) on this index in 2014. However, in other years, going back to at least 2006, the state was in the middle of the pack, scoring 24th in 2006 and 27th in 2013. Connecticut has very bifurcated rankings on the sub-indices. The state scores in the top ten states in terms of openness (5th), technology (8th) and security (6th), and in the upper ranks in human resources (15th).

The state then scores very poorly on government and fiscal policy (47th), business incubation capacity (50th), infrastructure (41st), and environmental policy (42nd). Oddly, the recent overall shift from 24th to 40th appears to have been partly driven by a 13-point change in the state's infrastructure index ranking, which in turn appears to be driven by a drop in "mobile phones per person" from 1st in the nation to 15th.

Considerations

As with the other indices and measures, this much more ambitious index of the overall business climate is subject to some of the same cautions, as well as some additional ones. First, the choice of the different measures and their relative weights are largely grounded in judgment calls. Among the many questions one might raise are whether the components of each sub-index are actually appropriate "proxies" for the concept they are trying to measure. Many of the sub-indices combine some disparate concepts, while others may not be fully specified. Ideally, indices are tested for predictive validity of some sort – does the security measure actually correlate with business perceptions of security that might hinder business startups or growth?

Second, the index includes the actual outcomes that the index intends to predict. For instance, the index includes a measure of business startups, presumably an *outcome* that a good business climate would produce. Along the same lines, the authors show a correlation between their index and growth in personal income, claiming that policymakers can improve their index score and thereby improve personal income. However, causation is not always clear – for example, a high number of mobile phones per capita and a high number of physicians per capita is likely associated with a high personal income state. Does the index measure the environment that causes personal income to increase, or does it simply measure quality of life indicators associated with having a high personal income in the first place?

Conclusion

This analysis is intended to provide some insight into the contours of Connecticut's revenue and expenditure portfolio as compared to neighboring states as well as other states in the country. By using these comparisons, state policy-makers may gain some insight into areas that may be fruitful for further investigation.

Importantly, both the simple indices in part one and the more sophisticated indices in the second part show that the state cannot be all things to all people but has to balance between competing objectives. A state tax system that taxes a higher percentage of the income of wealthy people may not be the most efficient tax system. High taxes may be used to fund public services important for business development - such as education and physical infrastructure. Researchers have found that both taxes and expenditures have an effect on a state's economic development and growth.

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Notes

¹ Drenkard and Henschman (2015). The 2015 index reflects taxes as of July 2014.

² Other comparable wealth metrics include GDP and total taxable resources. While assessing expenditures and revenues using these different metrics in the denominator yields some differences (in particular natural resource rich states tend to rank higher in total taxable resources and GDP relative to personal income), in general, the metrics are all highly correlated. GDP and personal income yield a correlation coefficient of .85 while personal income and total taxable resources are correlated at .91. Switching out these metrics does not significantly change Connecticut's story since the state is ranked 1st in personal income and 3rd in total taxable resources (not including the District of Columbia).

³ Davis, et al (2015)

⁴ The national average reflects all national revenues in a particular category divided by population, rather than the average of the states. As such it reflects the experience of the average citizen as opposed to the average state. Using the average of the states can be skewed by a number of small but high revenue/high expenditure states such as Alaska and Wyoming, particularly in 2012 when energy prices were relatively high. The national average obviously biases the sample towards the large states. While using different types of averages does change the relative distance of CT's average revenues and expenditures from the average, it does not materially change the main observations of this report.

⁵ The Volker Alliance (2015), and Bifulco et al. (2012).

⁶ Munnell and Aubry (2015), Truth in Accounting (2014), Moody's Investors Service (2015), and The Pew Charitable Trusts (2014).

⁷ Garfield et al. (2012, and Holahan and Yemane (2013).

⁸ In this calculation, I simply assume the entire decline in health and hospitals is due to a shift towards Medicaid funding of these services, and so I add back the decline to health and hospital and deduct a comparable amount from the change in public welfare.

⁹ Dollery, Garcea, and LeSage (2008)

¹⁰ Effective tax rates in these contexts typically refer to total taxes paid over the total tax base as means of side-stepping the impact of deductions, exemptions and credits associated with a particular tax. Typically, when economists use this term, they also deduct the portion of a tax that a particular economic unit (a person or firm) is able to avoid or pass on to another economic actor. This type of calculation is not included in these analyses, which focus on the legal liability for a tax.

¹¹ Cline, Neubig, and Phillips (2006).

¹² Phillips et al. (2014).

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Anderson (2012).

¹⁷ Phillips et al. (2014).

¹⁸ Pazniokas and Phaneuf (2015).

¹⁹ Anderson (2012).

²⁰ Drenkard and Henschman (2015).

²¹ Ibid, 29.

²² Anderson (2012), and Fisher (2005).

²³ Fisher (2005), p. 18.

²⁴ Anderson (2012).

²⁵ Davis et al. (2015), 133-135.

²⁶ Conceptually the SBTCI would also find these problematic since they erode the tax base; however, because of data collection issues, these are not included in the SBTCI.

²⁷ Malm and Pomerleu (2015).

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

³¹ Note that this index replaced the Small Business Survival Index, which included a broader set of economic and demographic criteria.

³² Beacon Hill Institute for Public Policy Research (2014)