Taking a Bite Out of Jobs:

The Economic Effects of a Sales Tax Increase on Restaurant Meals

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Predictably, Connecticut's budget languishes in perpetual deficit. This is because fixed costs like pension payments and healthcare have risen faster than tax revenue can keep up with them.

As a result, lawmakers confront two unpalatable choices – they can either cut costs or raise taxes. Unfortunately, too often over the past decade, lawmakers have chosen to raise taxes, stifling the state's economic growth and making Connecticut uncompetitive in attracting people and jobs.

One tax (among many others) that lawmakers have recently considered increasing is the restaurant tax. In this paper, researchers from The Beacon Hill Institute shows that even a one-percent increase on prepared meals would cost the state over a thousand jobs; a two-percent increase would result in almost 2,000 jobs lost.

As the history of the last seven years demonstrates all too well, there is a cost associated with every tax increase. More tax hikes will only continue to limit Connecticut's economic growth. The only long-term solution to our state's fiscal crisis is economic growth -- so tax hikes should definitely be off the table.

Introduction

The State of Connecticut has struggled to balance its budget over the last several years. In 2011, the state imposed $1.5 billion in tax increases to close a multi-billion dollar budget deficit. The state increased the income tax, estate tax, and sales tax. It also expanded the sales tax base to include services, such as yoga lessons and plastic surgery.[1]

Despite these tax increases, the state faced another multi-billion-dollar budget deficit in 2015. This time state leaders moved its corporate income tax to a unitary system, which hurt some of its largest employers. Middle and low-income households did not escape unharmed, as the state also reduced the residential property tax credit and increased the cigarette tax.[2]

The series of tax increases began to hurt the state's economic competitiveness. Connecticut ranked 43rd out of the 50 states in the 2017 BHI Competitiveness Index. It scored 47th for fiscal policy.[3] Its fiscal policy ranking has suffered from a pattern of increasing taxes to close a budget shortfall, and then, when the expected revenues don't materialize, increasing taxes still further, with further subsequent budget shortfalls.

The tax increases have been a factor in the state's slow economic growth rate over the current expansion and have led high-profile firms, such as General Electric, to flee the state.[4] The state's high-income households are also fleeing, with over 2,000 households with incomes over $200,000 moving to other states between 2015 and 2016.[5] Connecticut's political leaders fail to see the connection between tax policy, economic growth and tax revenues. They need better tools to measure these impacts.

Recently Governor Malloy and others have proposed increasing the sales tax on prepared meals from 6.35% to 7%, while others have proposed allowing local governments to impose their own meals tax.[6] Connecticut is not alone, as many state and local governments increasingly turn to a meals tax in order to raise revenue. Twenty states and the District of Columbia authorize a tax on prepared food. Maine and New Hampshire levy meals taxes only at the state level, while Vermont levies both state and local meals taxes.[7]

Governments use meals taxes to raise additional revenue outside traditional sources of tax collections, such as property and sales taxes. Similar to taxes on hotel rooms and rental cars, a portion of meal taxes is levied on visitors from other states, and thus non-voters. This makes meals taxes particularly attractive in tourist destinations and other locations where a substantial portion of the tax burden can be offloaded to out-of-town visitors.

Analysis of Increasing the Meals Tax

The Beacon Hill Institute (BHI) applied its STAMP® (State Tax Analysis Modeling Program) to estimate the effects of increasing the sales tax on meals on the Connecticut economy. We simulated meals tax increases of one-percentage point and two-percentage points. We assumed the tax changes would take place in 2018 and reported the results for the first year and for five years out to 2023. Table 1 displays the results for a one-percentage point increase in the tax on meals.

The tax increase would lead to the elimination of 1,080 private-sector jobs in 2018 and 1,117 in 2023. Real disposable income in Connecticut would decrease by $91 million in 2018, and by $102 million in 2023. Investment would decrease by $13 million in 2018, and by $15 million in 2023.

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[1] Peter Applebome, "Bucking Trend, Connecticut Budget Deal Raises Taxes, Gasoline Excepted," The New York Times, N.Y. / Region, (May 2, 2011), http://www.nytimes.com/2011/05/03/nyregion/tax-increases-stand-out-in-connecticut-budget-deal.html.

[2] Christopher Keating, "State Budget Finalized; $178M In Proposed Tax Increases Rescinded

[3] The Hartford Currant, (June 30, 2015), http://www.courant.com/politics/hc-budget-deliberations-0701-20150630-story.html.
BHI 16th Annual State Competitiveness Report, 2017,http://www.beaconhill.org/Compete16/2016Competitiveness_report_dgtWebVersion.pdf.

[4] http://www.courant.com/business/hc-biz-connecticut-economy-20171121-story.html.

[5] Marc E. Fitch, "Connecticut lost $2.6 billion in 2015 as high-wealth residents moved out," Yankee Institute for Public Policy, Economy, Taxes, (December 6, 2017), http://wwwyankeeinstitute.org/2017/12/connecticut-lost-2-6-billion-in-2015-as-high-wealth-residents-moved-out/.

[6] Christopher Keating, "Malloy Proposes Sales, Restaurant Tax Increases, Restoring Some Municipal Aid," The Hartford Currant, (September 8, 2017), http://www.courant.com/politics/hc-pol-malloy-budget-compromise-20170908-story.html.

[7] Jared Walczak, "Punching the Meal Ticket: Local Option Meals Taxes in the States," The Tax Foundation: Fiscal Fact, No. 538, (January 2017), https://files.taxfoundation.org/20170126102319/TaxFoundation-FF538.pdf.

Table 1: The Effects of a One-Percentage Point Tax Increase on Meals

Year	2018	2023
Sales Tax on Meals Revenue ($, million)	38.614	38.271
Private Employment (jobs)	(1,080)	(1,117)
Investment ($, million)	(13)	(15)
Disposable Income, real ($, million)	(91)	(102)

Table 2: The Economic Effects of a Two-Percentage Point Tax Increase on Meals

Year	2018	2023
Sales Tax Revenue ($, million)	78.927	78.226
Private Employment (jobs)	(1,993)	(2,075)
Investment ($, million)	(36)	(41)
Disposable Income, real ($, million)	(145)	(167)

The STAMP analysis shows that increasing the tax on meals by one-percentage point would raise $38.614 million in new revenue in the first full year, and $38.271 million in 2023. We project that the revenue increases would drop over time period, which is in line with the Connecticut Consensus Revenue forecast for sales tax revenue collections over the same period.[8]

BHI also analyzed the impact of a two-percentage-point tax increase on meals. Table 2 displays the fiscal and economic effects.

The tax increase would lead to the elimination of 1,993 private-sector jobs in the first full year, and 2,075 in 2023. Real disposable income in Connecticut would decrease by $145 million in 2018, and by $167 million in 2023. Investment would fall by $36 million in 2018, and by $41 million in 2023. The tax increase would raise $78.927 million in new revenue in 2018, and $78.226 million in 2023.

Conclusion

When elected officials discuss tax increases, they tend to overstate the amount of revenue that the proposed tax increases will yield. However, any honest discussion must include an estimate of how the state's economy will respond to tax increases. Tax increases do not exist in a vacuum; consumers, investors, and taxpayers change their behavior in response to higher taxes.

Were Connecticut to raise the sales tax on restaurant meals, the state economy would experience a substantial reduction in private sector jobs, private investment and disposable income.

Like all governments, Connecticut relies on a healthy underlying economy for income. When the state government has suffered budget shortfalls, Connecticut's leaders have sought additional revenue to fill the gap. However, the higher taxes have negative economic impacts such as lower employment, investment, and incomes. The state's subsequent weak economic performance led to additional budget gaps and more tax increases. Connecticut's leaders need to break this downward spiral and hold the line against further tax increases.

Methodology

To identify the economic effects of the meals tax and understand how they operate through a state's economy, BHI utilizes its STAMP (State Tax Analysis Modeling Program) model. STAMP is a five-year dynamic CGE (computable general equilibrium) model that has been programmed to simulate changes in taxes, costs (general and sector-specific) and other economic inputs. As such, it provides a mathematical description of the economic relationships among producers, households, governments and the rest of the world.[9]

A CGE tax model is a computerized method of accounting for the economic effects of tax policy changes. A CGE model is specified in terms of supply

[8] Connecticut Office of Policy and Management, Consensus Revenue, (January 16, 2018), http://www.ct.gov/opm/lib/opm/FINAL_CONSENSUS_JAN16_2018.pdf.

[9] For a clear introduction to CGE tax models, see John B. Shoven and John Whalley, "Applied General-Equilibrium Models of Taxation and International Trade: An Introduction and Survey," Journal of Economic Literature 22 (September 1984): 1008. Shoven and Whalley have also written a useful book on the practice of CGE modeling entitled Applying General Equilibrium (Cambridge: Cambridge University Press, 1992). See also Roberta Piermartini and Robert Teh Demystifying Modelling Methods for Trade Policy (Geneva, Switzerland: World Trade Organization, 2005) http://www.wto.org/english/res_e/booksp_e/discussion_papers10_e.pdf (accessed June 18, 2010).

and demand for each economic variable included in the model, where the quantity supplied or demanded of each variable depends on the price of each variable. Tax policy changes are shown to affect economic activity through their effects on the prices of outputs and of the factors of production (principally, labor and capital) that enter into those outputs.
A CGE model is in "equilibrium," in the sense that supply is assumed to equal demand for the individual markets in the model. For this to be true, prices are allowed to adjust within the model (i.e., they are "endogenous"). For instance, if the demand for labor rises while the supply remains unchanged, then the wage rate must rise to bring the labor market into equilibrium. A CGE model quantifies this effect.

Finally, a CGE model is numerically specified ("computable"), which is to say it incorporates parameters that are believed to be descriptive of the actual relationships between quantities and prices. It produces estimates of changes in quantities (such as employment, the capital stock, gross state product and personal consumption expenditures) that result from changes in prices (such as the price of labor or the cost of capital) that result from changes in tax policy (such as the substitution of an income tax for a sales tax).

BHI used a two-step approach to model the effects of a sales tax increase on meals to the state economy. First, we calculated the sales tax base. Open Connecticut has data for "retail sales" and "total tax due" for the "Accommodation and Food Service" sector of the North American Industry Classification System (NAICS) under code 720 for 2016.[10]

BHI used 2012 U.S. Census Bureau data for total sales for the "Food Services and Drinking Establishment" sector, NAICS code 722 and "Accommodation" sector NAICS code 722 to allocate the "retail sales" and "total tax due" to the "Food Services and Drinking Establishment" sector, or 65.48%.

We calculated the tax rate by dividing the "total tax due" into the "retail sales" for sector 722 to get a rate of 6.07%. We divided 1% and 2% into the 6.07% to calculate the percentage increase in the tax rate of 16.5% and 32.9% respectively. We used these percentage rate increases to simulate a change in the meals tax in STAMP models for the states of Massachusetts, Rhode Island, Maine, and Virginia. We calculated the average percentage change in private employment, real disposable income and investment across all four STAMP simulations.

Second, we obtained a ten-year data set (2006-2016) for Connecticut on income and investment (using payment for dividends, interest, and rent as a proxy) from the Bureau of Economic Analysis and private employment from the Bureau of Labor Statistics. We grew the variables to 2018 and 2025 using the ten-year compound annual growth rates. We applied the average changes to these variables from the STAMP model simulations to each data point for 2018 and 2025.[11]

We use the Connecticut Consensus Revenue forecast of sales and use tax to estimate the revenue to be raised by the tax increase on meals. The Consensus Revenue only forecasts through FY 2022. We use the CAGR for sales and use tax from 2016-2022 to estimate the tax revenue for 2023.[12]

[10] Open Connecticut, http://www.osc.ct.gov/openCT.html.
[11] U.S. Department of Labor, Bureau of Labor Statistics, State and Metro Area Employment, Hours and Earnings, Series SMS09000000500000001, https://www.bls.gov/sae/. U.S. Department of Commerce, Bureau of Economic Analysis, Regional Data, "SA4 Personal Income and Employment by Major Component," https://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=2#reqid=70&step=1&isuri=1.
[12] Connecticut Office of Policy and Management, Consensus Revenue, (January 16, 2018), http://www.ct.gov/opm/lib/opm/FINAL_CONSENSUS_JAN16_2018.pdf.

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