

Fall 2011

## Trends in Maine Revenue

Jamie Brennan

*University of Southern Maine, Muskie School of Public Service*

Follow this and additional works at: [https://digitalcommons.usm.maine.edu/muskie\\_capstones](https://digitalcommons.usm.maine.edu/muskie_capstones)



Part of the [Public Affairs, Public Policy and Public Administration Commons](#)

---

### Recommended Citation

Brennan, Jamie, "Trends in Maine Revenue" (2011). *Muskie School Capstones and Dissertations*. 44.  
[https://digitalcommons.usm.maine.edu/muskie\\_capstones/44](https://digitalcommons.usm.maine.edu/muskie_capstones/44)

This Capstone is brought to you for free and open access by the Student Scholarship at USM Digital Commons. It has been accepted for inclusion in Muskie School Capstones and Dissertations by an authorized administrator of USM Digital Commons. For more information, please contact [jessica.c.hovey@maine.edu](mailto:jessica.c.hovey@maine.edu).

---

# Trends in Maine Revenue

---

Identifying Key Issues  
between 1993 and  
2009

---

Jamie A. Brennan

---

Capstone Project  
Advisor: Dr. Josie LaPlante  
Fall, 2011

---

Introduction:.....	2
Part I: Analysis of Maine’s Revenue System in 2008.....	3
Revenue System Overview: .....	4
Maine Revenue Per Capita Breakdown: .....	7
2008 Tax Structure & Key Sources of Revenue – A Closer Look: .....	8
Diversity and Balance in the Tax System: .....	11
Tax Burden: .....	15
Revenue System Summary: .....	20
Part II: Analysis of Trends.....	21
Comparing 2008 and 2009:.....	21
Per Capita Revenue:.....	21
Tax Balance: .....	25
The Burden of the Revenue System:.....	27
Summary: .....	28
Comparing Wider Trends: .....	29
Per Capita:.....	29
The Traditional "Big Three": .....	31
The Expanded "Big Three": .....	35
Trends in Burden: .....	40
Summary: .....	48
Conclusion: Key Issues.....	49
Bibliography: .....	53

**All data was compiled using an analysis framework provided by Dr. Josephine LaPlante (aka my advisor). I would like to offer a special thank you to Dr. LaPlante for her all her assistance.**

## Introduction:

The State of Maine faces a troubling financial situation. Per capita personal income levels have lagged behind the national average for years.<sup>1</sup> It is no secret that Maine residents have been over burdened by the state's revenue system for some time. Taxes regularly claim a larger portion of individual income than in other states around the nation. Since 1993, tax burden in Maine has ranked among the top ten in the nation in every year but one.<sup>2</sup> Despite the heavy burden of the revenue system on Maine residents, the state faces regular budget shortfalls. Earlier in December 2011, the Maine Department of Health and Human Services announced a shortfall of nearly \$120 million dollars over the rest of fiscal year (FY) 2012 and an expected shortfall of over \$100 million dollars in FY2013.<sup>3</sup>

In her article titled, "Seven Habits of Unsustainable Budget Building: A State Policy Perspective", Dr. Josephine LaPlante argues that revenue / expenditure imbalances, such as the one that the State of Maine currently faces, are symptomatic of fundamental misperceptions in state budgeting. In particular, she contends that state policymakers regularly expect budgets to grow, and that policymakers expect contracting revenues and budgets to quickly return to sustained growth following the end of recessionary periods.<sup>4</sup> Further, Dr. LaPlante argues that states tend to build their baseline budget projections based on revenue trends observed during periods of economic growth, expecting such trends to persist in the long term.<sup>5</sup> Unfortunately, these trends often fail to carry on for extended periods or through economic downturns, creating major structural budget gaps such as the one currently facing the State of Maine.

It is against this backdrop that I examine Maine revenue trends across key years between 1993 and 2009. If the State of Maine can ever hope to build long-term stability into its revenue and expenditure system, state policymakers must understand what is affordable in Maine and

---

<sup>1</sup> <http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=4>. Bureau of Economic Analysis. Data gathered through customizable iTable function. Link above.

<sup>2</sup> <http://www.taxfoundation.org/taxdata/show/458.html>.

<sup>3</sup> Richardson, John. "LePage Calls for Overhaul of Medicaid Benefits." Portland Press Herald. December, 6, 2011.

<sup>4</sup> LaPlante, Dr. Josephine. "Seven Habits of Unsustainable Budget Building: A State Policy Perspective." Journal of Public Budgeting. Summer, 2011. Vol. 25, No. 2. Pg. 229.

<sup>5</sup> LaPlante, Dr. Josephine. "Seven Habits of Unsustainable Budget Building: A State Policy Perspective." Journal of Public Budgeting. Summer, 2011. Vol. 25, No. 2. Pg. 218.

what is not. By gaining a greater understanding of how revenues have grown and changed over an extended period of time, state policy makers can tailor budgets to more accurately reflect real world conditions. I begin my analysis by conducting a detailed profile of Maine's revenue system in FY2008, I then move on to a comparison between FY2008 and FY2009. In the following section, I build upon this comparison by examining wider trends between 1993 and 2009.<sup>6</sup>

This study seeks to provide context and understanding to policymakers as they chart a more sustainable fiscal path forward. To this end, I conclude by tying together the findings from the three levels of analysis to identify issues facing the Maine revenue system during the years examined for the study. I outline five key issues impacting revenue generation in Maine: the centrality of revenues, the burden of the revenue system on Maine residents, the balance of the revenue system, the growing dependence on federal aid in Maine, and the impact of The Great Recession. These are the major issues that the Maine revenue system dealt with between 1993 and 2009. My discussion of these topics offers a frame of reference for policymakers seeking to address similar problems today.

## Part I: Analysis of Maine's Revenue System in 2008

The following profile examines the State of Maine's revenue system in 2008. The profile begins with a broad overview of government revenue in Maine, describing the proportion of general revenue generated by key sources. Following the overview, I break down and analyze the data based on per capita revenue levels. In the next section, I review the diversity and balance of the state's revenue system. In the final section of the profile, I examine the burden that the revenue system imposed on Maine residents. Throughout the profile, I compare Maine data to figures for the rest of the nation to allow for a more thorough understanding of the revenue system and how it compares to national norms. By examining the revenue system from

---

<sup>6</sup> All revenue data is based upon the U.S. Census Bureau's Annual Survey of Government Finances for the applicable fiscal year. Data from the survey is arranged in the framework provided by Dr. LaPlante.

several perspectives and including national data, I offer a comprehensive profile of Maine's revenue system in 2008. All dollar figures are expressed in 2008 dollars unless specifically stated otherwise.

*Revenue System Overview:*

1. In 2008, Maine state and local governments generated over \$10.67 bln in general revenue. Of this total, the state government accounted for \$7.68 bln, or 72% of general revenue, and local governments brought in \$2.99 bln, accounted for the remaining 28% of revenue.<sup>7</sup>
  - a. The breakdown of revenue was quite different in Maine than nationally, where 61% of total general revenue was generated by states and 39% by local governments.
  - b. The 11 percentage point difference between Maine and the national average in revenue generated at the state level shows that revenue generation is significantly more centralized in Maine's state government than it is elsewhere around the nation.
2. Maine received \$2.55 bln in aid from the Federal Government. Intergovernmental revenue from the federal government, better-known and henceforth referred to as federal aid accounted for 26% of general revenue.
  - i. 94.6% of federal aid to Maine went to the state government, while allocations directly to local governments accounted for only 5.4%.
  - ii. Nationally, 89.7% of federal aid went to state government and the remaining 10.3% was disbursed directly to local governments.
3. The other 76% of Maine's general revenue, \$8.07 bln, was generated through own source revenue. Of that total, the state government accounted for \$5.23 bln, compared with \$2.84 bln at the local level.

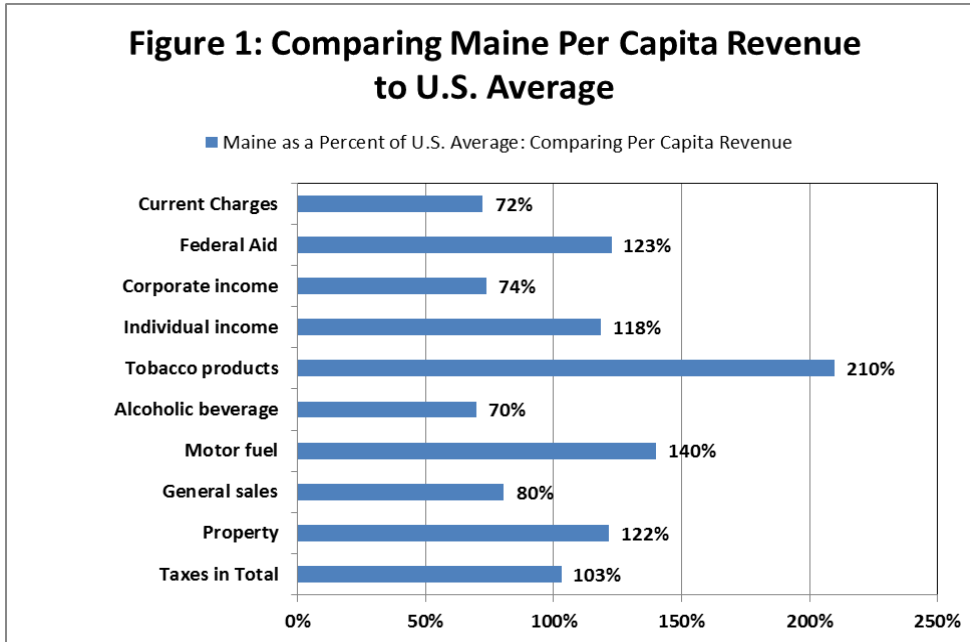
---

<sup>7</sup> These figures exclude duplicate intergovernmental revenue sources to avoid double counting particular revenue sources.

- a. The breakdown of own source revenue between state and local government was very different in Maine compared to the rest of the nation. In Maine, the state government accounted for 64.8% of own source general revenue, compared with only 36.2% locally.
  - i. Nationally, state government accounted for 55.9% of own source general revenue, compared with 45.1% at the local level.
- 4. In Maine, taxes at the state and local level combined to generate \$5.93 bln in revenue. State government accounted for \$3.78 bln of the total and local governments accounted for the remaining \$2.15 bln.
  - a. The distribution of tax revenue between state and local government in Maine differed from the national average. In Maine, 63.8% of tax revenue was generated at the state level, with the remaining 36.2% generated locally. Local tax revenue in Maine accounted for 5 percentage points more of total tax revenue than the national average, 31.2% of revenue.
- 5. The property tax in Maine generated \$2.16 bln, 98.3% of which came from local governments. The distribution of property tax revenue nationally aligned closely with the state of Maine. Nationally, local governments generated 96.9% of property tax revenue.
- 6. Local governments do not administer individual income taxes in Maine; therefore the state government collected all of the \$1.56 bln generated by the individual income tax.
  - a. Around the country, some municipalities (primarily major cities) impose their own income taxes, which resulted in local governments collecting 8.6% of income tax revenue. Such taxes do not exist in Maine, which accounts for the difference between Maine and the rest of the nation in the breakdown of individual income revenue.
- 7. The general sales tax generated \$1.06 bln worth of revenue in Maine. Similar to the individual income tax, local municipalities do not administer general sales taxes in Maine, therefore the state generates 100% of general sales tax revenue. Around the nation, local governments account for 20.8% of general sales tax revenue.

8. The three primary selective sales taxes utilized in the State of Maine are the fuel tax, the alcohol tax, and the tobacco tax. The fuel tax generated \$229.8 mln in revenue, the alcohol tax generated \$17.4 mln in revenue, and the tobacco tax generated \$150.5 mln.
  - a. Local governments in Maine do not administer any of the three primary selective sales taxes, which results in the state government generating 100% of revenue in each category. Nationally, local governments account for 18.5% of overall selective sales tax revenue.
    - i. Around the nation, local governments account for 3.8% of fuel tax revenue, 8.2% of alcohol tax revenue, and 3.1% of tobacco revenue.
    - ii. Although local governments do not administer any of the three primary selective sales taxes, local government does account for .7% of overall selective sales tax revenue. This is due to a small amount of revenue generated by locally administered taxes on public utilities.
9. Maine's corporate income tax generated \$184.5 mln in revenue. Similar to many of the other major tax types administered in Maine, only state government administers the corporate income tax, creating another deviation from the national average. Nationally, local governments collect 12.2% of corporate income tax revenue.
10. Current charges netted the State of Maine \$1.169 bln in revenue. State government collected \$634 mln while local governments collected \$535.
  - a. Maine and the rest of the nation differed sharply in how revenue from current charges broke down between state and local governments. In Maine, the state government generated the majority of current charges (54.3%), whereas nationally, local governments accounted for the majority (59.6%).
11. Key Issue: Maine differed significantly from the rest of the nation in the proportion of revenue generated at the state and local levels. These differences persisted from the general revenue category, to broad sub-categories like own source general revenue and tax revenue, down to more specific revenue categories such as federal aid and various tax





bases. One of the primary factors influencing the difference is the lack of locally administered taxes in Maine.

#### *Maine Revenue Per Capita Breakdown:*

1. The State of Maine generated \$8,074 per capita in general revenue. This is \$96 per capita and 1.2 percentage points greater than the national average.
  - a. Of this total, \$6,133, or 76% came from own source revenue. This figure is notably 4.2 percentage points lower than the national average, 80.2%.
    - i. Maine generated \$4,507 per capita from taxes, which accounted for 73.5% of own source revenue. Maine tax revenue was 5.1 percentage points higher than the national average.
    - ii. Current charges accounted for 14.5% of Maine's own source revenue, or \$888 per capita. This figure is significantly lower than the national average of \$1,229 per capita, a difference of \$341 per capita.

- iii. Maine earned the remaining 12% of own source revenue through a variety of miscellaneous revenue categories, including investment income, interest earnings, special assessments, and property sales, among others.
  - b. As stated in Section A, the other 24% of Maine's general revenue, \$1,941 per capita, resulted from federal aid.
    - i. Dependence on federal aid in Maine was well above the national per capita average of \$1,583. Nationally federal aid represented 19.8% of general revenue.
    - ii. Maine relied on federal aid for 4.2 percentage points more of its general revenue than the rest of the nation on average.
- 2. Key Issues: This basic overview of the Maine revenue system in 2008 shows that total per capita general revenue aligned closely with the national average. However, closer inspection reveals that the state deviates from national norms in key sub categories:
  - a. Maine relied more heavily on federal aid than the rest of the nation on average, both as a percent of general revenue.
  - b. Maine also relied more heavily than the rest of the nation on tax revenue.
  - c. Corresponding with Maine's greater reliance on taxes, per capita revenue from current charges fell below the national average.

*2008 Tax Structure & Key Sources of Revenue – A Closer Look:*

- 1. Maine generated tax revenue from a wide variety of sources. I detail these sources below in descending order based on their share of total revenue from key sources. Key sources consist of the property tax, general sales tax, selective sales taxes (fuel, alcohol, and tobacco), individual and corporate income taxes, current charges, and federal aid. Figure 1 displays Maine per capita revenue as a percent of the national average and offers a graphic representation of the variations between Maine and the national average for these key revenue sources.

- a. Property: Maine generated \$1,639 per capita from the property tax, which accounted for 23.7% of key revenue sources.
  - i. Maine generated a significantly higher amount of revenue from the property tax than the nation on average. As shown in Figure 1, Maine per capita revenue accounted for 122% of the national average, a difference of \$291 per capita.
- b. Individual Income: The individual income tax netted the state of Maine \$1,187 per capita, which accounted for 17.2% of key source revenue.
  - i. Maine revenue from the individual income tax was also well above the national average. The state collected 118% of the national average for individual income taxes (\$1,002 per capita), or \$185 more per capita.
- c. General Sales: Maine generated 11.7% of key source revenue from the general sales tax. This amounted to \$806 per capita.
  - i. As shown in Figure 1, Maine collected only 80% of the national average (\$1,001 per capita), which equals \$196 less per capita than the national average.
- d. Selective Sales: As a whole, selective sales taxes in Maine accounted for 4.4% of revenue from key sources or \$302 per capita. On a per capita basis, Maine collected 152.5% of the national average in selective sales taxes. However, Maine's reliance on revenue from these taxes varied among the three major bases- motor fuel, tobacco, and alcohol.
  - i. Fuel: Maine collected \$175 per capita in fuel taxes, 40% higher than the national per capita average, \$125.
  - ii. Tobacco: Maine collected \$114 per capita in tobacco taxes, which registered well above the national average of \$55 per capita. As shown in figure 1, Maine revenue from the tobacco tax was 10% above the national average.
  - iii. Alcohol: Maine collected 30% less than the national average in alcohol taxes, the largest negative percentage point difference from the national average among key

revenue sources. However, because the alcohol tax is a small source of revenue, this amounted to only a \$6 difference (\$13 per capita in Maine, compared with \$19 nationally).

- e. Corporate Income: Maine collected \$140 per capita in corporate income taxes, which represented only 2% of revenue from key sources.
  - i. Nationally, corporate income tax collections averaged \$190 per capita. In this category, Maine collected only 74% of the national average. As shown in Figure 1, this is the second largest negative difference between Maine and the national average.
- 2. When current charges and federal aid are reviewed in line with the other key revenue sources, their relative position within the revenue structure becomes clearer.
  - a. As discussed in the system overview in Part A, current charges account for a smaller proportion of revenue in Maine than on average nationally. The key revenue source framework reinforces this point.
    - i. Among key revenue sources, current charges account for only 12.9% of revenue in Maine, compared with 18.8% on average nationwide.
    - ii. Figure 1 offers another perspective, showing that Maine per capita revenue from current charges was only at 72% of the national average.
  - b. Within the key revenue framework, federal aid represents the single most important source of revenue to the State of Maine, accounting for 28.1% of revenue, 4.4 percentage points greater than the next most important source, property tax revenue.
    - i. As Figure 1 illustrates, Maine revenue from federal aid is 123% of the national average, the third highest positive percentage point difference overall, and the highest overall when the selective sales taxes, which account for small amounts of overall revenue, are removed from the equation.

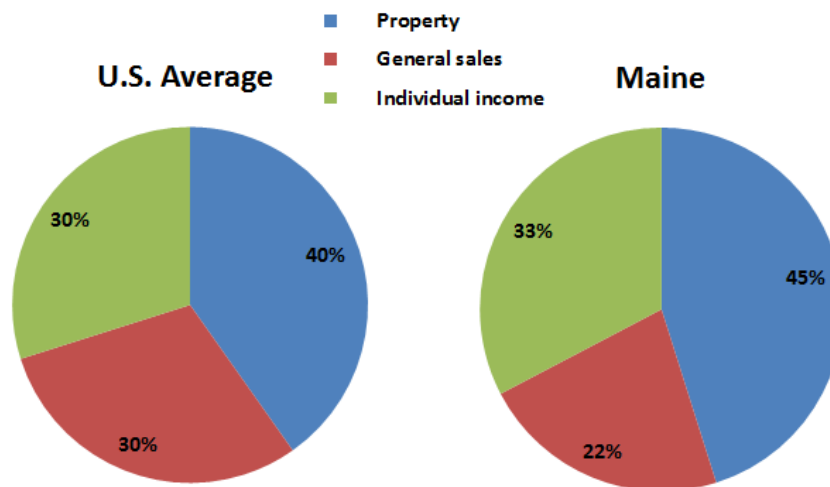
- ii. Maine received \$357 more per capita in federal aid than the national average, far and away the largest dollar figure deviation (positive or negative) from the national average among any of the key revenue sources.
  - iii. These figures show Maine's disproportionately strong reliance on federal aid, both within the state revenue structure and in comparison to the rest of the nation.
3. Key Issues: Several important issues emerge from my analysis of key revenue sources:
- a. Per capita revenue from the property tax, individual income tax, and federal aid were all well above the national average.
  - b. On the other hand, general sales and corporate income tax revenues were below the corresponding national averages.
  - c. Revenue from the primary selective sales in Maine varied in comparison to their respective national averages. Maine generated more per capita from fuel and tobacco taxes, and less from the alcoholic beverage tax.

*Diversity and Balance in the Tax System:*

1. Diversity: Tax diversity refers to the use of a wide range of tax types within a revenue system. Public Finance experts recommend that policy makers utilize a diverse array of taxes in order to increase equity and avoid an over dependence on any single revenue source. In a diverse tax system, the strengths of one tax type compensate for the weaknesses of another. For example, a combination of elastic (taxes sensitive to economic cycles) and inelastic taxes (more stable types) should be used to allow revenue to grow rapidly during periods of economic growth while providing stability during recessionary times. Maine has a diverse tax system, because it uses a variety of tax types to generate revenue.

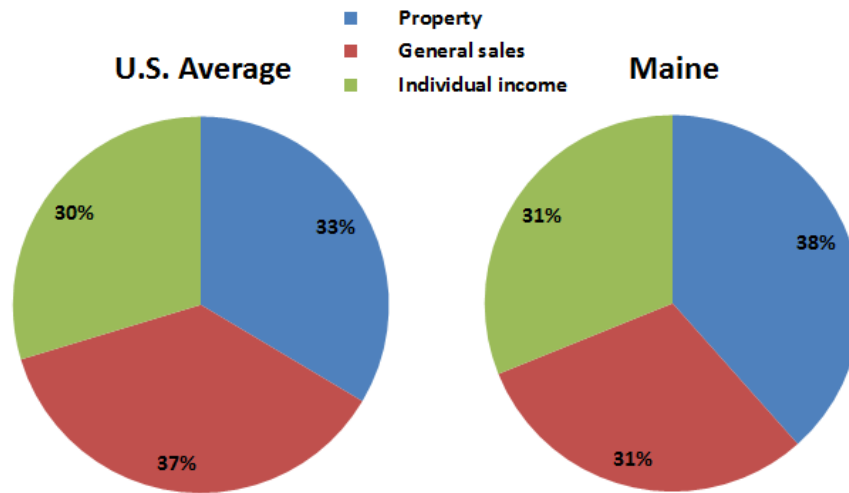
- a. Although none of the major tax types are missing entirely, when compared to national averages Section C showed that Maine under-utilized three key types in 2008: the alcoholic beverages tax, the general sales tax, and the corporate income tax (See Figure 1 for per capita collections as a percentage of national averages).
2. **Balance:** A balanced tax system draws revenue evenly from whatever array of taxes the government administers. Utilizing a diverse array of taxes will not have the desired effect without balancing the system's reliance on the various tax types. In this regard, the principles of diversity and balance are closely linked within the tax system. For example, a system that relies too heavily on elastic taxes may find itself awash with revenue during periods of economic growth, only to be plunged into a financial crisis when the economy contracts. Similarly, a system that relies too heavily on inelastic taxes will not have the capability to leverage periods of economic growth into corresponding revenue growth.
3. To gauge the balance of taxes in a revenue system, public finance experts look at the "Big Three" tax bases: property, sales, and income. There are two competing definitions of the "Big Three" tax types: the traditional definition and the expanded definition. The traditional definition of the "Big Three" compares only the property tax, the general sales tax, and the individual income tax.

**Figure 2: Traditional "Big Three" Tax Balance**



- a. Figure 2 illustrates the off-balance nature of the traditional “Big Three” tax bases in Maine. In particular, the extremely weak use of the sales tax (22% of total per capita revenue from the “Big Three”) and the over reliance on the property tax (45% of per capita revenue from the “Big Three”) cast the balance of the system into disarray.
  - i. When compared with the national average, Maine’s tax imbalance becomes even more apparent. Maine’s reliance on the general sales tax is 8 percentage points below the national average. On the other hand, the property tax is 5 percentage points above the national average.
  - ii. Maine’s use of the individual income tax appears well balanced at 33% of total revenue. The proportion of revenue generated by Maine’s individual income tax is 3 percentage points above the national average.
  - iii. Although more balanced than the revenue system in Maine, nationally the tax system was also off balance in 2008. The over reliance on the property tax persisted nationally, where it generated 40% of revenue, while the individual income and sales taxes split the remaining 60% of revenue in half.
4. The traditional definition of the “Big Three” tax bases encompasses a limited number of revenue sources, and may not reflect differences in income classifications across state lines. To account for this issue, public finance experts often use an expanded definition of the “Big Three”. The expanded definition adds selective sales taxes to the general sales tax, creating the sales tax category. It also adds corporate income to the individual income tax, creating the income tax category. By implementing these changes the new “Big Three” tax bases are property, sales, and income. The balance of the expanded revenue system for Maine and the rest of the nation is displayed in Figure 3.

**Figure 3: Expanded "Big Three" Tax Balance**



- a. Although utilization of the broadened definition improves the balance of the Maine revenue system slightly, major imbalances persist. The state still relies disproportionately strongly upon the property tax, which accounts for 38% of revenue from the “Big Three”. Even under the expanded definition, reliance on the property tax is still above the national average. However, the difference is smaller, only 4 percentage points.
- b. Nationally, the broadened definition greatly improves the balance of revenue from the “Big Three”. Property taxes are reduced to the second highest proportional position and the sales tax becomes the dominant tax base, generating 37% of revenue.
- c. The expanded definition greatly increases the share of total revenue from the sales tax category, increasing its share by 8 percentage points under the expanded definition. A similar increase occurred nationally, where the proportion of total “Big Three” revenue increased by 7 percentage points.
- d. While the proportion of revenue from the income tax category remained at 30% nationally, it actually decreased as a share of Maine revenue from the “Big Three” by 2 percentage points. This occurs because the corporate income tax does not

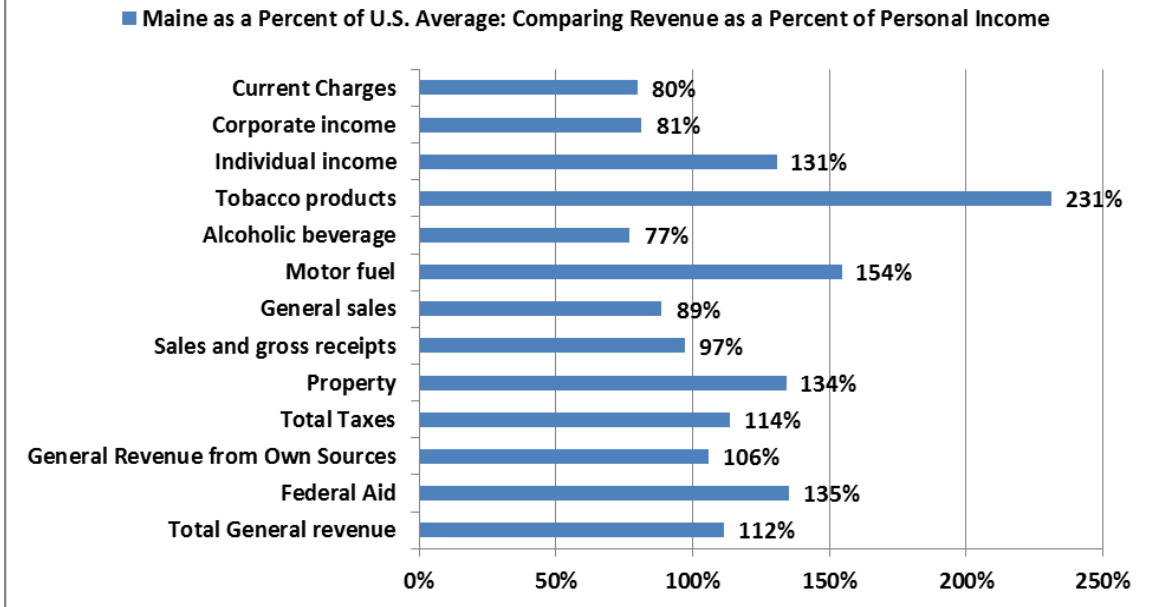


- contribute enough revenue to the income tax category to offset the revenue added to the sales tax category from the selective sales taxes.
- e. Switching from the traditional to the expanded definition of the “Big Three” further illustrates Maine’s over-dependence on the property tax in comparison to the rest of the nation. Under the traditional definition, property taxes account for the majority of big three revenue both nationally and in Maine. When considering the broadened definition, the property tax remains in the number one position in Maine, while it slips to number two behind, the sales tax, nationally. While the addition of new revenue streams to the sales and income categories re-ordered the “Big Three” nationally, the broadened definition could not remove the property tax from the top proportional position in Maine.
5. Key Issue: Although Maine uses a diverse array of taxes, the state revenue system is out of balance. Whether the traditional or expanded definition of the "Big Three" tax bases is used, the property tax still generates the largest portion of big three revenue.
- a. The expanded definition improves the balance of the revenue system slightly, but still leaves Maine’s revenue system out of balance.
  - b. As discussed previously, a disproportionately heavy reliance on inelastic tax types like the property tax revenue can impact a state’s ability to boost revenues during periods of economic growth. The trend analysis in Part II will provide further evidence that this is an issue in Maine.

### *Tax Burden:*

1. The burden imposed by a revenue system expresses how much of resident’s income is claimed by taxes. One way to describe burden is to examine the bite of taxes as a percentage of individual income. Studying revenue data from the perspective of personal income yields useful information about the burden of taxation because it examines how

**Figure 4: Comparing Tax Burden in Maine to U.S. Average**



much the per capita revenue levels discussed in Section B actually impact the income of Maine residents. All data reflects income and revenue data for 2008.

- a. Policy analysts must consider one important caveat when reviewing the data exhibiting revenue as a percentage of personal income: Maine's per capita personal income was below the national average in 2008. Maine's per capita personal income was \$36,457, just over \$3,750 below the national average (\$40,208 per capita).
- b. With personal income levels in mind, it becomes clear that the per capita tax data discussed previously does not tell the whole story about the burden imposed by Maine's revenue system. Similar per capita tax revenue reflects a greater burden on Maine taxpayers because the tax is collected from a smaller amount of personal income and therefore claims a larger percentage of their income.
- c. This section describes revenue levels as a percentage of personal income, and compares these levels to per capita levels and the national average. Figure 4 shows

how the tax burden in Maine compared to the rest of the nation. I will discuss the implications of the data shown in Figure 4 throughout this section.

2. The Burden of the Revenue System:

- a. In 2008, total general revenue for the State of Maine represented 22.1% of personal income. This is 2.3 percentage points higher than the national average.
- b. Federal aid accounted for 5.3% of personal income. This is much higher than the national average of 3.9% and places Maine at 135% of the national average. As Figure 4 shows, this is the third highest deviation, whether positive or negative, from the national average. This data reinforce the notion that Maine depends more on federal aid than the rest of the nation on average.
- c. Own source revenue generated in Maine accounted for 16.8% of personal income, which is .9 percentage points higher than the national average of 15.9%.
- d. Current charges accounted for 2.4% of personal income. The national average for current charges was 3.1%, .7 percentage points above the level for Maine. This is unsurprising given the discussion in Section A regarding Maine's lower than average reliance on revenue from current charges.
- e. Total taxes in Maine accounted for 12.4% of personal income. This is 114% of the national average, which was 10.9% of personal income.
  - i. This figure casts new light on the previously discussed per capita level of taxation. Per capita total tax revenue in Maine was only 103% of the national average, whereas total taxes as a percentage of personal income were 114% of the national average. This shows that, even though the per capita amount of taxes collected in Maine may be similar to the national average, the actual burden on the Maine taxpayer is much higher.

3. The Burden of Property Taxes:

- a. Property taxes claimed 4.5% of personal income in Maine compared with 3.4% on average nationally. As Figure 4 shows, the burden of property taxes in Maine were 134% of the national average, offering further evidence of the state's strong reliance on the property tax in comparison to the rest of the nation.
  - i. The property tax represented the third largest positive deviation from the national average among the major taxes levied by the state.

4. Sales Tax Burden:

- a. Sales and gross receipts claimed 3.6% of personal income in Maine. This is only slightly less than the national average, 3.7%. The per capita data showed that Maine sales and gross receipts were only 88% of the national average. However, from the personal income perspective, Maine aligns much more closely with the national average, at 97%. This is due to lower than average per capita personal income levels in Maine.
- b. The general sales tax in Maine claimed 2.2% of personal income, compared with 2.5% nationally. Maine general sales align more closely with the national average when viewed as a percent of personal income than as a per capita amount. Maine's per capita level was only 80% of the national average, whereas the percentage of personal income was 89% of the national average. This comparison suggests that the general sales tax is not as under-utilized in Maine as the per capita data first suggests.
- c. The fuel tax accounted for .48% of personal income in Maine, compared with .31% nationally. Maine was 154% of the national average in this category. The fuel tax reflected the second highest deviation from the national average for any revenue source in the state.
  - i. The personal income data shows that, when compared with the national average, the bite of the fuel tax in Maine is worse than the per capita data first hinted.

- d. The alcoholic beverage tax took a smaller percentage of personal income in Maine than on average nationally. In Maine, it accounted for only .04% of income, compared with .05% nationally.
- e. Per capita data showed that the tobacco tax generates much more revenue in Maine than nationally, and the personal income data shows how much greater the bite of this tax is in Maine than at the national level. The tobacco tax claimed .31% of personal income in Maine, more than double the national average of .14%, marking it as the revenue source with the greatest deviation from the national average.

5. The Burden of Income Taxes:

- a. The individual income tax accounted for 3.3% of personal income, which was .8 percentage points higher than the national average, 2.5%. As Figure 4 shows, the individual income tax bite in Maine was 131% of the national average, marking it as the fourth largest positive deviation from the national average among any major tax levied by the State of Maine.
  - i. The personal income data paints a very different picture of the individual income tax than the per capita data discussed in Section B. Per capita revenue from Maine's individual income tax was 118% of the national average. Although still above average, the per capita data does not show the true impact of the individual income tax on Maine residents. The personal income data shows that a relatively moderate per capita difference can produce a dramatic difference in burden.
- b. The corporate income tax claimed .38% of personal income, compared with .47% nationally. Similar to the general sales tax, the personal income data shows that the corporate income tax is not as underutilized as the per capita data suggests.
  - i. As discussed previously, the per capita data showed that Maine was only collecting corporate income taxes at 74% of the national average. Although still below the national average, the bite of the corporate income tax as a percent of personal income in Maine was 81% of the national average, bringing closer to levels around the nation.

- c. Key Issues: 2008 data shows that the burden of taxes in Maine is high particularly in the property, individual income, tobacco, and motor fuel tax categories.
  - i. The data in this section also shows how much more federal aid Maine gets than the rest of the nation on average.
  - ii. The data on burden also provides additional evidence that other tax types like corporate income and general sales are under-utilized, although to a lesser extent than the per capita data first indicated.

*Revenue System Summary:*

- a. Based on the key issues listed throughout Part I, a clear picture of the Maine revenue system in 2008 emerges:
  - i. Maine's revenue system was highly centralized at the state level.
    - 1. The only major tax type collected at the local level was the property tax. This created a stable base of income at the local level, but would not allow local governments the flexibility to generate additional revenue during periods of strong economic growth.
  - ii. Although the state government utilized a diverse array of taxes, the system was out of balance. The system relied heavily on revenue from the property tax.
  - iii. The burden of taxation in Maine was well above the national average, especially for key tax types such as the property, individual income, fuel, and tobacco taxes.
  - iv. Whether viewed from a per capita perspective, as a percent of personal income, or as a percent of general revenue, the data shows that Maine received a larger than average amount of federal aid compared to the rest of the nation.
  - v. Compared with the rest of the nation, Maine underutilized the general sales tax in 2008.

## Part II: Analysis of Trends

### *Comparing 2008 and 2009:*

While Part I offers a detailed discussion of state revenues for one particular year, one cannot gain a complete understanding of Maine's revenue system without examining trends over time. Instead of merely viewing a snapshot of the system, studying multiple years allows one to learn about how the system has changed over time: What taxes does the state rely on more or less heavily now than it has in the past? Do taxes take a larger bite of personal income now than they have in the past? Is the state of Maine improving the balance of its tax system? These are just a few of the topics that I examine in Part II.

My analysis of trends begins by comparing fiscal years (FY) 2008 and 2009, a period of interest because it reflects the deepening impact of The Great Recession. All dollar amounts are expressed in 2011 dollars unless specifically noted otherwise.

### Per Capita Revenue:

1. The Great Recession had an unprecedented negative impact on State revenues across the United States, and Maine was no different. Data from FY 2009, which ran from July 1, 2008 to June 30, 2009 reflects the final year of the Great Recession, which officially ended in June of 2009.<sup>8</sup> Although a brief comparison to national averages suggests that the recession did not impact Maine as harshly as the rest of the nation, a detailed inspection shows that a larger than average infusion of federal aid inflated state revenue, which masked weak generation of revenue.

---

<sup>8</sup> Isidore, Chris. "Recession Officially ended in June 2009". CNN Money. September 20, 2010. [http://money.cnn.com/2010/09/20/news/economy/recession\\_over/index.htm](http://money.cnn.com/2010/09/20/news/economy/recession_over/index.htm)

- a. General Revenue in Maine increased by \$223 per capita between 2008 and 2009, a 2.6% increase year over year. This represents a major departure from the national average which declined by \$264 or 3.1% per capita.
- b. While General Revenue in Maine increased, the proportion of revenue from own sources dropped considerably from 76% in 2008 to 70.9% in 2009.
  - i. Own source revenue declined not only as proportion of general revenue, but also on a per capita basis. Maine own source revenue declined by \$278 per capita, from \$6,490 in 2008, to \$6,212 in 2009.
- c. Slumping own source revenue coupled with an increase in general revenue hints that federal aid increased dramatically between 2008 and 2009. This is in fact true. The increase results largely from the controversial American Recovery and Reinvestment Act (ARRA), which was intended to kick-start the economy by pumping billions of dollars in federal aid into state governments.<sup>9</sup>
  - i. Federal aid in Maine increased from 24% of general revenue in 2008, to 29.1% of general revenue in 2009.
  - ii. Federal aid jumped by \$502 per capita in Maine, a striking 24.4% increase year over year.
  - iii. As a result of ARRA, federal aid also increased across the rest of the nation. However, the data shows that Maine benefitted from a larger infusion of federal aid on a per capita basis than the rest of the nation on average.
    - 1. Per capita federal aid increased by \$143 nationally, or 8.57%. While still a substantial increase, it pales in comparison to the increase in Maine.
    - 2. Nationally, reliance on federal aid also increased as a percentage of general revenue, although once again to a lesser extent than in the State of Maine. In

---

<sup>9</sup> [http://www.recovery.gov/About/Pages/The\\_Act.aspx](http://www.recovery.gov/About/Pages/The_Act.aspx). Recovery Act Website.

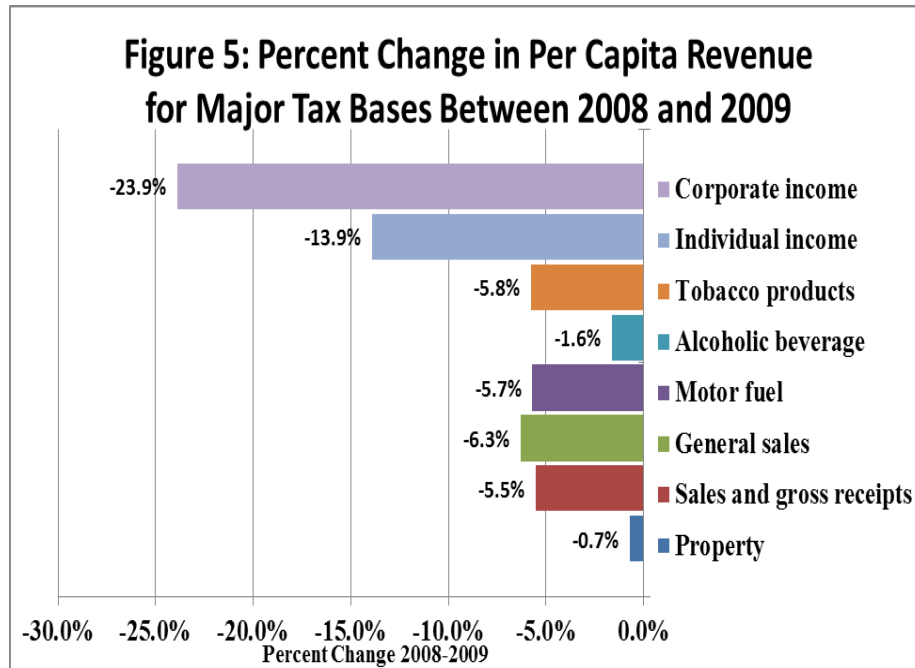


2009, Federal aid accounted for 22.2% of general revenue on average nationally, compared with 19.8% in 2008.

- iv. A direct comparison between Maine and the rest of the nation also illustrates the dramatic infusion of federal dollars in Maine. In 2008, per capita federal aid to the state of Maine was already 23% above the national average. Just one year later, per capita federal aid to Maine was 40% above the corresponding national average.
  - v. It should be noted that FY2009 reflected only the initial stages of ARRA. Data from the official ARRA website indicates that the state of Maine has been awarded over \$1.45 billion in federal aid under the Recovery Act through September, 2011. Of this total, just over \$752 million had been awarded between the passage of the act in Mid-February and September, 2009.<sup>10</sup> With this in mind, the state's dependence on federal aid should be expected to continue to grow in subsequent years not examined for this report.
- d. Per Capita own source revenue in Maine declined by 4.3% or \$278 from 2008 to 2009. Reduced tax revenue was a major culprit of the decline in own source revenue in Maine between 2008 and 2009. Total tax revenue in Maine declined by 6.5% or \$309 per capita.
- i. The rest of the nation experienced a larger 7% decline in tax revenue for the same period. These corresponding declines served to keep Maine closely aligned to the national per capita average for tax revenue. Maine was at 103% of the national average in 2008 and 104% in 2009.
  - ii. As illustrated in Figure 5, per capita tax revenue decreased across the board in Maine, although by varying degrees. Figure 5 shows the percent change between 2008 and 2009 for the major tax bases.

---

<sup>10</sup> <http://www.recovery.gov/Pages/TextView.aspx?data=stateSummaryAwardsByQuarterChart&StateCode=ME>. Maine Funding by Quarter. Updated November 30, 2011.



1. The largest declines were in the income tax category (23.87% decline in corporate income, 13.89% decline in individual income). Although the individual income tax reflected the second largest percentage decline, it reflected the largest per capita dollar loss, \$175.
2. Property taxes represented the most stable base between 2008 and 2009, declining only .7%, or \$12 per capita.
3. Sales and gross receipts declined by 5.51%, and although this is a modest percentage decline compared with other tax bases, the loss amounted to \$75 per capita, the second largest dollar figure decline.
  - a. Within this broad category, general sales tax revenue declined by 6.28% or \$54 per capita.
  - b. All three of the major selective sales taxes also declined, although by varying degrees. Revenue from the fuel tax declined by \$11 per capita (5.7%), revenue from the tax on alcohol declined by a barely noticeable 1.6% (which amounted to only a

few cents per capita), and revenue from the taxes on tobacco declined by \$7 per capita (5.78%).

iii. Nationally, per capita losses in tax revenue were similar to those in Maine. Losses were largest in the income tax categories, where individual income tax revenue declined by 13.5% and 22.6% respectively. Sales and gross receipts revenue declined by 5.9%, also similar to Maine.

1. While the state of Maine experienced revenue declines in every major tax base, national averages reflected slight gains in two categories: the property tax (.8%) and the tobacco tax, which held constant at \$58 per capita.

#### Tax Balance:

1. As described in the revenue profile in Part I balance is key to the health of a revenue system. Tax policy analysts study balance by looking at the “Big Three” tax bases: property, sales, and income. I will examine both the traditional and expanded definitions of the “Big Three”. See Part I for information on which tax bases are included in each definition.

#### 2. Traditional Definition:

- a. Between 2008 and 2009, total revenue from the “Big Three” tax bases declined by 6.25% or \$241 per capita.
- b. In 2008, Maine’s revenue system strongly relied on revenue from the property tax, which threw the revenue system off balance. This issue persisted in 2009.
- c. Reduced revenue from the major tax bases exacerbated Maine’s issues with revenue balance in 2009. As discussed in the previous section, revenue for all three of the primary tax bases declined between 2008 and 2009. The decline in the property tax was quite modest, however large declines in per capita revenue from the individual income and general sales taxes boosted proportional reliance on the property tax.

- i. The proportion of total revenue generated by the property tax increased 3 percentage points, from 45% to 48% of revenue between 2008 and 2009.
  - d. The 3 percentage point increase in reliance on property tax revenue from 2008 to 2009, was accounted for by a corresponding 3 percentage point decline in reliance on the individual income tax.
  - e. The proportion of “Big Three” revenue generated by the general sales tax held constant at 22% between 2008 and 2009.
  - f. Because property tax revenue accounted for nearly half of revenue from the “Big Three” tax bases in 2009, it is clear that Maine’s revenue system remained severely out of balance.
3. Expanded Definition:
- a. As one would expect, the addition of new tax bases to the sales and income tax base categories improves balance of Maine’s revenue system. However, even under the expanded definition the revenue system remains out of balance and exhibits a strong reliance on property tax revenue. These points of concern grew more pronounced from 2008 to 2009.
  - b. The proportion of “Big Three” revenue accounted for by the property tax under the expanded definition increased by 3 percentage points from 38% in 2008 to 41% in 2009. This is due to previously discussed revenue declines in the tax bases added to the sales and income tax categories under the expanded definition.
  - c. The proportion of big three revenue generated by the income tax declined from 31% in 2008 to 28% in 2009.
  - d. Although per capita revenue from sales and gross receipts declined from 2008 to 2009, the proportion of big three revenue generated by the expanded category increased slightly from 30% in 2008 to 31% in 2009. This slight increase is due to the much larger decline in revenue from income taxes.

4. The data shows that Maine's big three tax bases were even more out of balance in 2009 than they were in 2008. Whether studied from the traditional or expanded perspective, reduced revenue from the sales and income tax bases negatively impacted the balance of Maine's revenue system in 2009. Further, declining revenue in these tax bases decreased their ability to offset the state's strong reliance on property taxes. Unlike 2008, expanding the tax bases incorporated into the big three categories could not bring the proportion of revenue generated by the property tax in Maine below 40%.

#### The Burden of the Revenue System:

1. My analysis of the revenue system in 2008 showed that the burden of the Maine revenue system is above the national average. The data shows that the burden of nearly every major tax base declined between 2008 and 2009, both as a percent of personal income and in comparison to the national average.
  - a. The data for burden is calculated using personal income; therefore it is relevant to briefly examine Maine's personal income level in 2009. Personal income in Maine declined by \$350 per capita, from \$38,579 in 2008 to \$38,229 in 2009.
2. National personal income levels also declined from 2008 to 2009, and much more severely than in Maine. National per capita personal income declined by \$1,830, from \$42,548 in 2008 to \$40,718 in 2009.<sup>11</sup>
  - a. A comparison of federal aid to personal income provides further evidence of the dramatic influx of federal aid in 2009. Federal aid accounted for 6.68% of personal income in 2009, a 1.36 percentage point increase from 2008 levels. This is by far the largest variation from 2008 levels, whether positive or negative.
3. The amount of personal income accounted for by federal aid in Maine also increased as a percent of the national average. In 2009, Maine was 150% of the national average for federal aid, a 14 percentage point increase over 2008.

---

<sup>11</sup> Please note that the 2008 Personal Income figures do not match those in Part I because all dollar values in Part II have been converted to 2011 dollars.

- a. As a percent of personal income, general revenue increased by .78 percentage points, from 22.15% in 2008 to 22.93% in 2009. The increase in federal aid was enough to drive up the percent of personal income accounted for by general revenue, despite declines in nearly every other revenue category.
  - i. The burden of total tax revenue declined by .69 percentage points between 2008 and 2009. This decrease brought the State of Maine closer to the national average in this category, from 114% down to 110% of the national average.
4. The only tax base to increase in burden was the property tax, albeit a very slight increase of .01%. Despite this barely noticeable increase, the amount of personal income claimed by the property tax in Maine decreased as a percent of the national average by 7 percentage points, dropping to 128%. This hints to an increased bite from the property tax elsewhere in the U.S.
5. The burden of every other major tax base decreased from 2008 to 2009, as did Maine's burden as a percent of the national average for each category.
  - a. The largest decrease was in the individual income tax, which declined by .43 percentage points. This brought the state of Maine down to 126% of the national average, a 5 percentage point decline.
  - b. There were notable declines in Maine's selective sales tax burden as a percent of the national average as well. Revenue from the tobacco tax declined by 22 percentage points, down to 209% of the national average. Fuel tax revenue declined by 10 percentage points to 145% of the national average. The alcohol tax remained virtually unchanged.

Summary:

1. Comparing 2008 and 2009 shows the dramatic impact of The Great Recession as well as the federal government's efforts to ease the pain of the recession on state governments.

- a. Federal Aid to Maine skyrocketed in 2009, masking the decline in own source revenue that resulted from the recession.
- b. Per Capita revenues declined noticeably for nearly every tax base; however the property tax proved resilient, decreasing only incrementally.
- c. Declines in tax revenue from sales and income taxes pushed the state revenue system further out of balance.
- d. The burden of taxes in Maine declined, however the bite of state taxes remained above the national average.

### *Comparing Wider Trends:*

My analysis of wider trends in the Maine revenue system examines seven years that span from 1993 to 2009. The earliest year in the analysis is 1993, which reflects the after effects of the recession from 1990 to 1991. The next year is 1999, a year of strong economic growth in the midst of the internet boom of the late 1990s. The next year I have included is 2002, which reflects the impact of the recession that began shortly before the September 11<sup>th</sup> attacks. The next year examined is 2004, a period of economic growth in the United States. I also include the years 2007, 2008, and 2009, which reflect the time leading up to and during The Great Recession (The great recession began in December 2007 and ended in June 2009<sup>12</sup>).

My analysis also shows that many fundamental issues facing the Maine revenue system in 1993 still existed 16 years later in 2009. Please note that all dollar figures are in 2011 dollars unless specifically noted otherwise.

### *Per Capita:*

1. The amount of revenue generated in the State of Maine grew substantially from 1993 to 2009. However, my analysis shows that much of this growth occurred from 1993 to 1999. In fact, from 1999 to 2009 revenue was stagnant, and in some cases declined.

---

<sup>12</sup> National Bureau of Economic Research. <http://www.nber.org/cycles.html>.

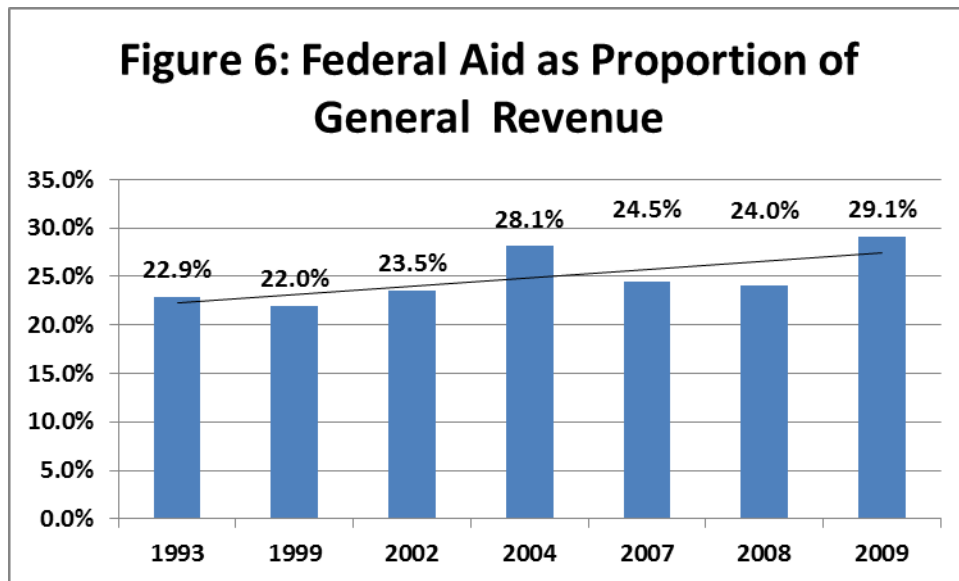
- a. From 1993 to 2009, per capita general revenue rose by \$2,543; a startling increase of 41%. However, over half of this increase occurred between 1993 and 1999. Over this six year period, revenue increased by 21.2%, or \$1,321 per capita. The remaining \$1,222 per capita increase in general revenue occurred over the decade from 1999 to 2009.
- b. Own source revenue also displayed strong revenue growth between 1993 and 1999 followed by much slower growth from 1999 to 2009. From 1993 to 1999, own source revenue in Maine grew 22.7% or \$1,087 per capita. From 1999 to 2009, own source revenue only increased by 5.5% or \$326 per capita.
  - i. Much of the continuing increase in own source revenue is attributable to current charges collected by the state government. Per Capita revenue from current charges increased in each of the first five years examined in this study: \$626 (1993), \$742 (1999), \$788 (2002), \$842 (2004), \$948 (2007). From 2007 through 2009, revenue from charges remained stable and did not dip below \$940 per capita.
  - ii. Of the \$326 per capita increase in general revenue between 1999 and 2009, \$201 was the result of increased charge revenue.
- c. Total tax revenue increased by 23.8% or \$858 per capita, from 1993 to 2009. While this figure appears promising, revenue growth from taxes was virtually unchanged from 1999 to 2009. Over this period, total tax revenue only grew by \$40 per capita<sup>13</sup>, representing a .9% increase.
  - i. Over the six-year period from 1993 to 1999, total tax revenue grew substantially, \$818 per capita, or 22.7%.
- d. Although federal aid did not show increases across all seven years examined for this report, Figure 6 shows that there is a clear upward trend. It also illustrates well how

---

<sup>13</sup> It should be noted that own source revenues increased by \$326 per capita between 1999 and 2009. You may have noticed that total tax revenue and current charges only account for \$241. The remaining \$85 in revenue growth is attributed to a variety of smaller state revenue sources, including interest earnings, special assessments, and property sales, among others.

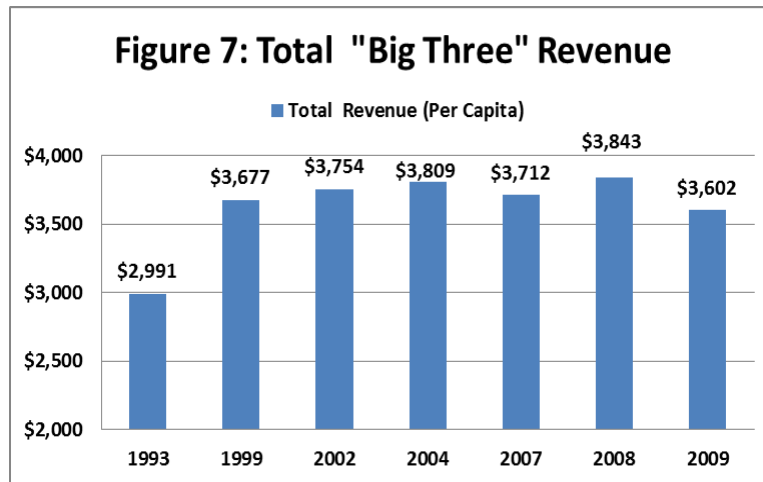


federal aid supplements own source revenue to drive general revenue figures in a positive direction. Figure 6 also shows the proportion of general revenue accounted for by federal aid.



- i. The proportion of general revenue accounted for by federal aid peaked in 2009 at 29.1%, followed closely by 2004, at 28.1%.
  - i. Despite these two spikes, there is a clear upward trend in the proportion of Maine's general revenue generated by federal aid.
  - ii. Federal aid increased dramatically from 1993 to 2004, the year with the second largest infusion of federal aid. During this period, federal aid jumped 71%. However, the spike in federal aid in 2004 did not last. By 2007 per capita levels had dropped by 14%.
  - iii. Between 2007 and 2009, federal aid steadily climbed, before peaking in 2009 due to the impact of ARRA funding in Maine. Over this period, aid increased by 23%.

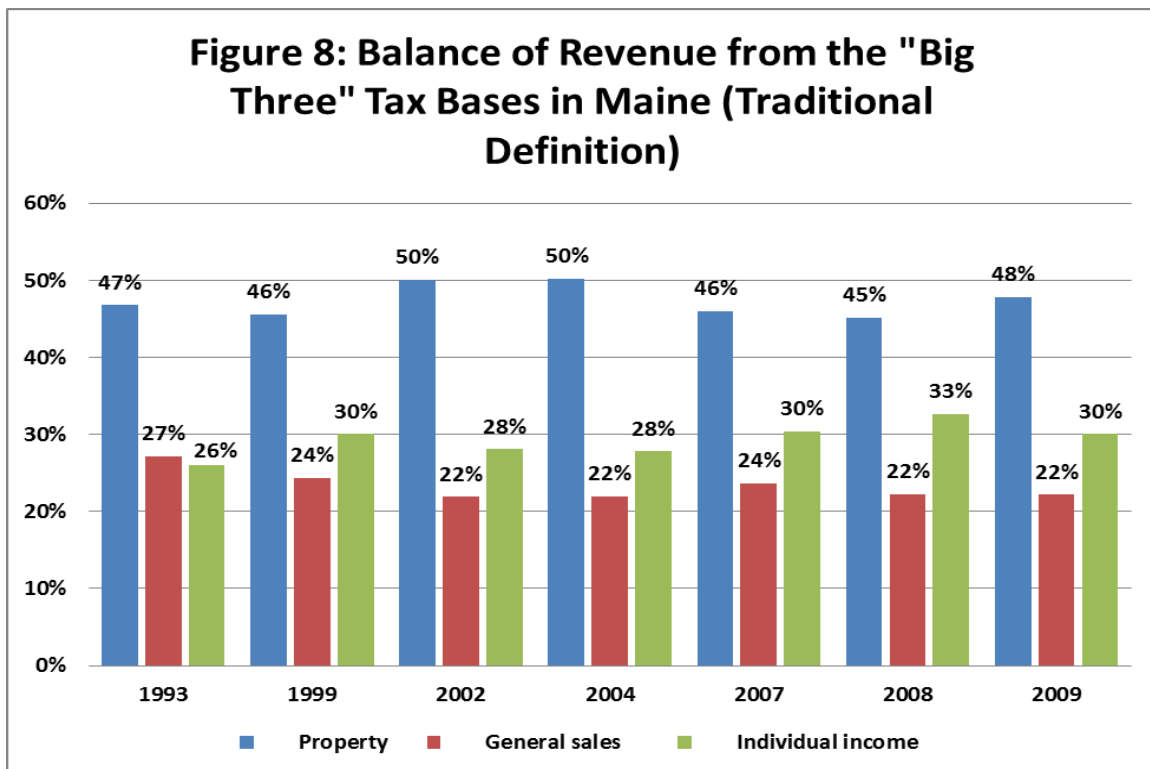
The Traditional "Big Three":



1. Total Revenue from the traditional "Big Three" tax bases, increased dramatically over the timespan examined for this paper. Figure 7 shows total revenue from the "Big Three".
  - a. From 1993 to 2009 total revenue generated by the "Big Three" increased by 20.4%, or \$611 per capita.
  - b. Revenue from the "Big Three" peaked in 2008 at \$3,843 per capita. At its peak, revenue from the "Big Three" had grown by 24.1% or \$721 per capita since 1993.
  - c. While the increase from 1993 to the peak and to 2009 was quite large, when 1993 is removed from the equation the picture changes dramatically.
    - i. From 1999 to 2009, total revenue actually *decreased* by 2% or \$74 per capita.
    - ii. From 1999 to the peak in 2008, total revenue increased by only 4.5% or \$166 per capita.
    - iii. Similar issues persisted across the "Big Three" bases.
2. From 1993 to 2009 revenue from the property tax increased by 23%, or \$323 per capita. The change from 1993 to the peak of property tax revenue in 2004 was even greater, 37% or \$516 per capita.

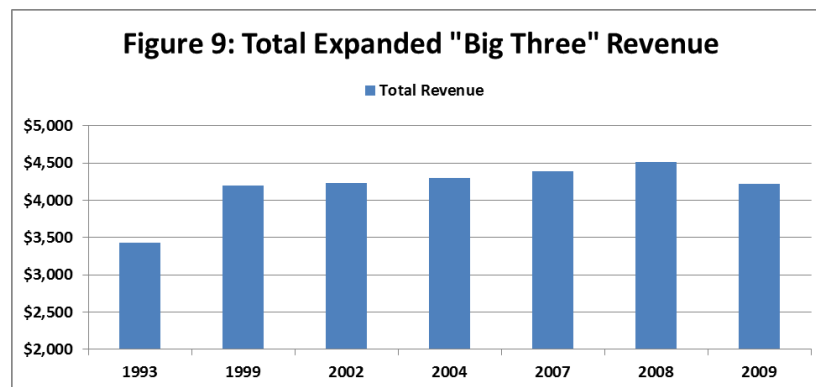
- a. Once again, when 1993 is removed from the equation, the increase in revenue drops substantially. From 1999 to 2009, property tax revenue increased by only 2.8%, or \$46 per capita.
  - b. From 1999 to the 2004 peak in property tax revenue, the increase was also more modest, only 14.3%.
  - c. From 2004 to 2009, property tax revenue declined by 10.1%.
3. General sales tax revenue was the only "Big Three" tax base to show a net decline from 1993 to 2009; revenue in this category declined by \$14 per capita. Interestingly, general sales tax revenue was the only of the big three to show peak revenue in the 1990s.
  - a. In 1999 the general sales tax peaked at \$897 per capita, \$98 per capita above 2009, the sample year with the lowest revenue.
4. The individual income tax showed the greatest fluctuation across the sample years. From 1993 to 2009, individual income tax revenue increased by 39%. From 1993, which reflected the lowest per capita individual income tax revenue, to the peak in 2008, revenue increased a whopping 61% or \$477 per capita.
  - a. As we have seen with the property and general sales taxes, these net increases do not tell the whole story.
  - b. Revenue from the individual income tax grew substantially between 1993 and 1999, increasing by 41.8%. However from 1999 to 2009, per capita revenue decreased by 2.1%.
5. The revenue figures displayed above are quite troubling, as they show that total revenue from the "Big Three" tax bases declined over the decade from 1999 to 2009. Lower revenues in the general sales and individual income tax categories drove this decline.

- a. The only of the "Big Three" to gain revenue over this period was the property tax, which as the analysis below will show, generates a disproportionately large amount of revenue in Maine.
6. Throughout the sample studied for this report, the State of Maine suffered from a lop-sided revenue system that strongly favored the property tax. Figure 8 displays the balance of the "Big Three" across the sample years.



- a. In fact over the seven years examined, the property tax never dipped below 45% of total revenue generated by the "Big Three". In 2002 and 2004 the property tax accounted for half of "Big Three" revenue.
  - i. While 2007 and 2008 hinted at slight improvements in balance, The Great Recession forced a greater reliance on the property tax due to reduced revenue in the general sales and individual income tax bases.

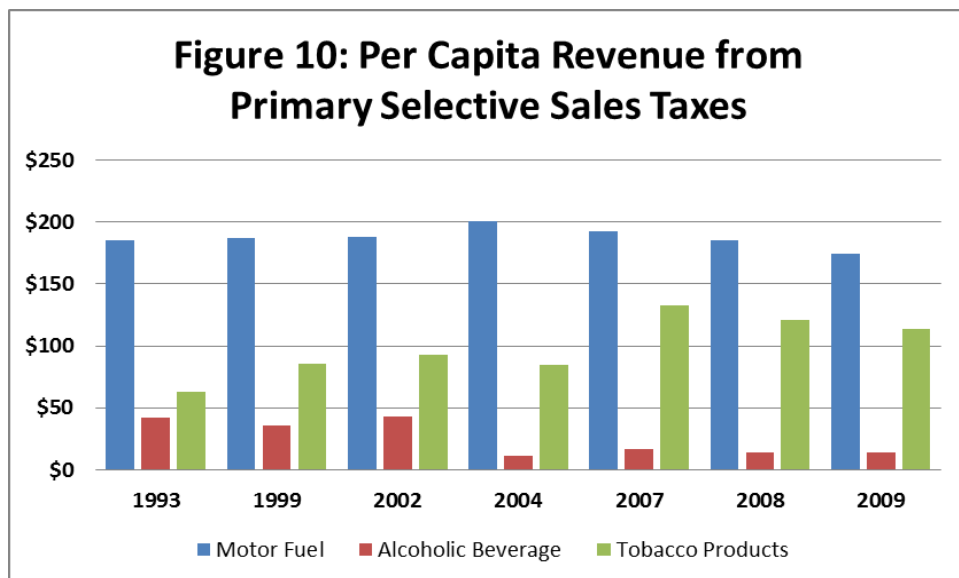
- ii. Interestingly, the proportion of revenue generated by the general sales tax peaked in 1993, when it represented the second largest source within the "Big Three". Since that time, the general sales tax has not accounted for more than 24% of revenue, and has been relegated to third place among the "Big Three".
- iii. Excluding 1993, the individual income tax accounted for the second largest proportion of "Big Three" revenue in every year examined. In fact, it took second place by a large margin, as the general sales tax never got closer than 6 percentage points away from the individual income tax.
- iv. The data shows that the individual income tax came closest among the "Big Three" to playing a truly balanced role. It hit the 33% mark in 2008, and the 30% mark on three other occasions. Neither the property tax nor the general sales tax came so close to the evenly balanced 33% proportion on any occasion in the sample of years examined.



The Expanded "Big Three":

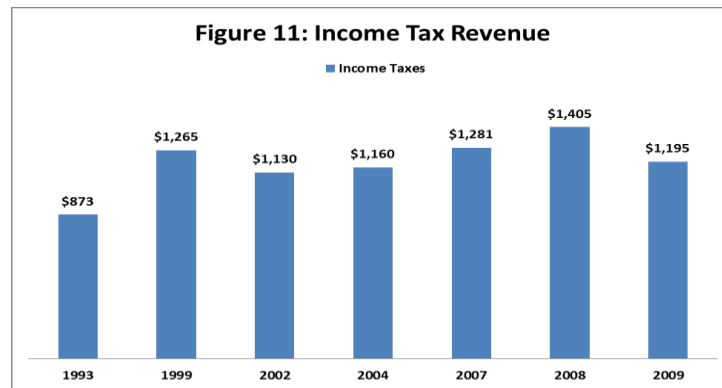
1. As one should expect, total revenue from the expanded "Big Three" is much larger than under the traditional definition. This should not come as a surprise given that additional revenue streams are added to the "Big Three" for the expanded definition. Figure 9 illustrates the revenue growth of the expanded "Big Three" over the years sampled for this study.

- a. Total revenue expanded substantially across the timeframe examined in this report. However, most of the increase took place between 1993 and 1999, when total revenue jumped by 22.5% or \$770 per capita.
  - b. From 1999 to 2009, total revenue only increased by .4% or \$16 per capita. This is quite similar to the trends seen in the traditional "Big Three", where large increases occurred between 1993 and 1999, with revenue growing much more slowly or declining from 1999 to 2009.
2. As discussed in earlier sections, under the expanded definition of the "Big Three" the broad sales and gross receipt tax category replaces the general sales tax category. This category includes several new tax bases, most notably the three primary selective sales taxes, fuel, alcohol, and tobacco.
  - a. Revenue from the sales tax category grew by 12%, or \$142 per capita, from 1993 to 2009.
  - b. As we have seen throughout this trend analysis, much of the increase occurred from 1993 to 1999, when revenues grew by \$102 per capita, an increase of 9%. Between 1999 and 2009, revenue increased by only \$40 per capita, or 3%.

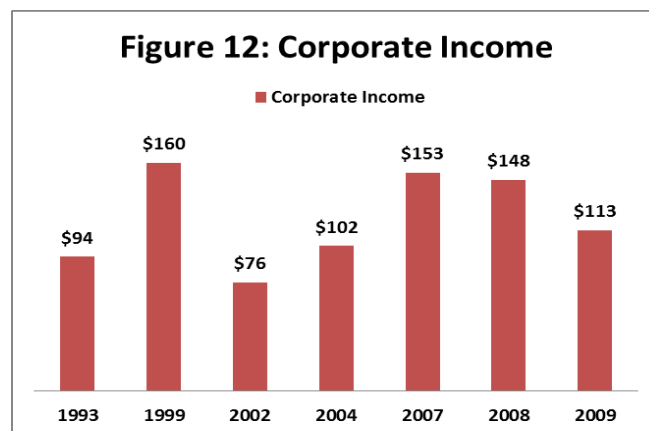


- c. Revenue from three primary selective sales tax bases varied over the period studied for this report. Figure 10 illustrates per capita revenue generated by the fuel, alcohol, and tobacco taxes.
  - i. Fuel Tax revenue declined modestly from 1993 to 2009, from \$185 to \$174 per capita, a net decrease of \$11 per capita. When 1993 is excluded, the decline increases slightly to \$13 per capita.
    - A. Since peaking in 2004, per capita revenue from the fuel tax has trended downward, as illustrated in Figure 10. Per capita revenue decreased by \$27 from 2004 to 2009.
  - ii. Revenue from the alcoholic beverage tax also decreased over the period studied for this report. From 1993 to 2009 per capita revenue decreased from \$42 to \$14.
    - A. Revenue from the alcoholic beverage tax peaked at \$43 per capita in 2002 and declined precipitously between 2002 and 2004, when it netted only \$12 per capita.
  - iii. Tobacco tax revenue increased dramatically over the period studied for this report. From 1993 to 2009 tobacco revenue increased by 81%, or \$51 per capita. From 1993 to the revenue peak in 2007, yields increased by 110.7% or \$70 per capita.
    - A. Contrary to many of the other tax bases examined here, these substantial increases persist even when ignoring 1993. From 1999 to 2009, tobacco tax revenue increased by \$29 per capita, which amounts to a 33.3% increase.
- 3. Revenue from the expanded income tax category varied greatly across the years examined for this study. As shown in Figure 11, income tax revenue expanded greatly during years of solid economic growth and contracted during (and shortly after) recessions.
  - a. The three years with the highest per capita income tax yields were the three years when the economy was growing, 1999 (\$1,265), 2007 (\$1,281), and 2008, (\$1,405).

Similarly, the years nearest recession showed lower yields, 1993 (\$873), 2002 (\$1,130), and 2009 (\$1,195).

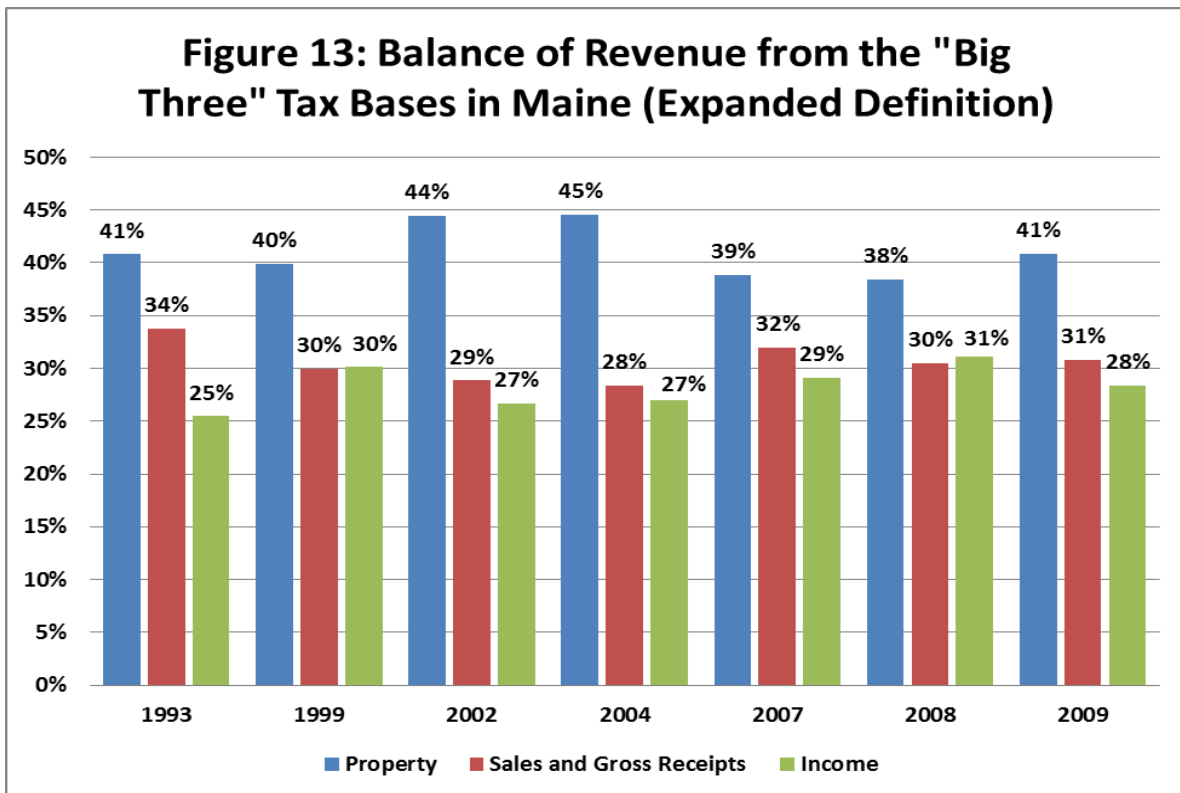


- b. It is much harder to pull broad trend data from the expanded income tax because revenue aligns closely to economic growth. However, it is safe to say that income tax revenue has trended slightly upward.
  - i. Revenue grew strongly between 2002 and 2008, increasing by \$275 per capita, or 24.3%. However, once 2009 is taken into account, these strong gains decline precipitously: Revenue increased by \$65 per capita, or 5.7%, over this period of time.





- c. Some of the volatility in the income tax category can be attributed to the corporate income tax, which showed great swings over the period studied for this report. Figure 12 shows corporate income tax yields over the years sampled.
- ii. Similar to the income tax category as a whole, revenue from the corporate income tax reflects the economic climate during the year in question. Revenue peaked during the strong economic growth in 1999, closely followed by large revenues in 2007 and 2008. Similarly, revenue bottomed out in 2002 and declined in 2009.
- 4. As I observed in the 2008 revenue profile in Part I, the expanded definition of the "Big Three" improves the balance of Maine's revenue system. However, despite this improvement, problems with balance still persisted across all seven years examined. Figure 13 illustrates the balance of taxes under the expanded definition of "Big Three".
  - a. As Figure 13 shows well, the property tax remains the dominant tax base even under



the expanded definition of "Big Three". It declined from its peak of 45% in 2004 to 38% in 2008, only to tick back up to 41% of total revenue in 2009.

- b. Unlike the situation under the traditional definition, the expanded sales tax category takes on a more prominent role, accounting for the second highest proportion of revenue in five of the seven years examined.
- c. From 2002 to 2008 revenue from the income tax accounted for an increasing proportion of "Big Three" revenue, progressing from 27% to 31%. In 2009, the great recession negatively impacted revenues from income taxes therefore pushing the proportion of revenue for this category back down to 28%.
- d. Balance appears to have improved since 1993 when Property Taxes accounted for 41% of revenue and the income tax accounted for only 25%. However, the data does not indicate that balance improved between 1999 and the late 2000s. The property tax remains the dominant base, with the sales and income bases flip flopping between second and third place proportionally.

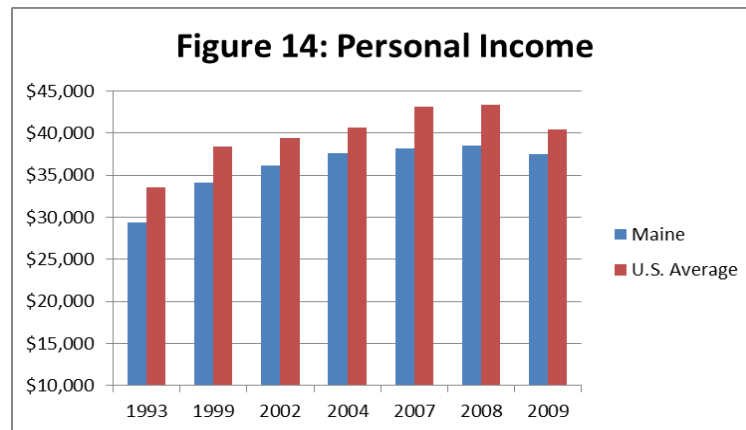
#### Trends in Burden:

- 1. As discussed in previous sections, personal income is an important consideration when reviewing burden. In examining the burden imposed by the Maine revenue system I will once again rely on the percent of personal income claimed by each revenue source and how this figure compares to the national average.
- 2. Figure 14 shows per capita personal income for the U.S. and the State of Maine for each of the seven years examined for this study.<sup>14</sup>
  - a. Figure 14 shows that Maine is consistently below the national average in per capita personal income. This is consistent with my observations for the years 2008 and 2009 in previous sections.

---

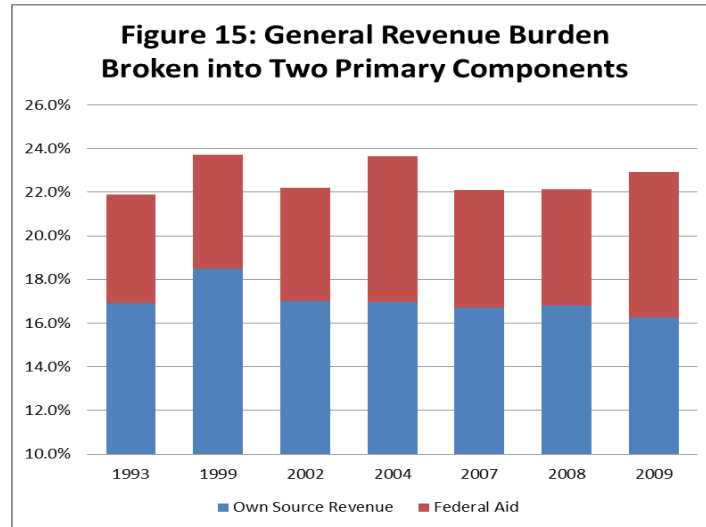
<sup>14</sup> Personal Income data taken from U.S. Bureau of Economic Research, customizable tables.  
[http://www.bea.gov/iTable/index\\_regional.cfm](http://www.bea.gov/iTable/index_regional.cfm)

- b. Figure 14 also shows that Maine and the rest of the nation followed the same trend of growth from 1993 through 2008 followed by a decline in 2009.
- c. Per capita individual income in Maine increased by 27.8% between 1993 and 2009. However, as we have seen time and again in this study, the majority of this growth, 16.3%, occurred from 1993 to 1999.



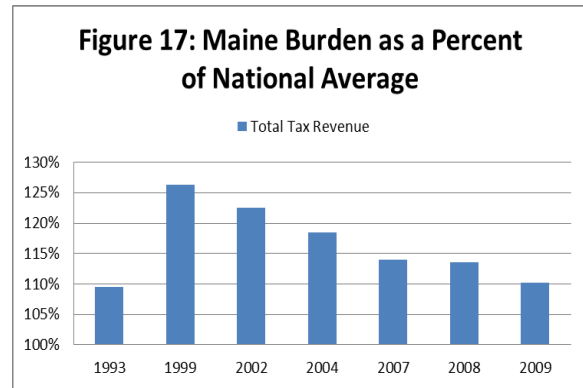
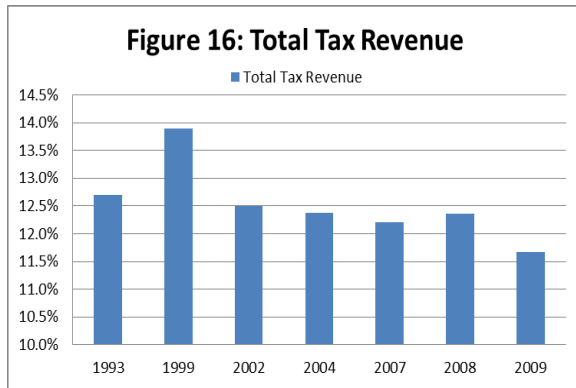
- i. Of particular interest to the rest of this section is individual income growth from 1999 to 2009. Over this period, per capita individual income grew by 9.9%.
  - d. Over the course of this study, per capita individual income in Maine grew at a faster rate than the U.S. average. Nationally, per capita individual income increased by 20.4% from 1993 to 2009, which was 7.4 percentage points less than the State of Maine for the same period.
  - i. Similarly, from 1999 to 2009, per capita individual income increased by 5.1% nationally, 4.8 percentage points less than Maine.
3. While there does not appear to be a clear upward or downward trend in general revenue, examination of the two primary components of general income, own source revenue and federal aid, reveals an interesting point.
  - a. From 1999 to 2009, the burden of own source revenue in Maine declined from 18.5% to 16.2% of personal income. This is shown by the declining blue bar in Figure 15.

- b. Although the percent of personal income accounted for by federal aid did not show a smooth upward trend, it masked the downward trend in the burden of own source revenue.

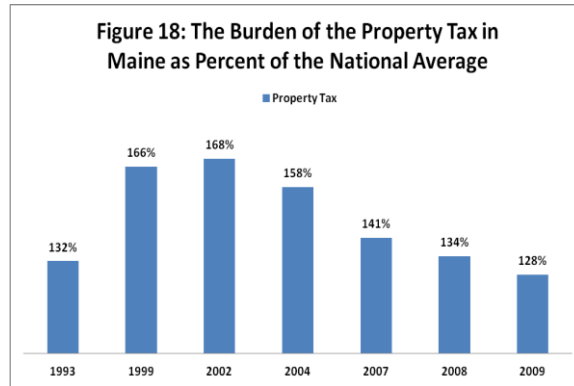


- c. As described in the previous section, federal aid peaked in 2004 and again in 2009. The percent of general revenue accounted for by federal aid also peaked in these two years, cresting 6%.
- i. Interestingly, among the seven years studied for this report, the percent of personal income accounted for by general revenue only crested 22.5% on three occasions. In 2004 and 2009, higher levels of federal aid drove the increase. On the other hand in 1999, own source revenue drove the increase.
- ii. 1999 clearly represents the peak of own source revenue as a percent of personal income and my analysis throughout the rest of this section shows that following the peak in 1999, burden declined for every tax type with the exception of the tax on tobacco products.
- A. A similar trend exists with the burden of total tax revenue in Maine compared with the national average.

- d. Figure 16 shows the burden of tax revenue in Maine across the years sampled for this study. The burden of total tax revenue fits the trend discussed above well. In 1999, Maine's divergence from the national average in tax burden peaked, followed by varying degrees of decline thereafter.

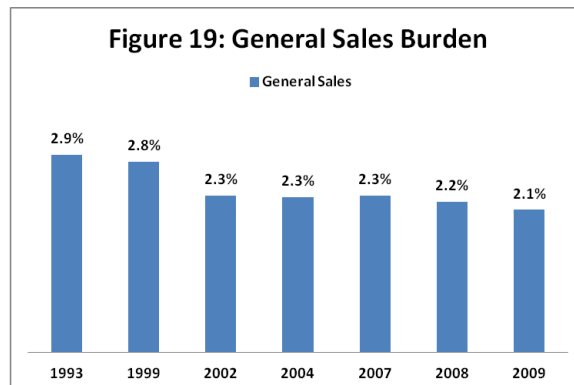


- i. Figure 16 shows the peak burden in 1999 and the ensuing decline over the next decade.
- ii. Figure 17 illustrates the corresponding decline in Maine's total tax burden as a percent of the national average.
- A. Although the burden of taxes in Maine declined compared with the national average, it is important to note that even after a substantial decline, the state ended 2009 at 110% of the national average.
- e. To further break down the decline in the burden of taxation I will examine burden trends across the "Big Three" tax bases.
- i. The property tax followed the trend set forth by total tax revenues in Maine, peaking at 5.3% in 1999 and 2002, only to end 2009 at 4.5%. Figure 18 shows the decline Maine's property tax burden as a percent of the national average. Interestingly, the peak percentage came in 2002 and then proceeded to decline by 40 percentage points.



ii. The general sales tax also follows the downward trend in tax burden. Interesting, general sales tax burden peaked in 1993 and trended downward over the course of the seven years examined. Figure 19 shows the burden of the general sales tax over this period.

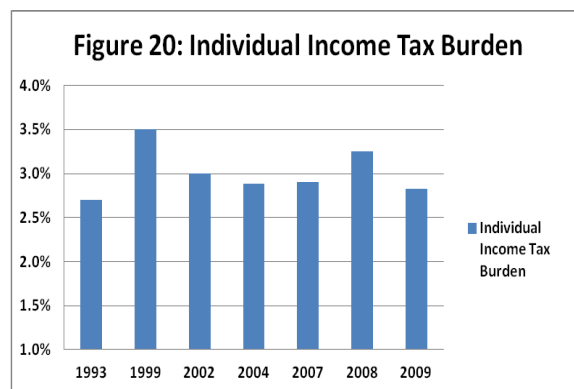
A. In 1993 and 1999, the general sales tax burden in Maine was above the national average. However, from 2002 on, burden registered below the national average.



B. The general sales tax is one of four taxes that progressed from above to below average burden compared with the national average between 1999 and 2009 (from 104% to 86%). The other three tax bases to exhibit this change were the sales and gross receipts category (103% to 94%), the alcoholic beverage tax (183% to 74%), and the corporate income tax (109% to 77%).

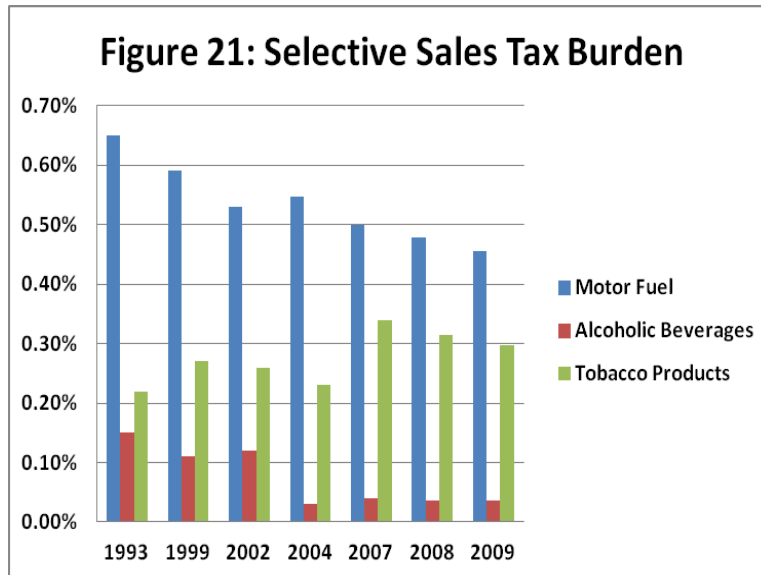
iii. In contrast to the general sales tax, the individual income tax does not display a smooth downward trend. Figure 20 displays the burden of the individual income tax from 1993 to 2009.

A. The burden of the income tax peaked in 1999, and then displayed an uneven downward trend over the next decade. Over this period, burden decreased by .7 percentage points in Maine.



B. The burden of the individual income tax in Maine also declined as a percentage of the national average from 1999 to 2009. That is with the exception of 2008, which also represented a one-year increase in the burden of the income tax. This is most likely the result of increased personal income, which, as discussed at the beginning of this section, peaked in 2008.

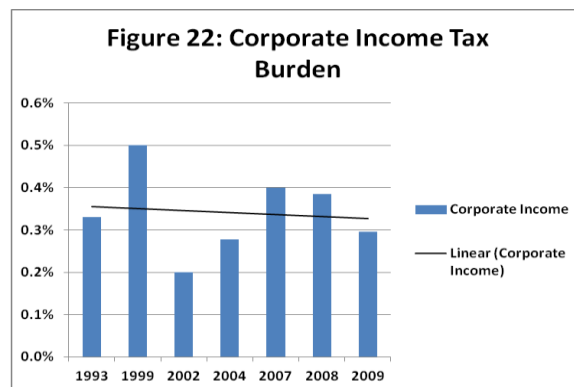
f. While the traditional "Big Three" tax bases fit the trend discussed at the outset of this section well, not all of the tax bases added to the expanded "Big Three" fit the pattern. Figure 21 shows the burden imposed by the three primary selective sales tax bases in the years sampled for this report.



- i. Figure 21 illustrates the burden of the fuel tax, which showed a steady downward trend across the years studied for this report. Fuel tax burden peaked in 1993 at .65% of personal income, and declined by .19 percentage points by 2009.
  - A. While the burden of the fuel tax was declining in Maine, the burden of the tax in comparison to the national average was rising. In 1993, Maine's fuel tax burden measured 138% of the national average. When the difference between Maine and the rest of the nation peaked in 2007, it represented 156% of the national average.
  - B. From 2007 to 2009, the difference between Maine and the national average moderated slightly, measuring 145% in 2009.
- ii. Although the burden of the alcoholic beverage tax declined across the years examined, the decline was by no means gradual or orderly.
  - A. The burden of the alcoholic beverage tax declined precipitously between 2002 and 2004. In 1993, 1999, and 2002, burden measured .15%, .11%, and .12%, respectively. The peak of burden in Maine compared with the national average came in 2002 when it measured 231%.



- B. From 2004 onward, burden ranged between .03% and .04% of personal income. Interestingly, from 2004 to 2009, the measure of burden in Maine as a percent of the national average never crested 84%.
- iii. The burden imposed by taxes on tobacco products increased over the sample of years examined for this study from .22% of personal income in 1993, to .3% of personal income in 2009.
- A. Although there was a net increase across all seven years, burden did not increase unimpeded. Following a decrease from 1999 to 2004, burden from taxes on tobacco products increased by 47.8% from 2004 to 2007 when burden peaked, claiming .34% of income.
- iv. Figure 22 illustrates the burden of the corporate income tax over the seven years examined for this study. Note the linear trend line, which reflects a slight downward trend in the burden imposed by the corporate income tax.



- A. The data shows that the burden of corporate income tax spiked during years of strong economic growth, illustrated by the peaks in 1999 and 2007.
- B. With the exception of 1999, when the burden of the corporate income tax peaked, burden in Maine registered below the national average. At its low point in 2004, the burden in Maine was only 63% of the national average, and remained very low in 2007 (78%), 2008 (81%), and 2009 (77%).

Summary:

1. Several key trends emerged from my analysis of the revenue system:

- a. Much of the growth in Maine's revenue system occurred between 1993 and 1999. Whether it be own source revenue in general, the "Big Three" tax bases, or smaller tax bases like the motor fuel tax or the alcoholic beverage tax, this trend holds true.
  - i. Strong growth between 1993 and 1999 persisted regardless of the medium used to study the data. Per capita review, "Big Three" tax revenue, and tax burden all indicate strong revenue growth between 1993 and 1999.
- b. The period between 1993 and 1999 accounted for the majority of revenue growth that occurred across the full sample of fiscal years examined in this study. As a result, revenue growth over the decade that spanned 1999 through 2009 was much weaker. On several occasions revenue actually contracted over this period.
- c. In each of the seven years studied, the property tax generated a majority of "Big Three" tax revenue. This held true whether applying traditional or expanded definition of "Big Three". The persistence of this reliance across both definitions of the "Big Three" illustrates how strongly the State of Maine relies on property tax revenue.
- d. The data shows that Maine was overburdened with taxes in each of the seven years examined in this report.
  - i. However, the data also shows that tax burden in Maine declined substantially from 1999 to 2009. Although burdens improved, the state remained above the national average for burden in 2009.
    - A. This trend holds true with the exception of the tax on tobacco products, for which burden increased across the seven years examined.

- ii. Notably, burden declined for each of the traditional "Big Three" tax bases: property, general sales, and individual income.

A. In comparison to the national average, the burden of each also declined.

While the property and individual income taxes remained above national averages, the burden of the general sales tax crossed from above to below the national average.

### Conclusion: Key Issues

Centrality of Revenue Generating Capacity: The vast majority of revenue is generated at the state level in Maine. The property tax is the only major tax collected by local governments. This creates greater volatility in state level revenues, because local governments administer one of the most inelastic tax types, thereby forcing state government to rely on more economically responsive tax types like the general sales and individual income taxes. This situation makes state revenues more dependent on economic conditions. On the other hand, the fact that the primary source of local revenue is the property tax hurts the ability of local governments to earn more revenue during periods of economic growth.

Burden: My analysis clearly shows that in 2008, Maine residents were overburdened with taxes and paid a greater proportion of their income into the state revenue system than do their counterparts elsewhere in the country.

1. The good news is that my comparison of 2008 and 2009 showed that burdens broadly decreased over that period, both as a percent of personal income and in comparison to the national average. My broader analysis showed that the changes between 2008 and 2009 were not an isolated case. The burden of Maine's revenue system and its various components has declined substantially since 1999. The decline from 1999 to 2009 is in contrast to the dramatic increase in burden that occurred between 1993 and 1999.

2. While overall burden is high, there are still some tax bases that burden Maine taxpayers less than their counterparts around the country. In particular, the general sales tax and the corporate income tax fit in this category. Current charges also burden Mainers to a lesser extent than other Americans, despite the fact that current charges are one of the few revenue categories that reflected consistent growth across all seven years examined in this study.

Balance: The issues with balance identified in Part I are a single example of long-term problem with the balance of Maine's revenue system.

1. One issue that contributes to the State's off balance revenue system is the underutilization of the general sales tax. The data on burden shows that Maine residents pay a smaller amount of their income in general sales taxes than their counterparts in other areas of the country, this is also shown in my per capita analysis. For this reason, general sales taxes do not contribute a balanced proportion of revenue to the system. The expanded definition of the "Big Three" tax bases improved the balance of the sales tax category, but could not draw the system into balance because the property tax generated a disproportionately large amount of revenue.
2. Property taxes are another of the "Big Three" tax types that is far out of balance. Revenue from property taxes accounts for a disproportionately large percentage of "Big Three" revenue. This is an issue that impacted the Maine revenue system in each of the seven years examined for this study. Although the expanded definition of the "Big Three" helped offset the property tax somewhat, even adding additional revenue streams to the other "Big Three" categories could not draw the property tax into balance.
3. Income taxes contributed perhaps the most balanced portion of revenue among any of the "Big Three" tax bases. Under the traditional definition of the "Big Three", the individual income tax was consistently at or near the 1/3 of revenue mark. While weak revenue from the capital gain's tax caused the income tax to lose ground under the expanded definition, it remained a strong contributor to "Big Three" revenue.

Federal Aid: Across all seven years examined for this study, the State of Maine received federal aid at levels well above the national average. In 2009, this had the effect of masking substantial problems in the generation of own source revenue, in particular declining tax revenue. In this regard, federal aid has been crucial to maintaining the health of Maine's revenue system.

1. Although federal aid to the State of Maine ebbed and flowed across the seven years examined for this study, it trended upwards in general. For example, in 1999 federal aid accounted for only 22% of general revenue. By 2009, it accounted for nearly 30%. This is a major shift and one that cannot be ignored.
2. It is clear that Maine's strong reliance on federal aid creates vulnerability in the state revenue system. If the federal government reduced the amount of aid to the states, corresponding to its greater than average reliance on federal aid, Maine would find itself impacted to a greater degree than the rest of the nation. In today's world of deficit reduction and budget cuts, reductions in state aid represent a real possibility, and one that policy makers in Maine must bear in mind. Policymakers should also note that the increased amount of federal aid distributed to the state in 2009 is not permanent: it will decline dramatically when ARRA funding expires in the coming years.

The Great Recession: Many of the effects of The Great Recession have been discussed above. However, the recession amplified trends in declining revenue and declining tax burden that have been building in Maine since at least 1999. The recession also made the state of Maine more reliant than ever on federal aid and also drove up reliance on the property tax. My trend analysis showed that prior to 2009, the property tax had been trending downward in the proportion of "Big Three" revenue it accounted for. This reversed in 2009 as the proportion of "Big Three" revenue generated by the property tax moved back upward. Further, the Great Recession negatively impacted personal income in Maine, which had been growing slowly yet consistently for years.

By continuing to study the after effects of the Great Recession, policymakers can learn from what amounts to a worst-case scenario for state revenues. The State of Maine will feel the effects of the Great Recession for years, and for that reason future research should continue to

track the trends outlined above into 2010, 2011, and eventually 2012. No analysis of trends is complete without continued monitoring to track new developments and identify emerging issues.

## **Bibliography:**

- Bureau of Economic Analysis. Customizeable Regional Income Tables.  
<http://www.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=4>.
- U.S. Census Bureau. Annual Survey of State Government Finances.  
<http://www.census.gov/govs/state/>.
- Isidore, Chris. "Recession Officially ended in June 2009". CNN Money. September 20, 2010. [http://money.cnn.com/2010/09/20/news/economy/recession\\_over/index.htm](http://money.cnn.com/2010/09/20/news/economy/recession_over/index.htm)
- LaPlante, Dr. Josephine. "Seven Habits of Unsustainable Budget Building: A State Policy Perspective." Journal of Public Budgeting. Summer, 2011. Vol. 25, No. 2. Pgs. 215-262.
- Richardson, John. "LePage Calls for Overhaul of Medicaid Benefits." Portland Press Herald. December, 6, 2011.
- National Bureau of Economic Research. "U.S. Business Cycle Expansions and Contractions." <http://www.nber.org/cycles.html>. September 20, 2010 [Last Update].
- The Tax Foundation. "Maine's State and Local Tax Burden"  
<http://www.taxfoundation.org/taxdata/show/458.html>. February 23, 2011.
- U.S. Government. "The Recovery Act." Official Website of the Recovery Act.  
[http://www.recovery.gov/About/Pages/The\\_Act.aspx](http://www.recovery.gov/About/Pages/The_Act.aspx). December 14, 2011 [Latest Update].
- U.S. Government. "Maine Funding by Quarter." Official Website of the Recovery Act.  
<http://www.recovery.gov/Pages/TextView.aspx?data=stateSummaryAwardsByQuarterChart&stateCode=ME>. November 30, 2011 [Latest Update].