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TAXATION IN THE FIFTY STATES, WITH SPECIAL ATTENTION ON THE LONE STAR STATE

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Taxpayers in the United States are taxed by federal, state, and local governments. While federal tax rules apply uniformly to taxpayers across the country, state and local taxation, by its very nature, differs in application across state lines and, within states, across local tax districts. At their disposal, states have a number of ways to raise tax revenue, including property taxes, sales taxes, and income taxes. However, even the common names mask differences in how these well-known taxes are imposed. For example, while property taxes are typically applied to land and improvements (i.e., houses and other structures), some states also tax what is labeled personal property, including house furnishings, automobiles, and other personal belongings. Similarly businesses might pay property taxes on land and structures, and also on inventory of various forms. States that tax income often piggyback on federal income definitions, but this is not universal. Income tax collections on corporations or other businesses can vary markedly. Sales taxes also differ by state, with some states exempting some categories of expenditures, most commonly food and medical expenses. Finally, states differ in the tax rates they impose as well as the types of taxes they use.

This monograph looks at the fifty states and the District of Columbia to see how these entities vary in overall tax collections and in the use of the most common forms of taxation, namely, property taxes, income taxes, and sales taxes. The goal is to provide an overall picture of how these methods of taxation are used across these United States, as well as to compare the experience of the fifty states to taxation in Texas.

Texas does not impose an income tax on personal income, although it does have a form of business income taxation (the franchise tax). Texas is a relatively low-tax state both on a per-capita basis and when looking at taxation compared to personal income. Of course, with no personal income tax, Texas applies its sales taxes and property taxes more intensely than some other states. Given the outcry in some quarters for a reduction in the reliance of Texas on property taxation, this study puts taxation in perspective by using data on the sum of state and local taxation in recent years on a per-person basis and, separately, taxes as a fraction of personal income. The state-centric approach used here examines data on each state's tax collections for property, sales, and income taxes, and compares them to USA averages and to the Lone Star State.

In any discussion of tax collections over time, it is important to adjust for inflation, the increase in the overall level of prices over time. Changes in price level result in rising prices and rising levels of wages, incomes, and tax collections. Even if the level of economic output were constant and tax rates were constant, the higher wages, higher incomes, and higher housing prices caused by inflation would also lead to higher tax collections. Further, this rise in tax collections would not indicate an increase in the purchasing power of those tax collections because the price level in the economy had risen and caused the increase in tax collections. For this reason, economists regularly correct for this feature by calculating what is termed 'real tax collections,' 'real personal income,' 'real

GDP (Gross Domestic Product),’ and so forth. The adjective “real” simply indicates that the data has been adjusted to take out the effect of inflation.

Calculating real tax collections is not sufficient for most purposes, as the size of the tax base, namely, the population, will also affect the size of tax collections. States with larger populations tend to collect more taxes, even after adjusting for inflation, in part because larger populations lead to more government spending and hence the requirement for more taxes. Comparisons of real tax collections on a per-person basis, otherwise known as per capita, allows a comparison of the average real taxes paid per person in a state. To the extent that government spending on goods and services varies with population, this comparison puts states with large populations and states with smaller populations on a more comparable basis.

States with larger levels of real personal income – “richer states” – tend to have larger real tax collections. As a state’s personal income grows, taxpayers have a greater capacity to pay taxes and states often demonstrate a propensity to raise taxes with personal income. Thus, it is also common to look at real tax collections relative to real personal income in a state and not just real taxes relative to population.

This analysis recognizes these effects and accounts for them in order to properly assess tax revenues. If real per capita taxes should increase, it is useful to consider taxes as a percentage of personal income. It is possible for the former to change while the latter remains the same. For example, an increase in real per capita wages would explain a coincident increase in the real per capita income tax. In this case, income taxes as a percentage of total income would remain constant, while income taxes per capita would increase. Both statistics are informative about different issues.

This study documents real taxes per capita, and real taxes relative to real personal income, across the fifty states. It illustrates the various combinations of taxes, and the level of taxes, in these states. In this way, the study intends to shed light on how the level and mix of taxes have changed over time. No conclusion will be offered here as to the appropriateness of the level of taxation imposed by any state, nor on the appropriate mix of taxes. Those judgments will be left to the reader.

STATE AND LOCAL TAXES

The data used in this section consist of state and local tax revenues aggregated to the state level for the years 2000 to 2015. These data include overall non-federal tax collections within a state and also provide a variety of subcategories of taxes within a state, including income taxes, property taxes, and sales taxes.

One important issue when discussing state and local tax collections is the treatment of tax revenues funneled from the federal government to state and local governments. These revenues are known as intergovernmental transfers (IGTs), and are a nontrivial portion of state and local tax revenues. However, IGTs are excluded here. Instead, this analysis is confined to those tax revenues originating from state or local sources, otherwise called ‘own source’ taxes.

Figure 1 displays the percentage contribution of taxes in each category to total own-source tax revenue during 2000 – 2015. Sales taxes make up 24% of own-source tax revenue, and 22% for property taxes. Income taxes are 15% of tax revenue. The nebulous “other” category represents 39% of own-source tax revenue and includes a variety of user charges like tolls, local registration fees, estate and inheritance taxes, and, importantly, the corporate income tax. Though often small on an individual basis, the multiplicity of these “other” taxes together produce a tax burden as substantial as sales and income taxes combined. Moreover, the prevalence and diversity of these “other” taxes indicates how states and localities tailor tax rules and policies according to state and local political preferences. Finally, this reliance on “other” taxes is not a new phenomenon. It has been a feature of the state and local tax environment for many years preceding the sample period used in this study.

¹ IGTs are important. Since 1977 IGTs have ranged from a minimum of 16% to a maximum of 25% of total tax revenue. The difference between the value in 1977 and the value in 2015 is only one percentage point.

**FIGURE 1. TAX REVENUE BY CATEGORY, ALL STATES AVERAGE
2000 - 2015 AVERAGE BREAKDOWN**

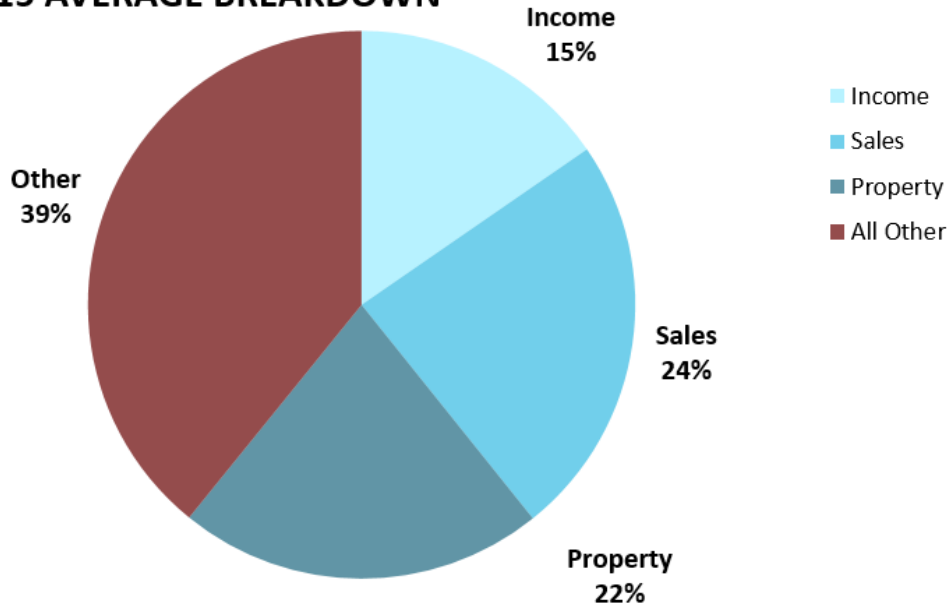
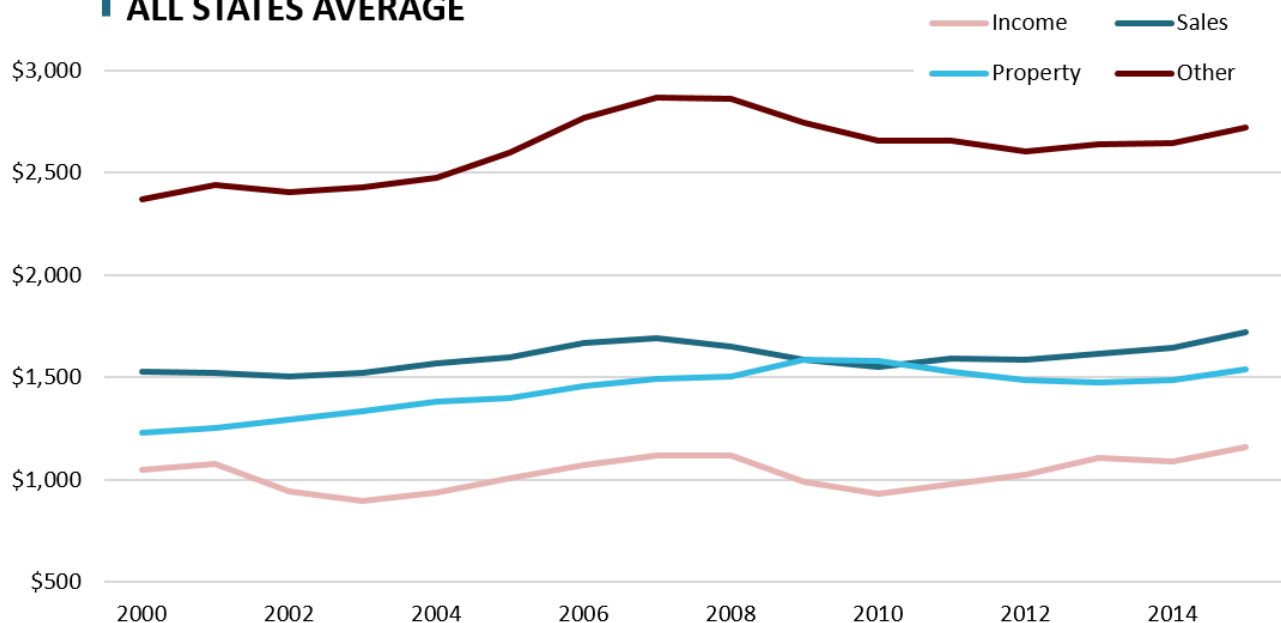


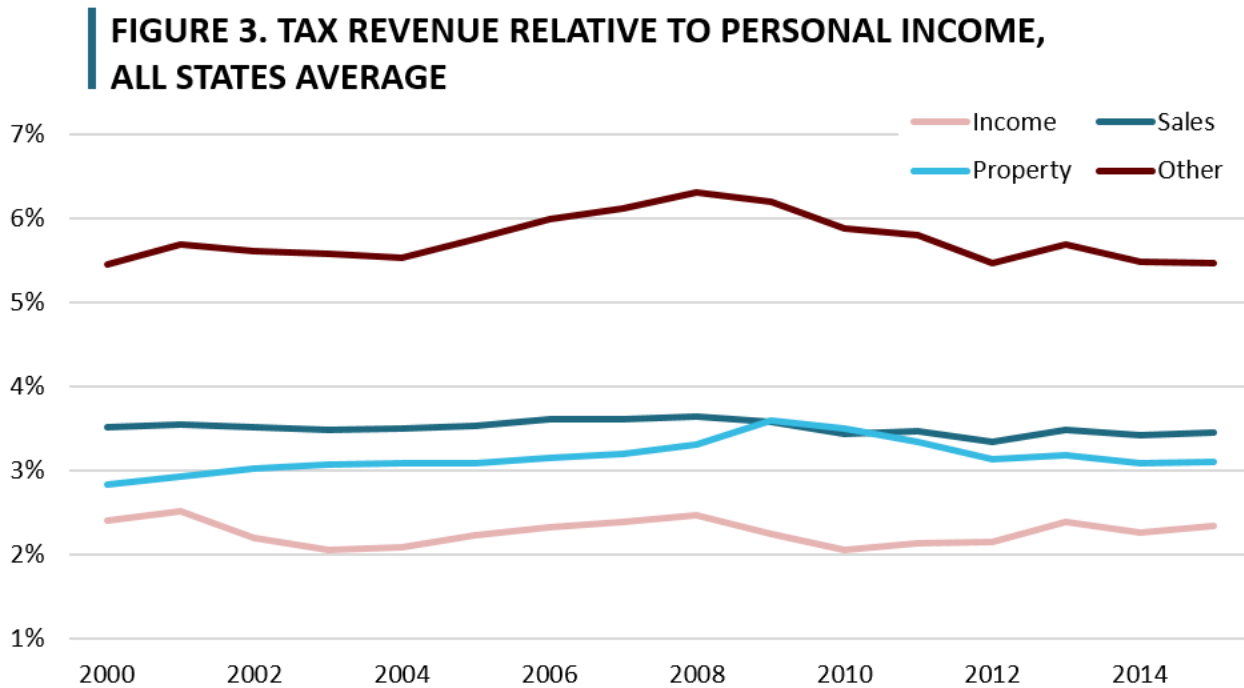
Figure 2 graphs the evolution over time of real income taxes, sales taxes, property taxes, and “other” taxes on a per-capita basis. The dollar values reported on the vertical axis are inflation adjusted, and are termed “constant 2016 dollars,” indicating that they are adjusted for changes in the price level between each year of the sample and the year 2016. Thus, the purchasing power of a dollar value reported in the graph for the last year of the sample, 2015, and in the first year of the sample, 2000, are the same.

The figure shows that real tax collections per person vary over time, but generally trend upward so that all values in the graph are higher at the end of the graph than at the beginning. The variation along the path includes a decline in tax revenue in most categories after 2008, after the so-called Great Recession that accompanied the financial crisis. Adding these four categories together, total state and local tax revenue increased by 16% over the entire sample period, or nearly 1% annually. Property taxes per person increased by 25%, or 1.5% annually. Clearly, state and local taxes have risen for reasons in addition to inflation and population growth.

**FIGURE 2. REAL TAX REVENUE PER CAPITA BY CATEGORY,
ALL STATES AVERAGE**



Per-capita taxes could rise but, if per-capita income rises enough, then taxes divided by income might remain constant or even fall. In this situation, the burden on individuals of an increase in taxes would be offset by rising incomes. Figure 3 graphs the ratio of real tax revenue to real personal income. The vertical axis reports the percentage of personal income that is needed to pay for the state and local tax collections. Because personal income is, in general, rising over time, the slope of the trends in Figure 3 are different than those in Figure 2. Indeed, there is no general upward trend in any of the four tax categories and total real taxes as a percent of real personal income varies between 14% and 16% over the entire period. In comparing the year 2000 to 2015, neither sales, income, property nor “other” taxes changed more than a quarter of a percent relative to personal income. In 2008 and 2009, the first years of the Great Recession, there was a relative increase in all forms of taxation most likely caused by a recession-induced 2% decrease in personal income, rather than any sort of policy aimed at collecting more taxes.



STATE AND LOCAL TAXES: INDIVIDUAL STATES

The previous section outlined the relative importance and magnitude of state and local tax collections for all of the fifty states. This section shows the relative importance and magnitude of state and local taxes for each of the fifty states. Because the tax data is of a different sort, the period of available data changes to the twelve years from 2004 to 2015 and includes data on the fifty states, on the District of Columbia, and also the U.S. as a whole.

Figure 4 illustrates total real own-source taxation per person for each individual state, with each state represented by a particular color.² Three collections of points receive special treatment and are connected by lines: the dark blue line, which connects points for the state of Texas, the light blue line denotes the entire U.S., and the pink link shows connection points for California. The U.S. represents an average of the values for the states, with points below the light blue line indicating states that collect lower real own-source tax revenue per capita compared to the U.S. as a whole. Note that the yearly values of the U.S. average in Figure 4 are the yearly sums of the four categories of taxes shown in Figure 2 above.

Texas is highlighted so that its relative position can be easily identified. In Figure 4 it is clear that Texas collects a relatively low level of real own-source tax revenue per capita. In fact, averaged over these twelve

² For all figures in this section Alaska is not represented, as it has relatively high taxes that are outliers relative to other states, and including its values would distort the graphs

years, the Lone Star State ranks 40th in per capita taxation among the other 49 states and the District of Columbia. The top of the list includes Alaska, Wyoming, and New York, which each collect an average of over \$10,000 in real own source tax revenue per person. The highest taxes in 2015 were paid in North Dakota, \$12,341 per person, dwarfed only by the District of Columbia with \$13,417 per person. The lowest taxes in 2015 were paid in Tennessee, \$5,037 per person. California is specifically pointed out because it is both large and regarded as a relatively high-tax state, certainly above the USA average. In 2015 Texans on average paid \$6,061 in state and local taxes per person, while the USA average was \$7,136 per person, and Californians paid \$8,449 per person.

During these twelve years, only ten states decreased their real per capita tax collections. Ten states increased their per-capita real tax collections by more than 20%. North Dakota follows a unique upward trend, more than doubling the real per capita tax burden in these twelve years. Texas increased its real per capita taxes by 11% over this period.

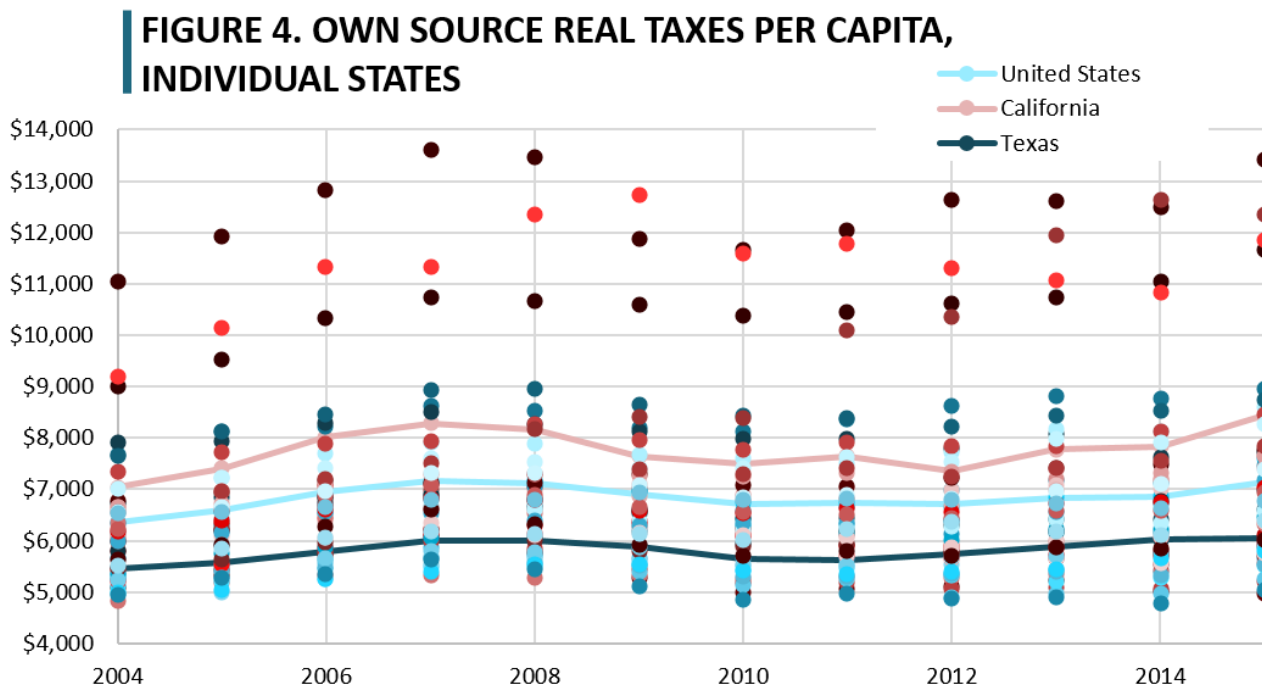
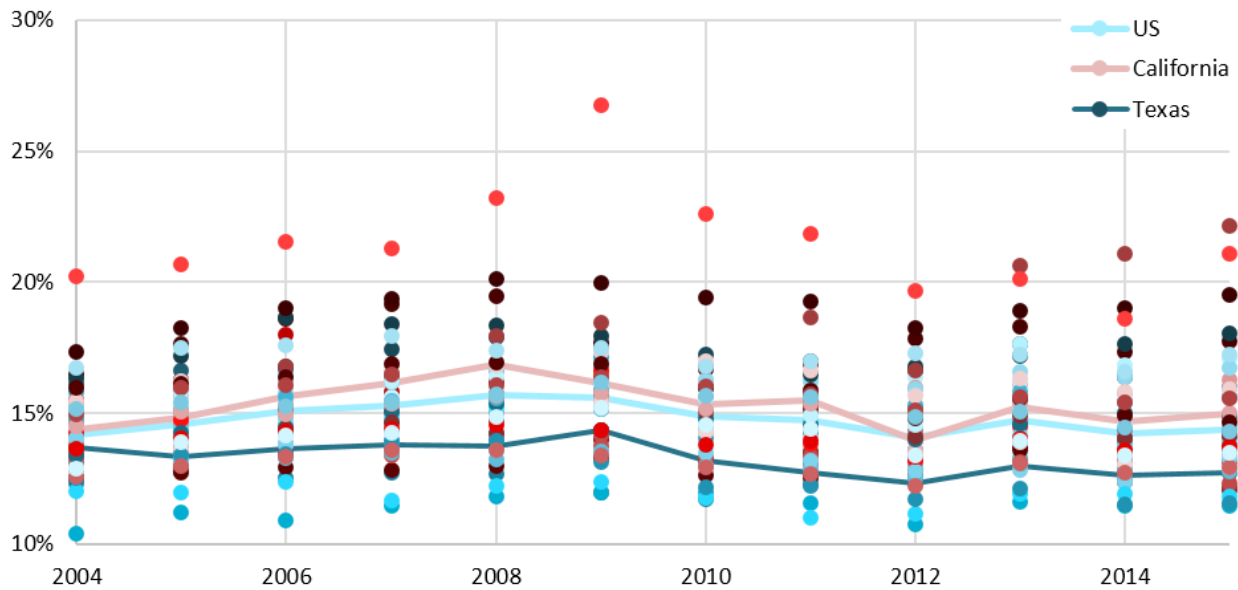


Figure 5 graphs own-source real taxes as a fraction of real personal income. This figure shows how much of average personal income in a state was needed to pay the average state and local taxes in that state. While Figure 4 tells the story of an overall increasing trend in per-capita taxation, Figure 5 shows that taxes relative to personal income have been relatively steady over time. It is clear that the change in taxation relative to personal income has plateaued over time, so that while tax collections per person have risen, they have risen more slowly with respect to personal income. For ten of the states shown in Figure 5 (District of Columbia, Hawaii, Illinois, Iowa, Minnesota, Mississippi, New Hampshire, New Mexico, New York, North Dakota) there was a greater than 1% increase in the fraction of personal income needed to pay state and local taxes for 2015 compared to 2004. The largest increase was for North Dakota (6.6%) and Hawaii (2.6%). For USA state and local governments as a whole, the tax burden as a fraction of personal income was only 0.16% higher in 2015 compared to 2004. For Texas, this ratio was slightly lower in 2015 compared to 2004, a decrease of 0.9%. California had an increase of 0.6%, New York an increase of 2.2%, and Florida a decrease of 1.2%. States showing a decrease of 1% or more, in addition to Florida, include Alaska, Idaho, Louisiana, Maine, Michigan and Utah. Texas would be next, with a decrease of 0.9%. The largest decline was in Alaska, -7.0%, followed by Louisiana at -2.3%.

If for each state we take the average state and local taxes as a percent of personal income over these twelve years and rank the states on this measure of tax burden, Texas ranks relatively low, sitting 44th among the states and the District of Columbia.

Looking just at 2015, the USA average state and local tax burden was 14.4% of personal income. For Texas this was 12.8% of personal income, while California had a tax burden of 15.0% of personal income. Two other large states, New York and Florida, had total average state and local tax burdens relative to personal income of 19.5% and 12.2%, respectively. The highest burden was in North Dakota, with state and local taxes consuming 22.2% of personal income. Wyoming was in second place at 21.1%. The lowest tax burden was in Tennessee, at 11.6% of personal income.

FIGURE 5. OWN SOURCE REAL TAXES RELATIVE TO PERSONAL INCOME, INDIVIDUAL STATES



For the next step, specific categories of taxes are analyzed. These are property taxes, sales taxes, income taxes, and other taxes. These four taxes will all be examined looking at tax revenue relative to personal income.

Figure 6 presents the data on property taxes. Property taxes nationwide have been up and down over time, but in 2004 the USA average property tax burden as a percent of personal income was 3.1%, and in 2015 they were also 3.1%. In Texas property taxes have shown more volatility over time, and they represent a larger than average percent of personal income. In 2004, property taxes were 4.0% of personal income in Texas. This fell to 3.5% in 2008, then returned back to over 4.2% in 2009, but subsequently declined over most of the years since, resting at 3.7% in 2015. In an average of the years 2004-2015, Texas ranks 12th in property taxes as a fraction of personal income.

In 2015 the highest property tax states include New Hampshire at 5.5% of personal income and Vermont at 5.1%. Texas, at 3.7%, again ranks 12th from the top. Among other large states, New York property taxes averaged 4.6% of personal income, California 2.9%, and Florida 2.7%. The lowest property tax burdens relative to personal income were in Oklahoma at 1.5% and Alabama at 1.4%.

FIGURE 6. PROPERTY TAXES RELATIVE TO PERSONAL INCOME, INDIVIDUAL STATES

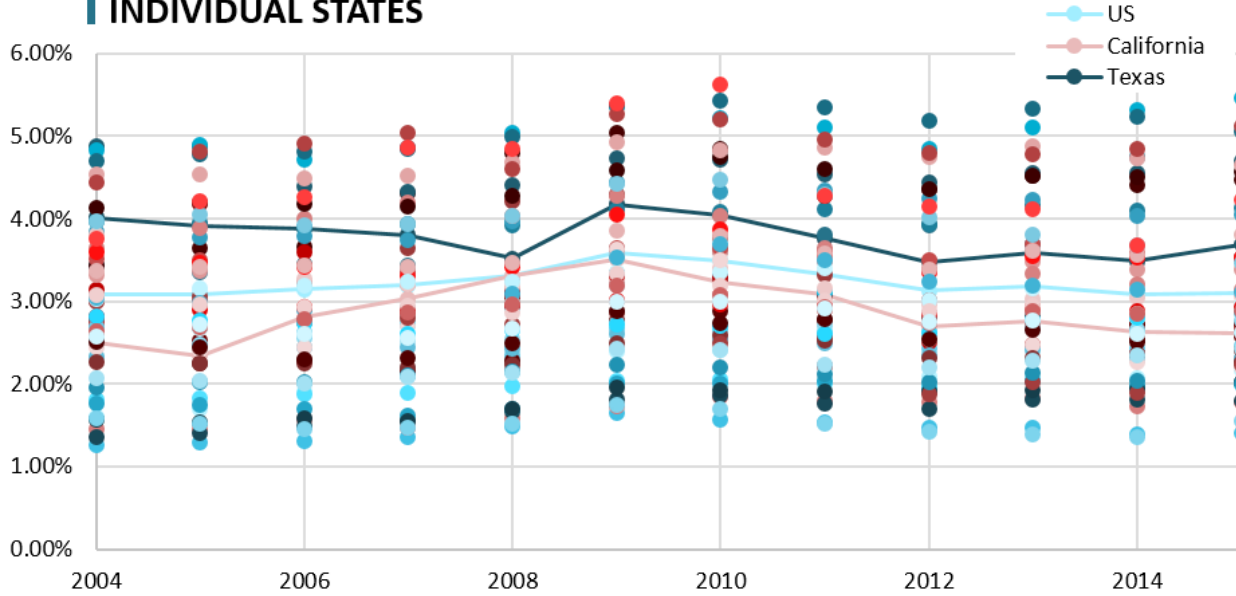
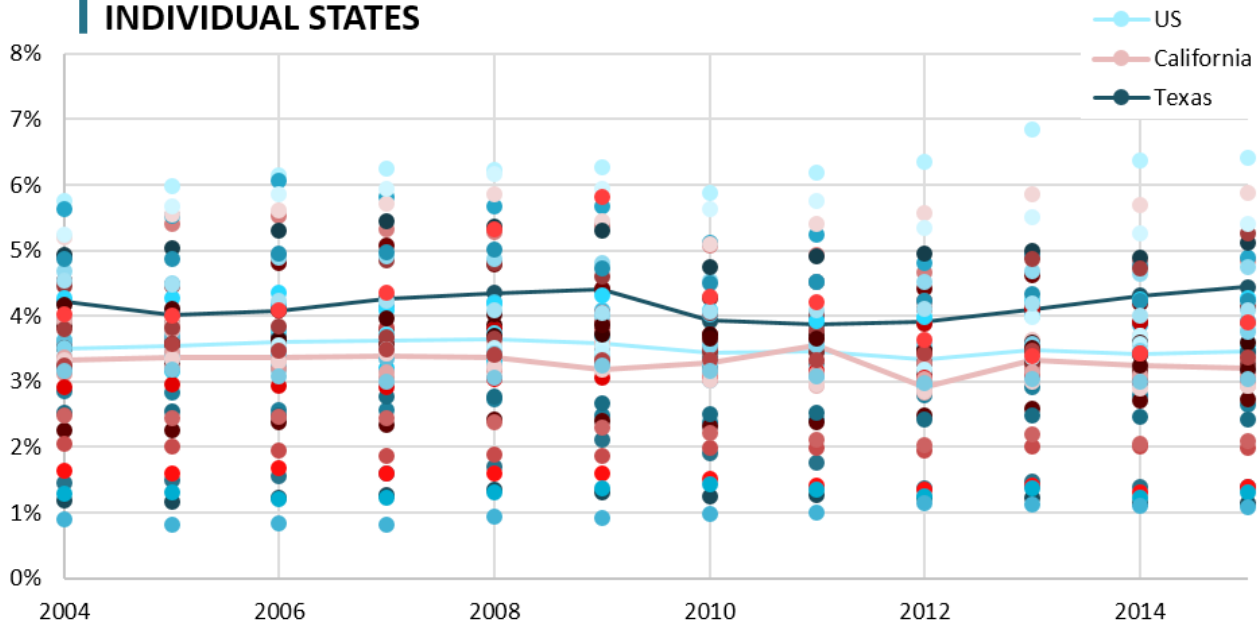


Figure 7 graphs sales tax revenue. For the USA average, sales taxes were 3.5% of personal income in 2004, and fairly constant over time. They fell to 3.3% of personal income in 2012 but rose back to 3.5% for 2013 and were that level in 2015. There was more movement over time for some states, and clearly in Texas sales taxes were more variable. They were 4.2% of personal income in 2004, rising to a high of 4.4% in 2009 before falling to 3.9% in 2010. Then they started a gradual climb back to 4.4% in 2015. On average over this period, Texas is 14th from the top in terms of sales taxes as a percent of personal income.

Looking just at 2015, the USA average sales tax collections relative to personal income were 3.5%, with the highest sales tax burden in Hawaii at 6.4%, followed by Nevada at 5.9%. Of course it is probably not surprising that two tourist destinations have a high sales tax rate. Texas has a sales tax burden of 4.4%, compared to California at 3.2%, New York at 3.6%, and Florida at 3.8%. The lowest sales tax burdens were in Oregon and Delaware, both at 1.1%.

FIGURE 7. SALES TAXES RELATIVE TO PERSONAL INCOME, INDIVIDUAL STATES



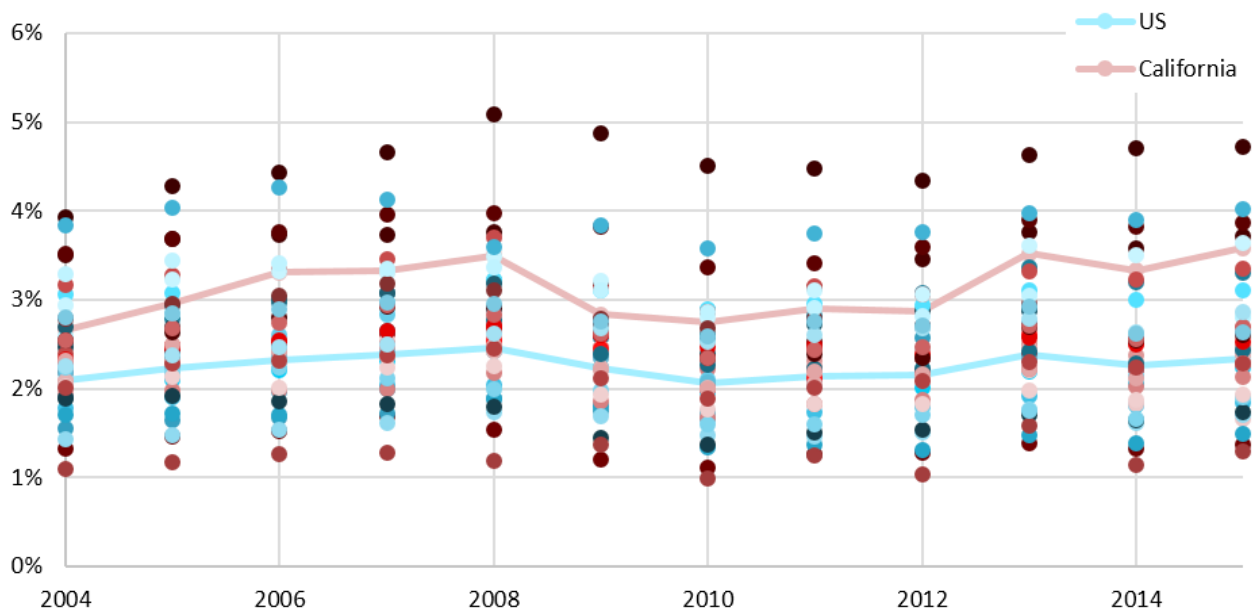
The graphs above show that Texas has a property and sales tax burden, relative to personal income, that exceeds the USA average, and that exceeds the burden at some states considered high tax states. This should be considered in light of the fact that Texas levies no state personal income tax.

Figure 8 graphs state personal income taxes relative to personal income. As can be seen in the graph, the USA average state income taxes relative to personal income trended upward for a time, then downward after 2008 and the Great Recession. In 2004 state income taxes were 2.1% of personal income, and in 2015 2.3%.

Since Texas does not collect a state personal income tax, the ratio is zero and the data points do not appear on the graph. Among the other large states in 2015, California has a state income tax burden of 3.6%, New York 4.7%, and Florida has not state income tax. (Other states that don't collect personal income taxes in 2017 include Alaska, Florida, Nevada, South Dakota, Washington, and Wyoming. Residents of New Hampshire and Tennessee pay a state income tax on dividends and interest income, but not wages.)

Obviously the lowest state income tax burden is zero. New York has the distinction of having the highest ratio of state income taxes to personal income, at 4.7%. Oregon is second, at 4.0%.

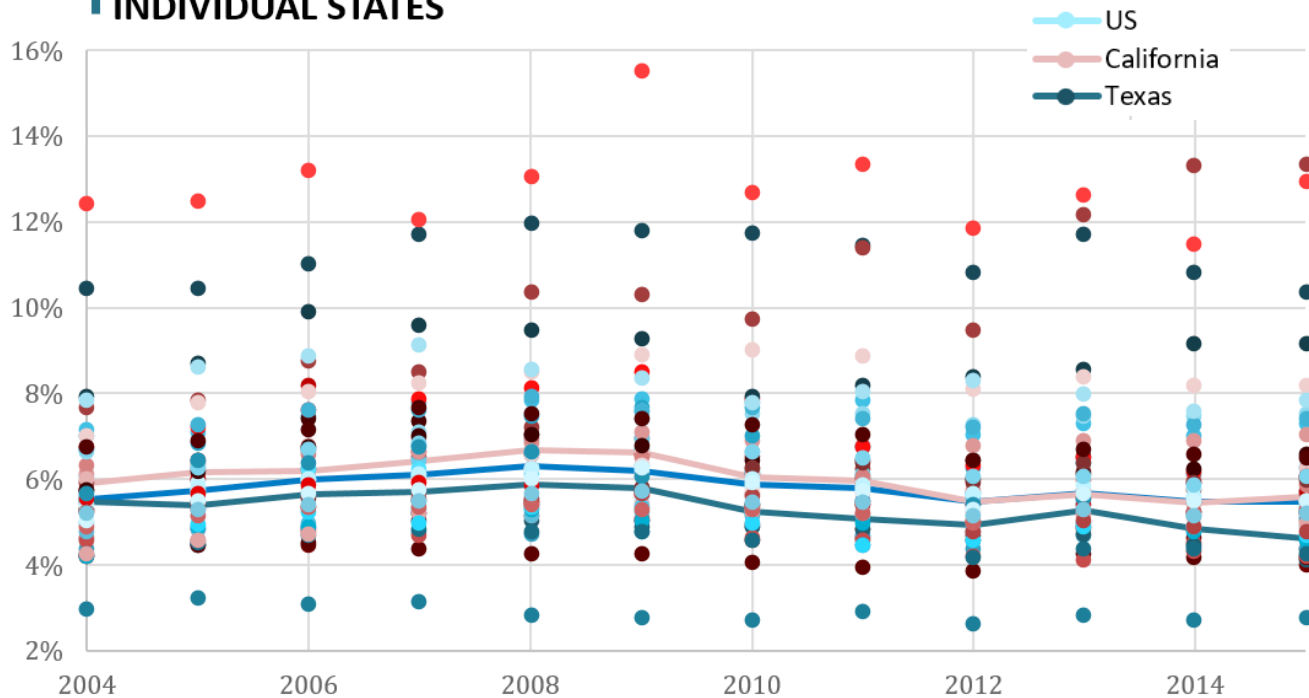
FIGURE 8. PERSONAL INCOME TAXES RELATIVE TO PERSONAL INCOME, INDIVIDUAL STATES



For the sake of completion, Figure 9 graphs “other taxes” relative to personal income for the individual states. At the national level this category is large, 5.2% of personal income in 2004, falling slightly to 5.1% in 2015. Texas mimics this pattern, but falls further, from 5.5% in 2004 to 4.6% in 2015.

In 2015 the states with the highest burden of “other taxes” were Wyoming and North Dakota, each at 12.9%. The lowest burden was Connecticut, at 2.5%. Among the large states, California’s burden was 5.2%, New York 5.6%, Florida at 5.4%, all higher than Texas’s 4.6%.

FIGURE 9. OTHER TAXES RELATIVE TO PERSONAL INCOME, INDIVIDUAL STATES



CONCLUSIONS

States vary in the level and growth of tax collections, whether presented in per capita terms or as a fraction of personal income. Overall state tax collections in real terms per capita have shown some tendency to grow over time, with much diversity among the individual states. Similarly state tax collections as a fraction of state personal income show a wide diversity of behavior, but the tendency is for these trends to be much flatter over time.

The situation in Texas has received special attention, and Texas is shown to be overall a low tax state, whether considered in either real per capita terms or as a fraction of personal income. Texas has no personal income tax and hence relies on the sales tax and the property tax to a larger extent than many other states.

Based upon tax trends that span more than a decade, 29 of 51 states (including DC) demonstrate an increasing burden of taxes relative to personal income. A sizable minority, 21 states, demonstrate a decreasing burden of taxes relative to personal income.

This study shows average tax rates, relative to population or relative to personal income, for the totality of state and local taxes in a state and for four important subcategories. In all cases the numbers reported are average tax rates, not marginal tax rates. Economists are most concerned with marginal tax rates, as these are the tax rates that influence economic behavior on the margin. Marginal tax rates may differ substantially from average tax rates, and marginal tax rates differ across income and wealth distributions within a state. Hence this study is only intended as a broad overview of the tendency for states to tax their citizens, and the methods by which they do so.

The aim of this study is to characterize state tax collections of various types for the United States as a whole and to show the distribution across states and over time. Whether these levels of tax collections are appropriate is an issue for another paper, and beyond the scope of the descriptive exercise conducted here.

DATA SOURCES

Tax Policy Center: Urban Institute and Brookings Institution, “State and Local General Revenue,” <http://www.taxpolicycenter.org/statistics/state-and-local-general-revenue>

Tax Policy Center: Urban Institute and Brookings Institution, “State and Local General Revenue by Source,” <http://www.taxpolicycenter.org/statistics/state-and-local-general-revenue-source>

US Census Bureau, “Intercensal Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2010,” <https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html>

US Census Bureau, “Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2017,” <https://www.census.gov/data/tables/2017/demo/popest/state-total.html>

Bureau of Economic Analysis, “SQ1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income,”

<https://www.bea.gov/itable/iTable.cfm?ReqID=70&step=1#reqid=70&step=30&isuri=1&7022=36&7023=0&7024=non-industry&7033=-1&7025=0&7026=xx&7027=2015,2014,2013,2012,2011,2010,2009,2008,2007,2006,2005,2004,2003,2002,2001,2000&7001=336&7028=1&7031=0&7040=-1&7083=levels&7029=36&7090=70>

Bureau of Labor Statistics, “CPI-All Urban Consumers (Current Series),” <https://data.bls.gov/pdq/SurveyOutputServlet>