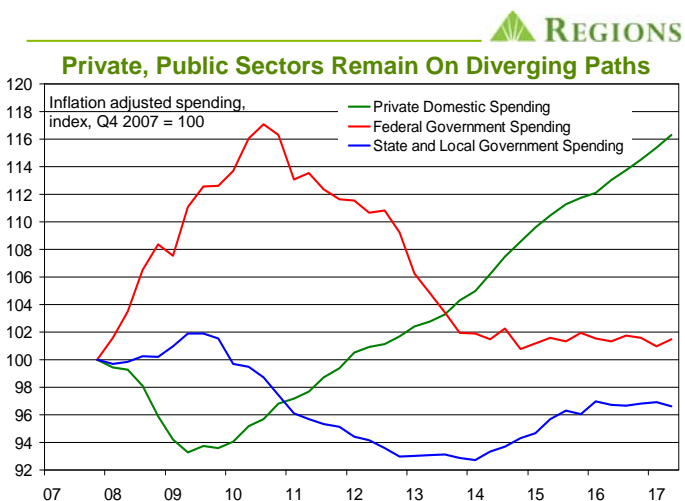


This Economic Update may include opinions, forecasts, projections, estimates, assumptions and speculations (the "Contents") based on currently available information which is believed to be reliable and on past, current and projected economic, political and other conditions. There is no guarantee as to the accuracy or completeness of the Contents of this Economic Update. The Contents of this Economic Update reflect judgments made at this time and are subject to change without notice, and the information and opinions herein are for general information use only. Regions specifically disclaims all warranties, express or implied, with respect to the use of or reliance on the Contents of this Economic Update or with respect to any results arising therefrom. The Contents of this Economic Update shall in no way be construed as a recommendation or advice with respect to the taking of any action or the making of any economic, financial or other plan or decision.

Q2 2017 State Government Finances: Regions Footprint

The current economic expansion, now in its ninth year, is poised to become the second longest on record, but already holds the dubious distinction of being the slowest on record. Or, as we often say, the current expansion may be old but hasn't done a lot of living. As a result, there is a sizeable list of variables for which the rates of growth over the course of the current expansion are notably below growth rates logged over prior expansions. While certain variables on that list, such as average hourly earnings or single family residential construction, get considerable attention, our focus here is on a data set that gets little attention, at least outside of state capitals. Even this deep into an economic expansion, the revenue environment remains challenging for many state governments, which is compounded by an increased share of state government spending being diverted to transfer payments to individuals and what in many states are growing unfunded pension obligations.



One implication is that, unlike past expansions, state government spending on goods and services and capital outlays is acting as a drag on GDP growth in the current expansion. As seen in the chart to the side, inflation adjusted spending on the combined state and local government levels remains below the level that prevailed when the economy fell into the 2007-09 recession, and shows no signs of recapturing that prior peak any time soon. Note that in the NIPA accounts state and local government spending are reported in one consolidated account and we cannot segregate the individual components, but in the discussion that follows the focus is on the state government level.

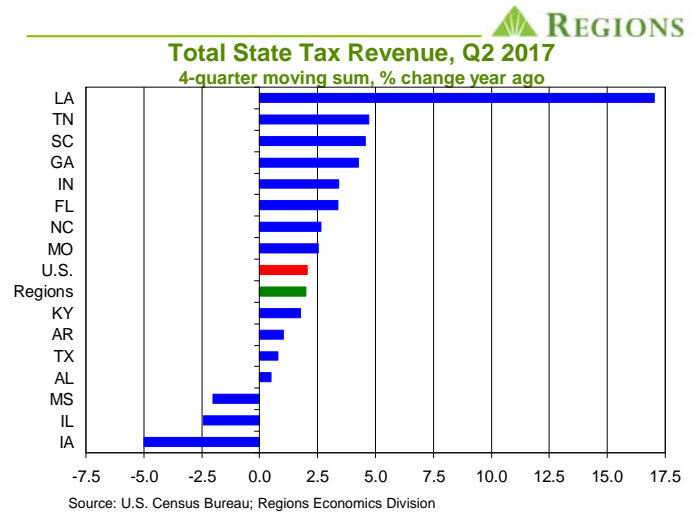
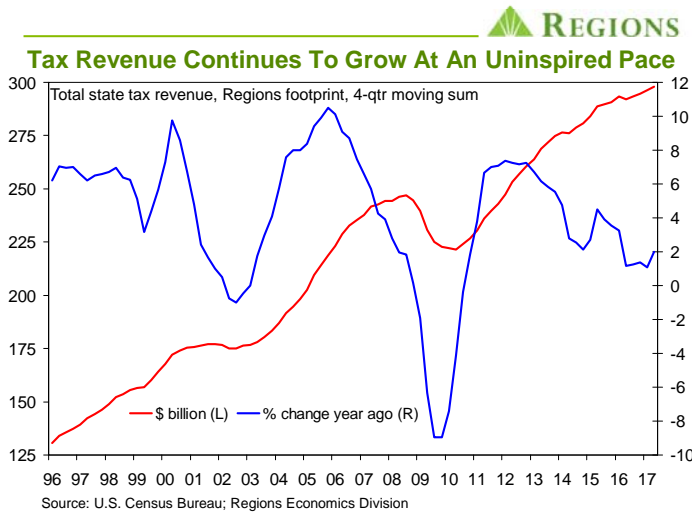
There is considerable uncertainty surrounding the fiscal outlook for state governments, on both the revenue and spending sides of the ledger. In part, this is a function of what remains an uncertain outlook for spending on the federal level and how much money will be flowing down to the states in the form of Medicaid spending and

other forms of nondefense spending. While those states with considerable exposure to the military could see a boost in overall economic activity, and in turn tax revenue, from increased defense outlays, there is as of yet little clarity on whether, or to what extent, such a boost in defense spending may occur. At the same time, while at present the odds of recession remain low, the reality is we are closer to the end of the current expansion than to the beginning and many states are less than fully prepared for the types of revenue challenges a recession would bring, even a recession far less severe than the 2007-09 recession. Moreover, many states (and municipal governments as well) face looming challenges on pension funding that will only add further stress to government finances over coming years.

On the revenue side of the ledger, what is striking is that this deep into an economic expansion growth in state government tax revenue remains so listless. As with each of our quarterly updates, we rely on data from the U.S. Census Bureau's *Quarterly Tax Survey* (QTS), which provides quarterly estimates of state and local tax revenue based on surveys of state and local taxing entities. As there is more detail in the state level data, that is our main focus here. The state level data show total tax revenue broken down into component parts, with individual and corporate taxes, sales taxes, property taxes, and severance taxes among the main categories for which data are provided. While there are clear seasonal patterns in the data, i.e., tax collections tend to be far stronger in some quarters than in others, the QTS data are not seasonally adjusted and hence prone to large quarter-to-quarter swings. As a means of looking past this volatility and gauging the underlying trends, our analysis is more focused on the patterns in the four-quarter moving sums of revenue collections.

As noted above growth in state tax revenue remains listless. In Q2 2017, total state tax revenue for the 50 states combined grew by just 2.3 percent compared to Q2 2016. As a side note, to our earlier point about the seasonal patterns in the data, Q2 of any given year is the quarter in which tax collections show the fastest quarter/quarter growth. As such, that total state level tax revenue increased by 20.9

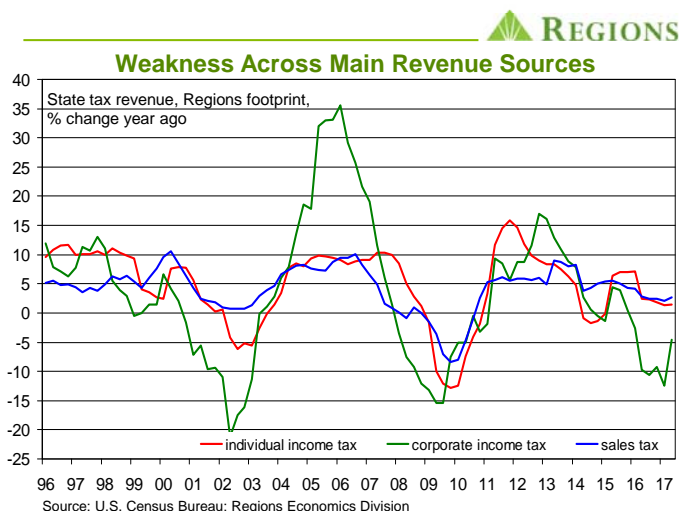
percent in Q2 relative to Q1 is not surprising, but the 20.9 percent increase is the smallest Q2 increase in any year since 2004, though it follows a slightly above average 3.9 percent increase in Q1. The bigger story, however, is the steady deceleration in what had already been a slow rate of growth in state tax revenue collections, which is the case both nationally and within the Regions footprint.



For the 15 states in the Regions footprint, total state tax revenue increased by 1.7 percent between Q2 2016 and Q2 2017; on a four-quarter moving sum basis, year-on-year growth in Q2 was 2.0 percent, as shown in the first chart above. The second chart above shows the year-on-year percentage change in the four-quarter moving sum of tax revenue as of Q2 2017. Louisiana is easily lapping the field, with an increase of 17.0 percent, but this is a good illustration of two caveats that come with any analysis of tax revenue data. First, one must take into account changes in tax rates, as higher or lower tax rates from one period to the next will obviously skew the measured change in revenue. In the case of Louisiana, better than 30 percent growth in sales tax revenue is a main driver of growth in overall tax revenue, but this reflects a higher general sales tax rate applied to a broader tax base. Tennessee is another example of how changes in rates can skew the measured change in tax revenue. While Tennessee in principal has a personal income tax, the reality is that only dividend, interest, and other investment income are subject to the tax, known in the state as the “Hall tax.” That tax is being phased out gradually, with the rate falling by 1 percentage point per year until it is completely eliminated in 2021 (the rate is 4.0 percent for 2017). Were one to look at the QTS data without accounting for this change they would misinterpret what looks like a sharp decline in revenue from the state’s individual income tax when it simply reflects the lower rate applied to a relatively small pool of taxable income.

The second caveat is that one must consider the base period, and again Louisiana is an illustration of this point. Depressed activity in the energy sector, a key component of the state’s economy, during the period of notably low energy prices had an adverse effect across much of the Louisiana economy, thus weighing on overall tax revenue. In part, the sturdy growth in tax revenue over the past few quarters reflects the better fortunes of the state economy thanks to firmer energy prices. The more obvious general illustration of this point would be the jump in tax revenue seen across states following the end of the 2007-09 recession, and the similar jumps seen early in the recoveries from prior recessions that no one would mistake for sustainable growth rates. At least we hope no one would.

In most states, the bulk of total tax revenue is comprised of some combination of personal income taxes, corporate income taxes, and sales taxes. In the table on Page 5 of this document, we present a table showing, for each of the 15 states in the Regions footprint and for the U.S. as a whole, the year-to-date percentage change (through Q2 2017) in revenue from each of these revenue sources, as well as the share of total tax revenue accounted for by each source. Our point about the changes in tax rates on Tennessee’s Hall tax and Louisiana’s sales tax will be apparent in the table. It is also worth noting that Texas has neither a personal income tax nor a corporate income tax, leaving the state’s sales tax as far and away the largest single source of tax revenue. Texas does, however, impose a severance tax, or, a tax imposed on the removal of nonrenewable resources such as crude oil or natural gas, with such taxes charged to producers or any person or entity with a working or royalty interest in oil and gas operations in the states imposing such taxes. Texas and Louisiana are two of nine states (the others being Alaska, Montana, New Mexico, North Dakota, Oklahoma, West Virginia, and Wyoming) that rely heavily on severance taxes, and these states have seen sharp swings in the revenue generated by these taxes over the past several quarters as energy prices fell sharply then recouped some, but not nearly all, of these declines. Also, note that Alabama and Kentucky impose severance taxes, which in these states are mainly applicable to coal so that severance tax revenue has tailed off significantly over the past few years.



As seen in the chart to the side, each of the three main sources of state government tax revenue have exhibited weak growth (or, ongoing declines in the case of corporate tax revenue) over the past several quarters. Understanding some of the drivers of the change in the individual components can help put what has been persistently slow growth in total state government tax revenue in better perspective. For instance, growth in personal income tax collections has lagged prior expansions in part because so too has growth in aggregate wage and salary earnings despite what had been a run of 83 consecutive months of job growth prior to the decline logged in September (which reflected the effects of Hurricanes Harvey and Irma). On a four-quarter moving sum basis, individual income tax collections for the footprint as a whole were up only 1.46 percent in Q2 2017 relative to Q2 2016.

While what remains below-average wage growth has gotten a considerable deal of attention, in terms of the tax base for individual income tax collections the relevant metric is aggregate labor earnings, or, the product of how many people are working, how many hours they are working, and what they are being paid for each hour worked (there is also income from bonuses and other forms of one-off payments, but this is a much smaller source of labor income). Over the past several quarters, aggregate private sector wage and salary earnings, far and away the largest single component of personal income, have grown at about 4.5 percent, whereas in past expansions this number would have been around 6.0 percent if not slightly higher. In other words, the tax base has grown at a much slower rate than has been the case in past cycles, and while slower growth in hourly earnings is one culprit, another largely unrecognized culprit is what has been a shorter workweek over the course of the current expansion. In any event, the slower growth in the tax base is a key factor behind slower growth in personal income tax collections in those states imposing such a tax. It figures that, as labor market conditions continue to improve, at some point wage growth will accelerate and hours worked will be extended, but these will be gradual changes and the reality is that the peak in growth of aggregate labor earnings will likely come only in the final phases of the expansion. This raises the question of the extent to which personal income tax collections will fully capture the tightening in labor market conditions during this cycle.

For the 15 states in the Regions footprint as a whole, sales tax revenue has grown at a sluggish pace over recent quarters, with the four-quarter moving sum up 2.65 percent in Q2 2017 compared to Q2 2016. There is a wide disparity across individual states, however, with Louisiana seeing growth of 34.7 percent (reflecting the higher sales tax rate and broader tax base, as noted above) and Iowa seeing a 7.6 percent decline (reflecting growing exemptions from sales taxes). As seen in the above chart, growth in sales tax revenue has steadily decelerated, which in turn has contributed to the listless growth in total state tax revenue. As if by reflex, many point to the sluggish growth in sales tax revenue as a sign of struggling consumers, the usual narrative being that meager wage growth has left many consumers strapped and unable to engage in discretionary spending. The other context in which we routinely hear this narrative is the monthly data on retail sales, which have also grown at a slower pace than seen over past expansions.

The only problem with this narrative is that it's simply not correct. What is often overlooked is that retail sales are reported on a nominal basis, i.e., the data are not adjusted to account for price changes. This of course matters given that prices for "core" consumer goods, i.e., goods excluding food and energy, have been falling for the past few years, which is reflected in the two main gauges of retail level inflation, the Consumer Price Index and the Personal Consumption Expenditures Deflator. This in turn depresses growth in sales tax revenue; think of it as the tax base either shrinking outright or at the least not growing as rapidly as would be the case were prices for core consumer goods rising. These price effects tell us absolutely nothing about the health of U.S. consumers, and to the extent they weigh on growth in sales tax revenue they can easily distort the view of the underlying health of the economy of a given state. Clearly, those states with lower rates of job and income growth will see slower growth in sales tax revenue. But, the point here is that understanding trends in goods prices is a key part of any meaningful assessment of trends in sales tax revenue given the degree to which the sales tax base is sensitive to price changes. In recent years price changes have acted as a drag on growth in sales tax revenue.

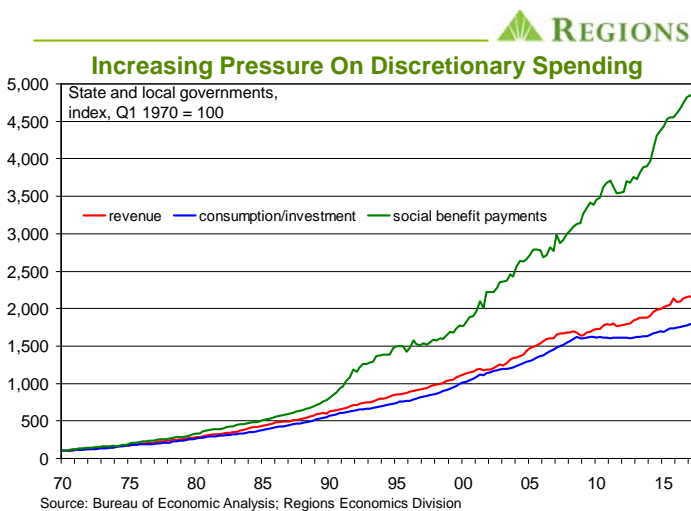
To a large extent, falling goods prices reflect an increasingly globalized economy coupled with the increased prevalence of online sales, a combination that has benefitted U.S. consumers in the form of reduced prices. The other manner in which the increased emphasis on online sales has impacted growth in sales tax revenue is that in many cases sales taxes have not been collected on purchases from out of state merchants. Over time states have become more aggressive in moving to collect sales taxes on online sales, and while merchants have become more cooperative, the extent to which online sales continue to represent a leakage from sales tax revenue is unclear,

though we suspect it remains a sizeable hole. Finally, it is also important to note that as a business cycle matures patterns in consumer spending tend to shift, with spending on goods giving way to spending on services, and in many instances sales taxes are not collected on services. To the extent we are seeing such a shift, it will also weigh on growth in sales tax revenue.

It is harder to account for the behavior of corporate income tax revenue, particularly for what is now a string of six consecutive year-on-year declines in total corporate income tax revenue for the Regions footprint as a whole, as seen in the chart on the prior page. This string of declines has little to do with underlying economic conditions and instead is more a reflection of the often gaping divide between statutory and effective tax rates. Think of it on the national level – with corporate tax reform very much in the news of late, one thing we regularly hear is that, at 35 percent, the U.S. has the highest corporate tax rate of any major industrialized nation. This is true if one is talking about statutory tax rates, and this distinction is often ignored, willfully or otherwise, by those using this as a rationale for lower corporate tax rates. In reality, many corporations pay effective tax rates closer to zero than the statutory 35 percent. This same pattern can be seen, even if not to the same degree, on the state level.

Many states use tax incentives, such as tax credits, to attract new corporations or to entice existing corporations to expand and/or take on additional workers. The point here isn't to pass judgment on these practices, but instead simply to note how this can distort revenue collections from corporate income taxes. Patterns in business capital outlays can have the same effect to the extent that depreciation allowances, particularly when expanded to encourage business investment, can lower corporate income tax liabilities. This effect is more noticeable on the state level given that, for many states, corporate income taxes represent a small share of overall tax revenue – a relatively small change in effective corporate tax rates on the state level can have a pronounced effect on measured tax revenue. Many support the use of such tax expenditures on the grounds that foregone corporate tax revenue is made up for in terms of higher levels of employment and income amongst state residents, which in turn would mean higher levels of revenue from personal income taxes and sales taxes. But, as the above discussion on trends in wages and prices of consumer goods hopefully illustrates, there are many factors that impact the cost-benefit math when it comes to assessing the efficacy of such tax expenditures.

As a side note, state governments stand to gain little, if anything, from what in many parts of the U.S. has been a more robust pace of house price appreciation over the past several quarters. In most states, property tax revenue is a trivial share of total tax revenue, unlike on the local government level where property taxes account for roughly 75 percent of total tax revenue. But, even on the local government level, the faster pace of house price appreciation has yet to lead to meaningfully faster growth in total tax revenue, given what is a roughly two-year lag between changes in market values and changes in assessed values of homes.



Persistently slow growth in tax revenue is one factor contributing to a changing dynamic in state government finances. On the spending side of the ledger, a steadily increasing share of spending on the state (and to a lesser extent, local) government level is being diverted toward mandatory programs, such as Medicaid, and other forms of transfer payments. As a result, state government purchases of goods and services and investment expenditures on things like equipment and infrastructure have been growing at only a slow pace on a nominal basis and have actually declined on a real, i.e., inflation adjusted, basis. This has acted as a persistent drag on real GDP growth in recent years.

Unfortunately, this trend is more likely to intensify than to abate over the next few years. In addition to the likelihood of the federal government putting heavier spending burdens on state governments, many states will have to contend with growing pension liabilities, and in these states it is hard to envision solving

these problems without cuts in other types of spending or potentially significant tax increases, if not both. On top of all of this, while at present the odds of recession remain notably low, the reality is that we are closer to the end of the current expansion than we are to the beginning. With revenue growth having been so persistently slow over the course of the current expansion and steadily increasing mandatory spending continuing to displace government consumption/investment spending, it is reasonable to ask how prepared state governments are for an economic downturn. By no means are we suggesting state governments are staring a crisis in the face today, but for those willing to look down the road, an ever-diminishing degree of financial flexibility on the part of state governments should be cause for concern.

State Tax Revenue, Regions Footprint

year-to-date through Q2, 2017

STATE	individual income tax		corporate income tax		sales tax	
	% change	% of total revenue	% change	% of total revenue	% change	% of total revenue
Alabama	2.18	37.59	15.81	5.44	-5.66	24.73
Arkansas	-3.93	29.60	-12.74	4.71	2.87	35.11
Florida	N/A	0.00	0.37	6.33	4.89	58.16
Georgia	7.97	49.35	0.36	5.11	1.68	26.01
Iowa	-9.89	36.07	-1.84	5.48	-13.00	31.99
Illinois	-2.04	37.36	-10.16	9.20	0.14	27.39
Indiana	4.78	39.01	2.90	5.66	4.01	35.72
Kentucky	1.08	38.01	-7.67	4.71	-0.52	29.34
Louisiana	10.40	24.24	1.53	4.39	31.21	37.43
Missouri	4.51	50.42	-2.11	2.10	4.15	28.05
Mississippi	0.55	22.38	-4.96	6.53	0.99	44.74
North Carolina	-2.34	45.55	-11.27	3.64	5.11	26.86
South Carolina	4.37	38.93	-8.10	5.59	-1.24	34.15
Tennessee	-22.30	2.87	15.82	13.23	3.62	52.75
Texas	N/A	N/A	N/A	N/A	0.01	62.72
U.S.	2.67	38.78	-3.15	6.70	3.12	30.15

Source: U.S. Census Bureau; Regions Economics Division