Q1 2019/Annual 2018 Gross State Product: Regions Footprint

As a counterpart to the national data on Gross Domestic Product, the Bureau of Economic Analysis (BEA) produces state level data to measure the market value of all goods and services produced by the labor and property located within each state. This measure is known as Gross State Product, or, GSP. As is the case with the GDP data, the GSP data are reported in both nominal and real terms, the former measuring gross output in current dollar terms and the latter measuring gross output in constant dollar (i.e., adjusted for price changes) terms. GSP is measured on an incomes basis, i.e., by aggregating the incomes earned by the various factors of production and the various costs of production. In other words, GSP is the sum of labor income (wages, salaries, and benefits) earned by workers, capital income (income earned by business owners ranging from sole proprietors to shareholders of large corporations as well as returns on capital), and business taxes. Unlike GDP, which can be measured on an incomes basis or an expenditures basis, there is no equivalent measure of GSP on an expenditures basis.

Given that GSP is measured on an incomes basis and that labor earnings comprise the bulk of income, the GSP data are basically a derivative of the state level data on employment and income (note there is also a metro area counterpart measured in the same manner). This, coupled with the fact that the GSP data come with a lengthy lag, is why we devote much more attention to the more timely state level data on employment and income. In other words, the trends apparent in the GSP data largely mirror those we identify and analyze in our regular reviews of the state level employment and income data, particularly the annual benchmark revisions to the data on nonfarm employment and the comprehensive annual data on state level personal income which include data on earnings by industry. That said, it can nonetheless be useful to go through the details of the GSP data, particularly as the GSP data offer an intuitive means of comparing industrial composition across individual states as well as the industry drivers of overall economic growth within a given state. In what follows we highlight some of key aspects of the recently released data for Q1 2019 and full-year 2018.
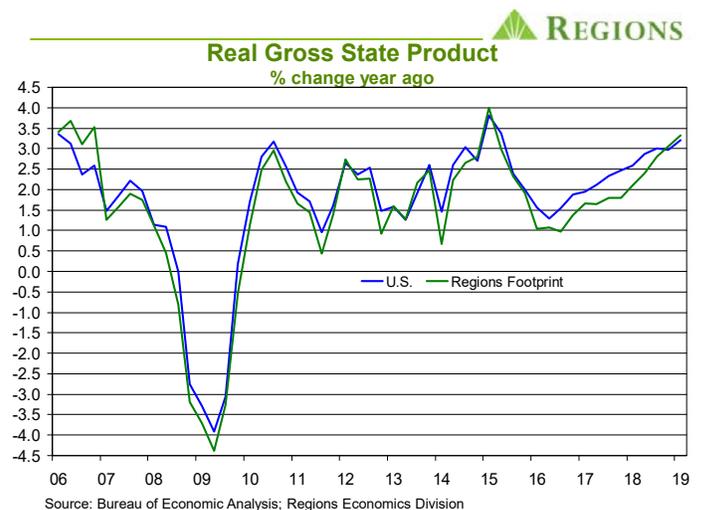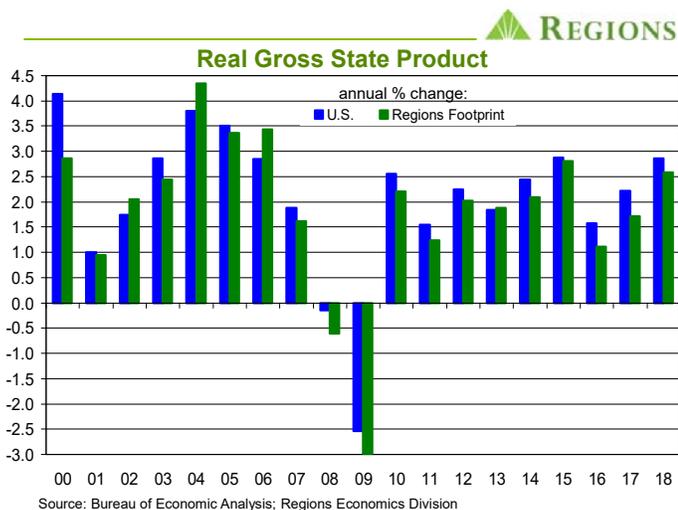
Real GSP for the Regions footprint increased by 2.59 percent in 2018, lagging the 2.86 percent growth for the U.S. as a whole. The 2.59 percent growth in 2018 marks the second fastest growth in real GSP for the Regions footprint over the life of the current expansion, topped only by the 2.80 percent growth in 2015. After lagging over most of the current expansion, real GSP growth in the Regions footprint has topped growth for the U.S. as a whole over the past three quarters. In Q1 2019, real GSP in the footprint was up 3.32 percent year-on-year, slightly ahead of the 3.20 percent growth for the U.S. as a whole. At 4.86 percent, Texas saw the fastest year-on-year growth in real GSP in Q1, with Tennessee second at 3.91 percent and Georgia third at 3.82 percent. With growth of 3.51 percent, Florida saw the fastest full-year 2018 growth in real GSP of any state within the Regions footprint, with Texas second at 3.18 percent ant Tennessee third at 2.97 percent. With growth of just 0.94 percent, Arkansas posted the slowest growth in real GSP in 2018, slightly

behind Mississippi at 1.03 percent and Louisiana at 1.09 percent. While Florida's 3.51 percent growth in 2018 was the fastest in the Regions footprint, it ranked fifth nationally, with Washington easily outpacing the rest of the U.S. with full-year 2018 real GSP growth of 5.75 percent, easily outpacing Utah (4.27 percent), Idaho (4.07 percent) and Arizona (3.99 percent). Last year was the second straight year in which Washington posted the nation's fastest growth in real GSP, though the gap between Washington and the runner-up was significantly larger in 2018 than was the case in 2017. Washington's growth has been driven by construction, retail trade (thanks, Amazon!), business services, and information services (reflecting the heavy tech presence). At the other end of the spectrum, Alaska saw real GSP decline by 0.34 percent in 2019, the third consecutive annual decline and the fifth out of the past six years, with the state's lack of economic diversity acting as a significant constraint on growth.

Real Gross State Product
2018 percentage change

Source: Bureau of Economic Analysis; Regions Economics Division

Recovery From 2007-09 Recession Has Been Uneven

percentage change:
peak-to-trough decline   q1 2019 from prior peak

Source: Bureau of Economic Analysis; Regions Economics Division
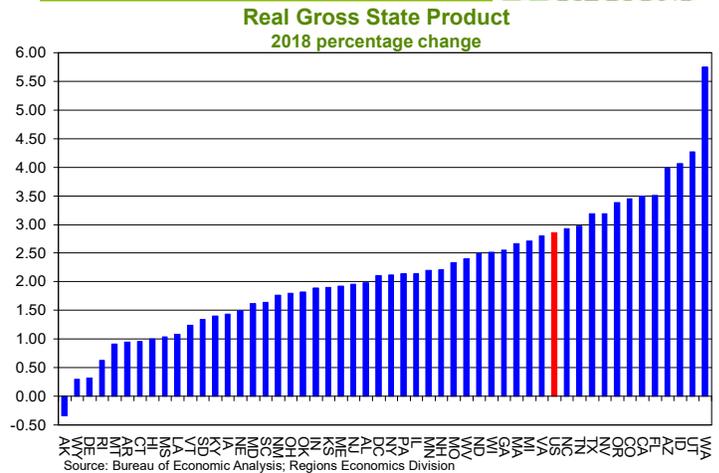
As we have frequently noted in our discussions of the state and metro area level economic data, the recovery from the 2007-09 recession has been notably uneven, across industry groups and across geographies. That is no less true of the data on Gross State Product than it is of the other main data series, as we illustrate in the chart to the side. As of Q1 2019, real GSP in Texas stood 33.95 percent above its pre-recession peak far and away the largest such differential of any state in the Regions footprint and easily ahead of the 19.97 percent differential for the U.S. as a whole. In a sense, Texas had a head start on the other states, as the 2.20 percent peak-to-trough decline in real GSP during the downturn is the smallest of all of the in-footprint states and much smaller than the 3.98 percent peak-to-trough decline for the U.S. as a whole. In contrast, real GSP has yet to return to the prior cyclical peak in both Louisiana and Mississippi while Q1 2019 real GSP in Alabama, Arkansas, and Missouri is only roughly 5.0 percent above the prior

cyclical peak, despite distinct differences in the hit to real GSP during the recession. The industry mix of each individual state, both prior to and subsequent to the 2007-09 recession, is a key factor behind the disparities illustrated in the chart.

For instance, Florida suffered a 10.6 percent peak-to-trough decline in real GSP during the 2007-09 recession, the most severe decline of any state in the Regions footprint and well more than double that of the U.S. as a whole. Moreover, while Q3 2009 is officially the first quarter of recovery from the 2007-09 recession, Florida saw its real GSP decline further during that quarter, meaning that not only did the state suffer more during the downturn, it also got a later start on the recovery. Florida's economy was hit extremely hard by the housing market meltdown, and the severity of that meltdown along with Florida's above-average exposure to consumer sensitive sectors such as retail trade and leisure & hospitality services acted as a material drag on the state's GSP growth in the early phases of recovery, during which energy, manufacturing, and trade were primary drivers of overall growth. As the recovery endured and ultimately transitioned to expansion, however, Florida's economy gathered pace as the expansion played right into the state's strengths, in terms of its industrial make-up. Solid consumer fundamentals, within the state and nationally, have supported travel/tourism and stronger growth in consumer spending which, along with materially better housing market conditions, have helped drive growth in Florida. At the same time, Florida's transportation infrastructure has supported growth in transportation and logistics. As such, Florida's economy has grown at a markedly faster pace during the second half of the current expansion than it did over the first half.

Coupled with a much smaller hit to real GSP during the downturn, Texas' exposure to energy, manufacturing, and trade gave it a distinct advantage in the early phases of the current expansion, while its high degree of industrial diversity has carried the Texas economy through what have been some stark shifts in relative growth rates across industry groups over the life of the expansion. This is a point we make frequently, i.e., industrial diversity is a key factor in the rate at which a given state or metro area can grow on a sustained basis

over time. One reason this stands out in the data on Gross State Product is that, as noted at the outset, GSP is estimated on an incomes basis, so that in the GSP data industry concentrations in higher-wage and lower-wage industry groups matter. For instance, Louisiana has higher concentrations of employment, and in turn GSP, in lower-wage industry groups such as retail trade, leisure & hospitality services, and education & health services relative to the U.S. average, and has lower concentrations in higher-wage industry groups such as business services, finance, and information services. The same is true of Mississippi, which has also lagged in terms of real GSP growth due in part to an outsized public sector – private industry accounted for just 82.59 percent of GSP in Mississippi as of Q1 2019, considerably below the national average of 87.89 percent (this has been a persistent trait of Mississippi's economy over time).

Industry Shares Of Gross State Product, % Of Total, Q1 2019
Source: Bureau of Economic Analysis; Regions Economics Division
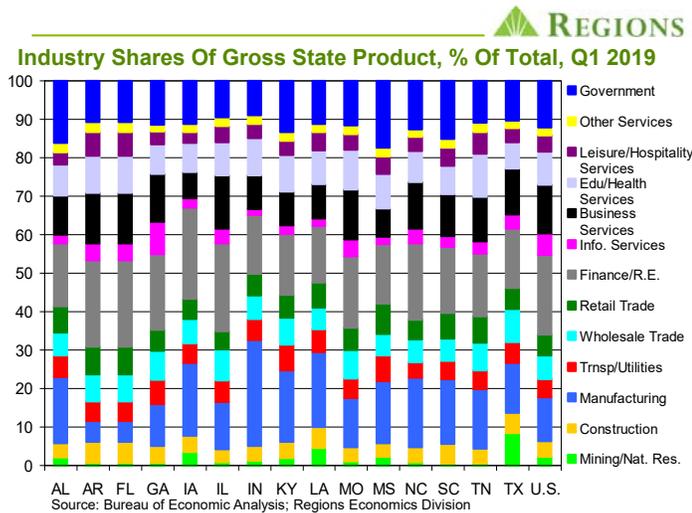
The chart to the side shows a snapshot of industry shares of total GSP for each state in the Regions footprint as of Q1 2019. Note that for, let's say, technical reasons, i.e., we ran out of colors, the "agriculture, fishing, and forestry" industry group is lumped into the "mining & natural resources" industry group, hence in Texas the higher share of GSP accounted for by mining & natural resources mainly reflects energy production while in Iowa the higher share for this group mainly reflects agriculture. Again, this chart merely offers a snapshot of the data as of Q1 2019, but the reality is that these concentrations change only slowly over time and differences in the industrial make-up of each state's economy have played a significant role in the growth differentials seen over the life of the current expansion. It is also worth pointing out that large concentrations of employment and income in any one or two industry groups can be both a blessing and a curse; just as sizeable concentrations in the "right" industry groups can drive

above-average growth in the broader economy, should those industry groups slip into a downturn, that downturn can in turn spread through the broader economy. This is why we routinely stress the importance of industrial diversity in our discussions of drivers of economic growth on the state and metro area levels over the long-term.

As we've noted before, a main drawback of the GSP data is a lack of timeliness – here we sit in the dog days of August and the Q1 data have only recently been released. Moreover, this will have to hold you for a while – the Q2 data as well as comprehensive revisions to the GSP data over the Q1 2014 through Q1 2019 data will be released in . . . wait for it (literally) . . . November. This does not mean the GSP data are not worthy of our time and attention. They are, but rather than shed a great deal of new light on the economy of a given state, the GSP data help reinforce patterns already apparent in the data on employment and income. It does sometimes help to have a different lens through which to view these patterns, and we find the GSP data useful in that regard. One advantage of analyzing the GSP data is perhaps that the GSP data more readily lend themselves to helping identify those specific industry groups that offer opportunities and those that pose potential downside risks. The bottom line, as it pertains to the economic performance of the Regions footprint, is that economic growth remains fairly concentrated amongst a handful of states and has been uneven across industry groups, though as the expansion has endured, these disparities across states and across industries have narrowed. While we look for them to narrow further as the expansion continues over coming quarters, trade poses a downside risk to our outlook, with the less diverse state and metro area economies at greater risk.

Real Gross State Product, Regions Footprint

STATE	2018 % change	year-on-year % change, Q1 2019	Q1 2019, % from prior peak
Alabama	1.98	2.20	6.35
Arkansas	0.94	1.58	5.92
Florida	3.51	3.37	11.24
Georgia	2.55	3.82	16.43
Iowa	1.44	2.21	12.32
Illinois	2.15	2.41	8.18
Indiana	1.89	1.33	8.09
Kentucky	1.41	2.43	7.47
Louisiana	1.09	1.59	-5.88
Missouri	2.33	3.00	4.93
Mississippi	1.03	1.66	-3.18
North Carolina	2.93	3.18	11.45
South Carolina	1.64	2.43	15.44
Tennessee	2.97	3.91	19.86
Texas	3.18	4.86	33.95
U.S.	2.86	3.20	19.97

Source: Bureau of Economic Analysis; Regions Economics Division