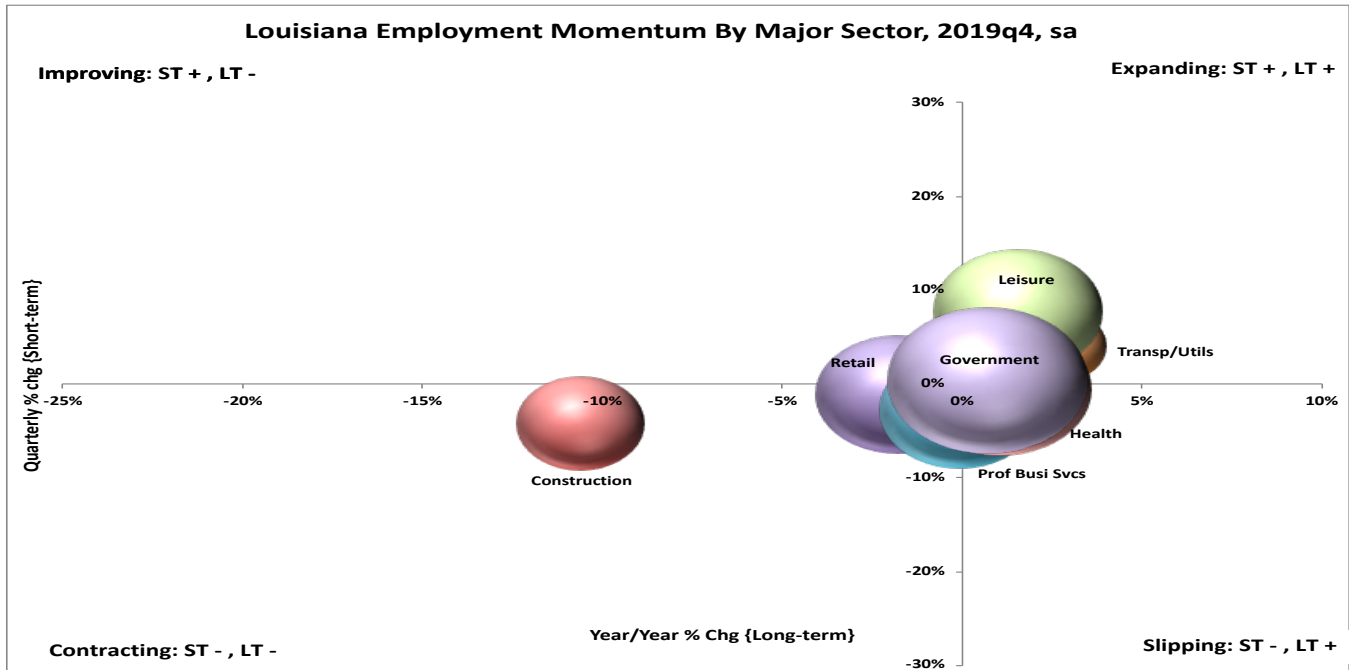


Employment Growth Momentum 2019 Fourth Quarter (Pre-Covid) to 2021 Second Quarter (Covid-Recovery)



The graph above is called a momentum graph, and is an interesting way to depict the short-term (3-month annualized growth rate) relative to the long-term (year-over-year growth rate) of ten major employment sectors (bubbles). Each sector's location in the graph is centered on coordinates of its short-term and long-term growth rates. Another feature of the graph is that the sizes of the bubbles reflect each sector's share of total employment. For example, for the 2019 4th quarter, the construction sector comprised 7.9% of total employment, and exhibited a 10.6% decline over the annual period from the 2018 4th quarter and a 4.2% decline in the 2019 3rd quarter; placing it in the contracting quadrant with the most negative long-term and short-term growth coordinates of the ten major sectors plotted. The calculation results underlying the graph above are displayed in the table below.

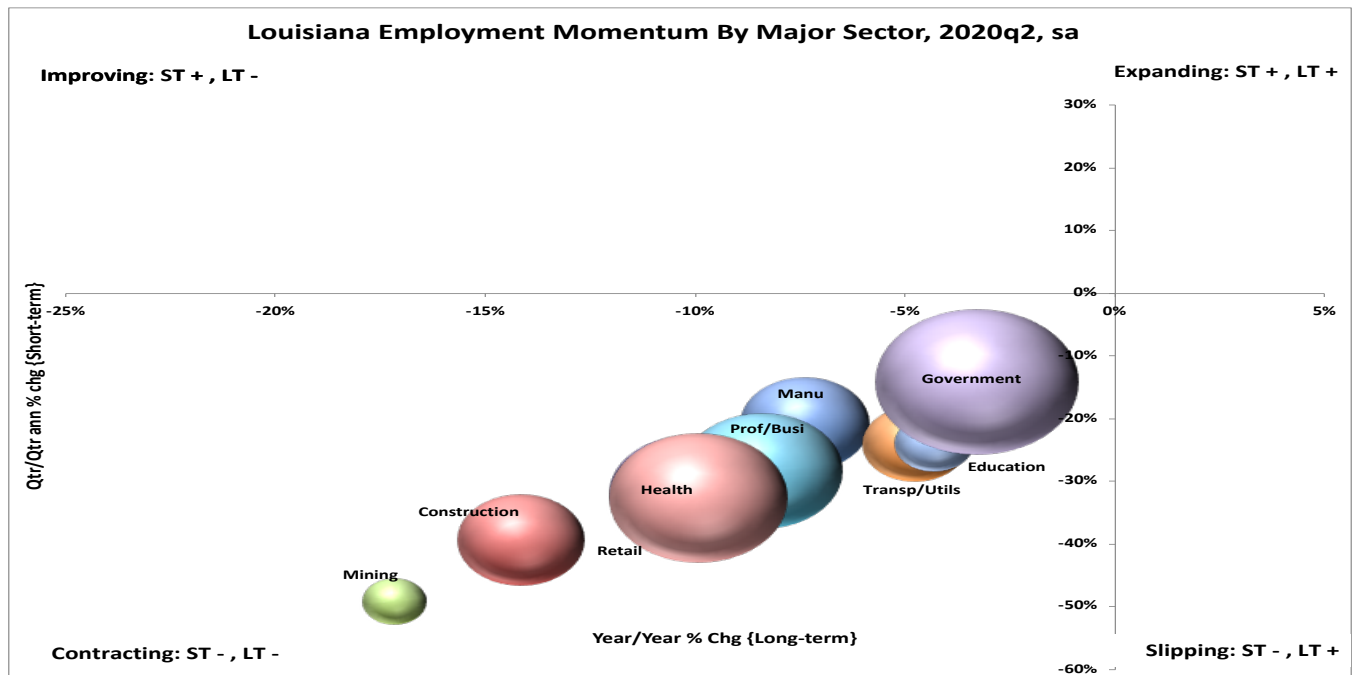
<u>Louisiana Employment Momentum By Major Sector, 2019q4, sa</u>					
Quadrant	SuperSector	Year/Year % Chg (Long-term)	Qtr/Qtr Ann % chg (Short-term)		Relative Sector Size
SLIPPING	Manufacturing	0.0%	-1.4%		7.9%
CONTRACTING	Construction	-10.6%	-4.2%		7.9%
CONTRACTING	Mining	-0.9%	-1.1%		2.1%
CONTRACTING	Retail	-1.8%	-1.1%		12.8%
CONTRACTING	Prof & Busi Svcs	-0.1%	-2.7%		12.4%
EXPANDING	Transp & Utilities	2.6%	4.0%		5.1%
EXPANDING	Education	2.7%	7.4%		2.8%
SLIPPING	Health	1.1%	-0.6%		15.8%
EXPANDING	Leisure	1.5%	7.7%		13.9%
EXPANDING	Government	0.7%	0.4%		19.2%

The 2019 4th quarter above, reflects the state economy prior to any material pandemic effect on employment. Employment sectors that were centered in the expanding quadrant (upper right), exhibited the conditions of both positive long-term and short-term growth, and included transportation & utilities, education, leisure, and government; as a group comprising 41% of total employment. As of 2019q4, the two sectors of manufacturing and health & social services were in the slipping quadrant (lower right), exhibiting positive year-over-year growth but negative growth in the latest quarter. There were no sectors in the improving quadrant (upper left), exhibiting negative year-over-year growth but positive growth in the latest quarter. Finally, the four sectors of construction, mining, retail trade, and professional/technical business services were all in the contracting sector, exhibiting both negative year-over-year and latest quarter growth.

While expanding and improving sectors comprised 41% of employment in 2019q4, sectors in the contracting and slipping quadrants combined comprised 59% of employment. This was an overall negative position for the

Employment Growth Momentum 2019 Fourth Quarter (Pre-Covid) to 2021 Second Quarter (Covid-Recovery)

employment outlook, with the economy, on net, exhibiting slightly negative momentum. A visual indicator of the lack of momentum for the economy at that time was the clustering of most sectors closely around the graph's origin, indicating that only small positive or negative values were being exhibited for the growth coordinates of most sectors. This can suggest an economy poised for more robust growth, but also indicates heightened vulnerability to adverse shocks to the economy. Those adverse shocks began to be realized late in 2019 and early 2020 as oil prices weakened from the OPEC+ market share dispute, and then near the end of the first quarter of 2020 as consumers began to stay at home to avoid the coronavirus, followed by stay-at-home orders and mandatory business closure policies. The effects of those behaviors and actions resulted in the 2020 2nd quarter recession depicted in the momentum graph below.

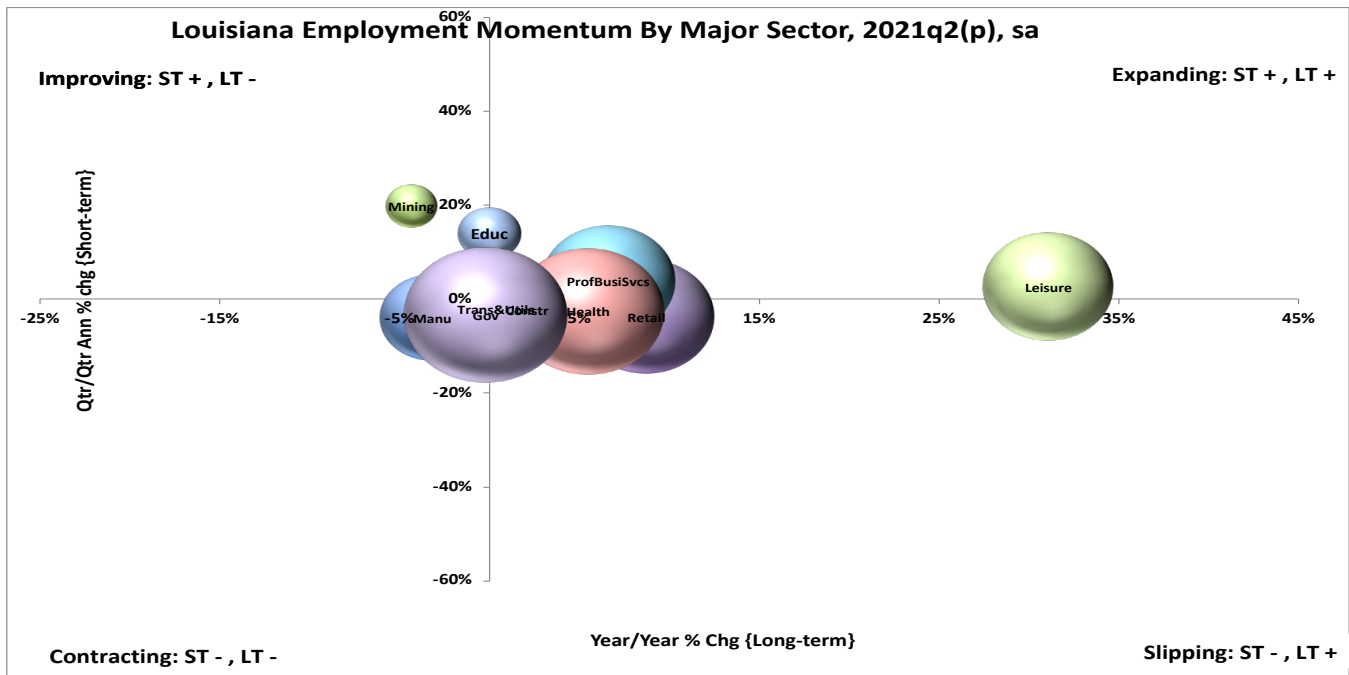


Louisiana Employment Momentum By Major Sector, 2020q2, sa					
Quadrant	SuperSector	Year/Year % Chg {Long-term}	Qtr/Qtr ann % chg {Short-term}	Relative Sector Size	
CONTRACTING	Manufacturing	-7.4%	-20.9%	8.4%	
CONTRACTING	Construction	-14.1%	-39.4%	8.0%	
CONTRACTING	Mining	-17.2%	-49.2%	2.0%	
CONTRACTING	Retail	-10.1%	-31.8%	13.2%	
CONTRACTING	Prof & Busi Svcs	-8.4%	-28.3%	13.0%	
CONTRACTING	Transp & Utilities	-4.8%	-24.2%	5.4%	
CONTRACTING	Education	-4.3%	-24.0%	3.0%	
CONTRACTING	Health	-9.9%	-32.7%	16.0%	
CONTRACTING	Leisure	-34.9%	-82.1%	10.1%	
CONTRACTING	Government	-3.3%	-14.2%	20.9%	

As depicted and quantified above, for the 2020 2nd quarter, all of the ten sectors plotted were centered within the contracting quadrant, reflecting a broad-based recession being experienced by the state as a result of the coronavirus pandemic. Dramatic employment losses occurred in March and April; 284,000 jobs lost in those two months from the February 2020 job count. While 61,000 jobs or 21% of the job loss had been added back in the months of May and June, as of the end of the 2nd quarter of 2020, all major sectors were well within the contracting quadrant (lower left) with both negative annual growth and latest-quarter growth.

As depicted in the graph below of the 2021 2nd quarter, the bounce-back from the recession spike has been significant. However, while seven of the ten sectors have bounced back positively from where they were a year earlier (positive year/year % change), only three of the ten are exhibiting positive momentum in the latest quarter (2021q2) relative to the prior quarter (2021q1).

Employment Growth Momentum 2019 Fourth Quarter (Pre-Covid) to 2021 Second Quarter (Covid-Recovery)



<u>Louisiana Employment Momentum By Major Sector, 2021q2(p), sa</u>					
Quadrant	SuperSector	Year/Year % Chg (Long-term)	Qtr/Qtr Ann % chg {Short-term}	Relative Sector Size	
CONTRACTING	Manu	-3.2%	-3.9%	7.9%	
SLIPPING	Constr	2.1%	-2.3%	7.3%	
IMPROVING	Mining	-4.3%	19.9%	1.8%	
SLIPPING	Retail	8.7%	-3.8%	13.6%	
EXPANDING	ProfBusiSvcs	6.6%	3.9%	13.0%	
SLIPPING	Trans&Utils	0.4%	-2.1%	5.0%	
EXPANDING	Educ	0.0%	13.9%	2.8%	
SLIPPING	Health	5.5%	-2.5%	16.8%	
EXPANDING	Leisure	31.1%	2.7%	12.3%	
CONTRACTING	Gov	-0.2%	-3.4%	19.5%	

As quantified in the table above, underlying the momentum graph, sectors that contain 70% of payroll employment are in the slipping or contracting quadrants, with sectors that contain only 30% of employment in the improving or expanding quadrants. The two most obvious sectors are mining, exhibiting the strongest short-term (quarter-over-quarter) annualized growth, although still below its year-ago employment level, and the leisure sector exhibiting the highest long-term (year-over-year) growth but a relatively low positive short-term (quarter-over-quarter) annualized growth. The mining sector's current position is mostly a reflection of how badly energy use was reduced by the pandemic recession, and the leisure sector current position reflects the desire of consumers to return to some semblance of normal. The manufacturing and government sectors (state, local, federal) are both still contracting, while only professional services, private education, and leisure are expanding. Note, though, that all the sectors, other than mining, lie closely on one of the axes, reflecting either relatively low long-term or low short-term growth performance. While a definite improvement from the trough of the recession in 2020, much of the economy is back to a position either poised for take-off or vulnerable to another shock.

The recovery is occurring, but it cannot be described as strong in the aggregate. Over the fifteen-month period of May 2020 to July 2021, the economy has added back only 49% of the total payroll jobs lost in the two month period of March and April of 2020. Rapid employment add-back of the early recovery months has given way to much slower add-back in the subsequent recovery months, and it seems that it will be a considerable time before the economy fully recovers from the effects of the pandemic.