Yukon Bureau of Statistics

Experimental Indexes of Economic Activity for Yukon September 2021

Highlights:

- On a ***year-over-year*** basis, the September 2021 LASSO-based economic activity index increased in all provinces and territories (where data were available); Yukon's index increased 1.0%.
- On a ***month-over-month*** basis, where data were available, the LASSO-based index increased in all provinces and territories except for New Brunswick which remained the same (0.0%), and decreased in Saskatchewan (-0.1%).

Timely measures of economic activity are critical for understanding how economies perform, and for informing policy responses to macroeconomic fluctuations. The onset of the COVID-19 pandemic emphasized the need to produce new monthly measures of aggregate economic activity for the provinces and territories, in advance of the annual estimates of gross domestic product. Monthly experimental economic activity indexes were created by Statistics Canada at the sub-national level using three different statistical methods to combine a range of economic indicators from a number of areas (i.e., labour market, merchandise trade, manufacturing production, consumer prices, electric power data, housing, wholesale and retail trade, food services and drinking places, vehicle movement between Canada and US, building permits) into composites:

1) **Simple economic activity index:** *assumes that total employment, total exports and total retail sales contain the appropriate information for understanding aggregate economic fluctuations; not available for Yukon.*

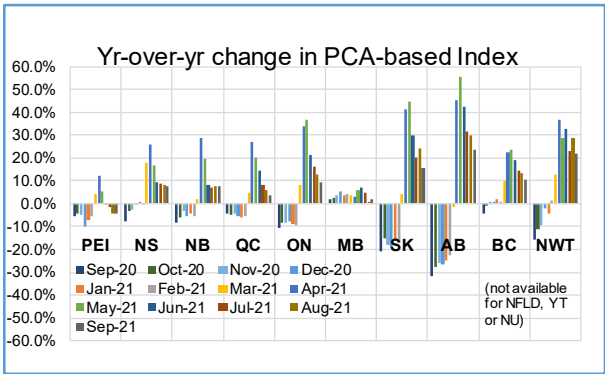
2) **Principal component analysis (PCA) index**: *uses a variable reduction technique to capture the variation in the input data set using a smaller number of principal components.*

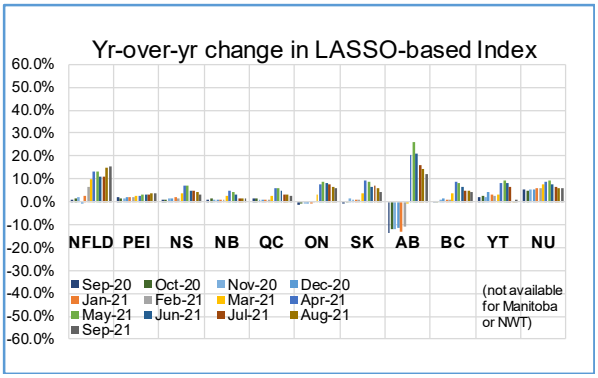
*3) L*east absolute shrinkage and selection operator (LASSO)**:** *uses a shrinkage and selection method to select series from the input data set to be included in a regression to explain annual growth.*

The indexes are experimental and not based on economic theories, and therefore, should be **interpreted with caution.** *Models employed typically have a different set of inputs for each province or territory. As a result, may affect inter-jurisdictional comparisons. The PCA-based indexes generally show larger changes than the LASSO-based indexes because they include a larger set of input series in their construction and therefore, capture more variability.*

Source: Statistics Canada. Data table 36-10-0633-01. For further information, see: Experimental Economic Activity Indexes for Canadian Provinces and Territories: Experimental Measures Based on Combinations of Monthly Time Series

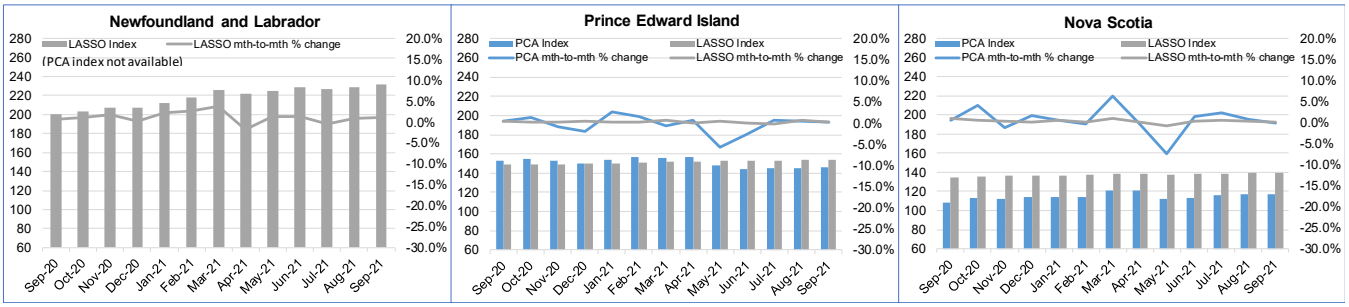
Year-over-year Changes in Economic Activity Indexes, Provinces and Territories, Sept. 2020 to Sept. 2021 Compared to Respective Month Sept. 2019 to Sept. 2020

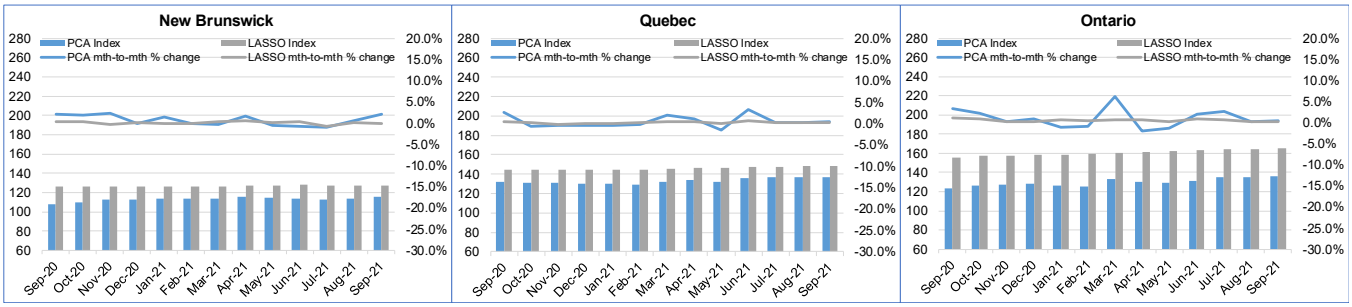


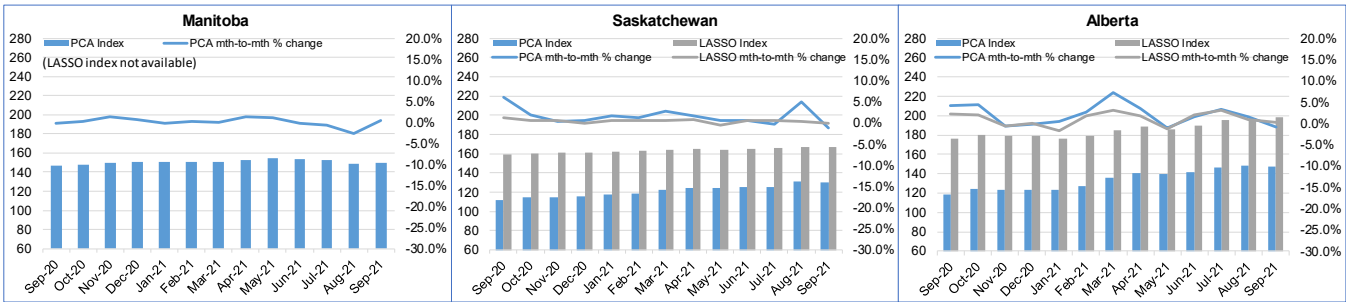


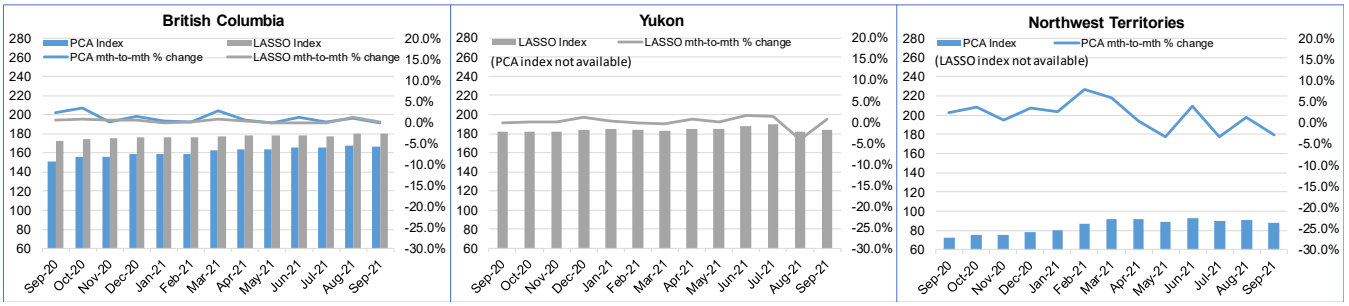
- The LASSO-based experimental index shows year-over-year increases in economic activity in all provinces and territories (not available for Manitoba and the Northwest Territories). Comparing September 2021 to that of September 2020 (revised), Newfoundland and Labrador saw the largest increase (15.3%) in economic activity, followed by: Alberta (12.1%); Ontario (5.9%); Nunavut (5.8%); Saskatchewan (4.5%); British Columbia (4.2%); Prince Edward Island (3.5%); Nova Scotia (3.3%); Quebec (2.7%); New Brunswick (1.2%) and Yukon (1.0%).
- The PCA-based experimental index shows that all provinces and territories (not available for Newfoundland and Labrador, Yukon and Nunavut) experienced increased economic activity in the month of September 2021 compared to September 2020 (revised), with the exception of Prince Edward Island (-4.3%).

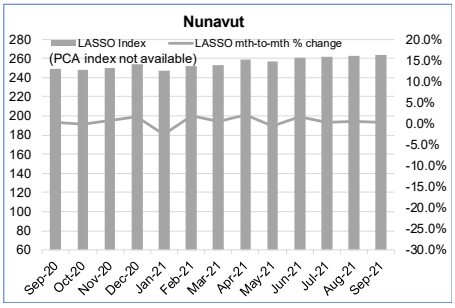
Economic Activity Indexes (January 2002 = 100) and *Month-over-month* Changes, Provinces and Territories, Sept. 2020 to Sept. 2021











- Experimental indexes of economic activity show that the level of activity had mixed results in provinces and territories in September 2021 compared to August 2021 (revised).
- Compared to August 2021, the September 2021 LASSO-based index of economic activity increased for Newfoundland and Labrador (1.1%), Yukon (0.7%), Ontario (0.3%), Alberta (0.3%), Nunavut (0.3%), Quebec (0.2%), Prince Edward Island (0.2%), British Columbia (0.2%), Nova Scotia (0.1%), and remained the same in New Brunswick (0.0%), and decreased for Saskatchewan (-0.1%). The LASSO-based economic activity index was not available for Manitoba and the Northwest Territories.

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