



## Experimental Indexes of Economic Activity for Yukon February 2021

### Highlights:

- On a **year-over-year** basis, the February 2021 LASSO-based experimental index of economic activity increased in provinces and territories, where available, with the exception of Alberta (-11.3%).
- On a **month-over-month** basis, the LASSO-based experimental indexes increased or remained the same in February 2021 compared to January 2021 (revised) in provinces and territories, where available, with the exception of Yukon (-0.3%).

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) **Least 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.

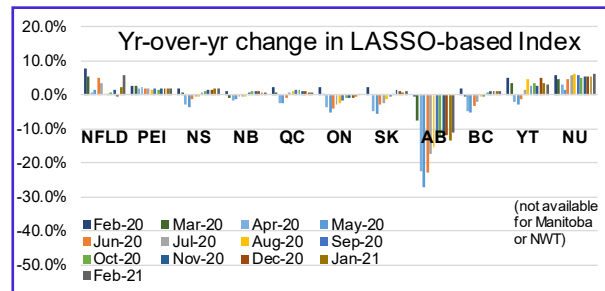
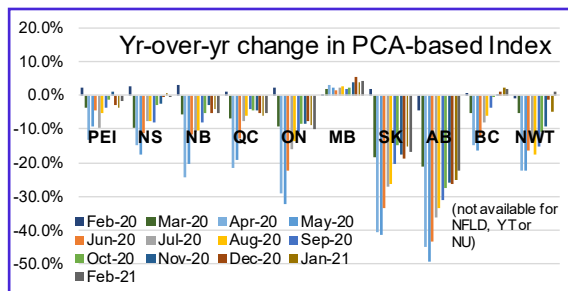
The indexes are experimental and not based on economic theories, and therefore, should be **interpreted with caution**. Models employed typically have a different set of inputs for each province or territory. As a result, may affect inter-jurisdictional comparisons.

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](#)

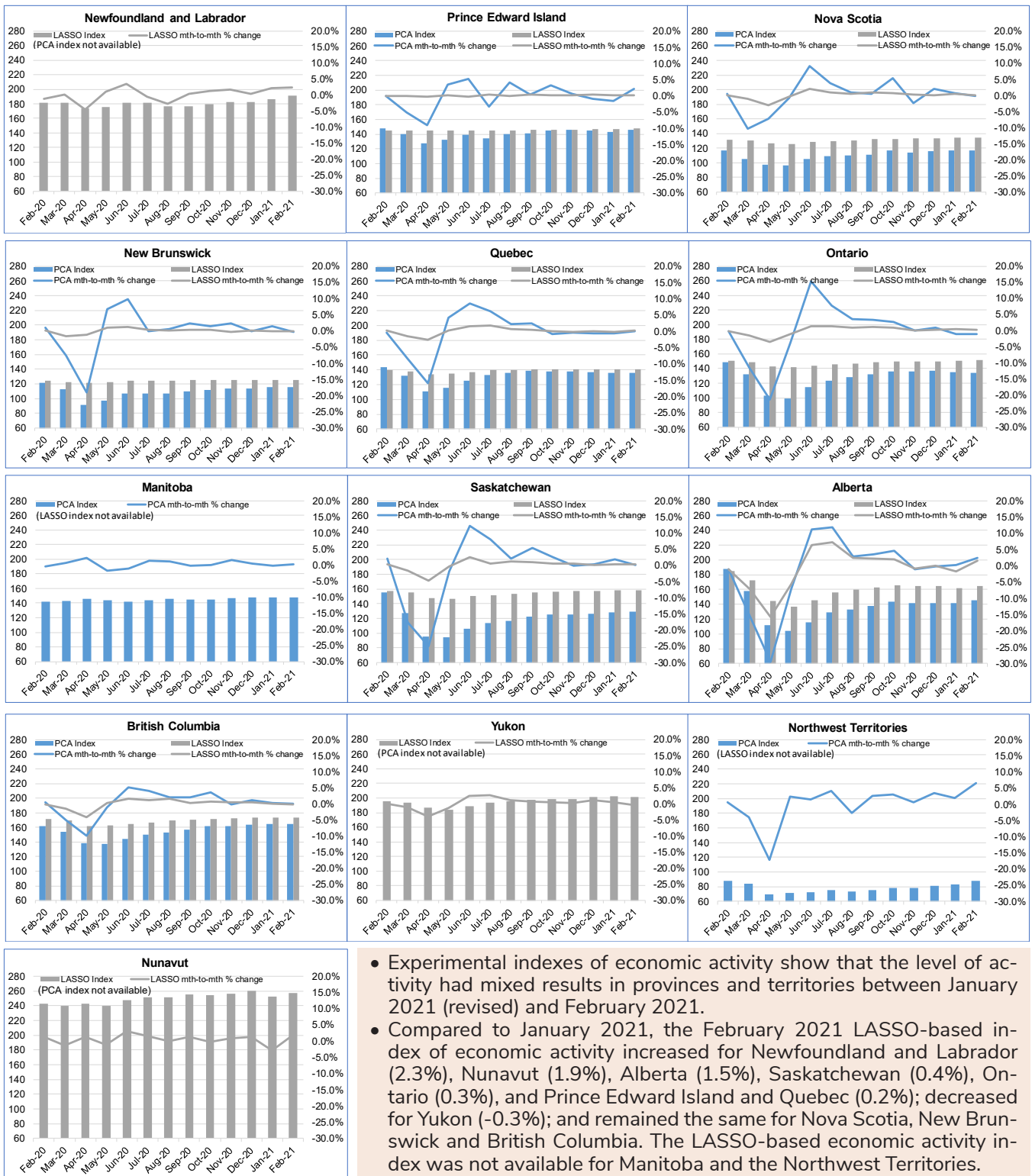
### Year-over-year Changes in Economic Activity Indexes, Provinces and Territories, Feb 2020 to Feb 2021 Compared to Respective Month Feb 2019 to Feb 2020

Note: 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.

- The PCA-based experimental index shows that most provinces and territories (not available for Newfoundland and Labrador, Yukon and Nunavut) have experienced decreased economic activity in months from March 2020 to February of 2021 (revised) compared to the respective month in 2019 and 2020 (revised), except for Manitoba. Comparing February 2021 to that of February 2020 (revised), Manitoba, British Columbia and the Northwest Territories saw an increase in economic activity at 4.3%, 1.8%, and 0.8%, respectively. Alberta had the largest decrease (-22.5%) year-over-year in February 2021.
- The LASSO-based experimental index (revised), however, shows year-over-year increases in economic activity in each month from March 2020 through February 2021 (not available for Manitoba and the Northwest Territories) for Prince Edward Island and Nunavut; decreases in Alberta; and mixed results for other jurisdictions including Yukon.



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



- Experimental indexes of economic activity show that the level of activity had mixed results in provinces and territories between January 2021 (revised) and February 2021.
- Compared to January 2021, the February 2021 LASSO-based index of economic activity increased for Newfoundland and Labrador (2.3%), Nunavut (1.9%), Alberta (1.5%), Saskatchewan (0.4%), Ontario (0.3%), and Prince Edward Island and Quebec (0.2%); decreased for Yukon (-0.3%); and remained the same for Nova Scotia, New Brunswick and British Columbia. The LASSO-based economic activity index was not available for Manitoba and the Northwest Territories.

June 2021