Dealing with economic shocks: How Statistics Canada pivoted during the pandemic

37th meeting of the Voorburg Group on Service Statistics, Virtual
September 15, 2022

Marie-Christine Bernard

Delivering insight through data for a better Canada

Overview

1 **Statistical operations and methods : strategies during the pandemic**

2 **New data developments : advanced indicators**

3 **Making greater use of administrative tax data**

4 **Statistical measurement challenges**

5 **Final thoughts**

Statistical operations and methods : strategies during the pandemic

Survey data collection during the pandemic
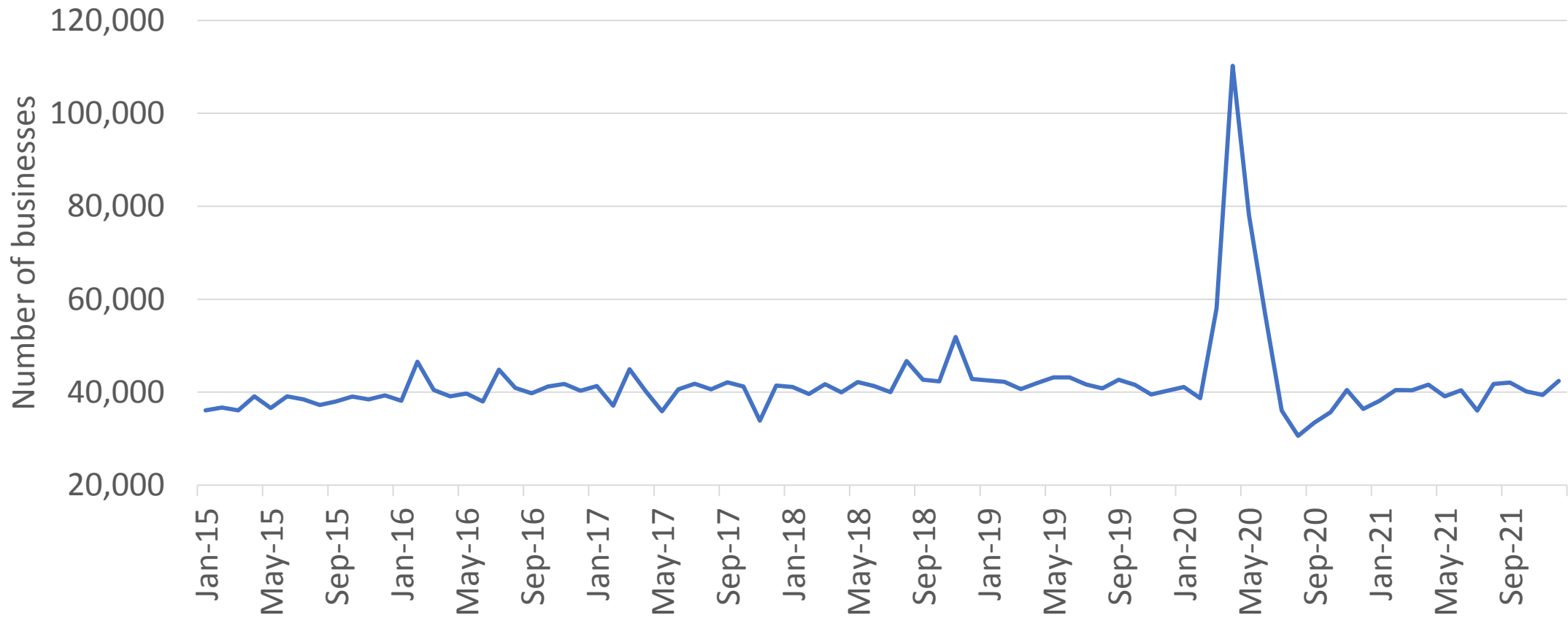
Streamlined approach for the Service Industries Program

➡️ Smaller portion of the sample was collected

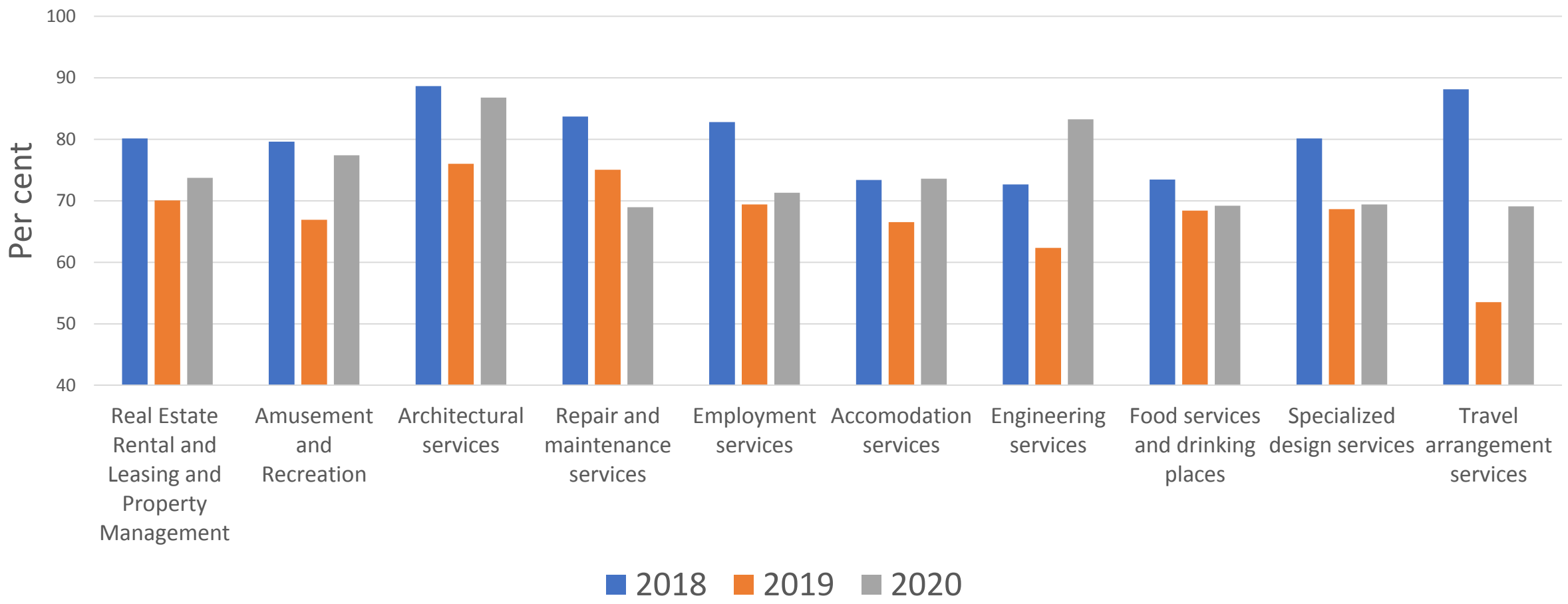➡️ Focused on critical units

Challenges

➡️ Many business closures

➡️ Several new surveys related to COVID-19

Statistics Canada / Statistique Canada

Canada

Business closings, January 2015 to December 2021, Canada

Revenue-weighted response rates in per cent for selected annual surveys of services industries, reference years 2018 to 2020, Canada

Statistical operations and methods : strategies during the pandemic

Imputation methods

→ Unprecedented shock to the economy

→ Make use of current information from similar reporting units

New data developments : advanced indicators

Advanced estimate of retail sales

- Need more timely information with rise of e-commerce
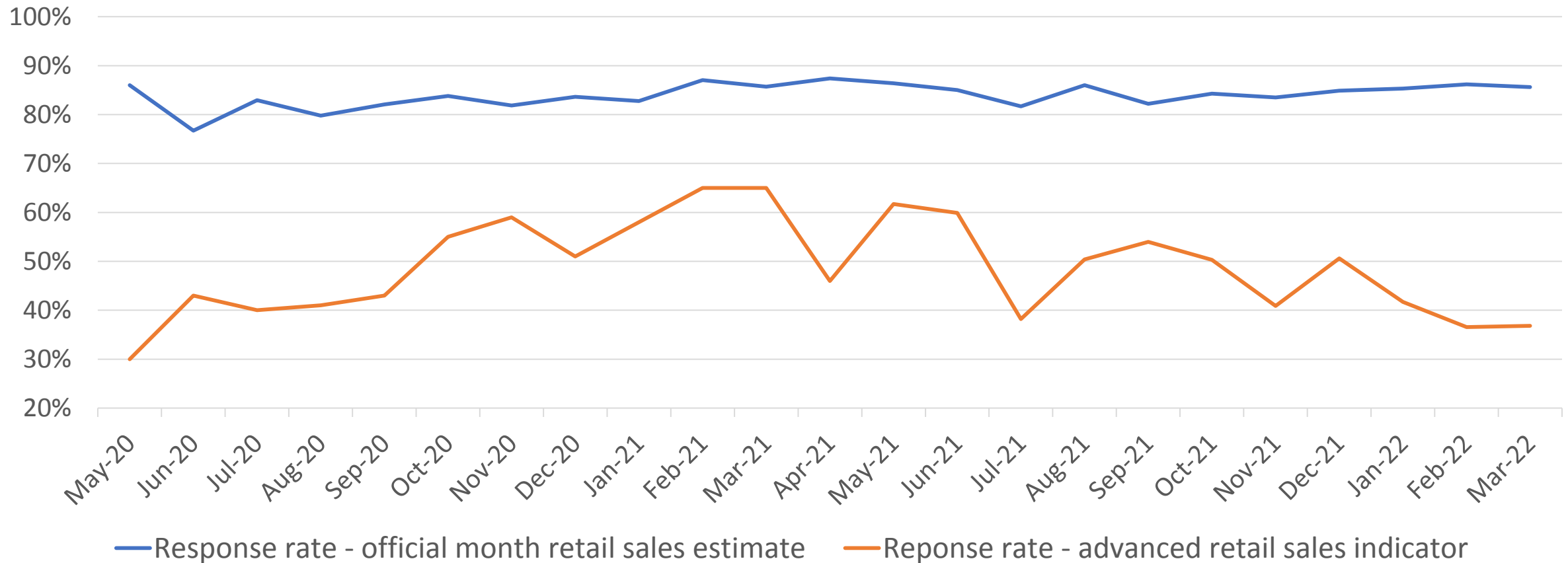- Make use of early respondents

Advanced estimate of wholesale sales

- Largely relies on early respondents as well
- More disaggregated by subsectors

Flash GDP

- Based on methodology that combines qualitative and quantitative information
- Trade-off between accuracy and timeliness

Delivering insight through data for a better Canada

Canada

Response rates in percent for the Monthly Retail Trade Survey, May 2020 to March 2022, Canada

Response rate - official month retail sales estimate   Reponse rate - advanced retail sales indicator

Delivering insight through data for a better Canada

Canada

Advanced indicator of retail sales and final estimate of retail sales, percentage change, April 2020 to March 2022, Canada

Making greater use of administrative tax data

% change

■ Actual, 2020 ■ Preliminary, 2020
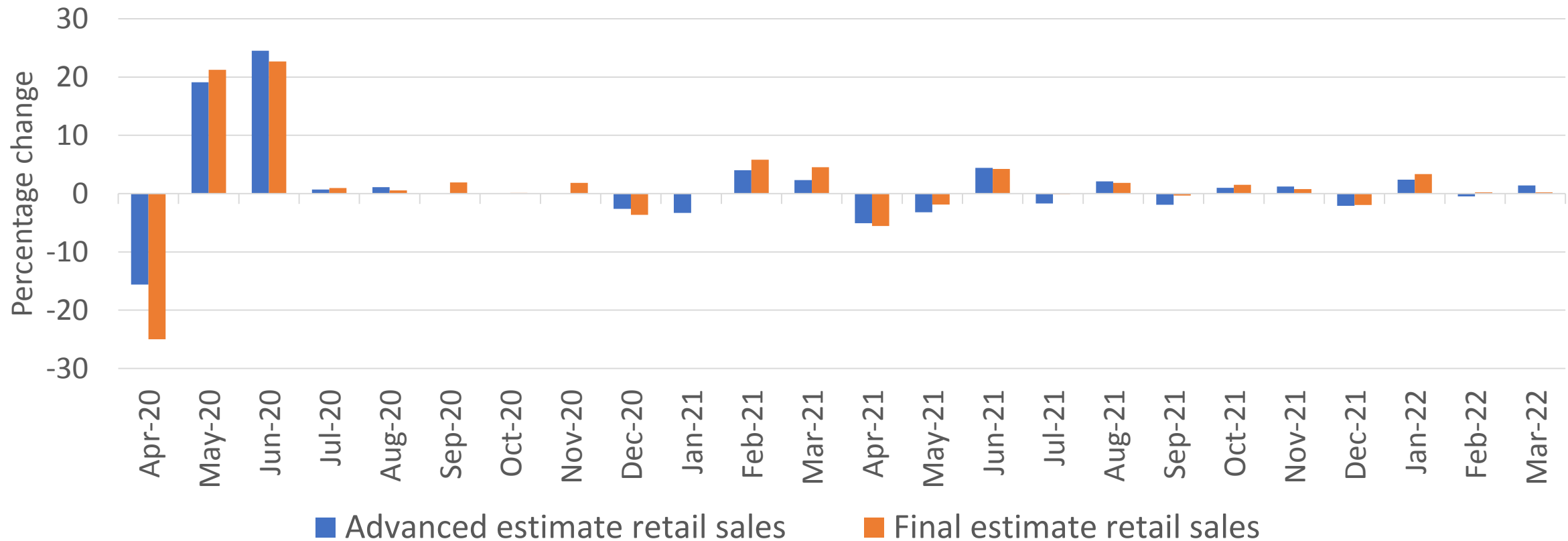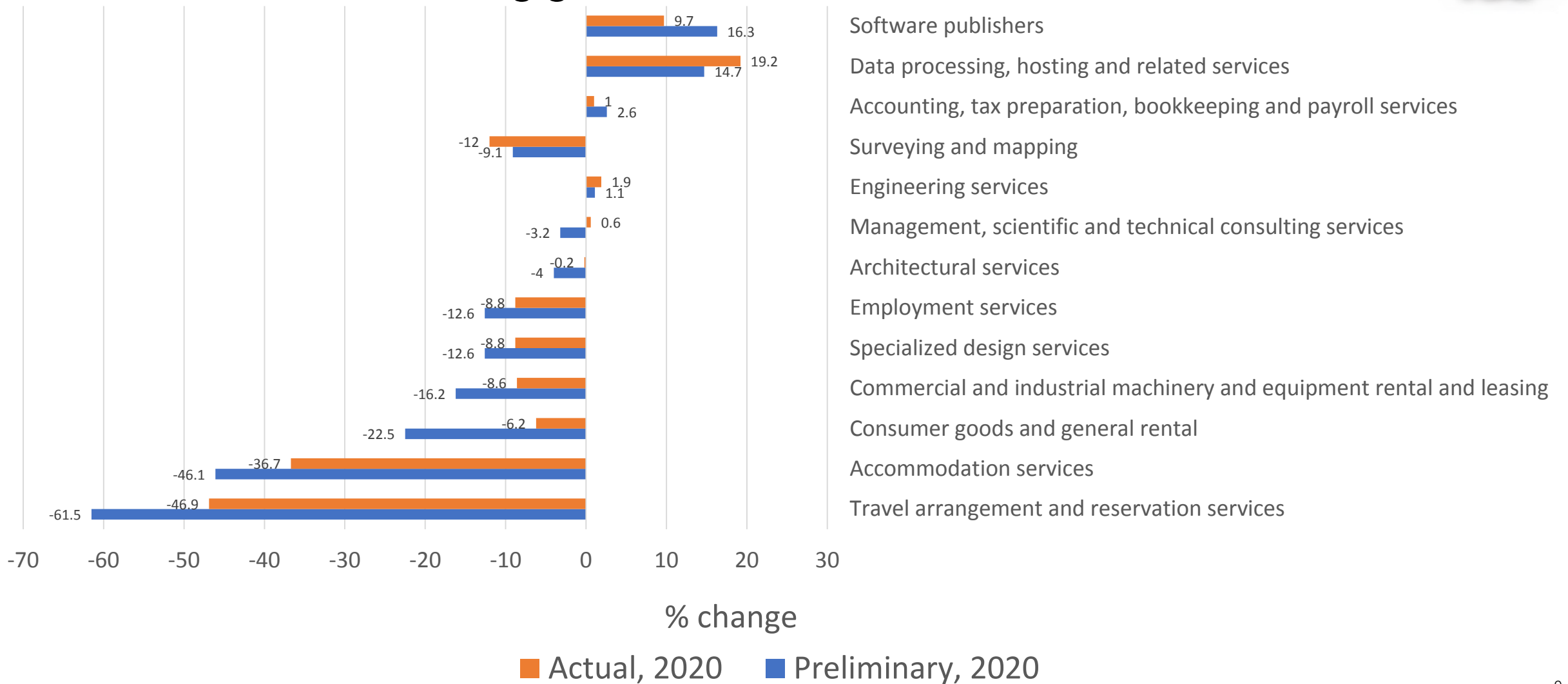
Statistical measurement challenges

Data gaps- digital economy
- E-commerce
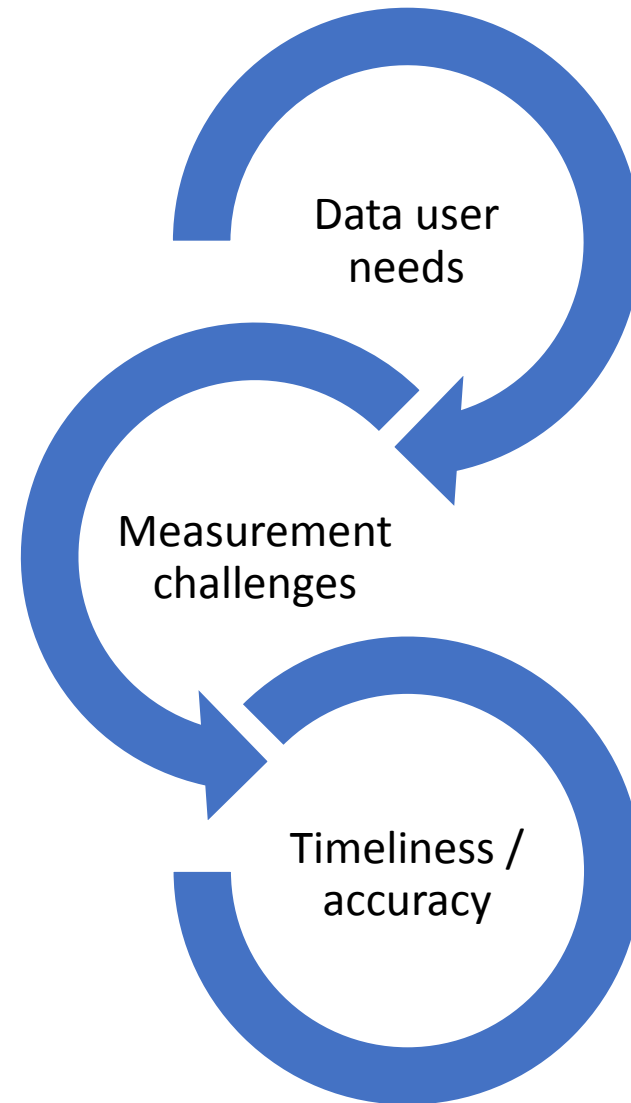- Platform-based activities

Lack of a business frame
- Cloud computing
- Cryptocurrency mining

Leveraging alternative data sources
- Administrative tax data
- External data sources

Final Thoughts

Data user needs → Measurement challenges → Timeliness / accuracy

Discussion / Questions

Thank-you / Merci!

Marie-Christine Bernard   marie-
christine.bernard@statcan.gc.ca