

# Evaluating Canada's adjusted estimates of emigration in the context of the COVID-19 pandemic

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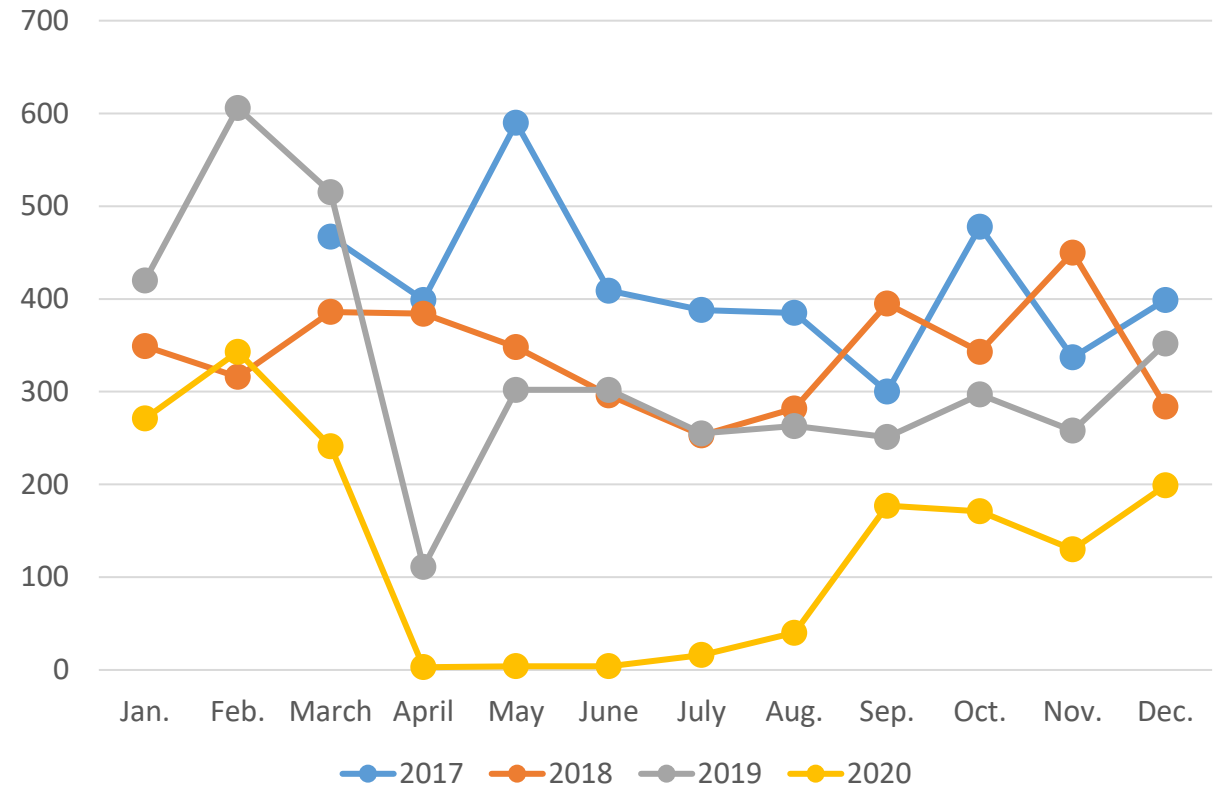
# Measuring Canadian emigration with accuracy in the context of COVID-19

- StatCan releases quarterly **preliminary** estimates **3 months after the end of the reference period**
  - Final estimates are available 2 years after the end of the reference period
- Emigrants: **Canadian citizens** + **permanent residents** who have left Canada to establish a permanent residence in another country
- Usual method: Canada Child Benefit (CCB) data (tax data) + demographic models
  - Preliminary : data lags 2 years (too incomplete) => use past trends => not reactive to the pandemic
- StatCan adjusted its models to consider the context of the pandemic
  - Use of U.S. visa data
  - Started in March 2020
  - [Technical Supplement: Production of Demographic Estimates for the Second Quarter of 2020 in the Context of COVID-19 \(statcan.gc.ca\)](#)

## Using U.S. visas data to adjust emigration estimates

- Most Canadian emigrants move to the U.S.
- Monthly immigrant visas issued by American consulates in Canada
  - Very timely
    - Few sources as timely
  - Show a change in trends in 2020 (responsiveness)
  - Publicly available from the U.S. Department of Homeland Security (DHS)
- Discussions and aggregated data exchanges with the U.S. Census Bureau
- Computed monthly ratios using StatCan's estimates and visas numbers from previous years

Visas delivered in consulates located in Canada



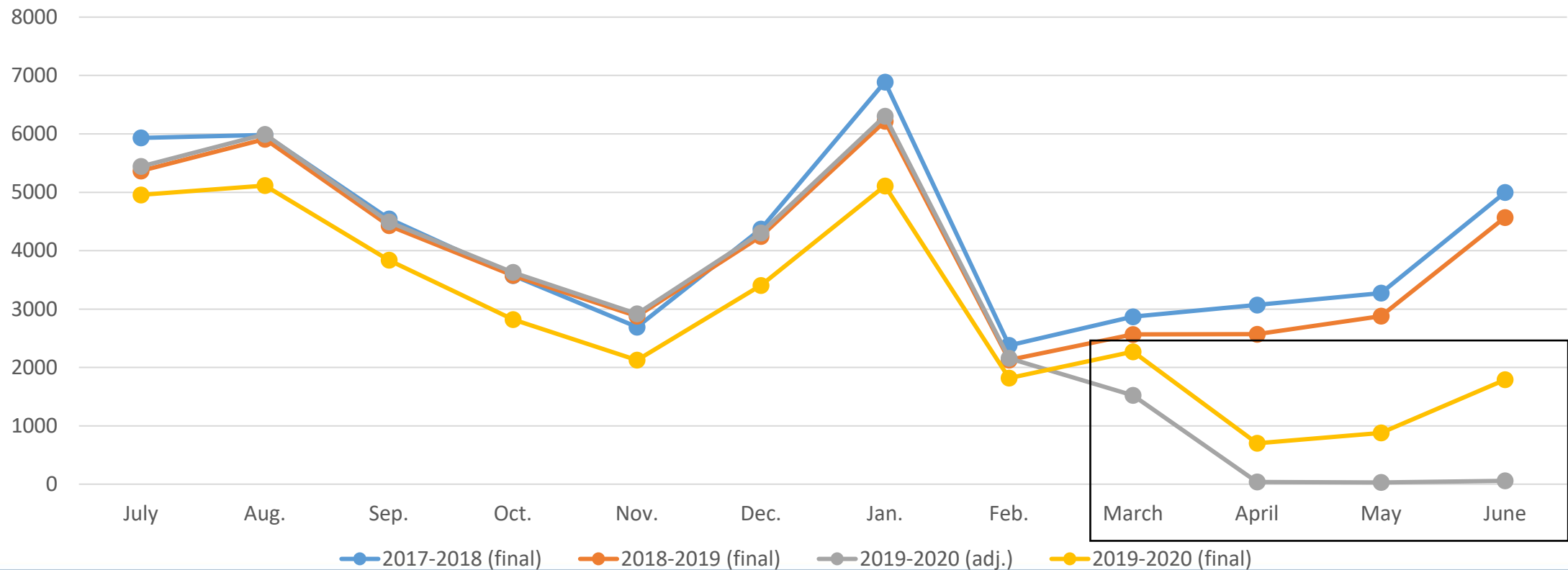


## The accuracy of the adjustment can now be evaluated

- Issue: adjusting our methods during the pandemic => added uncertainty to estimates that already have a certain degree of uncertainty
- Estimates up to June 2020 are now **final** and replaced the adjustment
- Opportunity: new sources are now available 1) to evaluate the accuracy of the adjustment and 2) to revise it

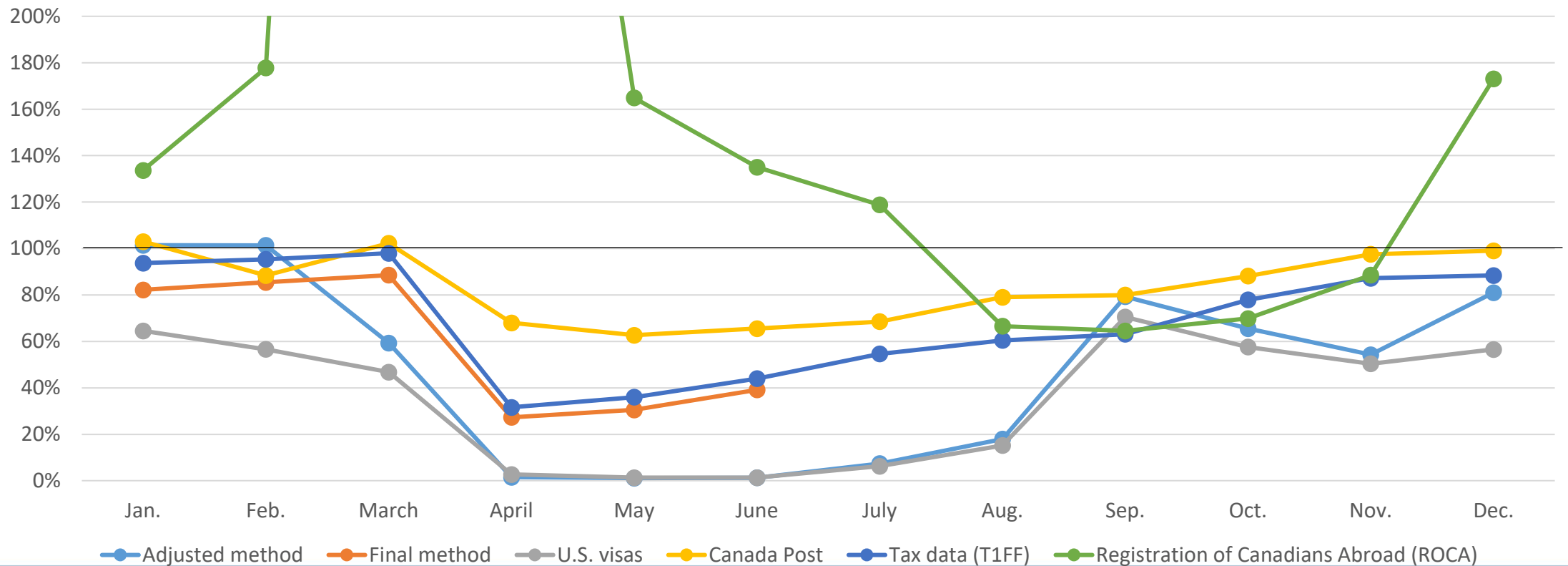
# The decrease in the number of emigrants observed with the adjustment might have been too marked

Estimated number of emigrants



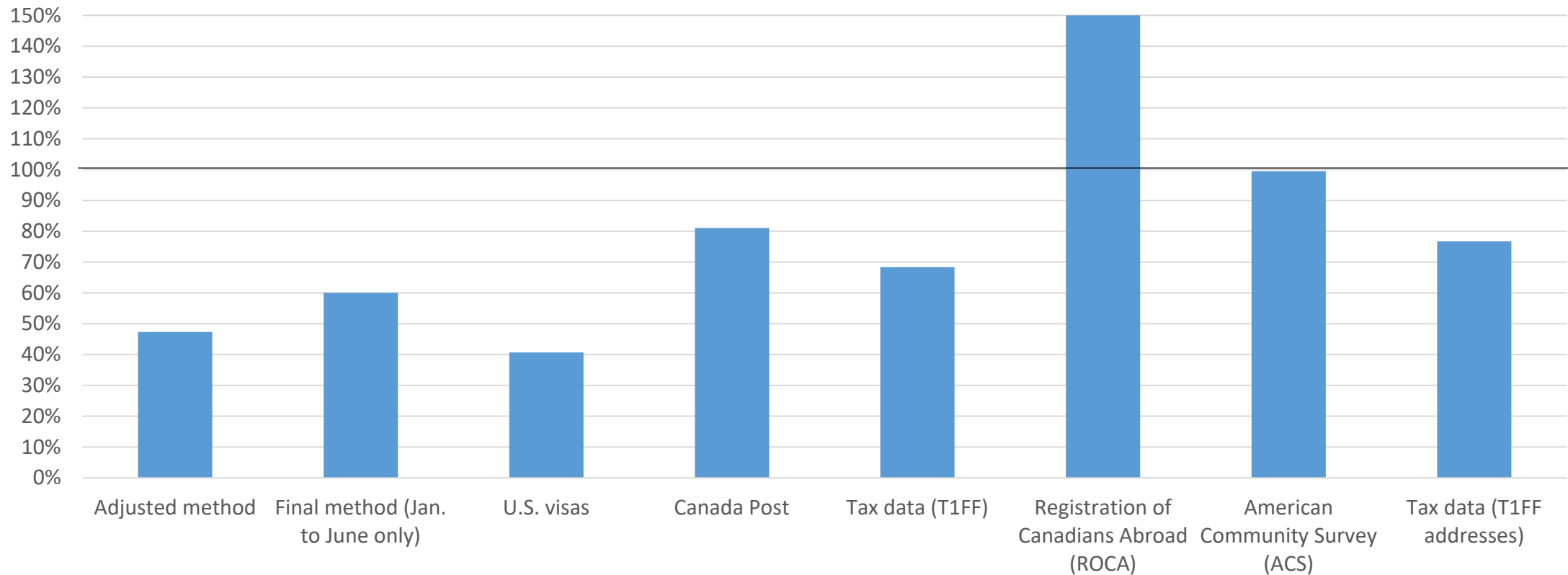
# Most sources suggest a smaller decrease than the adjustment in summer 2020 and a stronger increase in the fall

Monthly ratios of the number of emigrants (2020/2019)



# Most sources suggest a smaller decrease than the adjustment in 2020

Yearly ratios of the number of emigrants (2020/2019)





## Conclusion

- Measuring emigration with accuracy and in a timely fashion is challenging in Canada
- Adjustment was developed in a unique context with few sources available
- Availability of new sources allow the evaluation of the adjustment
- The adjusted estimates are lower than the final estimates for spring 2020
  - Also lower than most sources for the rest of 2020
- The adjustment was revised upwards in light of these results
  - Adjustment was revised in September 2022
- Final estimates for the whole year 2020 will be released in September 2023





## Some lessons learned

- Accuracy: the results of the adjustment are farther from the final estimates and alternate sources than expected
  - Most alternate sources were not available at the time
- Accuracy: necessary to constantly evaluate our estimates by using more than 1 source (when possible) and by considering the strengths and flaws of each source
- Timeliness: increasingly relevant to users (internal and external) => trade-offs needed
- Transparency: technical documents were very well received by users
  - Currently reflecting on a dissemination strategy for these evaluations
- Methods: created a momentum to innovate by acquiring new data and by developing new models. Many new sources are now used for evaluation purposes. Need to keep this momentum going.



## Some new developments and opportunities

- Collaborative agreement with the U.S. and Mexico
- [Study on the Canadian diaspora](#)
- [Entries and Exits Data](#)
  - Very early stage
- [2021 Census data on immigration and ethnocultural diversity](#) were released on Oct. 26.
  - *Immigrants accounted for 23.0% of the population in 2021, the largest proportion in over 150 years.*



Thank you for your attention / Merci pour votre attention ! 😊

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