# Stretching the Clock and Sharing the Time: Assessing the Impacts of Parental Leave Reforms

Steven Ryan University of Toronto

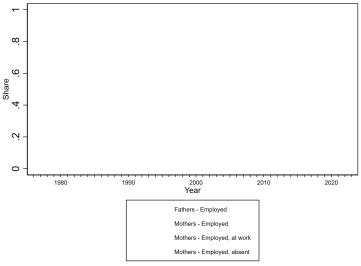
April 28, 2024

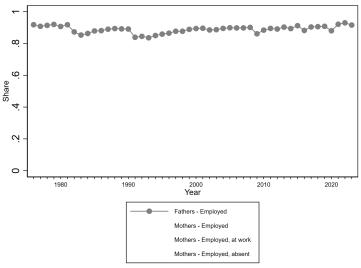
#### Introduction

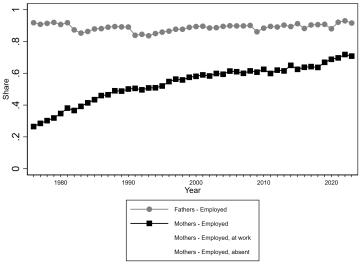
- In developed countries family policies have been put in place to help parents work and care for their children
- Paid maternity leave and parental leave programs exist in almost all OECD countries
  - Variation over time and across jurisdictions used by Baker and Milligan (2008, 2010, 2015), Caneiro et al. (2015) Dahl et al. (2016), Danzer and Lavy (2013), Dustmann and Schönberg (2011), Ginja et al. (2023), among many others
- This paper: looks at recent changes to Canada's parental leave system that introduced menu of parental leave options and introduction of shared weeks
  - Both are common features of modern parental leave systems
  - Fewer (or no) studies about these features

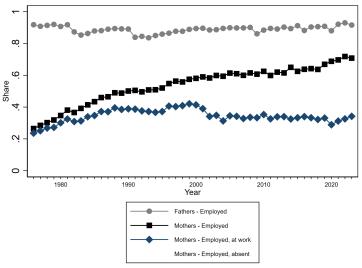
## What I (will) do

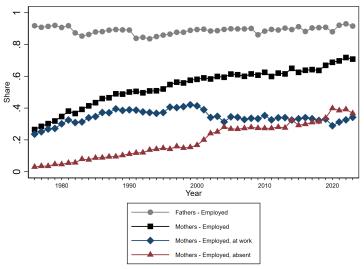
- Document take-up of extended leave and shared benefits
- Show behavioural response to these reforms
- Estimate short- and medium-run effects on earnings and employment
- Incorporate estimates of impacts into a model of parental leave design

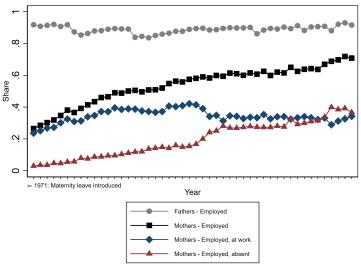


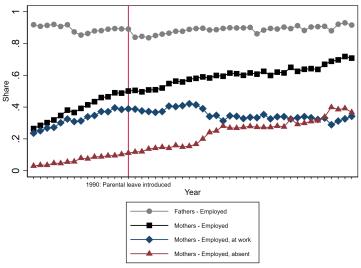


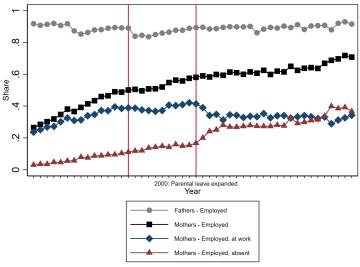


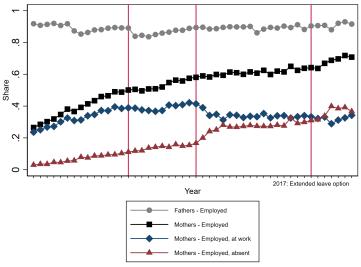


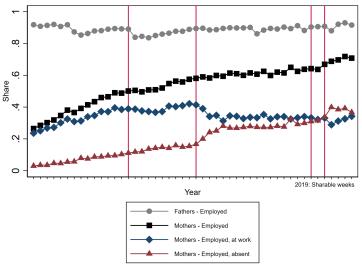


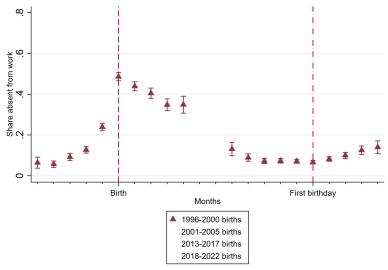


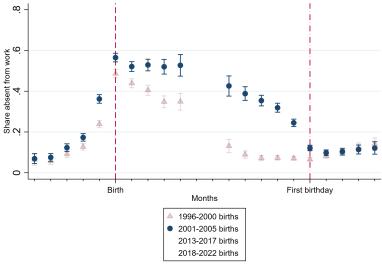


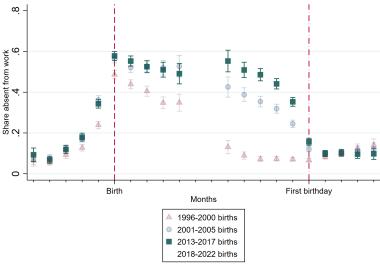


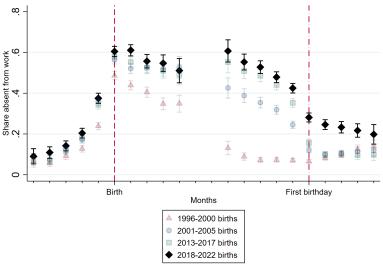


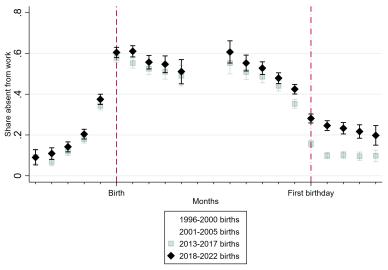












## Summary of reforms

- 1971: 15 weeks of maternity leave
- 1990: 10 weeks of parental leave introduced, taken by either parent
- 2000: weeks of parental leave increased to 35
- 2017: introduction of extended option of 61 weeks at 33% replacement rate vs. 35 weeks at 55%
- 2019: additional weeks of shared benefits up to maximum of 40 or 69 weeks

#### Data sources

- Employment Insurance (EI) administrative data
- Labour force survey (LFS)
- Longitudinal Administrative Database (LAD) 20% sample of taxfilers
- Linked EI and tax data
- El Coverage Survey

#### Data sources

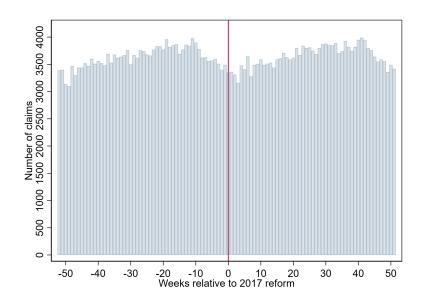
- Employment Insurance (EI) administrative data
- Labour force survey (LFS)
- Longitudinal Administrative Database (LAD) 20% sample of taxfilers
- Linked EI and tax data
- El Coverage Survey

## **Empirical strategy**

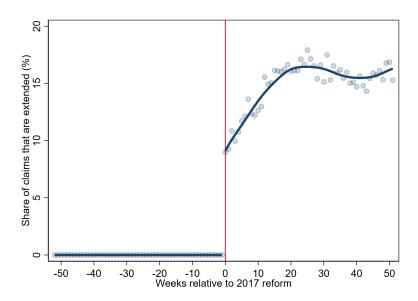
- Regression discontinuity comparing parents around birthdate cut-offs
- Difference-in-differences using parents in Quebec as control

## 2017: Extended benefits option

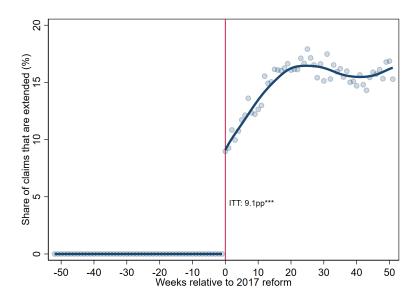
#### Number of claims



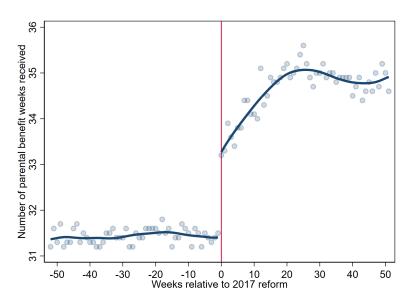
## Take-up of extended benefits



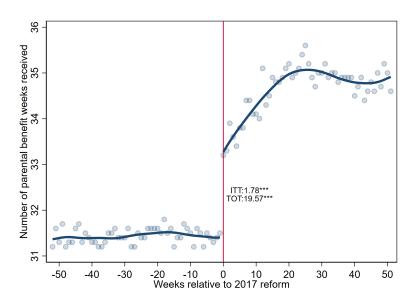
## Take-up of extended benefits



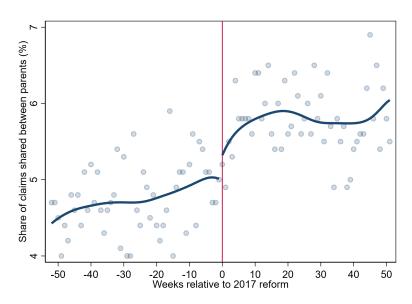
## Change in total parental weeks taken



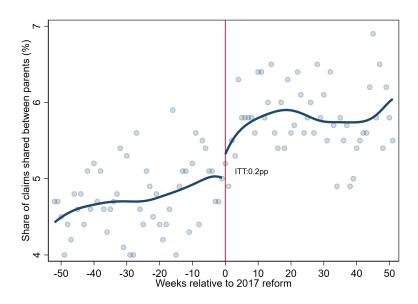
## Change in total parental weeks taken



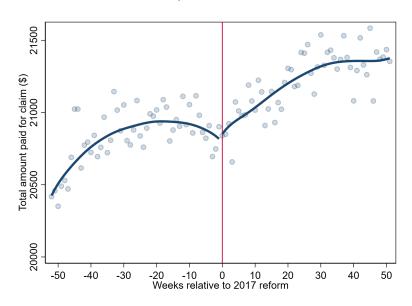
## Impacts on sharing of benefits



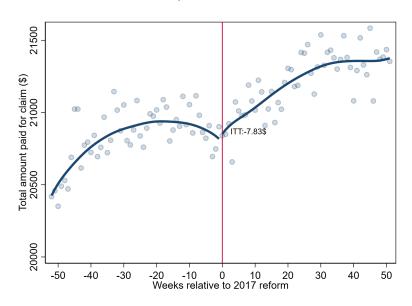
## Impacts on sharing of benefits



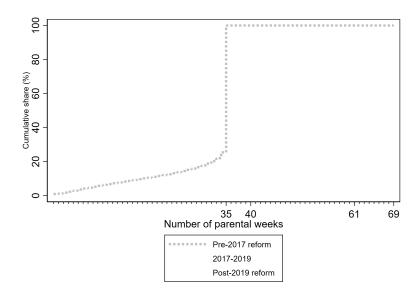
## Impacts on total benefits paid



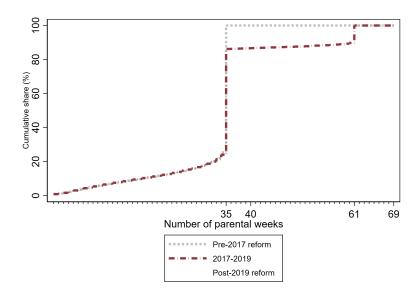
## Impacts on total benefits paid



#### Distribution of weeks used

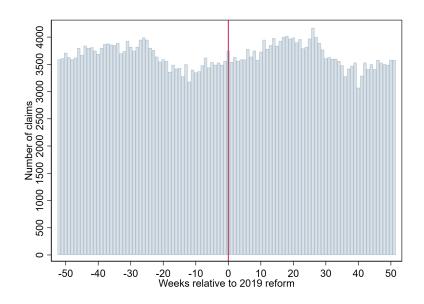


#### Distribution of weeks used

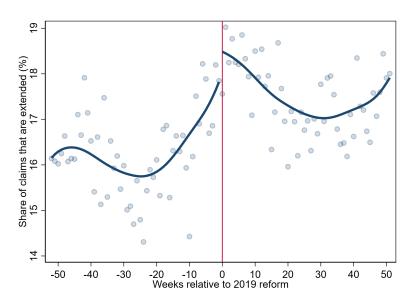


## 2019: Shared benefit weeks

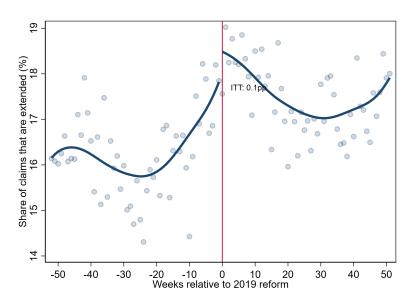
#### Number of claims



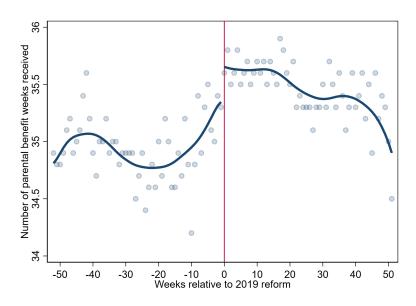
# Take-up of extended benefits



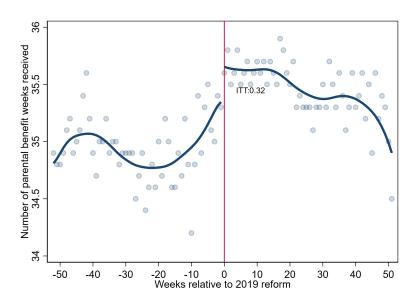
# Take-up of extended benefits



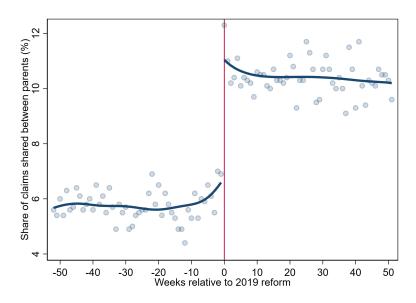
# Change in total parental weeks taken



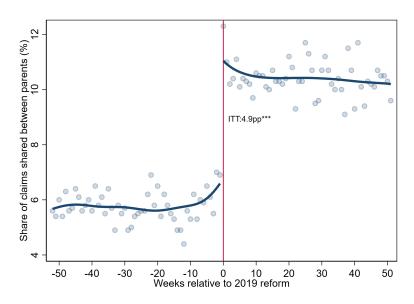
# Change in total parental weeks taken



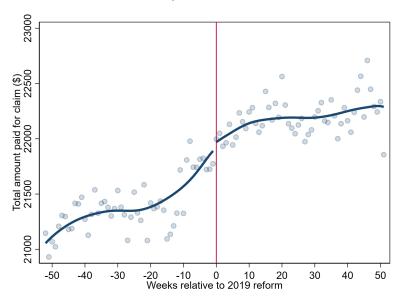
# Impacts on sharing of benefits



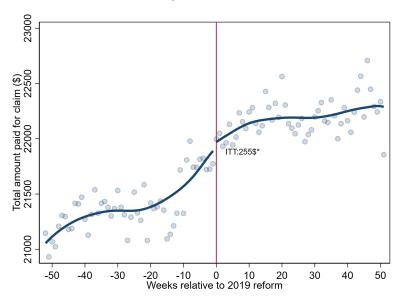
# Impacts on sharing of benefits



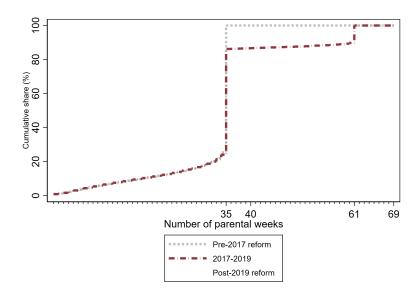
## Impacts on total benefits paid



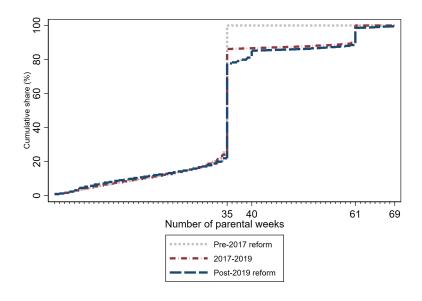
# Impacts on total benefits paid



### Distribution of weeks used

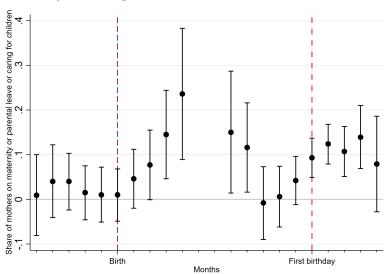


### Distribution of weeks used



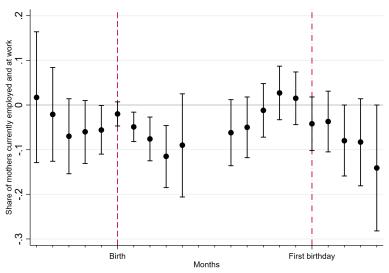
# LFS estimates

# Impacts on providing care



DiD estimates comparing mothers in rest of Canada to mothers in Quebec, before and after reforms

# Impacts on return-to-work



DiD estimates comparing mothers in rest of Canada to mothers in Quebec, before and after reforms

# LAD estimates

# Impacts of 2017 reform on all mothers

	Year relative to birth of child								
Outcome variable	-1	0	1	2	3	4			
Received El special ben- efits	0.019	-0.113***	-0.010	0.042***	0.003	-0.006			
Amount of EI special benefits	38.51	-245.53***	24.80	166.13**	69.181	-146.434			
T4 employment	0.002	0.002	-0.032*	-0.008	-0.013	-0.006			
T4 earnings	-779.02	-485.84	-611.19	-1475.41	-1003.03	-767.13			

Notes: Regression discontinuity estimates for all mothers in Canada (outside of Quebec) with child born in three weeks before and after Dec. 3, 2017 reform. Randomization inference procedure used with triangular weights. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

# Impacts of 2017 reform on likely eligible mothers

	Year relative to birth of child								
Outcome variable	-1	0	1	2	3	4			
Received El special benefits	0.020	-0.184***	-0.005	0.075***	0.007	-0.005			
Amount of EI special benefits	-30.31	-410.43***	12.13	308.42**	137.26	-182.23			
T4 employment	0.013*	0.000	-0.057***	-0.011	-0.018	-0.028*			
T4 earnings	-1872.67	-1250.67	-1413.08	-2831.73**	-1815.37	-850.31			

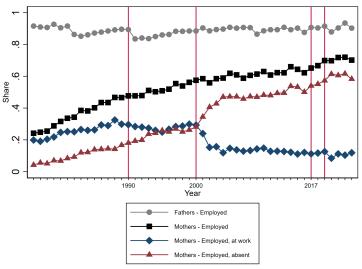
Notes: Regression discontinuity estimates for all mothers in Canada (outside of Quebec) with child born in three weeks before and after Dec. 3, 2017 reform with more than \$10,000 in T4 earnings in relative year 0. Randomization inference procedure used with triangular weights. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

### Next steps

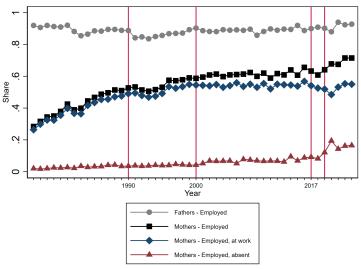
- Produce additional estimates using tax data for mothers and father for the 2017 and 2019 reforms
- Model
  - Why offer extended parental leave or shared benefits?
- For extended parental leave possible explanations may involve signalling (Tô 2018), creation of reference points for leave duration (Siebold 2021)



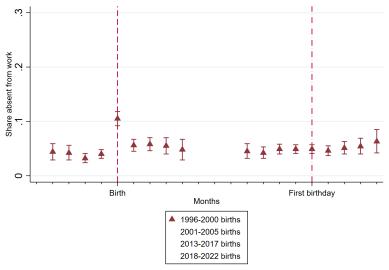
# Appendix

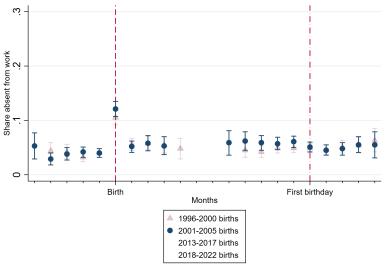


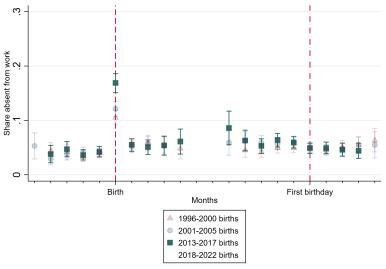
Shares for men and women with youngest child aged 0 outside of Quebec

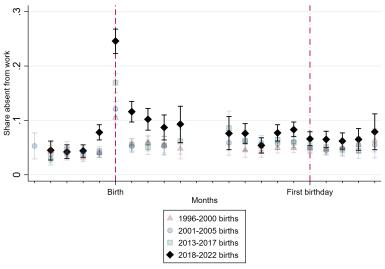


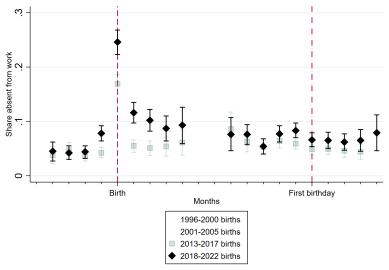
Shares for men and women with youngest child aged 1 outside of Quebec

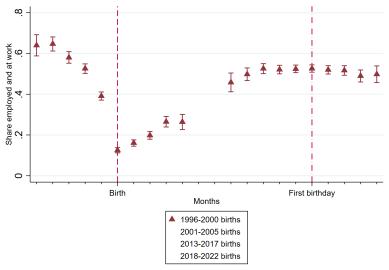


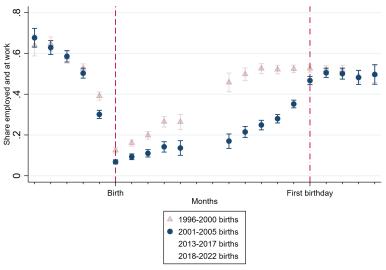


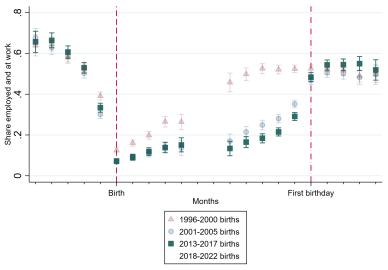


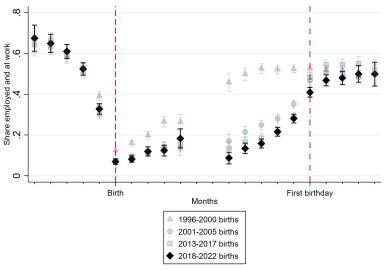


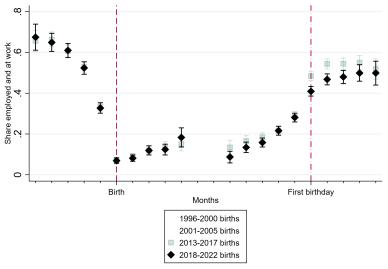




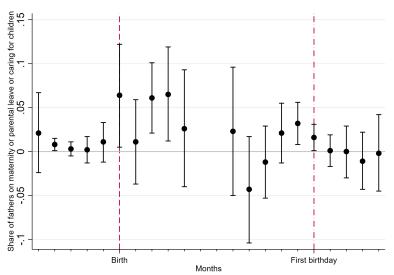






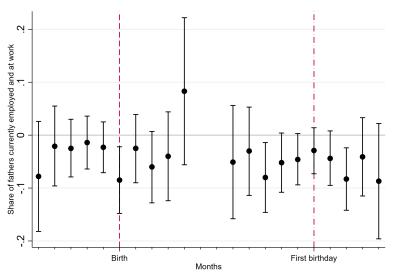


# Impacts on providing care



DiD estimates comparing fathers in rest of Canada to fathers in Quebec, before and after reforms

# Impacts on return-to-work



DiD estimates comparing fathers in rest of Canada to fathers in Quebec, before and after reforms