

The Effect of Quebec Childcare Policy Change on Labour Market Outcomes and Time Distribution in Families

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Quebec childcare policy change

- 1997-2000: \$5 per day charge for pre-school daycare (eligibility expanded every year for 4-, 3-, 2-, and 1-year-old children and new-borns)
- Full day kindergarten for 5-year-old children
- \$5 per day charge for before- and after-school daycare
- In 2004 the cost of daycare was increased to \$7 per day.

Quebec childcare policy change

- The parents had to commit to 261 days of daycare per year.
- Could use daycare for up to 11 hours per day.
- The number of daycare spots increased by 211 percent between 1997 and 2012.
- The daycare subsidy was provided in 89 percent of cases.
- Total cost of funding: increased from \$288 million in the 1996-1997 fiscal year to \$2.0 billion in the 2010-2011 fiscal year.

Research objectives

- The effect of the Quebec childcare policy on the labour supply outcomes of mothers and fathers
- The effect of the Quebec childcare policy on the allocation of housework and childcare hours between Quebec mothers and fathers.

Literature Review

Outcome	Effect	Authors
Mothers labour supply	Positive	Baker, Gruber, & Milligan (2005), Lefebvre & Merrigan (2008), Lefebvre et al. (2009)
Fathers labour supply	None	Haeck et al. (2013)
Mothers income share	Positive	Haeck et al. (2013)
Mothers' expenditure (eating out, household operations)	Positive	Haeck et al. (2013)
Egalitarian distribution of labour	Positive	Stalker & Ornstein (2013)
Parental life satisfaction and happiness	Negative	Brodeur & Connolly (2013)
Child outcomes (behavioural and health)	Negative	Baker, Gruber, & Milligan (2005), Kottelenberg & Lehrer (2013)
Parental outcomes (parenting practices and health)	Negative	Baker, Gruber, & Milligan (2005),

Data

Data: Canadian Census (1996 and 2001)

Sample:

Two-parent families with 0-5 year old children

Mothers' age: 24-55

Fathers' age: 24-65

Sample size:

1996: 14,717 families (25% Quebec)

2001: 13,089 families (22% Quebec)

Total: 27,806 families

Sample statistics: Mothers in the Census, 1996 and 2001

	Quebec		The Rest of Canada	
	1996	2001	1996	2001
25 to 34 years of age	0.80	0.74	0.77	0.70
35 to 44 years of age	0.19	0.25	0.22	0.29
High-school graduate	0.22	0.10	0.17	0.12
College graduate	0.35	0.39	0.36	0.36
Some university	0.01	0.11	0.04	0.12
Bachelor degree or higher	0.30	0.31	0.30	0.31

Sample statistics: Fathers in the Census, 1996 and 2001

	Quebec		The Rest of Canada	
	1996	2001	1996	2001
25 to 34 years of age	0.64	0.57	0.60	0.52
35 to 44 years of age	0.32	0.39	0.36	0.43
High-school graduate	0.22	0.13	0.17	0.13
College graduate	0.32	0.39	0.34	0.36
Some university	0.01	0.09	0.04	0.11
Bachelor degree or higher	0.29	0.25	0.28	0.27

Sample statistics: Parents in the Census, 1996 and 2001

	Quebec		The Rest of Canada	
	1996	2001	1996	2001
Foreign born mother	0.09	0.12	0.23	0.25
Foreign born father	0.11	0.13	0.23	0.25
Both spouses Canadian born	0.87	0.84	0.70	0.68
One spouse is Foreign born	0.06	0.08	0.14	0.14
Both spouses Foreign born	0.07	0.09	0.16	0.18
Common-law couple	0.40	0.48	0.08	0.10
Urban residents	0.67	0.69	0.65	0.67

Sample statistics: Labour market outcomes

	Quebec		The Rest of Canada	
	1996	2001	1996	2001
Mother is in labour force	70.47	74.95	68.86	68.69
Mother worked mostly part-time last year	20.03	17.3	25.43	24.79
Mother worked mostly full-time last year	58.89	65.99	55.14	56.72
Father is in labour force	91.83	92.94	92.92	93.29
Father worked mostly part-time last year	3.71	3.25	3.68	2.64
Father worked mostly full-time last year	94.24	94.39	94.31	95.8

Sample statistics: Time allocation

	Quebec		The Rest of Canada	
	1996	2001	1996	2001
Mother's hours worked last week	33.38	34.78	32.57	33.06
Mother's hours of housework	13.8	11.76	17.36	16.23
Mother's hours of childcare	24.41	25.12	30.48	31.58
Father's hours worked last week	43.59	43.13	45.58	46.28
Father's hours of housework	6.93	6.5	7.74	7.69
Father's hours of childcare	12.14	13.65	14.22	15.66
Father's share of housework	0.39	0.41	0.35	0.37
Father's share of childcare	0.34	0.35	0.31	0.32

Model specification

- Difference-in-difference model (DD)

$$Y_{ipt} = Policy_{pt} + Quebec_p + Year_t + X_{ipt} + \varepsilon_t$$

- Y_{ipt} is labour market or housework variable
- $Policy_{pt}$ is the variable of interaction between the $Year_t$ and $Quebec_p$
- X_{ipt} the set of control variables that includes personal and household characteristics

Labour market outcomes: DD

Difference in difference	Probit / Tobit (marginal)	OLS
Mothers		
Labour force participation	0.12***	0.04***
Hours worked last week	1.38	1.00*
Weeks worked last year	1.73**	1.36**
Fathers		
Labour force participation	0.06	0.01
Hours worked last week	-0.69	-0.72
Weeks worked last year	0.40	0.42

Parents with 0-5 year-old children, Quebec vs. the ROC

Labour market outcomes: FT vs. PT

	DD
Mothers	
Not working, not affected by policy	0.18***
Not working, affected by policy	0.15***
Working part-time, not affected by policy	0.25***
Working part-time, affected by policy	0.23***
Working full-time, not affected by policy	0.57***
Working full-time, affected by policy	0.62***

Parents with 0-5 year-old children, Quebec vs. the ROC

Labour market outcomes: FT vs. PT

	DD
Fathers	
Not working, not affected by policy	0.02***
Not working, affected by policy	0.02***
Working part-time, not affected by policy	0.03***
Working part-time, affected by policy	0.04***
Working full-time, not affected by policy	0.96***
Working full-time, affected by policy	0.94***

Parents with 0-5 year-old children, Quebec vs. the ROC

Time allocation outcomes: DD

Difference in difference	Tobit (marginal)	OLS
Mothers		
Hours of housework	-0.85**	-0.56
Hours of childcare	-0.30	-0.06
Fathers		
Hours of housework	-0.66**	-0.39*
Hours of childcare	0.00	-0.23
Share of housework	0.00	-0.00
Share of childcare	-0.02**	-0.02**

Parents with 0-5 year-old children, Quebec vs. the ROC

Summary

- Mothers increased labour force participation and labour supply.
- Mothers decreased hours of housework, but did not change hours of childcare
- Fathers did not change labour supply
- Fathers decreased hours of housework, but did not change hours of childcare
- Share of housework produced by fathers did not change
- Share of childcare produced by fathers decreased

Thank you