

Online Appendix

"How Infant Health Shapes Maternal Earnings"

Abdel-Hamid Bello

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A Summary Statistics

Table A.1 provides the summary statistics for the full sample, as well as for the subsample of mothers whose child is born unhealthy separately. Prematurity is the most common health condition at birth in the full sample. About 7% of the sample births are premature while 5% are of low birth weight. Compared to the full sample, treated mothers tend to have given birth to more male children and to have given birth earlier in the study period. In general, the table shows that treated mothers constitute a selected sample, both in terms of characteristics at delivery and of pre-delivery economic variables. In terms of maternal and family characteristics at birth, mothers of unhealthy children are older, less educated, less likely to be married (or cohabiting with a partner), less likely to have been born in Canada, and less likely to reside in the province of Quebec. Since they are older, it is not surprising that they are also more likely to have already given birth to a child. In addition, paternal characteristics follow a similar pattern. Fathers of unhealthy babies are less likely to have been born in Canada and their age is more likely to be reported as missing from the birth certificate.¹

In terms of income variables, mothers of unhealthy children have a lower average pre-birth labor market income and a lower total family income. For example, treated mothers earn approximately C\$1,000 less and belong to a household with a total income as much as C\$3,500 lower than that of the entire sample. In addition, they spent more years with zero labor income in the four years prior to giving birth. This could make them less eligible for unemployment insurance (UI). Consequently, they spent fewer years on UI prior to the event than the full unmatched sample.

Unsurprisingly, I find that there is a large difference between treated mothers and mothers in the entire unmatched sample when it comes to obtaining a disability tax credit prior to childbirth. 0.6% of mothers of unhealthy children received a tax credit for their own mental or physical limitations prior to childbirth, whereas this rate is only 0.2% for the full sample. This suggests that poor-health mothers are more likely to give birth to a poor-health child.

As I explain in detail in Section 3, all of these differences tend to overestimate the difference in labor market income after birth. When we compare the difference in post-birth income between the treated sample

¹This probably because the treated mothers are less likely to be in a marital relationship.

and the complete unmatched sample (at the bottom of the Table A.1) and the same difference between the treated sample and the matched sample (at the bottom of the Table A.2), we can see that the difference is smaller in the second case.²

Table A.1: Descriptive Statistics: Unmatched sample

	Full sample		Treated sample		p-value
	Mean	SD	Mean	SD	
<i>Child at birth:</i>					
Gender (%Male)	51.1	50	52.3	50	<0.001
Premature(%)	0.065	0.246	0.785	0.41	-
Low birth weight (%)	0.05	0.218	0.608	0.488	
Unhealthy(%)	0.082	0.275	1	0	-
Age in 2018	8.639	2.9691	8.348	2.97	<0.001
<i>Mothers and family at birth</i>					
Age	32.248	4.526	32.652	4.712	<0.001
Married (%)	74.1	43.8	70.7	45.5	<0.001
First time motherhood (%)	35.6	47.9	29.2	45.5	<0.001
Native born	78.7	41	76.8	42.2	<0.001
University education (%)	8.4	27.8	7.9	27	<0.001
College certificate (%)	6.1	23.9	6.5	24.6	<0.001
Post-secondary education is missing (%)	71.1	45.38	72.8	44.5	<0.001
Father age is missing (%)	3.7	19	5.4	22.7	<0.001
Father is native (%)	72.7	44.6	69.4	42.2	<0.001
Province (% Québec)	26.5	44.2	25.6	43.7	<0.001
<i>Average earnings before the event</i>					
Mother's market earnings (C\$)	36,193	33,234	35,406	30,960	<0.001
Family total income (C\$)	92,500	87,700	88,250	155,700	<0.001
Has ever received disability tax credit (%)	0.2	4.9	0.6	7.9	<0.001
% of years with non zero earnings	90.3	24.7	89.2	26.4	<0.001
% of years receiving UI	21.3	27.8	18	26.6	<0.001
<i>After the childbirth</i>					
Average earnings (C\$)	39,500	37,200	37,200	36,900	<0.001
Has received child disability benefit (%)	5.7	23.3	9.2	28.9	<0.001
Observations	680000		54500		

Notes: The table presents descriptive statistics for two samples: all mothers who gave birth once during the period 2006-2015, and the subsample of those whose child was born weighing less than 2,500 grams and / or before 37 weeks of gestation. The last column shows the p-value of the t-test for the significance of the difference in the means for each variable. All monetary variables are expressed in 2015 Canadian dollars and rounded to 100. Pre-event income variables are the average of the four years preceding the child's birth. The post-event income variables are the average of the seven years following birth. Missing data on post-secondary education should be interpreted as including secondary education or less, and post-secondary education taken abroad.

²From Table A.1, the gap is $\frac{C\$37200 - C\$39500}{C\$39500} \approx -6\%$. From Table A.2, the gap is $\frac{C\$37200 - C\$3800}{C\$3800} \approx -2\%$.

Table A.2: Balance Table : Matched treated and untreated

	Full sample		Treated sample		p-value
	Mean	SD	Mean	SD	
<i>Child at birth:</i>					
Gender (%Male)	52.7	50	52.3	50	0.20
Premature(%)	0.065	0.246	0.785	0.41	-
Low birth weight (%)	0.05	0.218	0.608	0.488	
Unhealthy(%)	0.082	0.275	1	0	-
Age in 2018	8.348	2.9691	8.348	2.97	0.99
<i>Mothers and family at birth</i>					
Age	32.679	4.605	32.653	4.712	0.34
Married (%)	70.2	45.7	70.7	45.5	0.12
First time motherhood (%)	29.2	45.5	29.2	45.5	0.99
Native born	77.9	41.5	76.8	42.2	0.001
University education (%)	8.0	27.1	7.9	27	0.51
College certificate (%)	6.4	24.5	6.5	24.6	0.55
Post-secondary education is missing (%)	72.8	44.5	72.8	44.5	0.99
Father age is missing (%)	5.4	22.5	5.4	22.7	0.51
Father is native (%)	70.5	45.6	69.4	46.1	0.001
Province (% Québec)	25.6	43.7	25.6	43.7	0.99
<i>Average earnings before the event</i>					
Mother's market earnings (C\$)	35,480	30,400	35,400	30,950	0.68
Family total income (C\$)	89,100	72,130	88,250	155,700	0.23
Has ever received disability tax credit (%)	0.6	7.9	0.6	7.9	0.99
% of years with non zero earnings	89.1	26.3	89.2	26.4	0.61
% of years receiving UI	17.7	26.3	18	26.6	0.03
<i>After the childbirth</i>					
Average earnings (C\$)	38,000	34,700	37,200	36,900	<0.001
Has received child disability benefit (%)	5.8	23.4	9.2	28.9	<0.001
Observations	109000		54500		

Notes: The balance table presents summary statistics for the sample of matched mothers. Mothers are matched exactly on the year of event, province of residence, whether this is their first child, whether they have experienced a significant limitation in physical or mental function previously, and whether information on their post-secondary education is missing. The best match for each mother with an unhealthy child is the one whose propensity score calculated with all other variables is the closest. Equilibrium is achieved for all variables, with the exception of whether the parents were born in the country and the proportion of years collecting unemployment insurance. However, the differences in means for each of these variables are considerably smaller than before matching.

B A simple model of infant health penalty

Gender norms, biology, and child care are often raised to explain why maternal earnings decrease following the birth of a child. In this section, I propose a theoretical framework that allows infant health to influence mother's labor supply by affecting those factors.

For simplification, I begin with a static model in which the mother makes a decision about her labor supply by maximizing her utility under the usual budget and time constraints. Although I think of a static model, it is important to keep in mind that she takes the decision in each period — in each year to be consistent with the empirical analysis — following her childbirth. I assume that she gets utility from the consumption of a numeraire good c , her child's health h and leisure l . The model also allows the mother to have some additional utility by producing some non-market goods with her time at home m .

$$U_t = U(c_t, h_t, l_t) + (1 + \alpha(Z_t))v(m_t) \quad (1)$$

To accommodate the possibility of gender division of household tasks, I assume that depending of the household structure (e.g., the presence of a spouse), Z_t , the mother gets more utility by staying at home by a factor of α .³

Furthermore, in each period, the mother transforms the time spent at home (m_t)⁴ into the health of her child according to a production technology $h_t(m_t)$ which is assumed to be non-decreasing and exhibit a diminishing marginal return ($h' > 0$; $h'' < 0$). This means that the more time you spend taking care of your child, the healthier he will be. However, as soon as the baseline health of the child increases, there is no need for additional effort.

$$h_t = h_t(m_t) \quad (2)$$

The model is completed by the time constraint (3) and the budget constraint (4)

$$l_t + m_t + n_t = 1 \quad (3)$$

$$c_t = (1 - \delta_t)w_t n_t + y_t \quad (4)$$

The time constraint says that the mother allocates her time (normalized to 1 in each period) between work n_t , leisure l_t , and child care time m_t , while the budget constraint says that expenditures on goods and services should be equal to the labor market income $w_t n_t$ discounted by a productivity shock δ_t plus non-labor market income y_t (including spouse income). I include a productivity shock so that biological factors related to delivery could influence the mother's ability and willingness to work.

In summary, the mother solves the following optimization problem for each period following the child

³Andresen and Nix (2022) make a similar assumption but rather state it as the disutility a male partner gets for the time spent by his wife at work when they have a child. Because my focus is the mother labor supply, I assume that the mother gets more utility by *conforming* to gender norms

⁴In fact, we could also think of child health as a function of time and money, as in Gould (2004). The only advantage of adding money to the framework is to distinguish between time- and money-intensive health issues. However, it is realistic to assume that the only input into the health production function is time in the context of universal health coverage.

birth:

$$\max_{m_t} U_t = U[(1 - \delta_t)(1 - m_t - l_t)w_t + y_t, h_t(m_t), 1 - m_t - n_t] + (1 + \alpha_t(Z_t))v_t(m_t), \quad (5)$$

which results in the following first order conditions:

$$\frac{\partial U / \partial l_t}{\partial U / \partial c_t} = \frac{\partial U / \partial h_t}{\partial U / \partial c_t} h'_t + (1 + \alpha_t(Z_t)) \frac{\partial v / \partial m_t}{\partial U / \partial c_t} - (1 - \delta_t)w_t \quad (6)$$

According to this equation, the substitution between leisure and consumption (work) depends positively on h'_t , α_t and δ_t . Is infant health capable of shifting those factors?

Productivity shock: Pregnancy and its outcomes can significantly alter a mother's capacity to earn, especially following adverse outcomes such as low birth weight or premature births. Mothers who experience such outcomes may suffer from physical or psychological impairments that diminish their ability to generate income. The repercussions of impaired health can extend beyond immediate recovery, affecting long-term earning potential and workforce participation.

Gender norms or preference: Infant health may influence the mother's exposure to gender norms, particularly in how such norms affect marital status. In other words, if mothers of low-birth weight or premature babies are more likely to remain married in the periods following the child's birth, this could be due to the infant's health condition strengthening the marriage. Consequently, these mothers may be more likely to experience traditional gender divisions within the household (α increases with child's low birth weight or prematurity).⁵

Continuing care for child: Established research in economics and health sciences underscores the significance of health at birth as a predictor of ongoing health needs in childhood. A child's health at birth can thus predict the extent of future demands on parent's time and involvement, necessitating adjustments in how mothers balance employment with caregiving responsibilities. This would directly affects the allocation of time between market work and domestic duties.

⁵Family structure could also influence mothers earnings due monetary incentives. The loss of shared resources following a marriage dissolution may lead women to increase their working hours or to change jobs in order to increase their earnings and compensate for the loss of resources following a separation (Tamborini et al., 2015). Alternatively, important child support payments received from an ex spouse may result in an income effect that is strong enough to lead to a reduction in hours worked (Harkness, 2022).

C Association between pre-determined characteristics and post-birth earnings

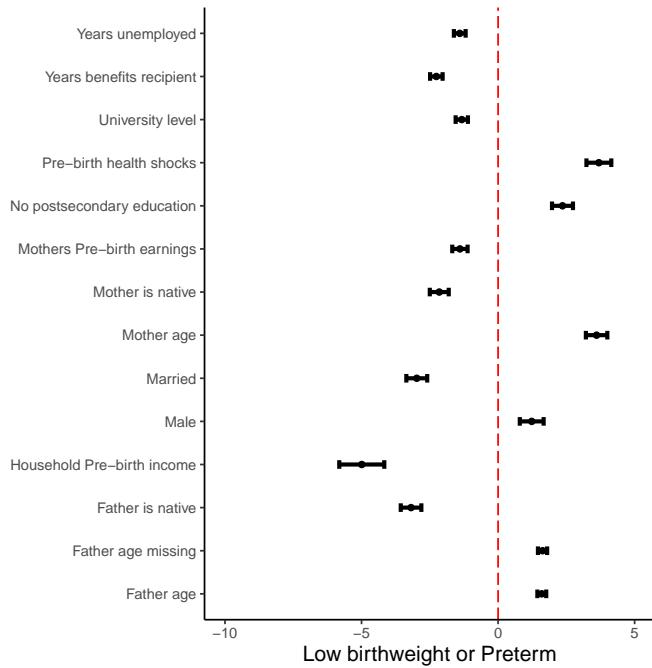


Figure C.1: Selection into treatment

Notes: This figure shows the estimated coefficients of a dummy variable indicating low birth weight or prematurity, along with their corresponding confidence intervals, across different regression models. The dependent variables are family characteristics both before and at the child's birth. All regressions include fixed effects for the year and province of birth.

Table C.3: Association between socioeconomic variables and average earnings after birth

Outcome	Average post-birth earnings
Panel A: Demographics	
Mother age	-68.59 (90.02)
Father age	2.824 (4.227)
Mother is native	-33.72 (326.1)
Father is native	21.82 (156.1)
Married or cohabiting	1,611.3*** (299.8)
Male child	2.954 (44.70)
No post-secondary education	-2,266.3*** (294.9)
University-educated	6,940.7*** (806.6)
first child	2,2204.1*** (178.2)
Major health shocks before	-3,839.6*** (854.7)
Panel B: Economic variables before	
Any zero earnings before	4,816.7 (2,743.6)
Unemployment insurance recipient	-2,879.2*** (551.7)
average earnings before	0.8372*** (0.0505)
Province FEs	✓
Birth year FE	✓
Observations	109,000

Notes: This table presents estimates of the association between predetermined family characteristics and mothers' average labour market income in the seven years following birth. This result is based on the sample of mothers before matching. Standard errors are clustered at the province level.

***p<0.01.

D Main event study

Table D.4: Main event study

	(1)	(2)	(3)
	Earnings	Total income	Family income
-4	0.102 (0.296)	0.253 (0.260)	-0.021 (0.648)
-3	0.536 (0.296)	0.423 (0.257)	0.686 (0.582)
-2	0.832** (0.219)	0.253 (0.327)	0.242 (0.575)
0	-0.376 (0.236)	-0.375 (0.233)	-1.734*** (0.456)
1	-1.637*** (0.277)	-1.268*** (0.276)	-3.103*** (0.479)
2	-1.571*** (0.296)	-0.947*** (0.312)	-3.287*** (0.841)
3	-2.122*** (0.344)	-1.505*** (0.303)	-3.201*** (0.550)
4	-2.548*** (0.383)	-1.855*** (0.315)	-3.759*** (0.613)
5	-3.156*** (0.429)	-2.274*** (0.324)	-3.370*** (0.546)
6	-4.155*** (0.422)	-3.296*** (0.364)	-4.630*** (0.754)
7	-3.531*** (0.446)	-2.880*** (0.401)	-4.200*** (0.880)
Individual FE	✓	✓	✓
Observations	950,000	950,000	950,000

Notes: The table shows estimates of the infant health penalty for labor market income (column (1)), individual total income (column(2)), and family total income (column(3)). The infant health penalties are defined as the percentage income gap (ATT_k defined in equation (2)) between mothers with an unhealthy child and mothers in the matched comparison group. The difference is calculated for each year, from four years before the child's birth to seven years after. Standard errors are clustered at the matched-pair level and calculated using 250 bootstrap replications.

***p<0.01 **p<0.05.

E Medical conditions eligible for disability tax credit

Table E.5: Medical conditions eligible for disability tax credit

Medical Conditions	Visible at Birth	Examples of Papers
Autism	No	Lampi et al. (2012)
Asperger's Syndrome	No	Johnson and Marlow (2011)
Celiac Disease	No	Mårlild et al. (2012)
ADHD/ADD	No	Lindström et al. (2011)
Crohn's Disease	No	Sonntag et al. (2007)
Oppositional Defiant Disorder (ODD)	No	Franz et al. (2018)
Sensory Processing Disorder (SPD)	No	Younge et al. (2017)
Down Syndrome	Yes	Hack et al. (1995)
Spina Bifida	Yes	Mili et al. (1991)
Depression	No	De Mola et al. (2014)
Developmental Delays	No	Hack et al. (1995)

Notes: The table presents various medical conditions eligible for the Child Disability Benefit, along with references to papers that demonstrate their association with health at birth.

F Alternatives matching

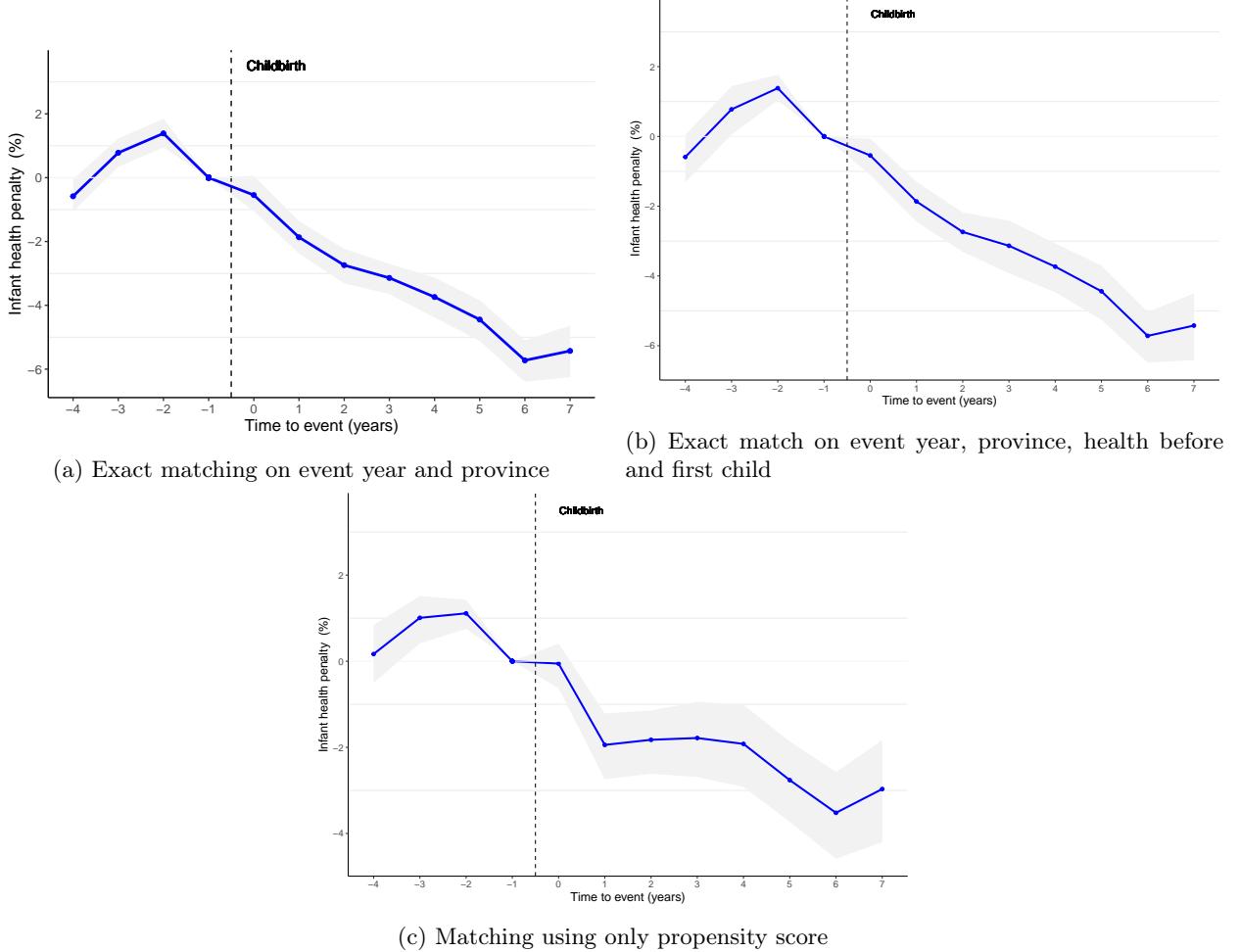


Figure F.2: Infant penalty: Alternatives matching

Notes: This figure shows the infant health penalty on labor market income using different counterfactuals. Panels (a) show the penalty when the sample is matched exactly on event year and province of residence only. Panel (b) shows the penalty when the sample is matched exactly on event year, province of residence, prior health limitations, and first maternity status. Panel (c) shows the penalty when the sample is matched on the basis of a propensity score calculated using all variables (based on [Abadie and Imbens \(2011\)](#)). The propensity score matching is performed without replacement. Standard errors are clustered at the matched-pair level and computed using 250 bootstrap replications.

G Heterogeneous effects across pre-birth characteristics

Assessing the heterogeneity of mothers' income responses within socioeconomic groups would help determine which subgroup should be targeted. I consider five subgroups for this purpose in Table G.6. I present estimates of the average effect of income after birth, as well as an interaction between infant health and subgroup dummy variables. The coefficients of the interaction terms are not statistically significant at 5%, suggesting that the results are not influenced by any particular subgroup. However, it should be noted that the coefficients are not precisely estimated, so the possibility of heterogeneous responses should not be ruled

out.

In panel A, I examine whether the maternal earnings response varies according to the child's gender. Although the coefficient of interaction between child health and gender is not statistically significant, the sign suggests that the earnings of mothers of boys are less affected. This could mean that male children with health problems at birth are healthier in childhood than female children, or, as [Baker and Milligan \(2016\)](#) point out, that parents invest more time in girls.

By considering potential differential responses according to education level (university-educated mothers) in panel C, and egalitarian household status (mothers' incomes accounting for at least 50% of total family income) in panel D, I wish to implicitly explore how opportunity cost fits into this story. Highly educated mothers can have more flexible jobs and adapt their schedules without having to reduce the number of hours worked. Similarly, mothers who earn as much or more than their partners may have a higher opportunity cost to reduce their working hours. Although the coefficients are statistically significant, the signs confirm the fact that mothers with a high level of education or bargaining power suffer a smaller loss of income after the birth of a low-weight or premature child.

Finally, in panel E, I explore the heterogeneity between mothers with low pre-birth incomes and mothers with higher pre-birth incomes. Not only is the difference not statistically significant at 10%, but its magnitude is really small. This suggests that pre-birth income is not driving the results.

Table G.6: Heterogeneous effects across pre-birth characteristics

Outcome	Average post-birth earnings
Panel A: child is male	
Unhealthy	-1,123.8*** (153.9)
Unhealthy X Male	153.9 (259.5)
Panel B: Mother is native	
Unhealthy	-1,161.8*** (279.8)
Unhealthy X Native	149.6 (315)
Panel C: Mother is university-educated	
Unhealthy	-1,056.9*** (132.4)
Unhealthy X University	175.4.6 (543.1)
Panel D: Mother earned at least 45% of family income	
Unhealthy	-1,156.4*** (145.3)
Unhealthy X egalitarian	269.9 (274.8)
Panel E: Mother pre-birth earnings in bottom quartile	
Unhealthy	-1,041.1*** (168.1)
Unhealthy X Low pre-birth earnings	-34.59 (222.8)
Controls	✓
Province FEs	✓
Birth year FEs	✓
Birth month FEs	✓
Observations	109,000

Notes: Controls include average income in the four years prior to childbirth, average total family income in the four years prior to childbirth, share of years with non-zero income in the last four years, share of years collecting unemployment insurance in the last four years, male birth indicator, father's and mother's age, first child dummy variable, university dummy variable, college dummy variable, dummy variables for Canadian-born mothers and Canadian-born fathers. Standard errors are clustered at the matched-pair level.

***p<0.01.

H Birth weight and maternal earnings after child's birth

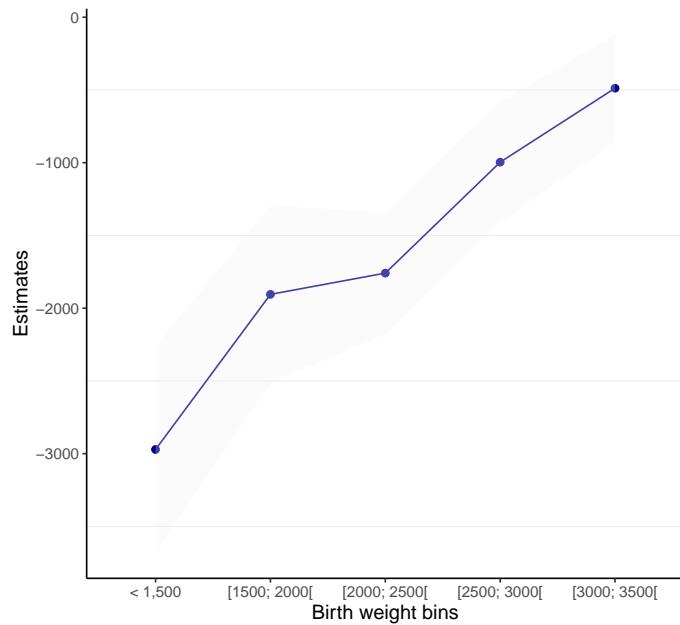


Figure H.3: Birth weight and maternal earnings after the birth of the child

Notes: This figure plots the effect of birth weight in different 500-grams bins on the mothers average post-childbirth earnings. The omitted bin is birth weight above 3,500 grams. Controls include prematurity indicator, average income in the four years prior to childbirth, average total family income in the four years prior to childbirth, share of years with non-zero income in the last four years, share of years collecting unemployment insurance in the last four years, male birth indicator, father's and mother's age, first child dummy variable, university dummy variable, college dummy variable, dummy variables for Canadian-born mothers and Canadian-born fathers. Province and Event year fixed effects are also included. Standard errors are clustered at the matched-pair level.

I Effects of low birth weight and prematurity on average earnings after birth

Table I.7: Decomposed effects of infant health at birth : Low birth weight vs prematurity.

Dependent variable	Average post-birth earnings
Low birth weight	−1,332.9*** (153.9)
Prematurity	−222.9 (144.5)
Controls	✓
Province FEs	✓
Birth year FEs	✓
Birth month FEs	✓
Observations	109,000

Notes: Controls include average income in the four years prior to child-birth, average total family income in the four years prior to childbirth, share of years with non-zero income in the last four years, share of years collecting unemployment insurance in the last four years, male birth indicator, father's and mother's age, first child dummy variable, university dummy variable, college dummy variable, dummy variables for Canadian-born mothers and Canadian-born fathers. Standard errors are clustered at the matched-pair level.

***p<0.01.

J Maternal leave length

Table J.8: Effects on maternal leave sample

	Maternal leave length	Prob. of taking all entitled leave
Unhealthy	0.1215* (0.0622)	0.0087*** (0.0017)
mean outcome	48	0.047
Controls	✓	✓
Province FEs	✓	✓
Birth year FEs	✓	✓
Birth month FEs	✓	✓
Observations	57,000	57,000

Notes: Controls include average income in the four years prior to childbirth, average total family income in the four years prior to childbirth, share of years with non-zero income in the last four years, share of years collecting unemployment insurance in the last four years, male birth indicator, father's and mother's age, first child dummy variable, university dummy variable, college dummy variable, dummy variables for Canadian-born mothers and Canadian-born fathers. Quebec-resident mothers are excluded from the analysis. Standard errors are clustered at the matched-pair level.

***p<0.01 **p<0.05 *p<0.1.

K First time mothers

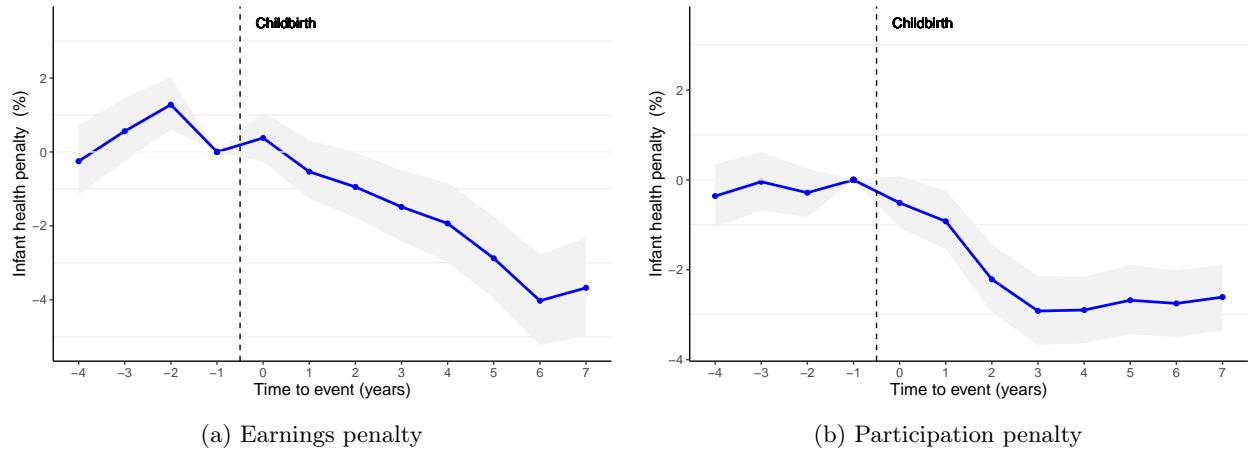


Figure K.4: Infant health penalty for the first time mothers

Notes: This figure shows the infant health penalty for the sample of first time mothers. Panel (a) shows the penalty on labor market income, while panel (b) shows the penalty on the probability of non-zero income. Standard errors are clustered at the matched-pair level, and computed using 250 bootstrap replications.

L Mediation analysis

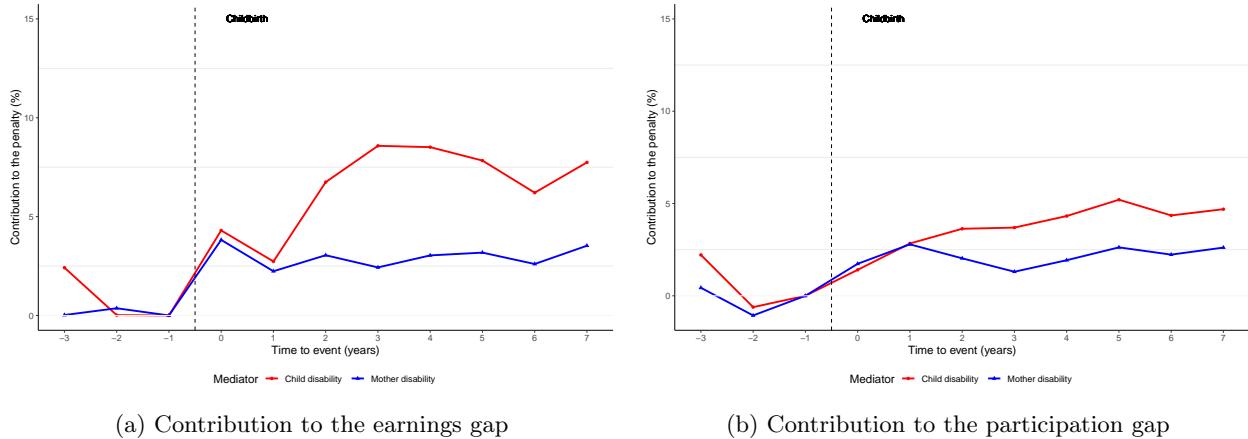


Figure L.5: Mediation analysis

Notes: This figure compares the percentage change in the estimated child health penalty due to receipt of a child disability benefit and a maternal disability tax credit over the period covered by the event study. Panel (a) shows the result of the penalty on labor income, while panel (b) shows the results of the penalty on the probability of non-zero income.

References

Abadie, Alberto and Guido W Imbens (2011) "Bias-corrected matching estimators for average treatment effects," *Journal of business & economic statistics*, 1–11.

Andresen, Martin Eckhoff and Emily Nix (2022) "What causes the child penalty? Evidence from adopting and same-sex couples," *Journal of labor economics*, 40 (4), 971–1004.

Baker, Michael and Kevin Milligan (2016) "Boy-girl differences in parental time investments: Evidence from three countries," *Journal of Human capital*, 10 (4), 399–441.

De Mola, Christian Loret, Giovanny Vinícius Araújo De França, Luciana de Avila Quevedo, and Bernardo Lessa Horta (2014) "Low birth weight, preterm birth and small for gestational age association with adult depression: systematic review and meta-analysis," *The British Journal of Psychiatry*, 205 (5), 340–347.

Franz, Adelar Pedro, Gul Unsel Bolat, Hilmi Bolat et al. (2018) "Attention-deficit/hyperactivity disorder and very preterm/very low birth weight: a meta-analysis," *Pediatrics*, 141 (1).

Gould, Elise (2004) "Decomposing the effects of children's health on mother's labor supply: is it time or money?" *Health Economics*, 13 (6), 525–541.

Hack, Maureen, Nancy K Klein, and H Gerry Taylor (1995) "Long-term developmental outcomes of low birth weight infants," *The future of children*, 176–196.

Harkness, Susan (2022) "The accumulation of disadvantage: How motherhood and relationship breakdown influence married and single mothers' economic outcomes," Technical report, ISER Working Paper Series.

Johnson, Samantha and Neil Marlow (2011) "Preterm birth and childhood psychiatric disorders," *Pediatric research*, 69 (8), 11–18.

Lampi, Katja M, Liisa Lehtonen, Phuong Lien Tran et al. (2012) "Risk of autism spectrum disorders in low birth weight and small for gestational age infants," *The Journal of pediatrics*, 161 (5), 830–836.

Lindström, Karolina, Frank Lindblad, and Anders Hjern (2011) "Preterm birth and attention-deficit/hyperactivity disorder in schoolchildren," *Pediatrics*, 127 (5), 858–865.

Mårlild, Karl, Olof Stephansson, Scott Montgomery, Joseph A Murray, and Jonas F Ludvigsson (2012) "Pregnancy outcome and risk of celiac disease in offspring: a nationwide case-control study," *Gastroenterology*, 142 (1), 39–45.

Mili, Fatima, Larry D Edmonds, Muin J Khoury, and Anne B McClearn (1991) "Prevalence of birth defects among low-birth-weight infants: a population study," *American journal of diseases of children*, 145 (11), 1313–1318.

Sonntag, Barbara, Birgit Stolze, Achim Heinecke et al. (2007) "Preterm birth but not mode of delivery is associated with an increased risk of developing inflammatory bowel disease later in life," *Inflammatory bowel diseases*, 13 (11), 1385–1390.

Tamborini, Christopher R, Kenneth A Couch, and Gayle L Reznik (2015) "Long-term impact of divorce on women's earnings across multiple divorce windows: A life course perspective," *Advances in Life Course Research*, 26, 44–59.

Younge, Noelle, Ricki F Goldstein, Carla M Bann et al. (2017) "Survival and neurodevelopmental outcomes among periviable infants," *New England Journal of Medicine*, 376 (7), 617–628.