Online Appendix

Parental Leave, (In)formal Childcare and Long-term Child Outcomes

This Online Appendix provides additional material discussed in the paper 'Parental Leave, (In)formal Childcare and Long-term Child Outcomes' by Natalia Danzer, Martin Halla, Nicole Schneeweis, and Martina Zweimüller, published in the Journal of Human Resources. This document comprises two sections. The first section (A.1) discusses the effects of the PL reform on educational performance. The second section (A.2) contains additional estimation results.

A.1 Effects of the PL reform on educational performance

A.1.1 Data

To assess the effect of the Austrian PL reform from 1990 on educational outcomes, we use PISA data from 2003 and 2006 and data from the *Educational Register* of the city of Linz (EducReg).[1] These data sets have several drawbacks compared with the register data that we use in our main analysis. First, these data do not cover the universe of births. PISA includes a representative sample of about 5,000 children aged 15/16 years at the time of testing. Thus, in PISA 2006 the 1990 birth cohort was sampled and in PISA 2003 we observe the 1987 birth cohort. The EducReg includes all children residing in Linz. Second, since these data do not include information on the mother's eligibility or actual PL takeup, we can only estimate ITTs. Third, we cannot impose the same sample restrictions, because these data sets lack information on birth order, multiple births, and the exact birth date (only the month of birth is available). Since the EducReg provides no information on the child's country of birth, we exclude all students with foreign language or citizenship.[2] Fourth, we adapt our econometric model, since we can not include trends in the running variable (birthdate). Fifth, the set of covariates is

[1] Linz is the third-largest city of Austria and the capital of the state of Upper Austria. Upper Austria is one of nine federal states in Austria. It comprises about one sixth of the Austrian population and workforce.

[2] This sample restrictions aims to exclude children, who were potentially not exposed to the Austrian PL system. Austria witnessed a large influx of migrants post 1993.

smaller. Sixth, the PISA and EducReg lack information on community of birth. Instead, our analysis of the EducReg is based on all children residing in Linz (at the time when we measure educational outcomes). While we know that nurseries were available in Linz in 1990, we do not know whether each of these children was actually born in a community with a nursery. In our analysis of the PISA data we observe the size of the community (in bands) in which the school is located and use a cutoff of 100,000 inhabitants to stratify the sample (since neither the community of birth nor the community of residence is observed). We know that communities with more than 100,000 inhabitants had a nursery in 1990, whereas almost all communities with fewer than 100,000 did not. Given these data restrictions, the results with respect to treatment effect heterogeneity have to be interpreted with caution.

A.1.2 Children's educational outcomes

We analyze PISA test scores in the fields of mathematics, science, and reading achieved at age 15/16. Further, we check which school track the child attended in grades 8 and 9. This information is contained in the EducReg sample (Linz) (grade 8) and the PISA data (grade 9), respectively. Table A.1 provides a description of the outcome variables.

Note that Austria has a system of early tracking. After primary school, students are allocated to two educational tracks. Higher secondary schools (the *high track*) comprise grades 5 to 12/13, provide advanced education, and conclude with a university entrance exam. Lower secondary schools (the *low track*) comprise grades 5 to 8, provide basic general education, and prepare students for vocational education either within an intermediate vocational school or within the dual education system. The dual education system combines an apprenticeship in a firm and (vocational) education at a vocational school. In the EducReg sample (Linz), we observe school tracks in grade 8. About 39 percent are in the high track, respectively. This share is above the national average (30 percent).[3] In the PISA sample, which covers students in grade 9 and is representative of Austria, about 63 percent of students are in the high track.[4]

[3]Data for the school year 2005/06 show that around 30 percent of all Austrian children attended the high track in grade 8. This share was higher in urban areas, 37 percent in Linz and 46 percent in Vienna (Schneeweis and Zweimüller, 2012).

[4]Data for the school year 2006/07 show that after grade 8 about a third of graduates from the low track transfer to the high track (Schneeweis and Zweimüller, 2012).

Table A.1: Description of children's educational outcome variables

Outcome	Variable description	Data source[a]	*N*	All Mean	Communities **with** nurseries Mean	Communities **w/o** nurseries Mean
Test score math	This variable captures the tests core in mathematics (age 15/16).	PISA	1,405	522	526	520
Test score science	This variable captures the tests core in science (age 15/16).	PISA	1,405	519	520	517
Test score reading	This variable captures the tests core in reading (age 15/16).	PISA	1,405	506	510	503
High track grade 8	Binary indicator equal to one if child is in the high track in grade 8 (age 13/14).	EducReg	456	-	0.386	-
High track grade 9	Binary indicator equal to one if child is in the high track in grade 9 (age 14/15).	PISA	1,386	0.560	0.630	0.526

Notes: [a]PISA = Programme for International Student Assessment, EducReg = *Educational Register* of the city of Linz

A.1.3 Empirical strategy

Since the data do not contain information on actual maternal PL duration, we estimate the following intention-to-treat effects:

$$O_i = \gamma_0 + \gamma_1 T_i + \gamma_2 A_i + \mathbf{x_i}\phi' + \tau_c + \omega_i \tag{3}$$

A.1.4 Educational outcomes: Average effects

Our complementary analysis on educational outcomes does not reveal any significant effects of the PL in the full sample (see Table A.2). The ITT estimates suggest that, on average, the PL extension did neither significantly affect PISA test scores nor the likelihood of high track attendance in secondary school. These results are robust to the exclusion (column 2) or addition of a rich set of covariates (column 3) and to the exclusion of children with foreign-born mothers from the sample (column 4). However, it is important to keep in mind that these estimations are based on much smaller samples and include children whose mothers were not eligible to PL. All coefficients on the PISA test scores have a positive sign and correspond in size to about

8 to 10 percent of a standard deviation, but are too imprecisely estimated to be statistically significantly different from zero.

Table A.2: Average child educational outcomes

	(1) Baseline	(2) No covariates	(3) More covariates	(4) Exclude migrants
Test score math (age 15/16)	13.168	8.646	10.398	8.422
	(10.880)	(11.438)	(12.206)	(11.546)
Test score science (age 15/16)	11.487	8.540	7.361	7.221
	(11.274)	(11.865)	(12.829)	(11.767)
Test score reading (age 15/16)	9.806	8.180	8.036	6.298
	(11.159)	(12.012)	(12.587)	(11.796)
High track grade 9 (age 14/15)	0.022	0.019	−0.019	0.006
	(0.048)	(0.051)	(0.054)	(0.050)

Each coefficient represents a separate regression based on survey data from *PISA*. Coefficients represent reduced form estimates. We use a sample of children born in Austria in June/July 1987/1990. In the baseline specification, presented in column (1), we control for the child's sex, low maternal SES (based on education), whether the mother was born abroad and birth-year and birth-month fixed-effects. Column (2) includes only controls for birth-year and birth-month. Column (3) includes additional indicators for maternal occupation and skills (4 groups) and the maternal socioeconomic index of occupational status (ISEI). Column (4) drops all foreign-born mothers from the sample. Robust standard errors are shown in parentheses. Estimations control for the survey design (school clusters, student weights). *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level.

A.1.5 Educational outcomes: Heterogeneity analysis

The heterogeneity analysis by availability of nursery at the time of birth yields similarly striking differences (despite the inferior data quality). As the results in Table A.3 suggest, the PL reform significantly improved the educational outcomes in communities without nurseries, but had zero to negative effects on educational performance in communities with nurseries.

As regards the PISA test scores, the estimated effects on the test scores in science and reading differ significantly between communities. In communities with childcare facilities, the coefficients are negative for all three subjects, although statistically significant only in reading. By contrast, we obtain positive and statistically significant effects in communities where childcare is unavailable. The positive coefficients on the test scores amount to about one quarter of the standard deviations in these variables. In addition to the test scores, we investigate high track attendance in different grades; however, we do not find any significant effects in grade 9. By contrast, significant negative effects are obtained for high track attendance in grade 8

in Linz (a community with a nursery). These results are robust to adjustments in the set of covariates and in the sample specification (see Table A.4).

Table A.3: Children's educational outcomes by availability of nursery (proxy)

	Communities **with** nursery[a]	Communities **w/o** nursery[b]	P-value Δ[c]
Test score math (age 15/16)	−11.833	21.712*	0.179
	(21.431)	(12.527)	
Test score science (age 15/16)	−27.516	23.435*	0.032
	(20.216)	(12.811)	
Test score reading (age 15/16)	−39.839**	27.161**	0.005
	(20.274)	(12.627)	
High track grade 9 (age 14/15)	0.027	0.012	0.891
	(0.094)	(0.056)	
High track grade 8 (age 13/14)	−0.213**		
	(0.091)		

Notes: Each row represents a separate regression based on survey data from *PISA* and register data from *EducReg Linz*. Estimation results are based on fully interacted models. Coefficients represent reduced form estimates. We use a sample of children born in Austria in June/July 1987/1990 in PISA (1989/1990 in EducReg). Each specification controls for the child's sex, low maternal SES, whether the mother was born abroad (only PISA sample) and birth-year and birth-month fixed-effects. Robust standard errors are shown in parentheses. Estimations for PISA education outcomes control for the survey design (school clusters, student weights). *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]The child attends a school in a community with $\geq$100,000 inhabitants. [b]The child attends a school in a community with <100,000 inhabitants. [c]Prob>F(chi2) of diff. in coefficients between communities with and w/o nursery.

Table A.4: Sensitivity: Children's educational outcomes by availability of nursery (proxy)

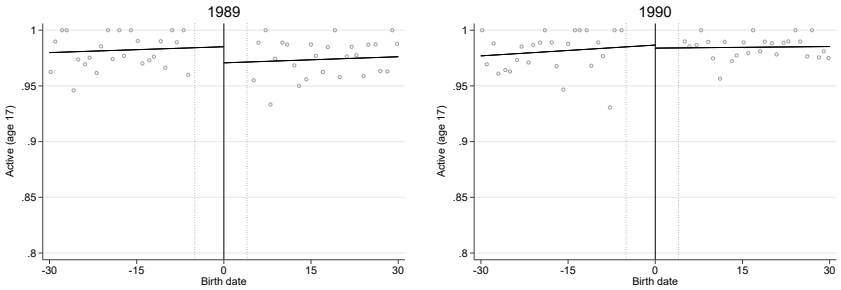
	Communities **with** nursery[a]				Communities **w/o** nursery[b]			
	(1) Baseline	(2) No covariates	(3) More covariates	(4) Exclude migrants	(1) Baseline	(2) No covariates	(3) More covariates	(4) Exclude migrants
Test score math (age 15/16)	−11.833	−25.090	−26.898	−27.656	21.712*	19.500	19.157	19.914
	(21.499)	(23.219)	(21.129)	(24.018)	(12.536)	(13.228)	(14.245)	(13.015)
Test score science (age 15/16)	−27.516	−39.560*	−46.506**	−44.747**	23.435*	22.720*	22.095	22.758*
	(20.280)	(21.371)	(20.782)	(21.963)	(12.821)	(13.352)	(14.865)	(13.283)
Test score reading (age 15/16)	−39.839*	−50.207**	−55.875***	−55.177**	27.161**	27.403**	28.031*	26.159**
	(20.338)	(21.786)	(20.368)	(22.834)	(12.636)	(13.447)	(14.614)	(13.196)
High track grade 9 (age 14/15)	0.027	0.000	−0.064	−0.028	0.012	0.012	−0.009	0.013
	(0.095)	(0.097)	(0.099)	(0.100)	(0.056)	(0.061)	(0.065)	(0.057)
High track grade 8 (age 13/14)	−0.213**	−0.190**	−0.154*					
	(0.091)	(0.092)	(0.093)					

Each coefficient represents a separate regression based on data from *PISA* and *EducReg Linz*. Coefficients are reduced form estimates. We use a sample of children born in Austria in June/July 1987/1990 in PISA (1989/1990 in EducReg). In the baseline specification, presented in column (1), we control for the child's sex, low maternal SES, whether the mother was born abroad (only PISA sample), and birth-year and birth-month fixed-effects. Column (2) includes only birth-year and birth-month fixed-effects. Column (3) includes additional indicators for maternal occupation and skills (4 groups) and the maternal socioeconomic index of occupational status (ISEI) in the PISA sample, and indicators for districts in the EducReg Linz sample. Column (4) drops all foreign-born mothers from the sample. Robust standard errors are shown in parentheses. Estimations for PISA education outcomes control for the survey design (school clusters, student weights). *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]The child attends a school in a community with ≥100,000 inhabitants. [b]The child attends a school in a community with <100,000 inhabitants.

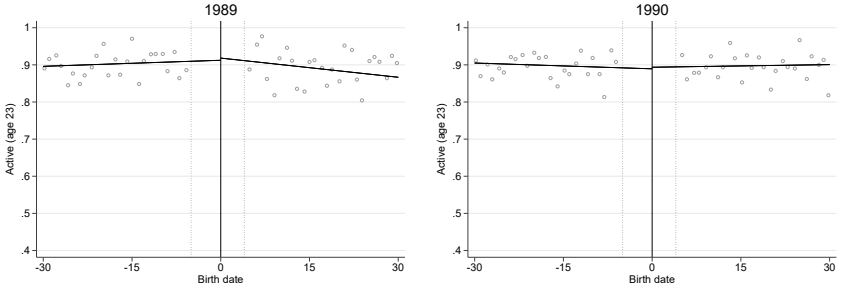
A.2 Additional tables and figures

Figure A.1: All communities

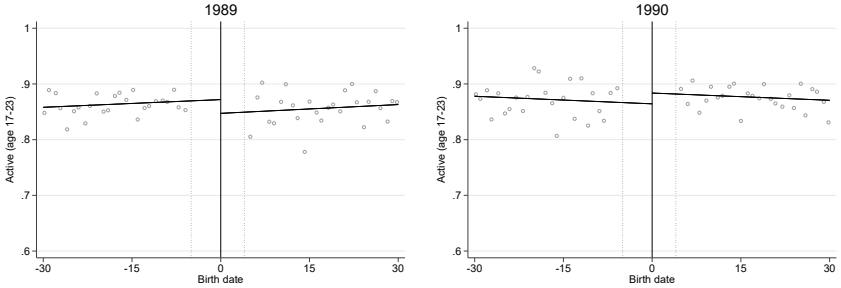
(a) Active (age 17)



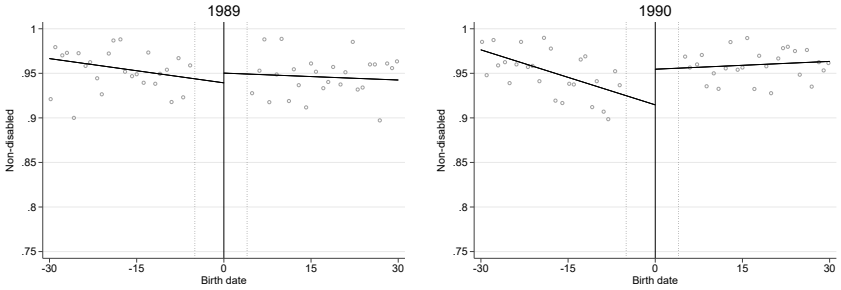
(b) Active (age 23)



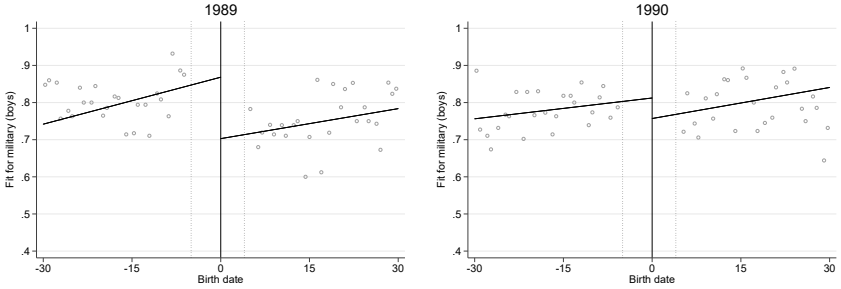
(c) Active (age 17-23)



(d) Non-disabled



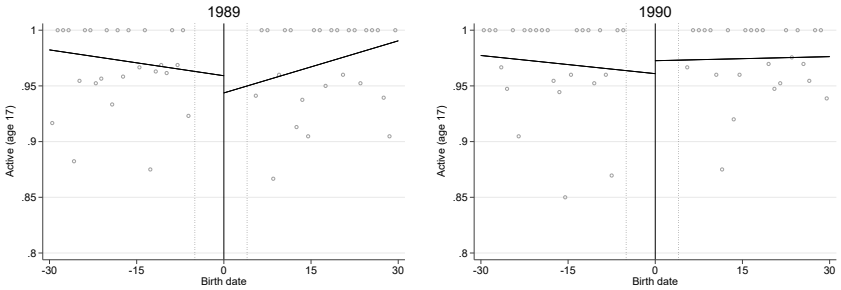
(e) Fit for military (boys)



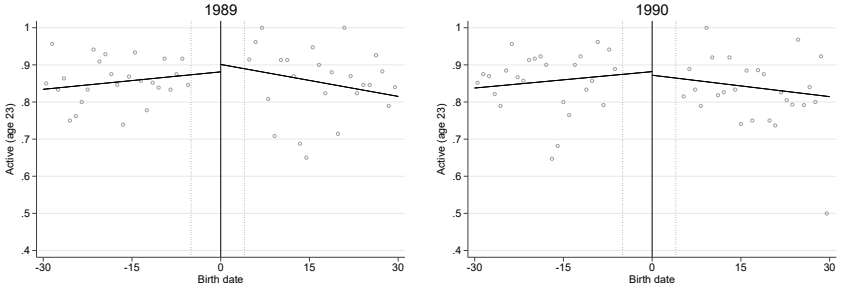
Notes: Variance RD plots with evenly-spaced bins. Circles are local sample means within bins. The solid line is a fitted triangular local linear regression with a bandwidth of 30 days (exluding observations ±5 days around the cutoff).

Figure A.2: Communities with nurseries

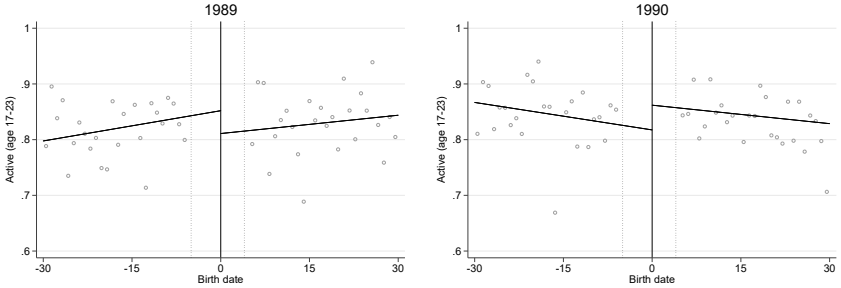
(a) Active (age 17)



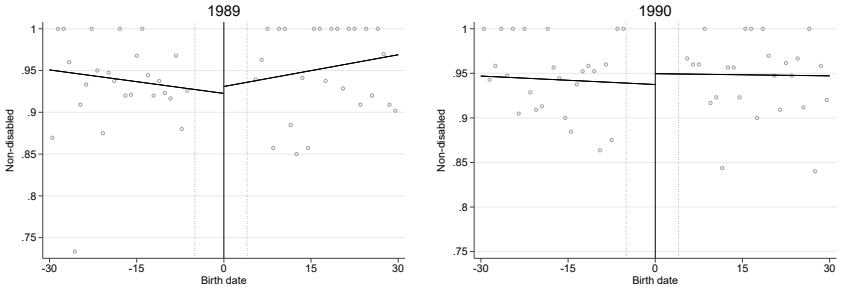
(b) Active (age 23)



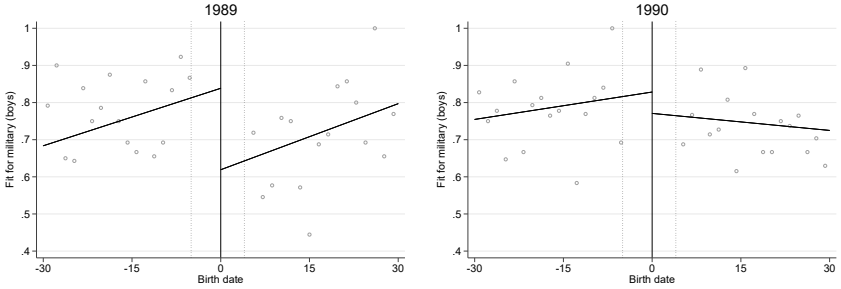
(c) Active (age 17-23)



(d) Non-disabled



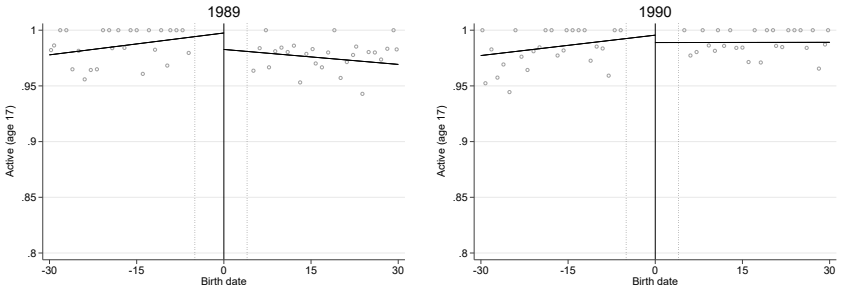
(e) Fit for military (boys)



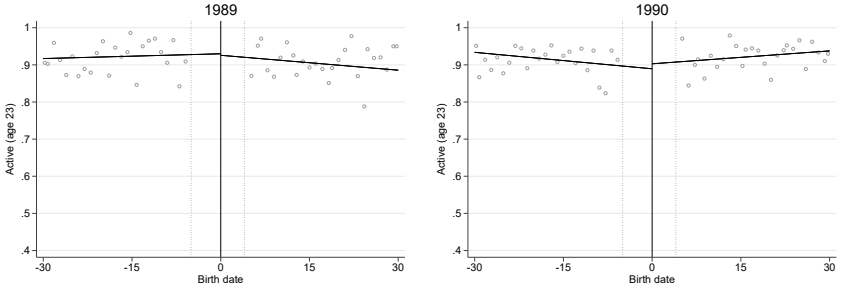
Notes: Variance RD plots with evenly-spaced bins. Circles are local sample means within bins. The solid line is a fitted triangular local linear regression with a bandwidth of 30 days (exluding observations ±5 days around the cutoff).

Figure A.3: Communities w/o nurseries

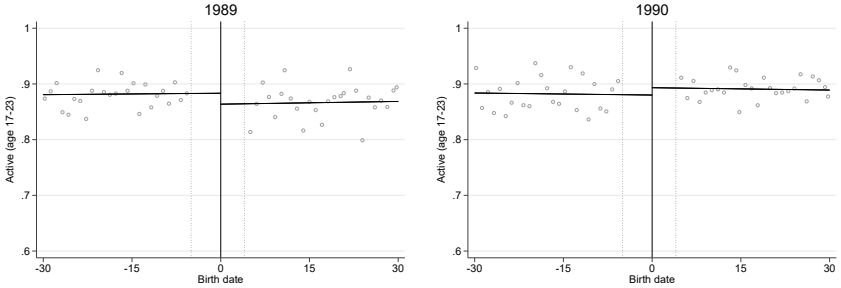
(a) Active (age 17)



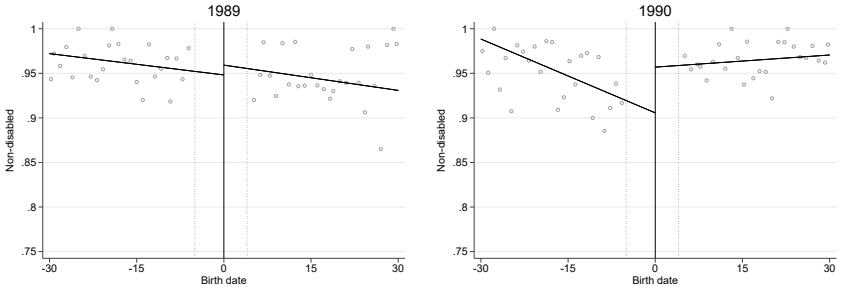
(b) Active (age 23)



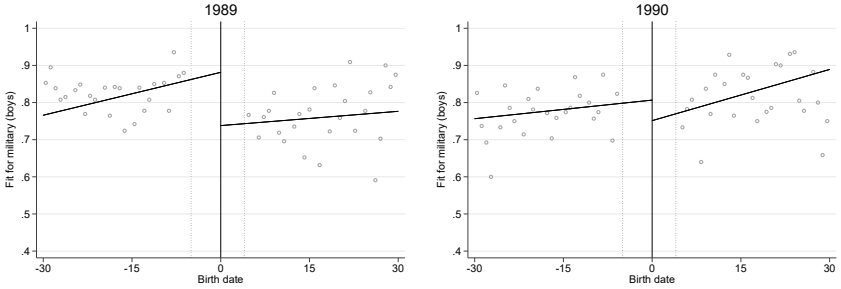
(c) Active (age 17-23)



(d) Non-disabled



(e) Fit for military (boys)



Notes: Variance RD plots with evenly-spaced bins. Circles are local sample means within bins. The solid line is a fitted triangular local linear regression with a bandwidth of 30 days (exluding observations ±5 days around the cutoff).

Figure A.4: Sensitivity with respect to donut choice

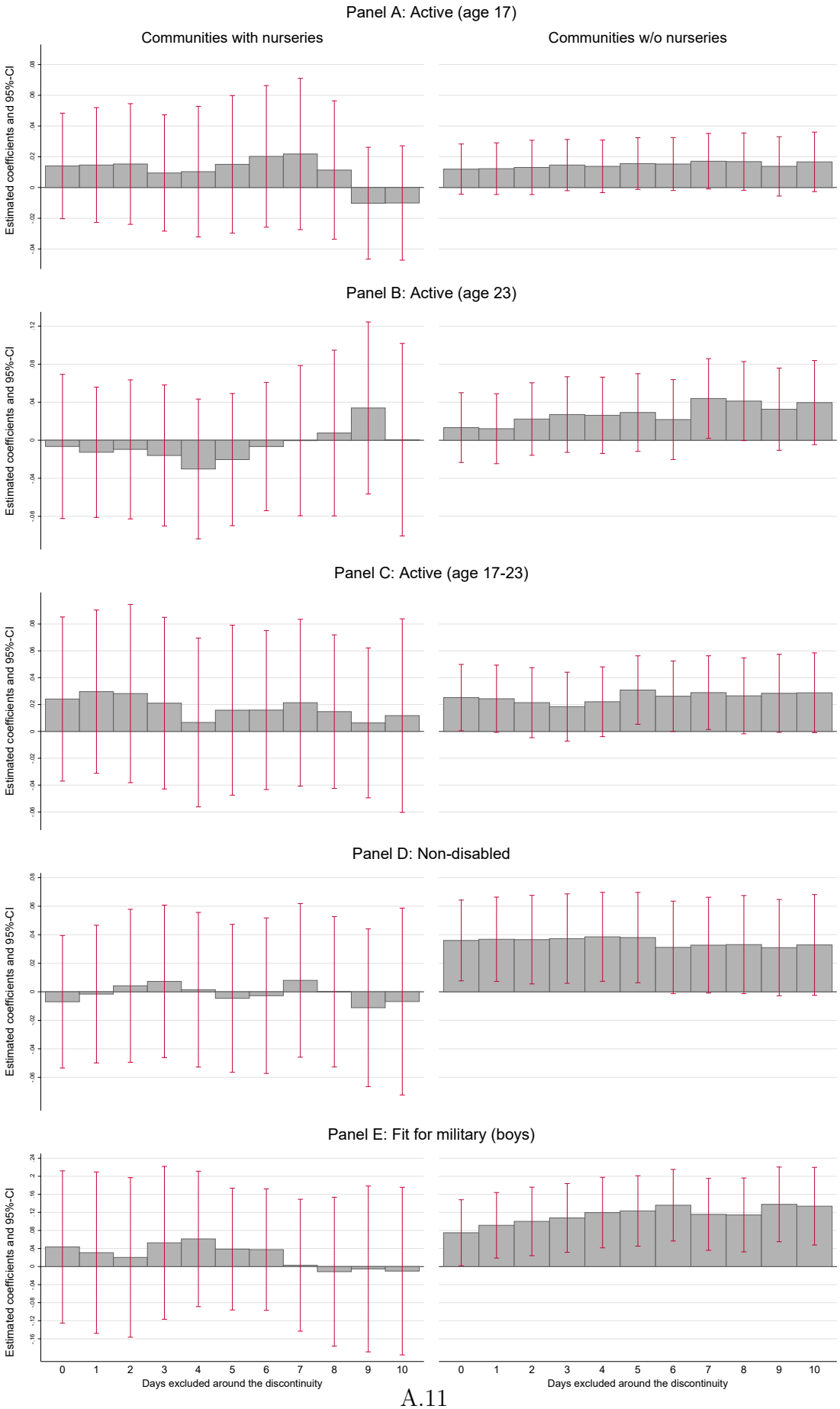


Table A.5: Overview: PL reforms and child outcomes

Study	Country and year of reform	Content of reform	Assessed child outcomes & data	Results	Mode of non-parental childcare
Baker and Milligan (2010)	Canada 31 December 2000	Extension of maternity leave benefits from 25 to 50 weeks. Extension of j.p. PL from 18-70 to at least 52 weeks in all regions.	Parent-reported measures (temperament, motor and social development) at age: 7 and 24 months. *Data*: survey data (NLSCY)	Small and mostly insignificant results. *Heterogeneity*: Not tested.	Mainly informal care (40% for under-2-year-olds). Formal care rare (4/6% of children younger than 1/2 year/s).
Baker and Milligan (2015)	Canada 31 December 2000	see Baker and Milligan (2010)	Cognitive development (vocabulary, numbers), parent-reported measures (eg hyperactivity) at age: 4/5 years. *Data*: survey data (NLSCY)	No significant positive effects. Small negative effects on vocabulary scores. *Heterogeneity*: Same across subgroups (gender, parental education).	see Baker and Milligan (2010)
Carneiro, Løcken and Salvanes (2015)	Norway 1 July 1977	Introduction of paid PL for 18 weeks (100% income replacement) Extension of unpaid j.p. PL from 12 weeks to 12 months	High school dropout, college attendance, earnings at age 30, years of schooling, IQ (males age 18-19), teenage pregnancy *Data*: Administrative data	Significant positive effects: Reduced drop-out rates and increased earnings, college attendance, completed years of schooling and IQ (males) *Heterogeneity*: Differential effects by maternal education, gender, birth order, rural/urban location and distance to grandparents.	Mainly informal care. Formal childcare rare (1-2% for under-2-year-olds).
Dahl, Løcken, Mogstad and Salvanes (2016)	Norway Six PL reforms: 1 May 1987 – 1 April 1992.	6 extensions of paid PL by 2 to 4 weeks each during the first year of life (at 100% income replacement).	Compulsory exam at end of junior high school, high school dropout *Data*: Administrative data	No significant effects. *Heterogeneity*: Not tested.	Mainly informal care. (see Carneiro et al. 2015)
Danzer and Lavy (2018)	Austria 1 July 1990	Extension of paid+j.p. PL from child's 1st to 2nd birthday.	Test scores in reading, math and science at age 15/16. *Data*: PISA	No significant average effects. *Heterogeneity*: Significantly positive effects for sons of highly educated mothers.	Mainly informal care. Formal childcare for under-3-year-olds rare (<3%).
Dustmann and Schönberg (2012)	Germany Three PL reforms: 1 May 1979 1 January 1986 1 January 1992	Extension of paid+j.p. PL from 2 to 6 months (flat rate; 1979), from 6 to 10 months (means-tested; 1986) Extension of unpaid j.p. PL from 18 to 36 months (1992).	Wages, educational attainment (age 28/29; 1979 reform), graduation from academic track (1986 reform), school track (age 14; 1992 reform) *Data*: Administrative data	No or extremely small effects. Expansion from 18 to 36 months slightly negative effects. *Heterogeneity*: Not tested.	Mainly informal care. Enrolment in formal care low (5% for under 18-months-olds).
Liu and Nordstrom Skans (2010)	Sweden 1 August 1988 – 1 October 1988	Gradual extension of paid PL from 12 to 15 months (by 30 days in each of 3 consecutive months 08/09/10 1988).	Test scores during last compulsory school year, compulsory school grades at age 16 *Data*: Administrative data	No significant effects. *Heterogeneity*: Positive effect for children from mothers with higher education.	Mainly formal care (40-50% of children aged 1-2). Few children in informal care.
Rasmussen (2010)	Denmark 26 March 1984	Extension of paid PL from 14 to 20 weeks	High school enrolment, GPA, reading scores at age 15/16 *Data*: Administrative data, PISA	No significant effects *Heterogeneity*: Same across subgroups (gender, parental education).	Mainly formal day care even for very young children.

Abbreviations: j.p. - job-protected; NLSCY - National Longitudinal Study of Children and Youth; PL - PL; PISA - Programme for International Student Assessment.

Table A.6: RD estimates with predetermined characteristics as outcome variables

	1989 & 1990 Linear trends	1989 & 1990 Quadratic trends
Baseline covariates:		
Mother is between 15 and 20 years	−0.008	−0.008
	(0.022)	(0.022)
Mother is between 21 and 25 years	−0.042	−0.043
	(0.028)	(0.028)
Mother is between 26 and 30 years	0.040	0.040
	(0.026)	(0.026)
Mother is between 31 and 35 years	0.012	0.011
	(0.014)	(0.014)
Mother is between 36 and 45 years	−0.002	−0.002
	(0.007)	(0.007)
Mother's socio-economic status is low	−0.009	−0.009
	(0.032)	(0.032)
Mother has a foreign background	0.023**	0.024**
	(0.012)	(0.012)
Child is female	0.032	0.031
	(0.033)	(0.033)
Child was a pre-term birth	0.006	0.005
	(0.012)	(0.012)
Other pre-determined variables:		
Low birth weight (<2500g)	−0.003	−0.004
	(0.013)	(0.013)
Birth weight in dekagram	1.715	1.801
	(2.752)	(2.748)
Mother was married at birth	−0.033	−0.033
	(0.028)	(0.028)
Mother's highest degree: Compulsory	−0.021	−0.021
	(0.024)	(0.024)
Mother's highest degree: Apprenticeship/voc.	−0.004	−0.003
	(0.027)	(0.027)
Mother's highest degree: Higher sec./college/uni	0.021	0.021
	(0.023)	(0.023)
Pre-birth daily wage	2.006	1.999
	(1.283)	(1.280)

Notes: Each coefficient represents a separate regression based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We estimate linear (column 1) and quadratic (column 2) trends in the running variable (birthdate), separately before and after the cutoff including triangular weights. We use a sample of children born in Austria in June/July 1989/1990 and a bandwidth of 30 days, exclude children born ±5 days around the cutoff date. Robust standard errors clustered at the community level are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level.

Table A.7: Child outcomes by socioeconomic status and sex

	Maternal SES[a]		P-value	Gender		P-value
	Low	High	Δ^b	Girls	Boys	Δ^c
Labor market outcomes						
Active (age 17)	0.009	0.023*	0.404	0.011	0.019	0.649
	(0.011)	(0.013)		(0.013)	(0.012)	
In education (age 17)	0.010	0.024*	0.366	0.007	0.022*	0.378
	(0.013)	(0.013)		(0.015)	(0.012)	
Active (age 23)	0.017	0.010	0.848	0.014	0.014	0.994
	(0.025)	(0.027)		(0.027)	(0.027)	
In education (age 23)	−0.025	0.047	0.186	0.035	−0.017	0.317
	(0.032)	(0.043)		(0.039)	(0.035)	
Employed (age 23)	0.057	−0.048	0.083	−0.008	0.028	0.559
	(0.037)	(0.047)		(0.043)	(0.040)	
Log wage (age 23)	−0.000	−0.019	0.744	−0.028	0.017	0.453
	(0.033)	(0.048)		(0.046)	(0.037)	
Active (age 17-23)	0.034**	0.017	0.542	0.017	0.033*	0.554
	(0.017)	(0.021)		(0.019)	(0.018)	
Always active (age 17-23)	−0.017	0.053	0.267	0.020	0.010	0.871
	(0.039)	(0.050)		(0.044)	(0.041)	
Health outcomes						
Non-disabled	0.025	0.024	0.959	0.034*	0.019	0.593
	(0.020)	(0.021)		(0.019)	(0.020)	
Fit for military (boys)	0.144***	0.047	0.114			
	(0.044)	(0.048)				

Notes: Estimation results are based on fully interacted models. Coefficients are based on 2SLS estimations, with years on PL instrumented by the assignment to the reform. We use local linear regressions including triangular weights, a bandwidth of 30 days (excluding children born ±5 days around the discontinuity) and separate trends on each side of the discontinuity. We control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Maternal socioeconomic status is based on maternal education and pre-birth earnings: Low SES mothers have either compulsory schooling or apprenticeship training/intermediate vocational school plus below median pre-birth earnings; high SES mothers have either apprenticeship training/intermediate vocational school plus above median pre-birth earnings or at least higher secondary education). [b]Prob>F(chi2) of difference in coefficients between children of mothers with low/high socioeconomic status. [c]Prob>F(chi2) of difference in coefficients between girls and boys.

Table A.8: Child outcomes by availability of nursery & socioeconomic status

	Communities with nursery			Communities w/o nursery		
	Low SES[a]	High SES[a]	P-value Δ[b]	Low SES[a]	High SES[a]	P-value Δ[b]
Active (age 17)	0.001	0.030	0.427	0.020	0.014	0.757
	(0.027)	(0.031)		(0.013)	(0.012)	
Active (age 23)	0.026	−0.063	0.237	0.045	0.016	0.474
	(0.053)	(0.052)		(0.030)	(0.028)	
Active (age 17-23)	0.019	0.015	0.946	0.018	0.042**	0.391
	(0.036)	(0.045)		(0.019)	(0.018)	
Non-disabled	0.036	−0.042	0.253	0.059**	0.023	0.245
	(0.046)	(0.040)		(0.023)	(0.022)	
Fit for military (boys)	0.111	−0.034	0.130	0.082	0.158***	0.326
	(0.083)	(0.087)		(0.059)	(0.052)	

Notes: Estimation results are based on fully interacted models, estimated separately for mothers living in communities with and without nursery. Coefficients are based on 2SLS estimations, with years on PL instrumented by the assignment to the reform (both interacted with indicators for mothers with low and high SES). We use local linear regressions including triangular weights and separate linear trends on each side of the discontinuity. We use a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Maternal socioeconomic status is based on maternal education and pre-birth earnings (low: compulsory, apprenticeship training or intermediate vocational school plus below median pre-birth earnings, missing education; high: apprenticeship training or intermediate vocational school plus above median pre-birth earnings and at least higher secondary education). [b]Prob>F(chi2) of difference in coefficients between mothers with high and low SES.

Table A.9: Sensitivity: Child outcomes by availability of nursery & maternal work propensity

	Low work propensity[a]			High work propensity[a]		
	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^b	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^b
No covariates[c]						
Active (age 17)	0.027	0.007	0.539	0.005	0.028**	0.512
	(0.030)	(0.011)		(0.033)	(0.013)	
Active (age 23)	0.020	−0.009	0.618	−0.068	0.079***	0.021
	(0.050)	(0.029)		(0.056)	(0.030)	
Active (age 17-23)	0.003	0.018	0.698	0.018	0.048**	0.555
	(0.034)	(0.017)		(0.047)	(0.020)	
Non-disabled	0.020	0.027	0.896	−0.025	0.055**	0.039
	(0.051)	(0.020)		(0.029)	(0.026)	
Fit for military (boys)	0.101	0.075	0.838	−0.021	0.178***	0.058
	(0.113)	(0.053)		(0.085)	(0.061)	
More covariates[d]						
Active (age 17)	0.031	0.006	0.420	0.003	0.027**	0.549
	(0.029)	(0.011)		(0.036)	(0.013)	
Active (age 23)	0.020	−0.012	0.607	−0.065	0.070**	0.042
	(0.055)	(0.028)		(0.060)	(0.029)	
Active (age 17-23)	0.010	0.016	0.890	0.027	0.049***	0.672
	(0.034)	(0.017)		(0.050)	(0.019)	
Non-disabled	0.019	0.025	0.920	−0.026	0.048*	0.061
	(0.051)	(0.020)		(0.030)	(0.025)	
Fit for military (boys)	0.126	0.072	0.663	−0.052	0.177***	0.017
	(0.114)	(0.053)		(0.075)	(0.060)	
Community-level covariates[e]						
Active (age 17)	0.027	0.007	0.489	0.011	0.027**	0.658
	(0.028)	(0.011)		(0.036)	(0.013)	
Active (age 23)	0.007	−0.009	0.788	−0.057	0.079***	0.032
	(0.053)	(0.028)		(0.056)	(0.030)	
Active (age 17-23)	0.010	0.016	0.861	0.027	0.052***	0.626
	(0.032)	(0.017)		(0.047)	(0.019)	
Non-disabled	0.023	0.026	0.964	−0.018	0.050*	0.081
	(0.050)	(0.020)		(0.030)	(0.026)	
Fit for military (boys)	0.126	0.071	0.661	−0.057	0.178***	0.019
	(0.113)	(0.053)		(0.081)	(0.059)	
Quadratic trends[f]						
Active (age 17)	0.031	0.006	0.418	0.002	0.027**	0.526
	(0.029)	(0.011)		(0.036)	(0.013)	
Active (age 23)	0.020	−0.013	0.593	−0.061	0.070**	0.047
	(0.055)	(0.028)		(0.059)	(0.029)	
Active (age 17-23)	0.010	0.015	0.889	0.026	0.050***	0.659
	(0.034)	(0.017)		(0.050)	(0.019)	
Non-disabled	0.020	0.024	0.936	−0.027	0.049*	0.056
	(0.050)	(0.020)		(0.030)	(0.025)	
Fit for military (boys)	0.126	0.071	0.663	−0.051	0.178***	0.017
	(0.113)	(0.053)		(0.075)	(0.059)	

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Table A8 continued

	Low work propensity[a]			High work propensity[a]		
	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^b	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^b
Exclude migrants[g]						
Active (age 17)	0.026	0.006	0.500	−0.019	0.032**	0.095
	(0.028)	(0.011)		(0.028)	(0.014)	
Active (age 23)	0.004	−0.010	0.815	−0.092*	0.064**	0.014
	(0.055)	(0.029)		(0.055)	(0.031)	
Active (age 17-23)	−0.003	0.014	0.658	0.015	0.042**	0.588
	(0.034)	(0.017)		(0.046)	(0.020)	
Non-disabled	0.017	0.017	0.996	−0.041	0.067**	0.008
	(0.050)	(0.020)		(0.031)	(0.026)	
Fit for military (boys)	0.107	0.071	0.768	−0.111	0.184***	0.007
	(0.110)	(0.053)		(0.089)	(0.063)	
Bandwidth of 61 days[h]						
Active (age 17)	0.009	−0.001	0.711	0.001	0.021**	0.363
	(0.026)	(0.008)		(0.021)	(0.009)	
Active (age 23)	−0.022	−0.009	0.734	−0.015	0.053**	0.110
	(0.033)	(0.019)		(0.037)	(0.021)	
Active (age 17-23)	−0.018	0.007	0.350	0.022	0.033**	0.699
	(0.024)	(0.012)		(0.026)	(0.014)	
Non-disabled	−0.009	0.002	0.714	−0.030*	0.056***	0.000
	(0.028)	(0.013)		(0.018)	(0.016)	
Fit for military (boys)	0.064	0.073**	0.915	−0.076	0.105***	0.031
	(0.076)	(0.036)		(0.073)	(0.040)	
Employed at least 180 days[i]						
Active (age 17)	0.046*	0.010	0.191	−0.013	0.023*	0.348
	(0.025)	(0.012)		(0.036)	(0.013)	
Active (age 23)	0.022	0.019	0.956	−0.073	0.040	0.123
	(0.055)	(0.028)		(0.066)	(0.032)	
Active (age 17-23)	0.044	0.010	0.405	−0.008	0.056***	0.215
	(0.036)	(0.017)		(0.049)	(0.019)	
Non-disabled	0.012	0.022	0.832	−0.024	0.058**	0.053
	(0.042)	(0.021)		(0.034)	(0.025)	
Fit for military (boys)	0.062	0.094*	0.738	−0.012	0.158***	0.086
	(0.079)	(0.054)		(0.079)	(0.060)	

Notes: Estimation results are based on fully interacted models, estimated separately for mothers with low and high work propensity. Coefficients are based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform (both interacted with indicators for communities with and without nursery). We use local linear regressions including triangular weights, a bandwidth of 30 days (excluding children born ±5 days around the cutoff date) and separate trends on each side of the discontinuity. Unless otherwise indicated, we control for a vector of pre-determined variables **x** (child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth). Standard errors (shown in parentheses) are clustered at the community-level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Maternal characteristics indicate a low/high propensity of being employed >0 days in the second year after childbirth, low/high according to median prediction (0.51). [b]Prob>F(chi2) of difference in coefficients between mothers living in communities with and without nursery based on fully interacted regressions. [c]Excludes vector of predetermined covariates **x**. [d]Additional covariates: maternal daily real wage (mean over last 2 years before child birth), maternal occupation (white-collar/civil servant, blue-collar, self-employed/farmer), whether the mother was married, maternal education (6 indicators), maternal religious denomination (5 indicators), province (8 indicators), and whether the child had low birth weight. [e]Additional community-level covariates: population size, population density, share of catholics, share of votes for conservative parties, share of married, share of pop. betw. 0 and 5 years, share of pop. betw. 0 and 15 years, female employment rate, female fulltime employment rate, availability of a higher secondary school and number of classes in higher secondary school. [f]Quadratic trends in the running variable. [g]Excludes foreign-born mothers from the sample. [h]Bandwidth of 61 days on each side of the discontinuity (excluding children born ±5 days around the cutoff date) [i]Maternal characteristics indicate a low/high propensity of being employed ≥180 days in the second year after childbirth, low/high according to median prediction (0.34).

Table A.10: Child outcomes by propensity of child care availability in communities w/o nursery

	Low work propensity[a]			High work propensity[a]		
Propensity score[b]	Above median	Below median	P-value Δ[c]	Above median	Below median	P-value Δ[c]
Active (age 17)	0.002	0.011	0.664	0.018	0.040**	0.405
	(0.016)	(0.014)		(0.018)	(0.020)	
Active (age 23)	−0.048	0.025	0.203	0.111**	0.048	0.292
	(0.045)	(0.036)		(0.045)	(0.040)	
Active (age 17-23)	0.024	0.008	0.647	0.037	0.066**	0.453
	(0.027)	(0.022)		(0.027)	(0.028)	
Non-disabled	0.069**	−0.008	0.052	0.042	0.058	0.763
	(0.029)	(0.028)		(0.034)	(0.040)	
Fit for military (boys)	0.054	0.082	0.794	0.196**	0.188**	0.950
	(0.081)	(0.071)		(0.083)	(0.086)	

Notes: Estimation results are based on fully interacted models, estimated separately for mothers with low and high work propensity. Coefficients are based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform (both interacted with indicators for low and high values of the respective community characteristic). We use local linear regressions including triangular weights, a bandwidth of 30 days (excluding children born ±5 days around the cutoff date) and separate trends on each side of the discontinuity. Unless otherwise indicated, we control for a vector of pre-determined variables $\mathbf{x}$ (child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth). Standard errors (shown in parentheses) are clustered at the community-level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Maternal characteristics indicate a high/low propensity of being employed >0 days in the second year after childbirth. [b]Communities (w/o nurseries) are stratified based on the estimated propensity of formal child care availability using the overall sample of communities with and w/o nurseries. [c]Prob>F(chi2) of difference in coefficients between mothers living in communities with low/high value of the respective community characteristic.

Table A.11: Further child

	All communities	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^a
Further child[b]				
1 year after birth	−0.003	−0.002	−0.004	0.774
	(0.005)	(0.007)	(0.006)	
2 years after birth	0.039*	0.004	0.052*	0.319
	(0.023)	(0.039)	(0.028)	
3 years after birth	0.043	0.078*	0.030	0.406
	(0.028)	(0.046)	(0.034)	
4 years after birth	0.036	0.054	0.032	0.729
	(0.030)	(0.052)	(0.036)	
5 years after birth	0.025	0.051	0.020	0.645
	(0.031)	(0.057)	(0.035)	
6 years after birth	0.031	0.024	0.040	0.801
	(0.031)	(0.054)	(0.036)	
7 years after birth	0.017	0.026	0.021	0.942
	(0.031)	(0.053)	(0.036)	
8 years after birth	0.035	0.030	0.045	0.809
	(0.029)	(0.050)	(0.034)	
9 years after birth	0.041	0.043	0.049	0.923
	(0.029)	(0.052)	(0.034)	
10 years after birth	0.039	0.049	0.043	0.917
	(0.028)	(0.047)	(0.033)	
11 years after birth	0.038	0.040	0.045	0.919
	(0.028)	(0.046)	(0.032)	
12 years after birth	0.032	0.045	0.035	0.839
	(0.027)	(0.042)	(0.032)	
13 years after birth	0.036	0.063	0.033	0.559
	(0.026)	(0.042)	(0.031)	
14 years after birth	0.039	0.061	0.038	0.670
	(0.026)	(0.044)	(0.031)	
15 years after birth	0.038	0.059	0.038	0.692
	(0.026)	(0.044)	(0.031)	
16 years after birth	0.040	0.062	0.039	0.663
	(0.026)	(0.044)	(0.031)	
17 years after birth	0.043	0.068	0.040	0.593
	(0.026)	(0.042)	(0.031)	

Notes: Each row represents two separate regressions. Estimation results by availability of nursery are based on fully interacted models. Coefficients based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We use local linear regressions including triangular weights and separate trends before and after the cutoff. We use a sample of children born in Austria in June/July 1989/1990, a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, whether the child was a pre-term birth and linear trends in the running variable (date of birth). Robust standard errors clustered at the community level are shown in parentheses. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Prob>chi2 of difference in coefficients between communities with and w/o nursery. [b]The mother has a further child at the first child's birthday in each year.

Table A.12: Number of children

	All communities	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^a
Number of children[b]				
1 year after birth	−0.004	−0.006	−0.004	0.896
	(0.005)	(0.009)	(0.006)	
2 years after birth	0.037	−0.008	0.054*	0.222
	(0.024)	(0.042)	(0.028)	
3 years after birth	0.046	0.059	0.042	0.775
	(0.030)	(0.049)	(0.036)	
4 years after birth	0.039	0.042	0.042	0.994
	(0.034)	(0.060)	(0.040)	
5 years after birth	0.043	0.064	0.040	0.779
	(0.038)	(0.071)	(0.044)	
6 years after birth	0.045	0.047	0.051	0.956
	(0.040)	(0.069)	(0.048)	
7 years after birth	0.024	0.059	0.018	0.633
	(0.041)	(0.071)	(0.050)	
8 years after birth	0.029	0.059	0.026	0.705
	(0.043)	(0.072)	(0.052)	
9 years after birth	0.032	0.085	0.020	0.483
	(0.045)	(0.076)	(0.053)	
10 years after birth	0.025	0.089	0.009	0.395
	(0.046)	(0.077)	(0.055)	
11 years after birth	0.027	0.083	0.012	0.497
	(0.048)	(0.088)	(0.056)	
12 years after birth	0.012	0.083	−0.007	0.384
	(0.048)	(0.087)	(0.058)	
13 years after birth	0.019	0.114	−0.011	0.263
	(0.050)	(0.095)	(0.058)	
14 years after birth	0.025	0.101	0.004	0.406
	(0.052)	(0.101)	(0.060)	
15 years after birth	0.019	0.097	−0.003	0.404
	(0.053)	(0.103)	(0.061)	
16 years after birth	0.015	0.081	−0.002	0.504
	(0.054)	(0.107)	(0.062)	
17 years after birth	0.004	0.065	−0.010	0.535
	(0.053)	(0.103)	(0.062)	

Notes: Each row represents two separate regressions. Estimation results by availability of nursery are based on fully interacted models. Coefficients based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We use local linear regressions including triangular weights and separate linear trends on each side of the discontinuity. We use a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Prob>chi2 of difference in coefficients between communities with and w/o nursery. [b]The number of children are measured at the first child's birthday in each year.

Table A.13: Maternal employment

	All communities	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^a
Mother is employed[b]				
1 year after birth	0.005	−0.012	0.012	0.230
	(0.010)	(0.016)	(0.012)	
2 years after birth	−0.319***	−0.332***	−0.310***	0.668
	(0.025)	(0.043)	(0.031)	
3 years after birth	−0.050*	−0.103**	−0.026	0.207
	(0.029)	(0.050)	(0.035)	
4 years after birth	−0.011	−0.107*	0.026	0.041
	(0.029)	(0.055)	(0.035)	
5 years after birth	−0.013	−0.048	−0.005	0.545
	(0.030)	(0.062)	(0.034)	
6 years after birth	0.023	0.086	−0.002	0.199
	(0.031)	(0.057)	(0.037)	
7 years after birth	0.002	0.024	−0.008	0.609
	(0.030)	(0.050)	(0.038)	
8 years after birth	−0.016	−0.021	−0.019	0.985
	(0.032)	(0.060)	(0.038)	
9 years after birth	0.002	−0.016	0.006	0.767
	(0.032)	(0.061)	(0.037)	
10 years after birth	0.001	−0.005	0.000	0.942
	(0.030)	(0.054)	(0.036)	
11 years after birth	0.021	−0.027	0.035	0.304
	(0.029)	(0.049)	(0.036)	
12 years after birth	0.007	−0.031	0.017	0.409
	(0.029)	(0.047)	(0.036)	
13 years after birth	−0.010	−0.060	0.004	0.238
	(0.027)	(0.043)	(0.034)	
14 years after birth	0.020	−0.017	0.027	0.420
	(0.027)	(0.043)	(0.033)	
15 years after birth	−0.002	0.007	−0.012	0.752
	(0.027)	(0.050)	(0.033)	
16 years after birth	0.013	0.025	0.004	0.712
	(0.027)	(0.046)	(0.033)	
17 years after birth	0.022	−0.000	0.028	0.586
	(0.025)	(0.042)	(0.031)	

Notes: Each row represents two separate regressions. Estimation results by availability of nursery are based on fully interacted models. Coefficients based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We use local linear regressions including triangular weights and separate linear trends on each side of the discontinuity. We use a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a] Prob>chi2 of difference in coefficients between communities with and w/o nursery. [b] Maternal employment is measured in January following the child's birthday in each year.

Table A.14: Maternal full-time employment

	All communities	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^a
Mother works full-time[b]				
1 year after birth	−0.005	−0.015	−0.001	0.307
	(0.006)	(0.012)	(0.007)	
2 years after birth	−0.167***	−0.244***	−0.139***	0.022
	(0.021)	(0.038)	(0.025)	
3 years after birth	−0.003	−0.076*	0.026	0.056
	(0.024)	(0.045)	(0.028)	
4 years after birth	0.040	−0.046	0.074**	0.027
	(0.025)	(0.046)	(0.029)	
5 years after birth	0.030	−0.057	0.060**	0.034
	(0.026)	(0.046)	(0.030)	
6 years after birth	0.034	−0.008	0.046	0.337
	(0.027)	(0.046)	(0.032)	
7 years after birth	0.019	−0.065	0.047	0.050
	(0.027)	(0.047)	(0.032)	
8 years after birth	0.019	−0.105*	0.060*	0.010
	(0.029)	(0.055)	(0.033)	
9 years after birth	0.060*	−0.083	0.109***	0.006
	(0.032)	(0.062)	(0.034)	
10 years after birth	0.038	−0.082	0.076**	0.015
	(0.030)	(0.055)	(0.035)	
11 years after birth	0.057*	−0.077	0.102***	0.010
	(0.031)	(0.060)	(0.035)	
12 years after birth	0.047	−0.091	0.094***	0.007
	(0.031)	(0.058)	(0.035)	
13 years after birth	0.029	−0.088	0.067*	0.017
	(0.030)	(0.055)	(0.035)	
14 years after birth	0.053*	−0.049	0.083**	0.033
	(0.030)	(0.051)	(0.036)	
15 years after birth	0.038	−0.019	0.050	0.247
	(0.030)	(0.048)	(0.036)	
16 years after birth	0.029	−0.040	0.046	0.148
	(0.029)	(0.047)	(0.036)	
17 years after birth	0.030	−0.015	0.038	0.385
	(0.030)	(0.048)	(0.037)	

Notes: Each row represents two separate regressions. Estimation results by availability of nursery are based on fully interacted models. Coefficients based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We use local linear regressions including triangular weights and separate linear trends on each side of the discontinuity. We use a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Prob>chi2 of difference in coefficients between communities with and w/o nursery. [b]The mother works and earns $\geq 75\%$ of her pre-birth earnings in January following the child's birthday in each year.

Table A.15: Family status — full sample

	All communities	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^a
Currently married, full sample[b]				
1 year after birth	−0.046*	−0.046	−0.045	0.974
	(0.024)	(0.044)	(0.029)	
2 years after birth	−0.029	−0.012	−0.033	0.683
	(0.023)	(0.043)	(0.028)	
3 years after birth	−0.021	0.010	−0.032	0.408
	(0.023)	(0.043)	(0.027)	
4 years after birth	−0.026	−0.022	−0.025	0.959
	(0.022)	(0.042)	(0.026)	
5 years after birth	−0.029	−0.007	−0.035	0.574
	(0.022)	(0.042)	(0.026)	
6 years after birth	−0.020	−0.008	−0.022	0.774
	(0.022)	(0.043)	(0.026)	
7 years after birth	−0.005	0.014	−0.010	0.625
	(0.022)	(0.043)	(0.026)	
8 years after birth	−0.004	0.000	−0.003	0.950
	(0.022)	(0.043)	(0.026)	
9 years after birth	−0.010	−0.001	−0.011	0.848
	(0.022)	(0.043)	(0.026)	
10 years after birth	−0.007	−0.003	−0.006	0.950
	(0.022)	(0.044)	(0.026)	
11 years after birth	−0.010	−0.027	−0.000	0.598
	(0.023)	(0.044)	(0.026)	
12 years after birth	−0.003	−0.016	0.005	0.687
	(0.023)	(0.044)	(0.026)	
13 years after birth	−0.007	−0.021	0.001	0.671
	(0.023)	(0.045)	(0.027)	
14 years after birth	−0.011	−0.023	−0.003	0.699
	(0.023)	(0.045)	(0.027)	
15 years after birth	−0.012	−0.040	0.002	0.435
	(0.023)	(0.045)	(0.027)	
16 years after birth	−0.008	−0.029	0.005	0.522
	(0.024)	(0.046)	(0.027)	
17 years after birth	−0.010	−0.032	0.003	0.515
	(0.024)	(0.046)	(0.027)	

Notes: Each row represents two separate regressions. Estimation results by availability of nursery are based on fully interacted models. Coefficients based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We use local linear regressions including triangular weights and separate linear trends on each side of the discontinuity. We use a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Prob>chi2 of difference in coefficients between communities with and w/o nursery. [b]The mother is currently married.

Table A.16: Family status — cond. on being married at birth

	All communities	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^a
Currently married, cond. on being married at birth[b]				
1 year after birth	−0.000	−0.006	0.003	0.235
	(0.003)	(0.007)	(0.003)	
2 years after birth	0.000	−0.013	0.007	0.090
	(0.005)	(0.011)	(0.005)	
3 years after birth	−0.001	0.000	−0.003	0.862
	(0.007)	(0.016)	(0.007)	
4 years after birth	−0.007	−0.015	−0.003	0.582
	(0.009)	(0.020)	(0.009)	
5 years after birth	−0.002	0.003	−0.004	0.781
	(0.010)	(0.025)	(0.010)	
6 years after birth	0.001	0.006	0.000	0.852
	(0.012)	(0.028)	(0.013)	
7 years after birth	0.016	0.020	0.017	0.929
	(0.014)	(0.030)	(0.015)	
8 years after birth	0.018	0.013	0.022	0.819
	(0.015)	(0.032)	(0.017)	
9 years after birth	0.019	0.020	0.020	0.997
	(0.017)	(0.035)	(0.018)	
10 years after birth	0.026	0.031	0.026	0.900
	(0.018)	(0.037)	(0.019)	
11 years after birth	0.019	0.004	0.028	0.586
	(0.019)	(0.039)	(0.020)	
12 years after birth	0.021	0.014	0.025	0.812
	(0.020)	(0.042)	(0.021)	
13 years after birth	0.014	0.021	0.012	0.848
	(0.020)	(0.043)	(0.022)	
14 years after birth	0.012	0.021	0.009	0.800
	(0.021)	(0.045)	(0.023)	
15 years after birth	0.004	−0.003	0.008	0.830
	(0.022)	(0.047)	(0.024)	
16 years after birth	0.006	0.004	0.008	0.935
	(0.023)	(0.048)	(0.025)	
17 years after birth	0.005	−0.011	0.015	0.641
	(0.024)	(0.049)	(0.026)	

Notes: Each row represents two separate regressions. Estimation results by availability of nursery are based on fully interacted models. Coefficients based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We use local linear regressions including triangular weights and separate linear trends on each side of the discontinuity. We use a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Prob>chi2 of difference in coefficients between communities with and w/o nursery. [b]Currently married in the sample of mothers who have been married at birth.

Table A.17: Family status — cond. on not being married at birth

	All communities	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^a
Currently married, cond. on not being married at birth[b]				
1 year after birth	−0.009	0.018	−0.013	0.496
	(0.023)	(0.034)	(0.029)	
2 years after birth	0.024	0.126**	−0.003	0.038
	(0.031)	(0.049)	(0.038)	
3 years after birth	0.038	0.159***	0.003	0.029
	(0.035)	(0.057)	(0.042)	
4 years after birth	0.024	0.084	0.011	0.353
	(0.038)	(0.065)	(0.045)	
5 years after birth	0.004	0.087	−0.017	0.195
	(0.038)	(0.067)	(0.045)	
6 years after birth	0.017	0.076	0.004	0.383
	(0.039)	(0.069)	(0.046)	
7 years after birth	0.029	0.112	0.008	0.216
	(0.039)	(0.070)	(0.046)	
8 years after birth	0.028	0.077	0.017	0.478
	(0.039)	(0.071)	(0.046)	
9 years after birth	0.010	0.059	−0.001	0.476
	(0.039)	(0.072)	(0.046)	
10 years after birth	0.005	0.031	0.002	0.728
	(0.040)	(0.072)	(0.046)	
11 years after birth	0.005	0.012	0.009	0.974
	(0.040)	(0.072)	(0.046)	
12 years after birth	0.019	0.023	0.023	1.000
	(0.040)	(0.071)	(0.046)	
13 years after birth	0.019	−0.006	0.032	0.653
	(0.040)	(0.071)	(0.046)	
14 years after birth	0.011	−0.017	0.026	0.611
	(0.040)	(0.071)	(0.046)	
15 years after birth	0.018	−0.021	0.036	0.497
	(0.040)	(0.071)	(0.046)	
16 years after birth	0.027	−0.005	0.043	0.573
	(0.040)	(0.071)	(0.046)	
17 years after birth	0.021	0.020	0.028	0.923
	(0.039)	(0.071)	(0.046)	

Notes: Each row represents two separate regressions. Estimation results by availability of nursery are based on fully interacted models. Coefficients based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We use local linear regressions including triangular weights and separate linear trends on each side of the discontinuity. We use a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Prob>chi2 of difference in coefficients between communities with and w/o nursery. [b]Currently married in the sample of mothers who have not been married at birth.

Table A.18: Sensitivity: Child outcomes by availability of nursery & maternal work propensity — cond. on family size and maternal (full-time) employment

	Low work propensity[a]			High work propensity[a]		
	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^b	Communities **with** nursery	Communities **w/o** nursery	P-value Δ^b
Number of children & maternal emp.[c]						
Active (age 17)	0.030	0.008	0.488	0.011	0.027**	0.667
	(0.030)	(0.010)		(0.036)	(0.013)	
Active (age 23)	0.026	−0.014	0.529	−0.064	0.077***	0.025
	(0.057)	(0.028)		(0.055)	(0.030)	
Active (age 17-23)	0.012	0.013	0.979	0.027	0.048**	0.687
	(0.035)	(0.017)		(0.047)	(0.019)	
Non-disabled	0.021	0.032	0.829	−0.019	0.049*	0.086
	(0.050)	(0.020)		(0.030)	(0.025)	
Fit for military (boys)	0.115	0.076	0.745	−0.044	0.191***	0.019
	(0.109)	(0.053)		(0.081)	(0.060)	
Number of children & maternal full-time emp.[d]						
Active (age 17)	0.028	0.012	0.648	−0.007	0.029**	0.318
	(0.033)	(0.011)		(0.034)	(0.014)	
Active (age 23)	0.025	−0.011	0.593	−0.035	0.087***	0.048
	(0.060)	(0.030)		(0.053)	(0.031)	
Active (age 17-23)	0.011	0.007	0.937	0.027	0.062***	0.507
	(0.036)	(0.018)		(0.050)	(0.020)	
Non-disabled	0.010	0.041*	0.568	−0.034	0.044*	0.072
	(0.049)	(0.021)		(0.035)	(0.026)	
Fit for military (boys)	0.061	0.096*	0.765	−0.048	0.223***	0.006
	(0.104)	(0.055)		(0.077)	(0.063)	

Notes: Estimation results are based on fully interacted models, estimated separately for mothers with low and high work propensity. Coefficients are based on 2SLS estimations, with years on parental leave instrumented by the assignment to the reform. We use local linear regressions including triangular weights and separate trends before and after the cutoff. We use a bandwidth of 30 days, exclude children born ±5 days around the cutoff date, and control for the child's sex, low maternal SES, maternal age groups, whether the mother was born abroad, and whether the child was a pre-term birth. Standard errors (shown in parentheses) are clustered at the community level. *, ** and *** indicate statistical significance at the 10-percent, 5-percent and 1-percent level. [a]Maternal characteristics indicate a low/high propensity of being employed >0 days in second year after childbirth, low/high according to median prediction (0.51). [b]Prob>F(chi2) of difference in coefficients between mothers living in communities with and without nursery based on fully interacted regressions. [c]Additional control variables: number of children and binary indicators for maternal employment 3, 5, and 10 years after birth. [d]Additional control variables: number of children and binary indicators for maternal full-time employment 3, 5, and 10 years after birth.

Table A.19: Total length of paid maternity, parental and home care leave available to mothers (2018)

Country	Weeks paid child-related leave	Weeks of paid leave (incl. long-option)	Maximum weeks of job-protected leave, regardless of income support
Australia	18	18	52
Austria	**60**	**138**	103.3
Belgium	32.3	32.3	32.3
Canada	51	**77**	77
Czech Republic	**63.3**	**214**	162
Denmark	50	**64**	50
Finland	**161**	**161**	161
France	42	42	162
Germany	**58**	**110**	162
Greece	43	43	60.3
Hungary	**160**	**160**	160
Iceland	26	26	43.3
Ireland	26	26	60
Italy	47.7	47.7	47.7
Japan	**58**	**58**	58
Korea	**64.9**	**64.9**	64.9
Luxembourg	37.3	37.3	37.3
Mexico	12	12	12
Netherlands	16	16	42
New Zealand	18	18	58
Norway	**91**	**101**	91
Poland	52	52	203.7
Portugal	30.1	34.4	134.1
Slovak Republic	**164**	**164**	164
Spain	16	16	166
Sweden	**55.7**	**55.7**	85
Switzerland	14	14	16
Turkey	16	16	42
United Kingdom	39	39	70
United States	0	0	12
Average	50.7	61.9	86.3

Notes: Data from the OECD Family Database (PF2 5: Trends in leave entitlements around childbirth, updated November 2019). Note that the expression paid *child-related leave* is an umbrella term for policies granting parents the right to paid child-related leave, which includes maternity leave, parental leave, and other forms of child-related leave, e.g., cash-for-care transfers or home-care subsidies. Information refers to weeks of paid maternity leave and any weeks of paid parental leave and paid home care leave (sometimes under a different name, for example, *childcare leave* or *child raising leave*) that are available to mothers. Data reflect entitlements at the national or federal level only (no regional-specific entitlements). Several countries allow spreading leave benefits over a longer period ('long-option').

Table A.20: Employment rates of mothers (not absent on leave) of children aged 0 to 2 and formal and informal childcare enrolment of 0-2-year-olds (in 2014)

Country	1. Maternal employment rate (MER), not absent on leave	2. Enrolment rates in early childhood education and care services (ER-ECE)	3. Difference MER and ER-ECE (p.p.)	4. Difference MER and ER-ECE (in % of MER)	5. Children in informal care during a typical week (in %), 2017	6. Avg. hours of informal childcare per week, 2017
Romania	36.4	2.6	33.8	92.9	49.3	
Poland	40.3	5.5	34.8	86.4	41.3	18.6
Greece	47.6	12.8	34.8	73.1	49.9	24.4
Croatia	45.5	17.1	28.4	62.4	32.8	23.1
Malta	47.3	18.2	29.1	61.5	27.0	16.3
Czech Republic	11.2	4.4	6.8	60.7	38.3	7.0
Bulgaria	27.4	11.2	16.2	59.1	10.6	23.2
Cyprus	61.2	25.5	35.7	58.3	44.4	27.6
Italy	44.9	22.9	22.0	49.0	32.9	19.2
Austria	31.2	16	15.2	48.7	31.7	8.2
Ireland	48.2	27.4	20.8	43.1	25.2	17.4
Latvia	34.5	21.6	12.9	37.3	10.3	
United Kingdom	44.8	28.9	15.9	35.5	34.9	12.2
Spain	54.3	36.9	17.4	32.0	12.0	26.3
Netherlands	65.2	44.6	20.6	31.6	56.6	10.8
Portugal	64.2	45	19.2	29.9	35.4	27.9
Slovenia	50.5	37.4	13.1	26.0	48.4	11.6
Slovak Republic	8.6	6.5	2.1	24.5	25.5	10.4
France	51.5	39.5	12.0	23.3	19.0	16.2
Germany	34.5	27.5	7.0	20.4		
Belgium	60.4	48.8	11.6	19.2	18.5	18.7
Luxembourg	58.2	49	9.2	15.8	26.3	11.2
Finland	38.2	33.2	5.0	13.1	1.4	
Estonia	21.6	19.4	2.2	10.0	28.5	8.3
Lithuania	24.0	22.9	1.1	4.5	23.1	19.0
Denmark	68.0	69.6	-1.6	-2.3	1.1	
Hungary	12.8	14.4	-1.6	-12.9	34.0	10.1
Average (unweighted)	41.9	26.3	15.7	37.1	29.2	16.7

Notes: Employment rates for women with children aged 0-2, by maternity/parental leave status, 2014 or latest available year (OECD Family Database, Chart LMF1.2.G.) Children aged 0-2 in formal childcare or education and duration in % over the population of age group (EU STAT / EU-SILC). 'Informal' childcare refers to unpaid care, usually provided by a grandparent of the child or by other relatives, friends or neighbours. It excludes any care that is paid for regardless of who is providing the paid-for care (OECD Family Database, Chart PF3.3.A.). Average hours of informal childcare per week among those using at least one hour of informal childcare during a typical week, 2017 (OECD Family Database, Chart PF3.3.D.)