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How does flexibility in the parental leave system affect mothers' return-to-work decisions and post-birth Careers?

An empirical evaluation of the Austrian parental leave reform of 2008

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Motivation

Goals of parental leave systems:

- Alleviate income loss during the baby break
- Increase women's employment
- Encouraging job continuity after birth

Key elements of parental leave systems:

- Financial support
- Job protection
- Child care facilities

In Austria the parental leave system went through several reforms:

- before 1990: Job protection: 12 months, Cash benefits: 12 months
- 1990: Job protection: 24 months, Cash benefits: 24 months
- 1996: Job protection: 24 months, Cash benefits: 18+6 months
- 2000: Job protection: 24 months, Cash benefits: 30+6 months
- 2008: Job protection: 24 months, Cash benefits: 30+6 months / 20+4 months / 15+3 months

The goal of the reform of 2008 was defined in the government agreement of 2007:

"Familienpolitische Maßnahmen

Familie wird in all ihren vielfältigen Formen von uns respektiert und unterstützt. Besonderes Augenmerk ist dabei auf das Kindeswohl zu legen.

1. Vereinbarkeit von Beruf und Familie

Die bessere Vereinbarkeit von Familie und Beruf ist die zentrale Herausforderung für die Zukunft. Das Kindergeld wird in folgender Weise flexibilisiert."

Lalive et al. (2014) use a DID-RD design to assess the average causal effects of the maximum duration of PL benefits and job protection on mothers' return-to-work decisions and several labor market outcomes (reforms of 1990, 1996 and 2000) and find that

- changes in the duration of job protection and PL benefits have different effects in delaying women's return-to-work behavior (PL benefit duration seems to have a larger impact)
- despite the delay in return-to-work due to more generous PL regimes, there seem to be no negative effects on medium-run labor market outcomes

The reform of 2008 is different in two ways:

- This reform introduces two additional shorter PL models with higher monthly benefits – different research question
- Mothers whose children were born before 2008 could switch to one of the new PL models – different methodology

Research Question

Does the reform of 2008 induce mothers to adjust their behavior and return to work earlier or does it simply improve the reconciliability of family and job?

Before the reform:

- Maximum duration of 30 months for PL benefit take-up (up to $36 = 30+6$ months if PL is shared between parents) – EUR 436/month

After the reform:

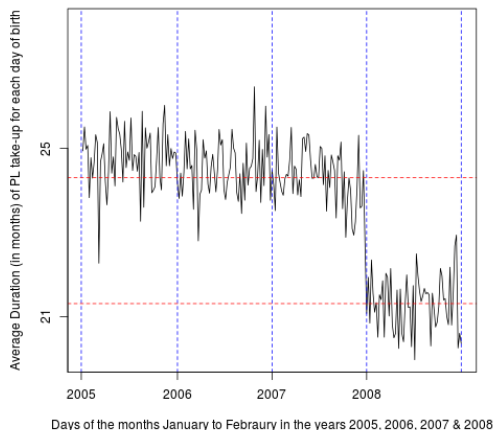
- Possibility to choose between 3 different PL models
 - ① EUR 436/month for up to $30+6$ months
 - ② EUR 624/month for up to $20+4$ months
 - ③ EUR 800/month for up to $15+3$ months

Data

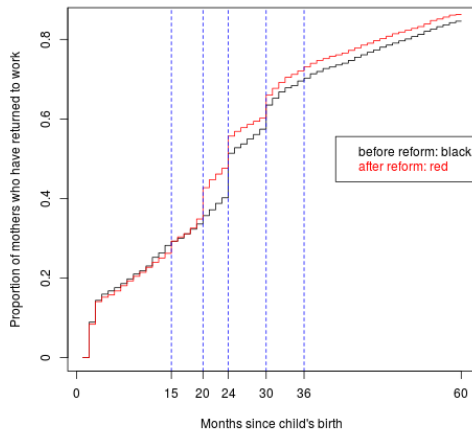
For the main analysis all women available in the data who gave birth in the months of January and February of the years 2008, 2007, 2006 and 2005 were selected. The sample was reduced to mothers who gave birth for the first time (labor market history is more informative) and were on maternity leave ("Wochengeldbezug" - to ensure better comparability with Lalive et al. 2014).

- public sector employees and self-employed excluded
- all income data adjusted to 2014 prices
- for the calculations of daily earnings (before birth, first job after birth, 5th year) all entries with 0 contribution days ("Beitragsstage") and daily income above 250 ($(bmg+sz)/btag$) are not used as they have obviously wrongly recorded contribution days (data restricted to "Höchstbeitragsgrundlage")
- other cases with obvious data errors are also excluded
- some cases are excluded, because the assignment to blue/white collar and other controls is not possible

Effects of the reform on the duration of parental leave benefit take-up



Effects of the reform on the return-to-work behavior



Econometric Model

$$y_{imt} = \beta_0 + \beta_1 D_m \text{reform}_t + \beta_2 D_m + \beta_3 \text{reform}_t + x_i' \gamma + z_{imt}' \delta + \epsilon_{imt} \quad (1)$$

- y_{imt} ... return-to-work and several labor market outcomes
- x_i' ... mother's age at birth and labor market performance indicators measured 12 months before birth (tenure, experience, unemployment, cumulative income, daily wage) and dummies for industry, region and white collar
- z_{imt}' ... local unemployment rate at the end of job protection (24 months) and 48 months after birth
- β_1 ... difference between the treated group (2008) and the comparison group (2007) relative to the difference between the groups of 2006 and 2005

Descriptive Statistics of pre-birth characteristics

	Pre	Post	Raw difference	Controlled DID
Age	29.54	29.36	-0.179 (0.121)	-0.329 (0.173)
Tenure	3.49	3.34	-0.154 (0.082)	-0.155 (0.109)
Experience	6.81	6.76	0.043 (0.090)	-0.332 (0.106)**
Unemployment	0.33	0.37	0.044 (0.014)**	0.020 (0.019)
Daily Earnings	71.79	71.46	-0.328 (0.840)	-1.510 (1.060)
Cumulative Inc.	49,867	49,623	-244 (612)	-1,054 (761)
Observations	3,795	3,995	7,790	15,568

Table: Comparison of pre-birth characteristics and labor market performance of mothers who gave birth for the first time in January-February 2007 (Pre) and January-February 2008 (Post).

Effects of the reform on the return-to-work behavior

	DID estimate	Robust SE	comparison
Time at home	-2.198**	0.809	28.452
Return to same employer	-2.161**	0.778	18.314
Return to new employer	-0.305	1.188	30.000
Back within 60 months	-0.020	0.061	0.846
Back to pre-birth employer	0.045*	0.021	0.529
Daily wage	0.664	1.668	55.508
Daily wage (same employer)	1.150	2.163	60.537
Daily wage (new employer)	-0.635	2.526	47.115

Table: This table reports DID estimates, robust standard errors and the means of the comparison group

Effects of the reform on cumulative outcomes in year 5 after child's birth

	DID estimate	Robust SE	comparison
Months in employment	1.188	0.727	20.959
Months unemployed	0.379	0.217	2.314
Cumulative income	1,478.843	1,634.818	48,327.200

Table: This table reports DID estimates, robust standard errors and the means of the comparison group

Effects of the reform on labor market outcomes in year 5 after child's birth

	DID estimate	Robust SE	comparison
Employed	0.000	0.021	0.696
Working for pre-birth employer	0.012	0.026	0.457
Tenure with current employer	1.993	2.199	50.673
Months worked	-0.145	0.243	6.563
Earnings per day worked	0.328	1.446	57.333
Earnings per calendar day	-1.252	1.493	38.809
Annual income	-457.012	545.074	13,307.500

Table: This table reports DID estimates, robust standard errors and the means of the comparison group

Conclusion

The results suggest that the reform induced women to return to work on average 2.2 months earlier and that these earlier returns are mainly driven by women returning to their pre-birth employer. Also the share of women returning to their pre-birth employers was raised by 4.5 percentage points. The effect on medium-run labor market outcomes was negligible (similar to Lalive et al. (2014)).

The intention of the reform was to improve the reconciliability of family and job. The reform offered parental leave models better suited for women who want to return to work until the end of job protection, but for women who would like to stay longer at home, the old parental leave model was still an option. Therefore, the reform can be seen as a success.

A separate analysis for women with daily earnings above and below the median suggests that the reform mainly affected high-income mothers.

References

- LALIVE, R., SCHLOSSER, A., STEINHAEUER, A. and ZWEIMÜLLER, J. (2014), Parental Leave and Mothers' Careers: The Relative Importance of Job Protection and Cash Benefits, Review of Economic Studies, 81(1), 219-265.
- LALIVE, R. and ZWEIMÜLLER, J. (2009), How Does Parental Leave Affect Fertility and Return to Work? Evidence from Two Natural Experiments, The Quarterly Journal of Economics, 124, 1363-1402.
- AMDB: Arbeitsmarktdatenbank des AMS Österreich und des BMASK - sample drawn by myself and variables and controls are calculated to the best of my knowledge
- R Core Team (2013), R: A Language and Environment for Statistical Computing, R Foundation for Statistical Computing. Vienna, Austria. URL: <http://www.R-project.org/>.