8.2 THE IMPACT OF CHILDCARE AVAILABILITY ON FEMALE LABOUR SUPPLY

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The employment situation of women is highly influenced by the fact that they fall out of the labour market by reason of having children. One of the most important measures of the employment policy in connection with this is the establishment of nursery and kindergarten places, which – by liberating the time of mothers – enables them to return to work before the child reaches school-age. The impact of the kindergarten¹ places on employment could, however, differ among countries, and therefore the outcomes in the literature are also ambiguous. Several studies show that the availability of childcare promotes female employment (*Lovász–Szabó-Morvai*, 2013, *Nollenberger–Rodríguez-Planas*, 2015 and *Bauernschuster–Schlotter*, 2015), while several other studies did not find a significant link between kindergarten availability and the employment of mothers (*Bettendorf et al.* 2015, *Lundin et al.* 2008, *Givord–Marbot*, 2015).

This, however, only appears to be contradictory. In reality, the extent of the impact depends on the elements of the institutional setting, for example, the length and amount of in-cash benefits, the flexibility of employment, or relevantsocial norms. Medium length parental leaves coupled with generous childcare benefits help mothers the most to efficiently return to the labour market. The lack of leaves, or leaves that are too short restrains maternal employment because their employment protection ends before they are able to return to their former job. On the other hand, long paid leaves encourage mothers to stay absent from the labour market for long time periods, which in general leads to lower wages and occupation levels (Budig et al. 2012). The availability of flexible work arrangements (for example part-time employment or remote work) contribute strongly to the employment of mothers with young children by allowing for a more gradual separation from the child. The attitude of society regarding the employment of mothers with young children is an important issue too. If mothers – in line with society's expectations – stay home with their child for a lengthy period (for example, in the case of Hungary and other Central-Eastern European countries, for three or even more years), then the expansion of the availability of childcare places may be less effective in increasing the employment of mothers with children under 3.

Based on data from seven European countries, Szabó-Morvai–Lovász (2017) studied the institutional conditions under which the availability of kindergarten places could increase the labour supply of mothers. The analysis relied on the data of the European Labour Force Survey (EU-LFS), and analysed the interaction between the impact of the availability of kindergarten places and

1 In fact, we have to consider both nursery and kindergarten services, as the composition of the child-care system differs from country to country, therefore the age of the children of the mothers in different studies varies between the ages of 0–12. However, the majority of articles consider ages 3–5 as the most relevant in this respect.

the institutional surroundings using a regression discontinuity design. The essence of the method is that in countries where a kindergarten enrolment threshold exists – i.e. those who were born before a certain date are able to enrol into kindergarten for sure, while those who were born after cannot – the impact of kindergarten availability can be estimated by comparing the labour supply of mothers whose children were born just before this date with those whose children were born just after. *Table 8.2.1* summarizes the results of the estimation and the most important institutional characteristics by country. The β values show the estimated impact of kindergarten availability on the labour supply of mothers.

Table 8.2.1 The impact of the availability of child-care services on the labour supply of mothers (β) and the most relevant institutional characteristics

	Enrolment rate of children in nursery and kindergarten (percent)		Impact of the kindergarten	Female employment by the age of the child (percent)		
	age 2	age 3	β	0-2 years	3-5 years	6-14 years
Austria	26.5	54.7	0.29***	67.0	74.0	82.0
France	58.0	86.2	0.25	61.0	74.0	79.0
Hungary	16.7	60.2	0.19**	12.0	63.0	75.0
Czech Republic	7.0	41.9	0.20*	20.0	70.0	87.0
Slovak Republic	6.7	46.4	0.28**	15.0	56.0	80.0
Greece	28.7	49.1	-0.07	50.0	54.0	59.0
Italy	38.4	81.5	-0.02	51.0	53.0	56.0
	Availability of informal child care (relatives, neighbours)	length of leave (weeks)	In-cash service average replace- ment rate of the leave (percent)	in-cash benefits at the age of 3 of the child as a percentage of the median wage	Flexibility of employ- ment: Share of part- time employment within the total em- ployed female popula- tion (percent)	Norms: the child suffers ^a (percent)
Austria	18.7	60	85.3	12.6	46.0	54.8
France	7.9	42	44.7	12.1		41.0
Hungary	18.9	160	44.5	23.0	9.0	54.7
Czech Republic	24.3	110	51.1	16.4	10.0	
Slovak Republic	16.3	164	32.0	17.7	6.0	44.4
Greece	32.5	43	53.9	5.2	12.5	65.3
Italy	18.0	48	52.7	5.2	31.6	61.8

^a A child below school-age suffers if their mother works (0 percent: do not agree at all, 100 percent: totally agree).

Note: Table prepared after Szabó-Morvai-Lovász (2017).

Based on the outcomes, childcare availability has a significant and high impact on the employment of mothers in the Central Eastern European countries (Czech Republic, Hungary, Slovak Republic). The labour supply of mothers is very low prior to age of three of children compared to that of mothers of

^{***} p < 0.01, ** p < 0.05, * p < 0.1.

Source: Own calculation based on the data of OECD Family Database, Eurostat, and the European Values Study.

older children. The availability of child-care places at nurseries is limited, and, additionally, parental leave also ends around age three of children. In Southern European countries (Italy, Greece), the results do not show a remarkable impact around age three of children. A significant portion of mothers fall out of the labour market permanently after childbirth, while those mothers who return to the labour market do so much earlier, due to the short length of child-care leaves. The impact in the two Western countries differs: in Austria – where the coverage of child-care services is much lower and the society's attitude is more traditional – there is a positive impact, while in France the impact is not significant. Overall, the results suggest that the labour supply of mothers in Central-Eastern Europe could be significantly increased through the expansion of child-care services. The impact, however – especially in the case of the development of the capacities of crèches – could be costrained by the societal attitudes against the use of child-care services at an early age, and the long period of the paid parental leave.

References

- BAUERNSCHUSTER, S.-SCHLOTTER, M. (2015): Public child care and mothers' labor supply Evidence from two quasi-experiments. Journal of Public Economics, Vol. 123. p. 1–16.
- BETTENDORF, L. J. H.-JONGEN, E. L. W.-MULLER, P. (2015): Childcare subsidies and labour supply Evidence from a large Dutch reform. Labour Economics, Vol. 36. pp. 112–123.
- BOCA, D. D. (2002): The Effect of Child Care and Part Time Opportunities on Participation and Fertility Decisions in Italy. Journal of Population Economics, Vol. 15. No. 3. pp. 549–573.
- BUDIG, M. J.-MISRA, J.-BOECKMANN, I. (2012): The Motherhood Penalty in Cross-National Perspective: The Importance of Work Family Policies and Cultural Attitudes. Social Politics: International Studies in Gender. State and Society, Vol. 19. No. 2. pp. 163–193.
- GIVORD, P.-MARBOT, C. (2015): Does the cost of child care affect female labor market participation? An evaluation of a French reform of childcare subsidies. Labour Economics, Vol. 36, No. C. pp. 99–111.
- LUNDIN, D.-MÖRK, E.-ÖCKERT, B. (2008): How far can reduced childcare prices push female labour supply? Labour Economics, Vol. 15. No. 4. pp. 647–659.
- NOLLENBERGER, N. –RODRÍGUEZ-PLANAS, N. (2015): Full-time universal childcare in a context of low maternal employment: Quasi-experimental evidence from Spain. Labour Economics, Vol. 36, No. C. pp. 124–136.
- SZABÓ-MORVAI, Á.—LOVÁSZ, A. (2013): Does Childcare Matter for Maternal Labor Supply? Pushing the limits of the Regression Discontinuity Framework. BWP, HAS CERC, Institute of Econonomics, 2013/13.
- SZABÓ-MORVAI ÁGNES–LOVÁSZ ANNA (2017): Childcare and Maternal Labor Supply a Cross-Country Analysis of Quasi-Experimental Estimates from 7 Countries. BWP, 2017/3. HAS CERC, Institute of Econonomics, Budapest.