

Bünning, Mareike

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The association between social support networks and maternal employment: a comparison of western German, eastern German, and migrant mothers of preschool-aged children

Mareike Bünning

WZB Berlin Social Science Center, Berlin, Germany

Abstract

A lack of adequate childcare can delay mothers' return to the labor market after childbirth. This paper examines whether social support with childcare by kin and friends facilitates maternal employment in the first 72 months after childbirth. Using data from the German Socio-Economic Panel (SOEP) 1993–2009, a comparison of natives ($n = 1409$) and migrants ($n = 411$) in corporative-conservative western Germany with mothers in former socialist eastern Germany ($n = 528$) shows that kinship support is positively associated with maternal employment when public childcare is limited. Western German and migrant mothers return to work sooner if they are surrounded by kin. But kin do not provide support for maternal employment in eastern Germany, where public childcare is more easily accessible and continuous female employment is a prevalent social norm. Friendship networks, by contrast, are most valuable for maternal employment if they complement public childcare.

Résumé

Le retour des mères sur le marché de travail peut être retardé à cause d'un manque de services de garde adéquats. Cet article examine si le soutien social à la garde d'enfant par la famille et des amis facilite le retour à l'emploi des mères dans les 72 premiers mois suivant l'accouchement. En utilisant les données du panel socio-économique allemand (SOEP) entre 1993 et 2009, nous comparons des natifs ($n = 1409$) et des immigrants ($n = 411$) en l'Allemagne de l'Ouest (corporatiste-conservatrice) d'une part, et, des mères dans l'ancienne Allemagne de l'Est socialiste ($n = 528$) d'autre part. Notre analyse montre qu'un soutien familial facilite le retour à l'emploi lorsque l'offre de services de garde publics est limitée. Les mères d'Allemagne de l'Ouest et les immigrantes retournent au travail plus tôt si elles sont soutenues par leur famille. Par contre, en Allemagne de l'Est, où les services de garde publics sont plus facilement accessibles et l'emploi en continu des femmes est une norme sociale davantage répandue, le soutien de la famille ne joue pas un rôle significatif. En revanche, les réseaux d'amis sont précieux pour les activités professionnelles des mères, s'ils permettent de compléter les services de garde publics.

Keywords

Maternal employment; childcare arrangements; social support; social networks; family policy

Mots-Clés

Emploi des mères; garde d'enfant; soutien social; réseaux sociaux; politique familiale

Contact

Mareike Bünning, mareike.buenning@wzb.eu

Employment interruptions after childbirth severely disadvantage mothers in the labor market and at home. For working women, motherhood reduces earnings and career opportunities. This can partly be attributed to discrimination against mothers (Correll, Benard, & Paik, 2007), but about one-third of the motherhood penalty in wages results directly from employment interruptions after the birth and reduced working hours upon return to the labor market (Budig & England, 2001; Gangl & Ziefle, 2009). Furthermore, long employment interruptions promote a traditional division of housework (Grunow, Schulz, & Blossfeld, 2007). Yet, as divorce rates are high in industrialized countries, it is risky for mothers to specialize in housework and to rely on their husbands as main breadwinners (Cooke & Baxter, 2010).

Sizable cross-national differences in mothers' employment rates persist, which coincide with state support for maternal employment. Subsidized public childcare facilitates maternal employment in the social democratic welfare states in Scandinavia, as well as in the former socialist countries in Central and Eastern Europe. By contrast, families in liberal welfare states such as the US have to rely on the market to provide childcare, and in the corporative-conservative welfare states of continental Europe, policies have long aimed at encouraging mothers to stay at home (Cooke & Baxter, 2010; Esping-Andersen, 1990).

Where subsidized public childcare is unavailable, many mothers are only able to work if they can draw on their social networks for help with childcare. Otherwise, high childcare costs often prevent mothers from working. Research from the 1970s stressed the importance of relatives and friends as an inexpensive source for childcare (Heckman, 1974; Stack, 1975). Yet, subsequent research only focused on grandmothers as providers of childcare and neglected other types of informal care. This research has repeatedly shown that mothers in Europe and the US return to work sooner if they live close to a grandmother who can provide childcare (Arpino, Pronzato, & Tavares, 2010; Compton & Pollak, 2011; Dimova & Wolff, 2011; Leibowitz, Klerman, & Waite, 1992; Wenk & Garret, 1992). The only country where this relationship did not appear to hold was Germany (Kreyenfeld & Hank, 2000). Kreyenfeld and Hank (2000) concluded that informal childcare is nonetheless important in Germany, but that mothers rely on patchwork childcare arrangements in which several people join in. Following this argument, this paper brings mothers' extended social networks back into the analysis of maternal employment.

Using German panel data, this paper asks whether kinship networks and friendship networks can facilitate maternal employment by providing social support in the form of childcare. First, it extends previous research by considering mothers' extended kinship networks and friends as sources of support with childcare. Second, it argues that the impact of social support depends on the context in which mothers live. In particular, it shows that social support intersects with public policies; that is, access to public childcare moderates the association between social support and maternal employment. The analyses provide evidence that public daycare complements friendship networks as a resource for maternal employment, but substitutes for kinship support. Third, the paper considers whether mothers return to work full-time or part-time. This distinction is important firstly because part-time work is associated with lower earnings and reduced career opportunities (Ziefle, 2004) and secondly because social support with childcare may be particularly relevant for enabling full-time employment.

Germany is an ideal case for this research because it allows for a comparison between former socialist eastern Germany and corporative-conservative western Germany. Despite German reunification in 1990, considerable differences between eastern and western Germany persist. The socialist former German Democratic Republic promoted the fulltime employment of all women including mothers since the end of WW II, whereas western German mothers were expected to stay at home (Cooke & Baxter, 2010). Twenty years after German reunification, societal norms still differ between eastern and western Germany, with more favorable attitudes towards maternal (full-time) employment in the east (Treas & Widmer, 2000). In line with this, eastern German mothers of preschool-aged children still work more often and are much more likely to work full-time than their western German counterparts. In 2008, 50% of mothers in eastern Germany worked fulltime, compared to only 19% in western Germany (Goldstein & Kreyenfeld, 2011).

A major reason for this is that public childcare is broadly available in eastern Germany, whereas too few public childcare slots exist in western Germany, especially for children under the age of three. In 2009, only 12% of children from this age group attended public childcare in western Germany compared to 41% in eastern Germany (Statistische Ämter des Bundes und der Länder, 2010). Furthermore, daycare centers are usually open full-time in eastern Germany but only in the mornings in western Germany. Correspondingly, western German mothers mention the lack of adequate childcare as a major barrier to employment (Büchel & Spiess, 2002; Kurz, 1998). Hence, the comparison of eastern and western Germany tests whether the association between social support and maternal employment depends on the availability of public childcare.

Furthermore, the study considers migrants from Turkey, Italy, Spain, Greece, and the former Yugoslavia as a third subgroup of mothers. These countries of origin consider the family as the main provider of care, which strengthens women's role as caregivers (Blossfeld & Drobnič, 2001; Lakinska-Popovska & Bornarova, 2004; Milewski, 2010; Symeonidou, 1997).¹ Although these migrant mothers face the same childcare conditions as western Germans (because almost all of them live in western Germany), their distinct cultural background may also affect their childcare and employment choices.

The remainder of the paper is organized as follows: I first develop hypotheses about the impact of social support networks on maternal employment among the three groups of mothers. The subsequent sections describe the data and methodological approach before presenting and discussing the results.

Social support networks and maternal employment

Social support networks are a component of Coleman's (1994) concept of social capital. On the one hand, this concept includes access to social networks and the resources embedded in them. On the other hand, it involves trust and social norms that enable cooperation among people. This paper concentrates on the first aspect, namely the transfer and exchange of resources among people from one's network, which is also referred to as instrumental social support (Ayman & Antani, 2008). In this study, the focus is on time for childcare as resources. Trust is not the central focus of this study, but is implicit in the process of having children cared for by others. This makes

strong ties such as kin and friends the most likely providers for childcare (Bengtson, 2004; Wellman & Wortley, 1990).

The emphasis on social support networks is compatible with previous theories of maternal employment. Previous studies have found rational choice models that consider the impact of market productivity and home productivity are well suited for explaining mothers' employment decisions (Leibowitz et al., 1992; Muszynska, 2004; Rønsen & Sundström, 2002). These models predict that a mother will maximize expected utility and enters into employment when her market productivity exceeds her home productivity (i.e. her productivity doing childcare and housework).

Social support affects both the market productivity and the home productivity. First, the costs of obtaining childcare during mothers' work hours severely reduce mothers' income if inexpensive childcare by relatives, friends, or public day care is unavailable. Second, social support lowers the home productivity: if relatives and friends assist mothers with childcare and possibly also housework (see Möser & Leonhäuser, 2014) this reduces the demand for mothers' time at home. Consequently, maternal employment becomes more likely if mothers have access to social support. I now consider kin and friends as mothers' major sources of social support.

Support by kinship networks

Kinship networks are an important source of social support for mothers. Kinship networks are characterized by intense, trusting relationships and mutual solidarity. Identification with the family and strong family norms induce family members to act selflessly in the family's interest (Igel & Szydlik, 2011; Portes, 1998; Stack, 1975; Wellman & Wortley, 1990). Consequently, kinship networks practice indirect reciprocity where the donor of social support does not expect to receive anything in return. Instead, s/he expects the recipient of support to pass on resources to another family member in the future, so that eventually all exchanges will balance out at the group level (Bühler, 2007; Degenne, Lebeauc, & Lemel, 2004). This is possible because members of kinship networks can expect to share a long common future, during which a service can be repaid (Flap, 2004).

As women typically assume the role of kin keepers, the maternal grandmother is the most likely relative to provide childcare, especially in migrants' countries of origin (Aycaan & Eskin, 2005; Hrženjak, 2012; Leira, Tobío, & Trifiletti, 2005; Thomese & Liefbroer, 2013). But other relatives also regularly provide childcare. Descriptive statistics for western Germany show that 40% of employed mothers rely on grandparents, 15% on aunts and uncles, and 10% on other relatives for regular childcare (Dressel, Cornelißen, & Wolf, 2005). The preconditions for kinship support are the physical presence of family members in or near the household, a strong relationship with them, and additional characteristics of the family members, for example, whether they are employed, in good health, and so on (Igel & Szydlik, 2011).

The more family members live in the neighborhood, the better the chances that mothers receive childcare. In addition to benefiting from dyadic relations within the family, mothers also draw on the broader kinship network. This is a dense network of relations that mutually influence each other. According to Coleman (1994; see also Flap, 2004), all-connected networks promote the willingness to help each other because they can threaten to sanction family members who disregard the norms of family solidarity.

This social control is easier when contact among kin is more frequent and intense. Thus, access to an extended family network within one's neighborhood does not merely increase the likelihood of receiving childcare because more family members are available to provide it. The presence of additional family members also enforces the collective norms of providing mutual assistance. For example, partnered grandfathers provide childcare more often than single grandfathers (Igél & Szydlik, 2011; Leira et al., 2005), and the paternal grandparents are more likely to provide childcare if the maternal grandparents are also involved (Thomese & Liefbroer, 2013). I thus hypothesize that a mother is more likely to return to work – both part-time and full-time – the more relatives live in her neighborhood (Hypothesis 1). I also expect the size of the kinship network to be more relevant than the presence of a specific kin, for instance the grandmother.

Support by friendship networks

In addition to kin, friends and neighbors frequently support each other by providing services such as childcare, especially if mothers maintain strong ties with them (Wellman & Wortley, 1990). For example, 20% of western German mothers regularly receive childcare from their friends (Dressel et al., 2005). Yet, as it is unclear how long friendships will last, direct exchange relations are common among friends, and social support has to be returned much faster than among kin. Hence, exchange relations among friends are less flexible and depend on the ability of mothers to offer an adequate resource in return (Degenne et al., 2004; Stack, 1975). Consequently, mobilizing friends for childcare may be difficult, especially when intensive childcare is required. Yet, if mothers only need help with childcare for a limited number of hours, they may succeed in drawing on exchange relations with their friends. Hence, I hypothesize that friendship networks have a stronger effect on maternal part-time employment than on maternal full-time employment (Hypothesis 2).

Interactions between social support networks and public childcare

Social networks are particularly vital for help with childcare if public childcare is unavailable. Access to public childcare differs strongly for eastern German, western German and migrant mothers. In the former German Democratic Republic, full-time public childcare for all children enabled mothers to work full-time. This high coverage has been largely maintained since the German reunification. In West Germany, by contrast, childcare was not established to further maternal employment, but to provide preschool education for children. Due to this development, public childcare in the west has usually been available part-time, and often did not cover children under the age of three. In 2002, slots were only available for 10% of this age group in western Germany, whereas 45% of these children were queuing for a slot (Wrohlich, 2008). Despite recent efforts to expand public childcare in western Germany, only 12% of children under the age of three attended public childcare in 2009 – the last year of observation in this study.² Queuing may thus considerably delay mothers' return to work. Even though access to public childcare is the same for western German and migrant mothers, enrollment rates are particularly low among the children of migrant families (Engels, Köller, Koopmans, & Höhne, 2011).

Coleman (1994, p. 307) argues that welfare services may replace social relations in providing support. Thus, the more public childcare slots become available, the more they will crowd out informal childcare by relatives and friends. Indeed, grandparents provide fewer hours of childcare in countries where the coverage of public daycare is higher (Esping-Andersen, 2009; Igel & Szydlik, 2011). Hence, I expect the positive effect of kinship networks on maternal employment to be stronger the lower public childcare coverage is (Hypothesis 3). This also means that kinship support should matter more for the employment decisions of western German and migrant mothers than for eastern German mothers because the supply of public childcare is much better in the east.

Alternatively, a reinforcing relationship between social support networks and public childcare also seems plausible. Some people in mothers' networks may be willing to help with childcare for a few hours, but not with full-time childcare on a regular basis. As outlined above, this applies especially to friendship networks. On its own, this support would be insufficient for maternal employment. But if this support is available in addition to public childcare, it may be a valuable supplement that eases mothers' decision to become employed. I thus hypothesize that the effect of friendship networks on maternal employment is stronger if friends are available in addition to public childcare (Hypothesis 4).

In sum, kinship networks are expected to facilitate both part-time and full-time employment (H1) and are needed especially when public childcare is unavailable (H3), which also means that they should be more important for western German and migrant mothers than for eastern German mothers. Friendship networks are expected to facilitate maternal employment when the amount of support needed is limited, either because mothers work part-time (H2) or because friendship networks supplement public childcare (H4).

Data and method

Data

My analyses are based on data from the German Socio-Economic Panel (SOEP) (Wagner, Frick, & Schupp, 2007). A unique feature of the SOEP is that it provides indicators on respondents' kinship and friendship networks in addition to detailed information on work and family life. Since 1984, the SOEP annually interviews all adult members of a sample of western German households. From the beginning, migrants from Turkey, Italy, Spain, Greece, and the (former) Yugoslavia were oversampled. In 1995, another migrant subsample was added to include more recent migrants. An eastern German sample was added in 1990, the year of German reunification.

My sample includes native western German and eastern German mothers, as well as migrant mothers from Turkey, Italy, Spain, Greece, and the (former) Yugoslavia who gave birth to at least one child between 1993 and 2009. If mothers had already given birth before 1993 or before they joined the SOEP, their subsequent births were nonetheless included in the analyses. The migrant sample also includes women born in Germany whose parents immigrated. Migrant mothers who lived in eastern Germany ($n = 3$) were excluded from the analysis. In total, the sample includes 1410 western German mothers, 528 eastern German mothers, and 409 migrant mothers.

Variables

The dependent variable measures the duration until mothers return to work for at least two subsequent months after the birth of a child. The variable is based on respondents' self-reported monthly employment status and distinguishes between full-time and part-time employment. As this paper focuses on mothers with preschool-aged children, mothers are followed for a maximum of 72 months after birth. Furthermore, the study only considers employment interruptions after the birth of the currently youngest child. I also stop following mothers when they move from eastern to western Germany or from western to eastern Germany within the period of observation, because they are too small in numbers to be considered an own comparison group and would otherwise confound the comparison proposed in this study.

Kinship networks are operationalized as an additive index of the number of grandparents, aunts, uncles, and other relatives of the child that live in the neighborhood. As alternative measures, two dummy variables indicate the presence of at least one grandmother and the presence of the maternal grandmother. As this information is only available for 1996, 2001, and 2006, previous research (Hank & Kreyenfeld, 2003) suggested to treat the variable as constant between 1993 and 1998, 1999 and 2003, and 2004 and 2009.

Friendship networks are measured by a scale ($\alpha = 0.67$) comprising how frequently the child's mother and her partner (a) meet with friends and neighbors and (b) help friends and neighbors. The single items are measured on a four-point scale. They were reversed so that range from 0 *never* to 3 *weekly* (with middle categories 1 *occasionally* and 2 *at least once a month*). As these items were not collected in 1993, 2000, 2002, 2004, and 2006, the average of the score from the previous and subsequent year was used for these years. The measure is lagged by one year to avoid the possibility of reversed causality, that is the possibility that nonemployed mothers maintain stronger ties to their friends and neighbors because they have more time available than employed mothers (see Blossfeld, 1998).

The indicators for kinship and friendship networks thus differ in that we know the size of the kinship network, but lack knowledge on the frequency of contact among kin, whereas for friends we know the intensity of contact but not the number of friends. Furthermore, we do not know whether the kin and friends in mothers' networks actually help with childcare. We assume that a positive relationship between these indicators and maternal employment indicates help with childcare, but other mechanisms such as the influence of support networks on social norms and expectations around motherhood are also possible. The measures are hence not ideal, but they are the best indicators available.

Descriptive statistics (shown in Appendix 1) reveal that access to kin in the neighborhood ranges from 1.4 among migrant mothers to 2 among eastern German mothers. Access to friendship networks follows the opposite pattern: Migrant mothers have the strongest ties to friends, followed by western German and eastern German mothers.

The supply of public childcare is measured per federated state (*Bundesland*) and year, which is the lowest level at which data were collected for the entire time period of this study. These data are provided by the Federal Statistical Office and distinguish between childcare slots for the under-threes and slots for children aged three to six. As the data are unavailable for some years, in lack of a more plausible alternative and for simplicity, I assume a linear development of the number of childcare slots for the years where no

official data are available. The results presented in this paper use the ratio of total childcare slots per 100 children, but additional analyses revealed that all results are robust when only the ratio of full-time slots is included.

The models control for indicators of the market productivity and home productivity (Leibowitz et al., 1992; Muszynska, 2004; Rønsen & Sundström, 2002). Education, accumulated work experience, and employment status three months prior to birth are indicators of the market productivity. Furthermore, a high regional unemployment rate (measured per federated state and year) can lower the wages obtained from working. The number of children, religiosity (measured as the frequency of church attendance), and net residual household income indicate the value of mothers time at home. Furthermore, the partner's participation in housework indicates whether mothers would bear a double burden if they became employed (Abendroth, van der Lippe, & Maas, 2012). Family policies such as parental leave can also alter the costs of staying at home. An indicator for the child's year of birth (prior to vs. after 2007) captures changes in the German parental leave regulations. In 2007, parental leave benefits switched from flat-rate payments within the first 24 months of the parental leave period to earnings-related payments for the first 12 months. Meanwhile, the duration of total job-protected parental leave remained three years. The models also include age at birth, age at birth squared, whether the mother is partnered (married or cohabiting) or single, and – for migrant mothers – country of origin (Turkey, southern EU, and the former Yugoslavia).

Methods

I use piecewise constant event history models for competing risks (Blossfeld, Golsch, & Rohwer, 2007) to analyze the length of maternal employment interruption after childbirth. Event history analysis models transitions from one state into another, in this case mothers' transition into full-time or part-time positions after a period of employment interruption following childbirth. It models the occurrence of a transition into employment as well as the duration of mothers' employment interruptions before returning to work, and estimates how these two components are affected by covariates of interest. To be precise, event history models estimate how covariates affect a mother's 'risk' of experiencing a transition into employment in month t conditional on having interrupted employment until month t . Specifying competing risk models allows for the simultaneous analyses of transitions to a full-time or part-time position.

As the models include two control variables that are measured at the state-level (regional availability of public childcare and regional unemployment rate), standard errors will be correlated within each state. In order to correct for this, standard errors are clustered by state. All analyses have been replicated using a Cox model instead of a piecewise constant model (Blossfeld et al., 2007), and the results proved to be robust.

All models are estimated separately for the three groups of mothers. In the first step, I test whether kinship and friendship networks are associated with maternal employment among the three groups (H1 and H2) and compare the effect of the entire kinship network to the effect of grandmothers. In the second step, I add interaction effects between the social network variables and public childcare coverage to the models. This tests whether the association between social networks and maternal employment depends on the availability of public childcare (H3 and H4).

Results

Table 1 displays the results of the piecewise constant models for competing risks. The numbers of transitions into full-time and part-time employment indicate that most western German and migrant mothers return to a part-time position, whereas eastern German mothers return to work full-time as often as part-time.

According to H1, kinship networks should facilitate maternal employment. The results indicate a positive effect of kinship networks on the full-time and part-time employment of western German mothers, though the effect on part-time employment is only marginally significant. Each additional kin increases the likelihood that mothers work part-time by 3%, and the likelihood that mothers work full-time by 6%. Mothers who have access to five kin are thus 16% ($e^{\ln(1.03)^5} - 1$) more likely to enter part-time employment than mothers without kin and 34% ($e^{\ln(1.06)^5} - 1$) more likely to enter full-time employment. But eastern German mothers with kinship networks are less likely to work full-time and no effect is found for migrant mothers. Whereas the high availability of public childcare in eastern Germany may explain why kinship networks do not support employment among eastern German mothers, the absence of an effect for migrant mothers is surprising because previous research on the countries of origin of migrant mothers stressed the great importance of kin, and in particular grandmothers, for maternal employment (Aycan & Eskin, 2005; Dimova & Wolff, 2011; Hrženjak, 2012; Leira et al., 2005).

Table 2 thus displays additional analyses, which test whether the presence of any grandmother (Model 1) or the maternal grandmother (Model 2) is related to mothers' return to the labor market. These additional results show that access to their own mothers has indeed a strong, positive effect on the employment transitions of migrant mothers. The likelihood to enter part-time employment increases by 37% if migrants' own mothers live in the neighborhood and the likelihood of full-time employment increases by 40%.

Among western German mothers, grandmothers also appear to play a key role for transitions into full-time employment, when long hours of childcare are required. Living near a grandmother increases the likelihood of full-time employment by 37%, which is roughly equal to the effect of five kin in the previous model. Yet, for transitions into part-time employment, the size of the kinship network is more important than the presence of a grandmother. Hence, whereas the employment transitions of migrants

Table 1. The effect of networks on maternal full-time and part-time employment: hazard ratios from the piecewise constant models.

| | West | | East | | Migrant | |
|----------------------|-------------------|-----------|-----------|-------------------|-----------|-------------------|
| | Part-time | Full-time | Part-time | Full-time | Part-time | Full-time |
| Kinship networks | 1.03 [†] | 1.06* | 1.06 | 0.93 [†] | 1.00 | 1.05 |
| Friendship networks | 1.22 [†] | 0.71* | 1.09 | 0.98 | 0.87 | 1.40 [†] |
| No. of subjects | 1410 | 1410 | 528 | 528 | 409 | 409 |
| No. of transitions | 578 | 157 | 148 | 142 | 117 | 45 |
| Time at risk | 31,518 | 31,518 | 11,315 | 11,315 | 11,686 | 11,686 |
| Log pseudolikelihood | -1249.26 | -618.05 | -315.61 | -311.82 | -283.73 | -116.07 |

Notes: All models control for six time periods, single motherhood, age, age squared, education, work experience, employment status prior to birth, income, religiosity, spousal participation in housework, the child's year of birth, availability of public childcare, and the regional unemployment rate.

[†] $p < .1$, * $p < .05$.

Table 2. The effect of grandmothers on maternal full-time and part-time employment.

| | M1: at least 1 grandmother | M2: maternal grandmother |
|--------------------|----------------------------|--------------------------|
| | HR (e^{β}) | HR (e^{β}) |
| West: Part-time | 1.17 | 1.10 |
| West: Full-time | 1.37*** | 1.49 [†] |
| East: Part-time | 1.27 | 1.25 [†] |
| East: Full-time | 0.98 | 0.58*** |
| Migrant: Part-time | 1.09 | 1.37** |
| Migrant: Full-time | 1.22 | 1.40 [†] |

Notes: All models control for six time periods, single motherhood, age, age squared, education, work experience, employment status prior to birth, income, religiosity, friendship networks, spousal participation in housework, the child's year of birth, availability of public childcare, and the regional unemployment rate.

[†] $p < .1$, ** $p < .01$, *** $p < .001$.

only depend on the presence of the maternal grandmother, the results for western Germany support Kreyenfeld and Hank's (2000) notion of patchwork childcare in which several relatives join in. The presence of the maternal grandmother also positively affects eastern German mothers' transitions into part-time employment. Yet surprisingly, full-time employment is less likely if eastern German mothers live close to their kin. Possibly, this is a selection effect: Women with higher career aspirations are more likely to move away from their hometown, and therefore less likely to live near their kin (see Lauterbach, 2004).

As displayed in Table 1, the availability of friendship networks only affects the employment transitions of western German and migrant mothers. A weakly significant effect suggests that Western German mothers who have close relationships with friends are more likely to work part-time, whereas they are less likely to work full-time than mothers who lack close friends. Mothers with an average score on friendship networks (1.86) are 45% ($e^{\ln(1.22)*1.86} - 1$) more likely to become employed part-time, but 44% ($e^{\ln(0.73)*1.86} - 1$) less likely to become employed full-time than mothers without friendship networks. This is in line with H2, which holds that friendship networks are only valuable if mothers require support for a limited amount of time. Migrant mothers, by contrast, are more likely to work full-time when they have access to friendship networks. The results for the control variables are displayed in Appendix 2.

Interactions between social support networks and public childcare

To test whether the association between social support networks and maternal employment depends on the availability of public childcare, I add an interaction effect between social support and public childcare to the model. For ease of interpretation, the interaction effects are displayed graphically. Figure 1 displays the effect with 95% confidence intervals of kinship networks across different levels of public childcare when all control variables are included in the model. Values above 1 indicate a positive effect of kinship networks on maternal employment at a given number of childcare slots per 100 children; values below 1 indicate a negative effect. For migrants, the presence of the maternal grandmother is used instead of the size of the kinship network, as this turned out to be a better indicator for kinship support among migrant mothers. As the availability of public childcare differs strongly between east and west Germany, gray bars mark the

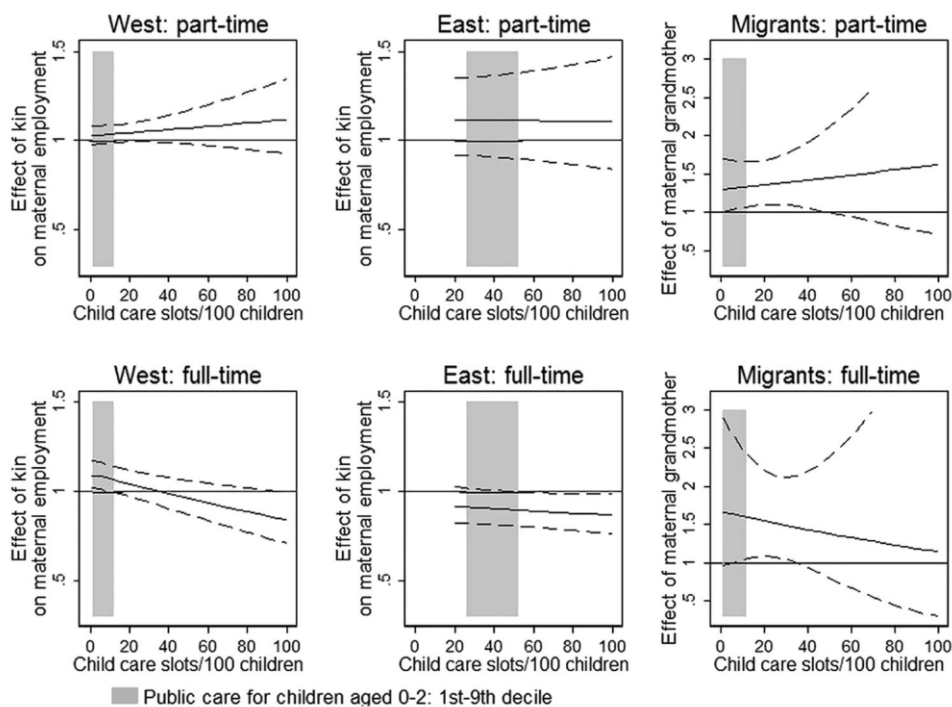


Figure 1. Interaction between kinship networks and public childcare in supporting maternal employment (effect and 95%-confidence intervals of kinship networks).

1st–9th decile of public childcare slots available (per state and year) for the three groups of mothers.

The results for transitions into full-time employment support H3, which states that access to kinship networks is most important when the supply of public childcare is low. Among western German mothers, the presence of kin is positively associated with maternal full-time employment when the supply of public childcare is below 20 slots per 100 children (95% confidence interval > 1). This is generally the case where childcare for the under-threes is concerned (see gray area for 1st–9th decile). Similarly, among migrant mothers, access to the maternal grandmother facilitates full-time employment when less than 35 slots per 100 children are available in public daycare. The threshold up to which kin have a positive effect is thus higher for migrants than for western German mothers. This is in line with the fact that migrant parents enroll their children in public childcare less often than natives, with a particularly pronounced gap in enrollment rates among the under-threes (Engels et al., 2011).

For eastern German mothers, we do not find a positive association between kinship networks and maternal employment irrespective of the supply of public childcare. Yet, we have to consider that more than 20 public childcare slots per 100 children were available in every eastern German state throughout the period of observation. As this is the threshold up to which kin support matters for maternal employment in western Germany, the lack of an effect of relatives in eastern Germany can be explained by the better availability of public childcare. For part-time employment, the effect of

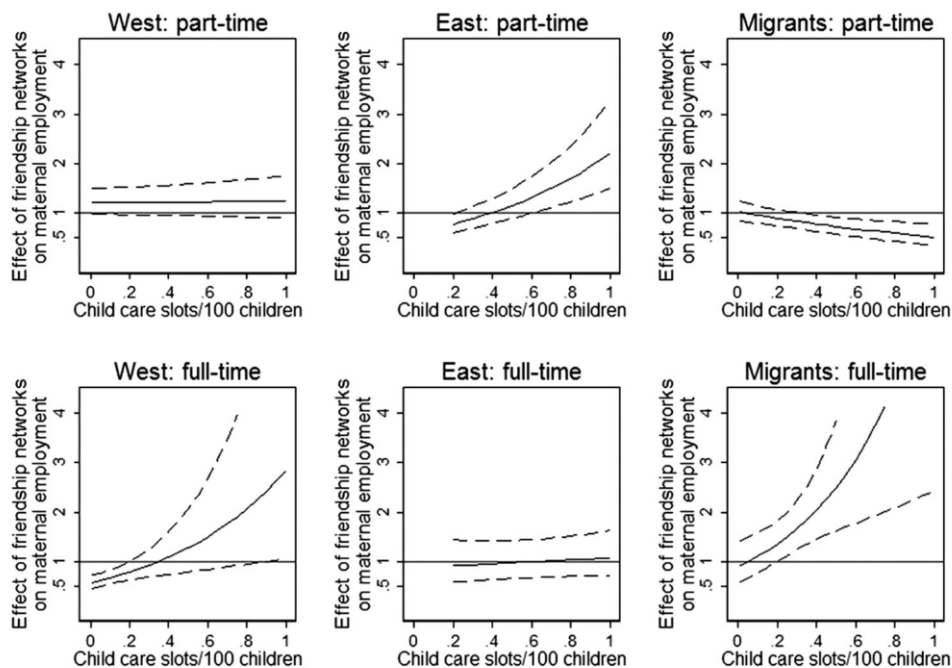


Figure 2. Interaction between friendship networks and public childcare in supporting maternal employment (effect and 95%-confidence intervals of friendship networks).

kinship networks does not differ between regions with high and low supply of public childcare.

Figure 2 displays how the effect of friendship networks varies according to the level of public childcare. As friends can only be expected to help with childcare for a limited amount of time, friendship networks should be of greater value if they are available in addition to public childcare, as specified by H4.

Among western German and migrant mothers, we find this reinforcing relationship for transitions into full-time employment: Friendship networks only have a positive effect on maternal full-time employment (95% confidence interval > 1) if access to public childcare is high. Migrant mothers appear to mobilize their friendship networks at lower levels of public childcare than western German mothers. A tentative explanation for this could be that migrants establish kinship-like ties with their friends when they lack real kinship ties in their country of residence (Foner, 1997). This may lead to stronger solidarity among friends. Alternatively, lower employment rates among the migrant population mean that migrants' friendship networks include more people who have time to provide childcare. Among eastern German mothers, friendship networks positively affect transitions into part-time employment when the supply of public childcare is high, but they are irrelevant for transitions into full-time employment.

Discussion and conclusion

Mothers face considerable career penalties if they interrupt employment for a longer period of time after childbirth. Therefore, they increasingly desire to combine work and

family. But a lack of adequate childcare can be a major barrier to maternal employment. Against this backdrop, this paper showed that western German and migrant mothers returned to work sooner if they had access to social support networks that can help with childcare. By contrast, social support had little effect on the employment decisions of eastern German mothers, who had better access to public childcare. This indicates that social support especially matters in an environment where public childcare is limited. Western German and migrant mothers returned to work sooner – on both fulltime and part-time positions – if they had access to kin. For both groups, kinship support had the strongest effect when public childcare was unavailable. Social support is hence crucial for mothers who want to return to work before their child's third birthday, as very few childcare slots are available for the under-threes. By contrast, kinship networks did not provide support for maternal employment in eastern Germany, where public childcare was more easily accessible.

Furthermore, the comparison of western German and migrant mothers hints that cultural differences also shape the relation between kinship support and maternal employment.

In line with Kreyenfeld and Hank's (2000) patchwork hypothesis, among western German mothers the size of the kinship network was more important than the presence of a grandmother for maternal employment. The employment transitions of migrant mothers, by contrast, were solely related to the presence of the maternal grandmother. Hence, migrant mothers in Germany continue to follow the pattern of mothers in their countries of origin (Aycaan & Eskin, 2005; Del Boca, 2002; Hrženjak, 2012; Leira et al., 2005).

Friendship networks only supported maternal employment when the amount of support required was limited. Friendship networks had a positive effect on maternal employment when they were available in addition to public childcare, but did not affect maternal employment on their own. Thus, whereas kinship networks and public childcare substitute for each other, friendship networks complement state support for maternal employment.

Among both western German and migrant mothers, the effect sizes of kinship support were somewhat larger for transitions into full-time employment than for transitions into part-time employment. Moreover, an interaction effect of social support and public childcare only emerged for transitions into full-time employment. Full-time employment is still uncommon for these two groups of mothers, and there is a widespread belief in western Germany that it is not good for young children if their mother works full-time (Goldstein & Kreyenfeld, 2011; Treas & Widmer, 2000). Furthermore, public childcare is often only available part-time. Therefore, mothers' decision to work full-time requires more social support than the decision to work part-time. In eastern Germany, by contrast, maternal full-time employment is much more common and accepted, and full-time public childcare is readily available. Therefore, eastern German mothers do not require additional support when they want to work full-time rather than part-time.

A drawback of this study is that the measures for support networks only provide information about the size of the kinship network and the intensity of contact with friends. This means that important information such as the employment status and other characteristics of the people in mothers' networks were not collected. The social network indicators may consequently underestimate the true effect of social support as some ties in mothers' networks are unavailable for help with childcare. Furthermore, we cannot be certain

whether the associations found by this study indicate causal effects. Qualitative analyses with more precise information on the ties in mothers' networks and on mothers' attitudes and decision-making processes among the three groups could further explore the causal link between social support networks and maternal employment (see e.g. Möser & Leonhäuser, 2014).

Despite these restrictions, adding the results for western German and migrant mothers to previous research suggests that social support networks play an important role for combining motherhood and career. First, social support positively affects the fertility of German mothers (Bühler, 2007; Hank & Kreyenfeld, 2003). Second, by encouraging mothers to return to work sooner and for longer hours, social support helps to reduce the career penalty of motherhood (Gangl & Ziefle, 2009) and prevents couples from switching to a more traditional division of housework (Grunow et al., 2007). This suggests that the role of social support networks in shaping life courses and work–family trajectories should receive further attention in future research.

However, increasing female employment and a rising age at retirement increase the chances that mothers' kin and friends will be working and therefore unable to help with childcare, and increased geographic mobility lowers the likelihood that mothers live near their kin. Hence, employed mothers will increasingly need state support with child care. We thus need further knowledge on the extent to which public childcare can compensate for these decreases in informal childcare. Next to the number of childcare slots available, important issues are the quality of public childcare and care gaps when the child is sick or the daycare center on holidays (see Compton & Pollak, 2011). Furthermore, flexible working hours may facilitate social support with childcare among friends.

In general, we need to think more deeply how social support varies across institutional and cultural settings. Previous research has established a positive effect of social support on a vast range of outcomes, such as health and well-being (Cohen, 2004; Heaney & Israel, 2008), career opportunities (Granovetter, 1995; Lin, 1999), and fertility (Bühler, 2007; Hank & Kreyenfeld, 2003; Thomese & Liefbroer, 2013). Yet so far, little comparative research has addressed how these effects are shaped by the contexts in which people live. This study showed that state support can either substitute or compensate social support for maternal employment. To what extent this also holds for other outcomes needs to be determined by future research.

Notes

1. Furthermore, divorce rates are lower in migrants' countries of origin than in Germany according to data from Eurostat, but I have no information on the divorce rates of migrant mothers in Germany.
2. In 2013, the situation improved as children aged one year or older now have the right to a place in public childcare. Yet, enrolment rates continue to be much higher in eastern than in western Germany (52% vs. 28% in 2015).

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributor

Mareike Bünning is research fellow at WZB Berlin Social Science Center, Germany. Her research focuses on the linkages between parenthood, family policies, and employment in Europe, especially Germany. Her recent work has been published in *European Sociological Review*, *Work, Employment and Society* and *European Societies*.

References

- Abendroth, A. K., van der Lippe, T., & Maas, I. (2012). Social support and the working hours of employed mothers in Europe. *Social Science Research*, 41, 581–597. doi:10.1016/j.ssresearch.2011.12.008
- Arpino, B., Pronzato, C., & Tavares, L. (2010). *All in the family: Informal childcare and mothers' labour market participation* (ISER Working Paper series no. 24). Colchester: Institute for Social and Economic Research, University of Essex.
- Aycan, Z., & Eskin, M. (2005). Relative contributions of childcare, spousal support, and organizational support in reducing work–family conflict for men and women: The case of Turkey. *Sex Roles*, 53, 453–471. doi:10.1007/s11199-005-7134-8
- Ayman, R., & Antani, A. (2008). Social support and work-family conflict. In K. Korabik, D. S. Lero, & D. L. Whitehead (Eds.), *Handbook of work-family integration: Research, theory, and best practices* (pp. 287–304). Amsterdam: Elsevier, Academic Press.
- Bengtson, V. (2004). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and Family*, 63, 1–16. doi:10.1111/j.1741-3737.2001.00001.x
- Blossfeld, H. P. (1998). A dynamic integration of micro-and macro-perspective using longitudinal data and event history models. In H. P. Blossfeld & G. Prein (Eds.), *Rational choice theory and large-scale data analysis*. Boulder, CO: Westview Press.
- Blossfeld, H. P., & Drobnič, S. (Eds.). (2001). *Careers of couples in contemporary societies: From male breadwinner to dual-earner families*. New York, NY: Oxford University Press.
- Blossfeld, H. P., Golsch, K., & Rohwer, G. (2007). *Event history analysis with Stata*. New York, NY: Lawrence Erlbaum.
- Büchel, F., & Spiess, C. K. (2002). Kindertageseinrichtungen und Müttererwerbstätigkeit-Neue Ergebnisse zu einem bekannten Zusammenhang [Public childcare and maternal employment. New insights into a known association]. *Vierteljahrshefte Zur Wirtschaftsforschung*, 71, 95–113. doi:10.3790/vjh.71.1.95
- Budig, M. J., & England, P. (2001). The wage penalty for motherhood. *American Sociological Review*, 66, 204–225. doi:10.1093/sp/jxs006
- Bühler, C. (2007). Soziales Kapital und Fertilität [Social capital and fertility]. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, Special Issue, 47, 397–419.
- Cohen, S. (2004). Social relationships and health. *American Psychologist*, 59, 676–684. doi:10.1037/0003-066X.59.8.676
- Coleman, J. S. (1994). *Foundations of social theory*. Cambridge, MA: Belknap Press.
- Compton, J., & Pollak, R. A. (2014). Family proximity, childcare, and women's labor force attachment. *Journal of Urban Economics*, 79, 72–90.
- Cooke, L. P., & Baxter, J. (2010). "Families" in international context: Comparing institutional effects across western societies. *Journal of Marriage and Family*, 72, 516–536.
- Correll, S., Benard, S., & Paik, I. (2007). Getting a job: Is there a motherhood penalty? *American Journal of Sociology*, 112, 1297–1339. doi:10.1086/511799
- Degenne, A., Lebeauc, M.-O., & Lemel, Y. (2004). Does social capital offset social and economic inequalities? Social capital in everyday life. In H. Flap & B. Volker (Eds.), *Creation and returns of social capital: A new research program* (pp. 51–73). London: Routledge.
- Del Boca, D. (2002). The effect of child care and part time opportunities on participation and fertility decisions in Italy. *Journal of Population Economics*, 15, 549–573. doi:10.1007/s001480100089

- Dimova, R., & Wolff, F. C. (2011). Do downward private transfers enhance maternal labor supply? Evidence from around Europe. *Journal of Population Economics*, 24, 911–933. doi:10.1007/s00148-010-0305-0
- Dressel, C., Cornelißen, W., & Wolf, K. (2005). Vereinbarkeit von Familie und Beruf [Work-family balance]. In W. Cornelißen (Ed.), *Gender Datenreport* (pp. 266–341). Munich: Federal Ministry of Family, Senior Citizens, Women and Youth.
- Engels, D., Köller, R., Koopmans, R., & Höhne, J. (2011). *Zweiter Integrationsindikatorenbericht erstellt für die Beauftragte der Bundesregierung für Migration, Flüchtlinge und Integration* [Second integration indicator report prepared for the Federal Government Commissioner for Migration, Refugees and Integration]. Berlin: Federal Government Commissioner for Migration, Refugees and Integration.
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Cambridge: Polity Press.
- Esping-Andersen, G. (2009). *The incomplete revolution: Adapting to women's new roles*. Cambridge: Polity Press.
- Flap, H. (2004). Creation and returns of social capital: A new research program. In H. Flap & B. Volker (Eds.), *Creation and returns of social capital: A new research program* (pp. 3–23). London: Routledge.
- Foner, N. (1997). The immigrant family: Cultural legacies and cultural changes. *International Migration Review*, 31, 961–974.
- Gangl, M., & Ziefle, A. (2009). Motherhood, labor force behavior, and women's careers: An empirical assessment of the wage penalty for motherhood in Britain, Germany, and the United States. *Demography*, 46, 341–369. doi:10.1353/dem.0.0056
- Goldstein, J., & Kreyenfeld, M. (2011). Has East Germany overtaken West Germany? Recent trends in order-specific fertility. *Population and Development Review*, 37, 453–472. doi:10.1111/j.1728-4457.2011.00430.x
- Granovetter, M. S. (1995). *Getting a job: A study of contacts and careers*. Chicago, IL: University of Chicago Press.
- Grunow, D., Schulz, F., & Blossfeld, H. P. (2007). Was erklärt die Traditionalisierungsprozesse häuslicher Arbeitsteilung im Eheverlauf: Soziale Normen oder ökonomische Ressourcen? [What explains the process of traditionalization in the division of household labor: Social norms or economic resources?]. *Zeitschrift Für Soziologie*, 36, 162–181.
- Hank, K., & Kreyenfeld, M. (2003). A multilevel analysis of child care and women's fertility decisions in western Germany. *Journal of Marriage and Family*, 65, 584–596. doi:10.1111/j.1741-3737.2003.00584.x
- Heaney, C. A., & Israel, B. A. (2008). Social networks and social support. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (pp. 189–210). San Francisco, CA: Jossey-Bass.
- Heckman, J. J. (1974). Effects of child-care programs on women's work effort. In T. Schultz (Ed.), *Marriage, family, human capital and fertility* (pp. 136–163). Cambridge, MA: UMI.
- Mržnjak, M. (2012). Hierarchization and segmentation of informal care markets in Slovenia. *Social Politics: International Studies in Gender, State & Society*, 19, 38–57. doi:10.1093/sp/jxr024
- Igel, C., & Szydlik, M. (2011). Grandchild care and welfare state arrangements in Europe. *Journal of European Social Policy*, 21, 210–224. doi:10.1177/0958928711401766
- Kreyenfeld, M., & Hank, K. (2000). Does the availability of child care influence the employment of mothers? Findings from western Germany. *Population Research and Policy Review*, 19, 317–337. doi:10.1177/0958928711401766
- Kurz, K. (1998). *Das Erwerbsverhalten von Frauen in der intensiven Familienphase* [Employment behavior of women in the intensive family phase]. Opladen: Leske+Budrich.
- Lakinska-Popovska, D., & Bornarova, S. (2004). Families in the Republic of Macedonia. In M. Robila (Ed.), *Families in Eastern Europe* (pp. 103–119). Amsterdam: JAI Press.
- Lauterbach, W. (2004). *Die multilokale Mehrgenerationenfamilie* [The multi-local multi-generation family]. Würzburg: Ergon.
- Leibowitz, A., Klerman, J. A., & Waite, L. J. (1992). Employment of new mothers and child care choice: Differences by children's age. *The Journal of Human Resources*, 27, 112–133.
- Leira, A., Tobío, C., & Trifiletti, R. (2005). Kinship and informal support: Care resources for the first generation of working mothers in Norway, Italy and Spain. In U. Gerhard, T. Knijn, & A. Weckwert (Eds.),

- Working mothers in Europe: A comparison of policies and practices* (pp. 74–96). Northampton, MA: Edward Elgar.
- Lin, N. (1999). Social networks and status attainment. *Annual Review of Sociology*, 25, 467–487. doi:10.1146/annurev.soc.25.1.467
- Milewski, N. (2010). *Fertility of immigrants: A two-generational approach in Germany*. Berlin: Springer.
- Möser, A., & Leonhäuser, I.-U. (2014). Too bustling to cook? Management of food provision in German family households with employed mothers. *International Journal of Home Economics*, 7, 36–53.
- Muszynska, M. (2004). *Employment after childbearing: A comparative study of Italy and Norway* (MPIDR Working Papers). Rostock: Max Planck Institute for Demographic Research.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1–24. doi:10.1146/annurev.soc.24.1.1
- Rønsen, M., & Sundström, M. (2002). Family policy and after-birth employment among new mothers: A comparison of Finland, Norway and Sweden. *European Journal of Population*, 18, 121–152. doi:10.1023/A:1015532305179
- Stack, C. B. (1975). *All our kin: Strategies for survival in a black community*. New York, NY: Harper & Row.
- Statistische Ämter des Bundes und der Länder. (2010). *Kinderbetreuung regional 2009* [Childcare at the regional level 2009]. Wiesbaden: Statistisches Bundesamt.
- Symeonidou, H. (1997). Full-time and part-time employment of women in Greece: Trends and relationships with life-cycle events. In H. P. Blossfeld & C. Hakim (Eds.), *Between equalization and marginalization: Women working part-time in Europe* (pp. 90–112). Oxford: Oxford University Press.
- Thomese, F., & Liefbroer, A. C. (2013). Child care and child births: The role of grandparents in the Netherlands. *Journal of Marriage and Family*, 75, 403–421. doi:10.1111/jomf.12005
- Treas, J., & Widmer, E. D. (2000). Married women's employment over the life course: Attitudes in crossnational perspective. *Social Forces*, 78, 1409–1436. doi:10.1093/sf/78.4.1409
- Wagner, G. G., Frick, J. R., & Schupp, J. (2007). The German Socio-Economic Panel Study (SOEP): Scope, evolution and enhancements. *Schmollers Jahrbuch*, 125, 139–169.
- Wellman, B., & Wortley, S. (1990). Different strokes from different folks: Community ties and social support. *American Journal of Sociology*, 96, 558. doi:10.2307/2781064
- Wenk, D., & Garret, P. (1992). Having a baby: Some predictions of maternal employment around child birth. *Gender & Society*, 6(1), 49–65. doi:10.1177/089124392006001004
- Wrohlich, K. (2008). The excess demand for subsidized child care in Germany. *Applied Economics*, 40(10), 1217–1228. doi:10.1080/00036840600771288
- Ziefle, A. (2004). Die individuellen Kosten des Erziehungsurlaubs [The individual costs of parental leave]. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie*, 56, 213–231. doi:10.1007/s11577-004-0032-1

Appendix 1

Descriptive statistics (means and standard deviations) of all explanatory and control variables as of year of birth.

| | West | | East | | Migrants | |
|------------------------------------|------|------|------|------|----------|------|
| | M | SD | M | SD | M | SD |
| Partnered | 0.92 | 0.28 | 0.81 | 0.39 | 0.93 | 0.25 |
| Single | 0.08 | 0.28 | 0.19 | 0.39 | 0.07 | 0.25 |
| Spouse housework ^a | 0.48 | 0.49 | 0.50 | 0.50 | 0.35 | 0.48 |
| Kinship networks ^b | 1.48 | 1.91 | 1.97 | 2.36 | 1.39 | 2.02 |
| Friendship networks ^c | 1.86 | 0.56 | 1.72 | 0.62 | 2.04 | 0.59 |
| Childcare slots per child aged 0–2 | 0.05 | 0.05 | 0.37 | 0.09 | 0.05 | 0.06 |
| Childcare slots per child aged 3–6 | 0.89 | 0.12 | 1.07 | 0.17 | 0.93 | 0.15 |
| Full-time slots per child aged 0–2 | 0.03 | 0.04 | 0.32 | 0.08 | 0.03 | 0.05 |
| Full-time slots per child aged 3–6 | 0.20 | 0.19 | 0.96 | 0.26 | 0.19 | 0.13 |

(Continued)

Continued.

| | West | | East | | Migrants | |
|---------------------------------------|-------|------|-------|------|----------|------|
| | M | SD | M | SD | M | SD |
| Basic education | 0.24 | 0.43 | 0.11 | 0.32 | 0.64 | 0.48 |
| Secondary education | 0.44 | 0.50 | 0.57 | 0.50 | 0.31 | 0.46 |
| Tertiary education | 0.32 | 0.47 | 0.32 | 0.47 | 0.05 | 0.23 |
| Work experience in years | 7.13 | 4.54 | 4.87 | 4.11 | 3.88 | 4.22 |
| Worked full-time before birth | 0.34 | 0.47 | 0.33 | 0.47 | 0.22 | 0.42 |
| Worked part-time before birth | 0.22 | 0.41 | 0.13 | 0.34 | 0.12 | 0.32 |
| Age at birth | 30.93 | 4.86 | 28.47 | 5.04 | 27.90 | 4.72 |
| 1 child | 0.42 | 0.49 | 0.48 | 0.50 | 0.34 | 0.48 |
| 2 children | 0.41 | 0.49 | 0.35 | 0.48 | 0.42 | 0.49 |
| 3+ children | 0.17 | 0.38 | 0.17 | 0.38 | 0.24 | 0.43 |
| Monthly HH-income 1000 € ^d | 2.35 | 1.26 | 1.77 | 1.06 | 1.96 | 1.03 |
| Church attendance ^e | 0.81 | 0.86 | 0.45 | 0.86 | 0.83 | 0.95 |
| Child born 2007–2009 | 0.11 | 0.31 | 0.15 | 0.36 | 0.08 | 0.28 |
| Regional unemployment rate | 9.16 | 2.38 | 17.83 | 2.27 | 9.23 | 2.58 |
| Turkey | | | | | 0.58 | 0.49 |
| Southern EU | | | | | 0.25 | 0.44 |
| Ex-Yugoslavia | | | | | 0.16 | 0.36 |

Notes: ^aSpouse housework: 0 = less than one hour per weekday, 1 = at least one hour per weekday.

^bNumber of kin living in the neighborhood.

^cFriendship networks: Frequency that mothers and their partners meet with and help friends ($\alpha = 0.67$).

^dMonthly household income: excluding mothers' wages.

^eChurch attendance: 0 = never, 3 = weekly.

Appendix 2

Determinants of mothers' part-time and full-time employment: full table, hazard-ratios.

| | West | | East | | Migrant | |
|-----------------------------------|-------------------|-------------------|-----------|-------------------|-----------|-------------------|
| | Part-time | Full-time | Part-time | Full-time | Part-time | Full-time |
| Kinship networks | 1.03 [†] | 1.06* | 1.06 | 0.93 [†] | 1.00 | 1.05 |
| Friendship networks | 1.22 [†] | 0.71* | 1.09 | 0.98 | 0.87 | 1.40 [†] |
| Basic education (ref.) | 1 | 1 | 1 | 1 | 1 | 1 |
| Secondary education | 1.37*** | 1.06 | 3.83 | 1.78 | 1.26 | 0.96 |
| Tertiary education | 2.43*** | 1.81 [†] | 5.80* | 2.29 [†] | 1.62 | 1.04 |
| Work experience ^b | 1.07*** | 1.04 | 1.06* | 1.08** | 1.01 | 1.26*** |
| Full-time bf. birth | 1.56*** | 4.91*** | 2.26*** | 1.89*** | 1.35 | 4.99*** |
| Part-time bf. birth | 3.36*** | 0.64 | 3.27*** | 0.61 [†] | 6.42*** | 0.48 |
| Partnered (ref.) | 1 | 1 | 1 | 1 | 1 | 1 |
| Single | 1.05 | 0.60 | 0.55 | 1.67 | 0.81 | 1.59 |
| 1 child (ref.) | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 children | 0.97 | 1.26 | 1.04 | 0.86 [†] | 0.64*** | 0.82 |
| 3+ children | 0.97 | 1.29 | 0.83 | 0.33*** | 0.79 | 0.83 |
| ln(household income) ^c | 0.87 | 0.47*** | 1.12 | 0.97 | 1.02 | 0.16*** |
| Church attendance | 0.90 [†] | 0.84 | 1.15* | 0.92 | 0.79* | 0.53* |
| Spouse housework ^a | 1.04 | 1.45* | 1.35 | 1.15 | 1.12 | 1.59 |
| Age at birth | 1.06 | 1.16 | 0.79 | 0.87 | 1.40** | 0.73 |
| Age at birth ² | 1.00 | 1.00 | 1.00 | 1.00 | 0.99** | 1.00 |
| Birth 2007–2009 | 0.52*** | 1.81*** | 1.05 | 1.47 | 0.60 | 0.44 |
| Public childcare ^d | 2.09 | 3.22 | 0.96 | 6.66 [†] | 2.30 | 1.23 |
| Reg. unemployment | 0.96** | 1.01 | 1.09** | 1.08*** | 0.94 | 0.99 |
| Turkey (ref.) | | | | | 1 | 1 |
| Southern EU | | | | | 1.43** | 0.66 |
| Ex-Yugoslavia | | | | | 1.18 | 1.03 |
| Months 1–12 (ref.) | 1 | 1 | 1 | 1 | 1 | 1 |

(Continued)

Continued.

| | West | | East | | Migrant | |
|----------------------|-----------|-----------|-----------|-----------|-------------------|-------------------|
| | Part-time | Full-time | Part-time | Full-time | Part-time | Full-time |
| Months 13–24 | 0.92 | 0.28*** | 2.47*** | 2.29* | 0.96 | 0.80 |
| Months 25–36 | 1.44** | 0.54* | 2.66*** | 3.63*** | 1.60 [†] | 1.71 [†] |
| Months 37–48 | 0.84 | 0.20 | 2.29* | 0.63 | 0.74 | 2.10 |
| Months 49–60 | 0.76 | 0.29 | 2.27 | 0.95 | 0.42 | 0.36 |
| Months 61–72 | 0.25* | 0.23* | 2.41 | 0.61 | 0.79 | 0.65 |
| No. of subjects | 1410 | 1410 | 528 | 528 | 409 | 409 |
| No. of transitions | 578 | 157 | 148 | 142 | 117 | 45 |
| Time at risk | 31,518 | 31,518 | 11,315 | 11,315 | 11,686 | 11,686 |
| Log pseudolikelihood | –1249.26 | –618.05 | –315.61 | –311.82 | –283.73 | –116.07 |

Notes: ^aPartner does at least one hour of housework per weekday.

^bIn years.

^cExcluding mothers' own earnings.

^dPlaces per 100 children.

[†] $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$.