

Long-Distance Moves and Employment of Women in Dual-Earner Couples in Britain and Germany

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Abstract

Chances are high that not both partners in dual-earner couples stay in employment after long-distance moves, because jobs are distributed heterogeneously in space. Previous research shows that women are more likely to leave employment than men. I extend this literature by adding evidence from Germany and by comparing the effects of moves in Britain, West and East Germany with data from the BHPS and the SOEP. My results show that women in dual-earner couples are more likely to leave employment after moves in Britain and West Germany compared to stayers, while women in East Germany are not adversely affected.

JEL Classification numbers: R23, J61, J16

1. Introduction

Long-distance moves are often occupationally motivated and individuals are assumed to move to job opportunities to increase their life-time earnings (Becker, 1995, 53). Individuals in dual-earner couples are constrained in their mobility, as both careers have to be considered in the decision of whether and where to move. It is unlikely that both partners will receive equally qualified job offers at a new location at the same time, because job opportunities are dispersed in geographical space and job offers emerge at relatively random

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times (Mincer, 1978). Therefore, long-distance moves can be expected to have divergent effects on the employment of both partners.

Previous literature shows that long-distance or job-motivated moves of couples affect partnered women's labour market participation negatively, on average (e.g., Taylor, 2007; Boyle/Feng/Gayle, 2009; Blackburn, 2010). This negative effect is mostly stronger for partnered women than for partnered men. Past research also shows significant gender differences in income returns of moves (e.g., Nisic, 2010). The differences between women and men remain significant in most cases when controlled for both partners' human capital, occupational position, relative resources and family status. The findings suggest that norms about gender-appropriate behaviour affect couples' decisions of whether and where to move. Traditionally, it is gender-appropriate for men to be active in the labour market, while women are supposed to be homemakers and these gender roles are reflected in the divergent effects of moves on employment (e.g., Bielby/Bielby, 1992; Jürges, 1998; Jürges, 2006; Cooke, 2008). Disruptions in employment after moves seem to be rather short-lived (Clark/Withers, 2002), but still long-term consequences of these disruptions may be severe, e.g., with regard to pension rights (Taylor, 2007).

The conditions for female labour market participation diverge across countries due to differences in tax, welfare and family policies and norms about gender roles. These conditions can be expected to affect the importance of women's employment in couples' decision to move. For example, women may be more likely to leave employment in countries in which female labour income is regarded as supplementary, on average. Therefore, one can expect the effect of long-distance moves on women's careers to vary by country, but there are few comparative studies of this issue and these studies only consider the US and Britain. Some comparative research finds British women to be more likely to leave employment after moves compared to women in the US (e.g., Boyle et al., 2002), while other studies find no significant differences across countries (e.g., Boyle et al., 2001). No research has examined the effect of long-distance moves on the employment of partners in German dual-earner couples or has compared it to effects in Britain and the US. The latter comparison would be especially interesting, because ample typologies of countries exists in which the Anglo-American countries and Germany are considered to belong to different families of nations. For example, Britain is considered a liberal welfare regime which supports individual freedom, while Germany is considered a conservative welfare regime committed to traditional forms of family (Esping-Andersen, 1990, 77ff; Ostner/Lewis, 1995). In Germany, gender role attitudes in the East and West differ, on average, due to the stronger labour market integration of women in the former socialist regime in the East (see next section). To close these gaps, this paper tackles the following research questions: 1) Are West and East German women in dual-earner couples more likely to leave employment after long-distance moves than men? 2) Are gender differences in

West and East Germany similar to gender differences in Britain? To answer these questions, I briefly describe the contexts in Britain, West and East Germany (Section 2). I then describe my data, measurement and empirical strategy (Section 3). I present my results in Section 4, before I return to my research questions in Section 5.

2. Institutional Context

Germany is characterized by an extensive family policy which favours a traditional division of labour in the household, i.e., women are supposed to prioritise unpaid house- and care work (Ostner/Lewis, 1995). The traditionalisation of gender roles is consolidated by manifold institutional design features. For example, public childcare for children is more extensive in Germany than in Britain and provision is better in East than West Germany, but still childcare is limited and public attitudes towards external childcare for young children are negative (Sainsbury, 1999). In addition, couples are taxed jointly which also undermines women's labour participation (Apps/Rees, 2005). Average gender attitudes differ between East and West Germany. Treas/Widmer (2000, 1421) categorise East Germany as having a "work oriented" gender ideology, where attitudes are more favourable for working mothers than in other countries. West Germany belongs to the cluster of countries with "family accommodating" gender ideology, where mothers of young children are expected to stay home and mothers of school-age children are expected to work only part-time (Treas/Widmer, 2000, 1422).

Britain is characterized by rudimentary family policies (Ferrarini, 2006, 13). While female labour participation is not actively supported, participation is also not hindered by policy incentives as in Germany. The tax burden for singles relative to married couples has been reduced and family members are taxed individually since 1991. Tax regulations facilitate two-earner couples (Apps/Rees, 2005; Sainsbury, 1999). The British welfare state – contrary to the German case – is not committed to the support of the family as such, e.g., parental leave is very limited (Ruspini, 1998). Public childcare is weakly developed in Britain compared to Germany and most parents must privately organise additional childcare, especially for under 3 years old children (Sainsbury, 1999; Lewis et al., 2008). Britain is categorised as having a prevalent "family accommodating" gender ideology similar to West Germany (Treas/Widmer, 2000, 1422). Due to the slightly higher labour market integration of British women and less gendered family policies, I expect long-distance moves to affect women's employment less adversely in Britain than in West and East Germany. I also expect West German women to be more likely to leave employment after moves than East German women due to the more egalitarian gender attitudes in the latter context.

3. Data, Measurement and Empirical Strategy

To analyse changes in careers of partners in dual-earner couples after long-distance moves, longitudinal data must be used. I draw my data for Germany from the Socio-Economic Panel Study (SOEP) and for Britain from the British Household Panel Survey (BHPS). My analytic sample consists of data for the years 1991 to 2008. I only consider stable couples, i.e., couples that live together at two subsequent interviews, in which one partner is the head of the household. As I focus on dual-earner couples, I only include couples in which both partners work more than 10 and less than 81 hours per week at the time of the interview. I only include couples in which both partners are at least 20 years old and not older than 55 years, because these respondents are in their prime working age. I exclude self-employed respondents and respondents with a second job because of problems measuring their work hours.

My dependent variable *leaving employment* is binary and coded 1 if the respondent is unemployed, inactive or in education at the next interview and coded 0 if the respondent is still in employment or in other activities, e.g., maternity leave, at the next interview. The independent variable in the present analysis measures *long-distance moves* and is coded 1, if respondents move across borders of one of 413 counties in Germany or one of 278 Local Authority Districts (LADs) in Britain. The variable is coded 0 if respondents do not move or move within county or LAD borders. As my variable of long-distance moves only measures whether respondents relocate across administrative borders, this proxy may not adequately capture the actual distance of moves. The SOEP does not provide data on actual moving distances before 2001. Additional analyses with the actual moving distance support the results presented here and are available from the author upon request. Several control variables such as age, educational attainment and occupational position are included in the multivariate analysis.

I use multivariate methods that account for intra-couple correlation to model the dependent variable leaving employment, namely actor-partner interdependence models (APIMs) in a logistic multi-level regression framework (Kenny/Kashy/Cook, 2006, 173ff). Dyadic data with several observations over time can be characterised as multi-level data where individual-year observations are at the first level, individuals at the second level and couples at the third level. As I expect differences between women and men in the effects of moves on careers, I follow the strategy of Raudenbush et al. (1995) and include separate intercepts for women and men in my model. I allow variation of these intercepts between couples and I allow correlation of these random effects within couples. In addition, I fully interact these intercepts with all dependent variables in the model. These interactions result in two different coefficients for each variable – one for women and one for men.

4. Results

Descriptive Findings

Table 1 shows the average rate of individuals leaving employment for women and men in dual-earner couples by mover status in Britain, West and East Germany, conditional on being employed at t . West and East Germany refer to the current region of residence. In Britain and West Germany, women in dual-earner couples that stay are significantly more likely than men to leave employment until $t+1$ and become unemployed, inactive or enter education. About 4 per cent of British women leave employment while only 2 per cent of British men do so. In West Germany, 4 per cent of women and 3 per cent of men in dual-earner couples leave employment until $t+1$, on average. In East Germany, female and male stayers are equally likely to leave employment. With the exception of East German men, long-distance movers are more likely to leave employment, but the differences by mover status are only statistically significant for women in Britain and West Germany. For British women, the proportion of those leaving employment more than triples for movers compared to stayers. About 13 per cent of female long-distance movers are no longer employed after the move. This share is significantly higher compared to the share of British men. In West Germany, about 9 percent of female long-distance movers are no longer employed after a long-distance move. I do not find a significant difference in the chances to leave employment after moves between West German women and men. In East Germany, about 11 per cent of female movers leave employment, while only 2 per cent of male movers are no longer employed. Due to the small number of observed moves, this substantial difference is not statistically significant. East German men have a lower average risk of leaving employment after long-distance moves, but again the difference is not statistically significant.

The descriptive findings suggest that long-distance moves of dual-earner couples are more disruptive for women's careers than for men's careers. While men continue to work in the same job or change to a new job quickly, a considerable share of women leave employment after moves. Thus, moves of dual-earner couples seem to take place after the male partner received a job offer for the new location. For women in dual-earner couples, moves often seem to be speculative, i.e., they do not have a job offer before the move.

Table 1

Proportion Leaving Employment and Number of Long-Distance Moves

Gender by context	Proportion leaving employment			N moves
	Stayer		Mover	
Britain				
Women	0.04***	###	0.13***	368
Men	0.02		0.03	364
West Germany				
Women	0.04**	#	0.09	215
Men	0.03		0.05	215
East Germany				
Women	0.07		0.11	80
Men	0.06		0.02	81

Data: BHPS wave 1–18, SOEP v26 wave 8–25 (weighted).

Note: Only dual-earner couples. Difference between women and men: *** significant at 0.1% two-tailed, ** significant at 1%, * significant at 5%. Difference between stayer and mover: ### significant at 0.1% two-tailed, ## significant at 1%, # significant at 5%.

Multivariate Findings

Table 2 shows the estimation results for the APIM estimated in a logistic regression framework. For the sake of parsimonious reporting, coefficients for women and men are presented in two separate columns; however they are estimated in one pooled model. I test for each pair of coefficients, if significant gender differences exist. The substantially interesting variable measures the occurrence of long-distance moves which is interacted with dummies for West and East Germany. The main effect of long-distance moves indicates that women's odds of leaving employment are about 4.0 ($\approx e^{1.376}$) times higher in Britain if they move long distances compared to staying put and their chances to leave employment increase by about 8 percentage points. This is significantly different from having no effect at the 99.9-% confidence level. For men, the odds of leaving employment after long-distance moves are about 1.8 ($\approx e^{0.568}$) times higher compared to male stayers in Britain and this is not significantly different from having no effect. The difference between the average marginal effects (AMEs) of long-distance moves for women and men is significantly different from 0 at the 95-% confidence level in Britain. Thus, women are more likely to leave employment after long-distance moves than men and than women that stay in Britain. Men are not more likely to leave employment if they move compared to staying.

Table 2

Actor-Partner Interdependence Model of Leaving Employment

	Model 1				
	Women			Men	
	Coeff.	AME		Coeff.	AME
West Germany ^a	-0.754*** (-3.67)	-0.018*** (-3.96)		-0.346 (-1.25)	-0.009 (-1.39)
East Germany ^a	0.248 (1.18)	0.007 (1.10)		0.719** (2.58)	0.026* (2.03)
Long-distance move ^b	1.376*** (6.90)	0.078*** (4.36)	#	0.568 (1.60)	0.020 (1.27)
West*Move ^c	-0.278 (-0.84)	0.027* (2.42)		0.385 (0.79)	0.027 (1.73)
East*Move ^d	-0.925* (-1.96)	0.015 (0.77)		-0.985 (-1.34)	-0.015 (-0.64)
Control variables ^e			yes		
Overall intercept	-3.702*** (-15.86)			-3.837*** (-12.45)	
Random effects					
Variance Intercepts	0.987*** (6.73)			1.304*** (6.08)	
Covariance Intercepts			0.570*** (5.07)		
Observations			66,968		
Individuals			15,678		
Couples			8,376		
LL			-10,086.72		

Data: BHPS 1–18, SOEP v26 wave 8–25 (unweighted).

Note: Multi-level logistic regression model with random intercepts, binary dependent variable: left employment between t and t+1 (coded 1), otherwise (coded 0); unstandardised coefficients, z statistics in parentheses; *** significant at 0.1% two-tailed, ** significant at 1%, * significant at 5%; difference between average marginal effects (AMEs) of woman and men: ### significant at 0.1% two-tailed, ## significant at 1%, # significant at 5%; ^a: AME for stayers, ^b: AME of move in Britain, ^c: AME of move in West Germany, ^d: AME of move in East German. ^e: Controls include age, age squared, marital status, children in household, home owner, educational attainment, continuous work history, occupational position, time with employer, permanent position, work hours, Southeast England, and country-specific period dummies. All individual-level variables are also included for respondents' partners.

The main effect of West Germany for women shows that female stayers in this context are less likely to leave employment than in Britain, while West German, male stayers do not differ significantly from British men. The interaction effects for West Germany and long-distance moves indicate no statistically significant differences in the chances to leave employment between women

and men in Britain compared to West Germany. The AMEs for West Germany show that women's chances to leave employment are about 3 percentage points higher if they move long-distances compared to stayers which is considerably lower than for British women. For men, the AMEs of long-distance moves on the probability to leave employment differ only modestly between West Germany (0.027) and Britain (0.020).

The main effects for East Germany suggest that female and male stayers in this context are more likely to leave employment than in Britain. To the contrary, the interaction effects for East Germany and long-distance moves evince that female and male movers in East Germany are less likely to leave employment than movers in Britain. This difference is only statistically significant for women. Female long-distance movers in East Germany have only a 2 percentage points higher chance to leave employment than comparable stayers, which is substantially lower than the AME for women in Britain. Men in East Germany are slightly *less* likely to leave employment if they move compared to stayers. However, the AMEs for movers in East Germany are not statistically significant at conventional levels.

The effects of long-distance moves are controlled for individuals' human capital, their occupational positions, job histories, family statuses, regions, country-specific period effects, and characteristics of their partners. The other variables in the model behave as expected and I do not discuss them further. The findings are also controlled for unobserved, time-constant individual characteristics that affect the likelihood to leave employment and for the correlation of these characteristics between partners by including random intercepts and allowing correlation of these intercepts in couples. The estimated variance of these random effects, which is highly significantly different from 0, supports the assumption that it is important to control for these unobserved characteristics. In future research, the gender gap in the risk of leaving employment in Britain may be further decomposed by considering relative resources of partners, gender role attitudes in couples and structural constraints in labour markets (Boyle et al., 2009).

5. Discussion

In this paper, I analyse the effects of long-distance moves on employment of women and men in dual-earner couples in Britain, West and East Germany. With regard to my research questions, my findings provide evidence that British women are more likely to leave employment after long-distance moves than female stayers and male movers in accordance with past literature. The negative effect of long-distance moves on employment is about 4 times as high for women than for men in Britain. My results suggest that women in West Germany are also more likely to leave employment if they move compared to fe-

male stayers, but I do not find clear evidence for significant gender differences in the effects of long-distance moves on employment. For East Germany, I neither find evidence that female movers are more likely to leave employment than female stayers nor that they are more likely to leave employment than male movers.

My findings do not support the expectations formulated in Section 2. Gender differences are strongest in Britain and weakest in East Germany, while I expected the differences to be strongest in West Germany and weakest in Britain. These findings may suggest that differences in average gender role attitudes in the three examined contexts mediate the effect of long-distance moves on couples' decision of whether and where to move stronger than expected. More egalitarian attitudes in East Germany compared to the other two contexts may increase the probability for couples to consider both careers in their mobility decision. Gender role attitudes may also explain the unexpectedly small gender gap in West Germany: Dual-earner couples in West Germany may be more selective than in Britain and the difference in gender role attitudes between dual-earner and male-breadwinner couples may be stronger in West Germany than in Britain. Due to more egalitarian gender role attitudes in dual-earner couples in West Germany, women may be less adversely affected by moves than women in Britain. These issues will be further examined in a forthcoming paper that studies the effect of long-distance moves on leaving employment in more detail than it is possible here.

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