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This publication is part of the Special Collection on “Finding Work-Life Balance: History, Determinants, and Consequences of New Bread-Winning Models in the Industrialized World,” organized by Guest Editors Trude Lappegård, Fran Goldscheider, and Eva Bernhardt.

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Family migration in a cross-national perspective: The importance of within-couple employment arrangements in Australia, Britain, Germany, and Sweden

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Abstract

OBJECTIVE

Migration rates of dual-earner couples are lower than those of male-breadwinner couples. We revisit this issue using a cross-national comparative perspective and examine heterogeneity in the role of female employment in couple relocations. We propose a theoretical framework in which national levels of support for female employment and normative expectations about gender roles act as moderators of the relationship between couple type (i.e., dual-earner and male-breadwinner) and family migration.

METHODS

We deploy discrete-time event history analyses of harmonised longitudinal data from four large-scale datasets from Australia, Britain, Germany, and Sweden, covering the 1992–2011 period.

RESULTS

Consistent with prior research, we find that male-breadwinner couples migrate more often than dual-earner couples in all countries, suggesting that traditional gender structures affecting family migration operate across very different contexts. We also find cross-country differences in the estimated effects of different sorts of absolute and relative partner resources on family migration.

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CONCLUSIONS

We take our results as preliminary evidence that national contexts can serve as moderators of the relationship between within-couple employment arrangements and family migration decisions.

CONTRIBUTION

Our study contributes to family migration literature by illustrating how cross-national comparisons are a valuable methodological approach to put prevailing micro-level explanations of the relationship between female employment and family migration in context.

1. Introduction

In post-industrialized countries gender plays an important role in the determination of couples' long-distance residential relocations within national boundaries, or family migrations. Typically, men initiate family migrations to improve their work careers, while women follow their partners and experience negative impacts on their employment and earnings (Boyle et al. 2001; Cooke 2003; McKinnish 2008). Given that men's careers tend to be prioritized in family moves, it is not surprising that traditional male-breadwinner couples (i.e., couples with a male breadwinner and a female homemaker) are overrepresented amongst migrant couples (Nivalainen 2004; Tenn 2010). Much of the existing literature explains this pattern by building on the degree to which women's new work roles, resulting from increasing gender equality and portrayed in the dual-earner couple model, restrict family migration. When women also pursue careers outside the family home, decisions about whether or not to undertake family migration become more difficult. Hence, policy efforts devoted to support female employment and gender egalitarianism may be partially responsible for the steady declines in family migration observed in many post-industrialized countries during the last decades, restricting the potential for within-country population redistribution (United Nations 2013).

To date, most studies on family migration have restricted themselves to the study of a single country (Cooke et al. 2009), with larger debates in the field ignoring the fact that discrepancies in study results might be partly due to differences in the study context. This is limiting, since labour markets, state policies, and cultural norms have the potential to enhance or alleviate gender inequalities that likely affect family migration decisions. In fact, a prolific strand of international comparative research has unveiled a high degree of heterogeneity across countries in levels of female employment and types of gender inequality at work and at home, as well as diversity in

the impacts of these social environments on life-course events (Cooke and Baxter 2010).

In this paper we adopt a cross-national comparative approach to examine similarities and differences in couples' propensity to undertake long-distance relocations. Our goal is to assess cross-national variation in the ways in which within-couple employment arrangements, and in particular the employment status of the female partner, affect couples' propensity to relocate.⁵ Our theoretical framework combines emerging cross-national literature on the effects of female employment on demographic behaviour with existing micro-level explanations of family migration. Our empirical analysis examines the micro-level associations between within-couple employment arrangements and family migration in Australia, Britain, Germany, and Sweden. We deploy discrete-time event history analyses of harmonized, nationally representative, panel datasets covering the 1992–2011 period. Our results contribute to the debate about how women's new economic role influences household mobility decisions.

2. Theoretical framework

2.1 Previous literature

Dual-earner couples are less likely to migrate than couples comprising a male breadwinner and a female homemaker. This phenomenon was the focus of much scholarly attention in the early family migration literature. Early studies in the United States attributed declining levels of inter-state family migration to the large increase in female labour force participation (especially for mothers and married women) that took place after World War II (Long 1974; Da Vanzo 1976). Under the umbrella of human capital theory, cost-benefit models for family migration became popular. These postulate that factors such as the education, skills, earnings, and career prospects of the leading spouse are associated with family migration, with families deciding to move when there are absolute (net) gains in income for the household as a whole (Mincer 1978). More recent theories have considered spouses as bargaining actors, acknowledging that relocation decisions are more complex. The relative gains of the spouse who contributes more resources to the household, or has more power in the relationship, might trigger relocations even if no net income gains for the household are attained (Lundberg and Pollack 2003).

⁵ While others have previously examined cross-national differences in overall internal migration rates, and how such differences relate to macro-level factors (Rees et al. 2000; UN 2013), this is not the focus of this research.

Although these theorisations are *a priori* neutral on the role of gender (gender-symmetric perspective), the researchers were aware of the endemic gendered divisions of household labour in industrialized societies. They assumed traditional couple specialization to be a form of equilibrium that ensured stability and predictability: men were expected to specialize in paid work and thus lead family migrations, while women were expected to specialize in domestic work and follow their partners in family migrations – being often referred to as “tied migrants” or “trailing wives” (Cooke 2001). Therefore, as partnered women gain more labour market resources (e.g., education, work experience, and earnings) and gender specialization within couples weakens, absolute household benefits from family migration decrease and women’s ability to influence family migration decisions increases, for example, by enhancing their ability to veto unfavourable relocation proposals. This explains why dual-earner couples are less mobile than other couple types (and increasingly more so).

Gender-symmetric perspectives on family migration have nevertheless been criticised for being unable to explain why men continue to lead family migrations despite women’s progressive accumulation of labour market resources. Challenging earlier theoretical perspectives, research found that men’s but not women’s labour market resources were important determinants of family migration decisions (Duncan and Perruci 1976; Lichter 1983; Boyle, Feng, and Gayle 2009). This suggests that mechanisms other than spousal resources are at play, with gender ideology and gendered expectations being proposed as moderators of the association between female employment and family migration (Bielby and Bielby 1992; Lersch 2016). Partnered individuals who hold egalitarian gender ideologies or are in couples with egalitarian gender divisions of labour attribute more importance to the socioeconomic resources of the female spouse when making household decisions – including the decision to migrate – than partnered individuals who hold traditional gender ideologies or are in couples with traditional gender divisions of labour. It follows that dual-earner couples’ lower migration rates will not only be the product of spousal resources but also of the differential valuation of such resources in dual-earner and male-breadwinner couples. Yet, gender roles change over the life course, often associated with the experience of parenthood leading to decreases in paid work and increases in domestic work among women (Baxter, Hewitt, and Haynes 2008; Boeckmann, Misra, and Budig 2015). In this regard, research shows that the worsening of female work careers after family migration is related to fertility episodes (Cooke 2001; 2003; Cooke *et al.* 2009; Brandén 2014). Thus, the gendering of family roles that often accompanies the birth of children contributes to explaining why male-breadwinner couples move more often.

2.2 Structural perspectives and early cross-national research

To date, empirical support for the different micro-level explanations outlined above is partial and mixed. Some of these differences likely emerge due to divergences in the research design of existing studies. Additionally, this field of research has also been criticised for failing to pay attention to the broader context of opportunities that channel gender inequality in family migration decisions (Halfacree 1995). An incipient literature has begun to question the role of occupational structures and regional contexts of opportunity in shaping the migration behaviour of family households (Nisic 2009; Shauman 2010; Brandén and Ström 2011; Perales and Vidal 2013). Analysing Swedish data, Brandén (2013) finds that the fact that men's education affects family migration decisions more than women's is due to a higher concentration of women in occupations with low wages and career potential. Using British data, Perales and Vidal (2013) show that gender asymmetries in the impact of spousal resources on family migration decisions are channelled by structural inequalities in the labour market (such as occupational sex-segregation). In Germany, Nisic (2009) finds that the employment outcomes of women who migrate following their partners depend on the labour market opportunities in the origin and destination regions. Altogether, these findings suggest that gender-based labour-market inequalities (and spatial variation in these) influence how men's and women's capabilities affect the decision to relocate, as well as the consequences that relocations have on women's work outcomes. Hence, the difference in family migration rates between male-breadwinner and dual-earner couples may vary across regional and national contexts.

Given the relative importance of opportunity contexts in shaping migration decisions, it is surprising that little research has been devoted to examining cross-national variation in family migration patterns and outcomes. The best example of systematic cross-national research in this area comes from a collection of publications by Boyle, Cooke, and colleagues, in which census microdata from the early 1990s was used to compare family migration outcomes in Britain and the United States (Boyle et al. 1999, 2001, 2003; Cooke 2003, Cooke et al. 2009). While their results confirm the applicability of existing theories of family migration to more than one country, their analyses does not yield noteworthy cross-country differences. Arguably, this is because of the very similar sociopolitical traditions of Britain and the United States. More recently, Lersch (2013, 2014) examined the impact of family relocations on the employment outcomes of individuals in dual-earner couples in England and (East and West) Germany, finding that migrant women are more likely to become unemployed and lose wages in England than in Germany. Lersch argues that these differences could be explained by country differences in the selection processes leading to family migration, which are in turn influenced by national policies and cultural norms. Our study differs from these pioneering cross-national studies in that we examine the

precursors instead of the consequences of family migration – specifically, the differences in migration rates of male-breadwinner and dual-earner couples – and adds to them by increasing the number of countries under analysis, incorporating a greater degree of context variation with regards to national institutional arrangements.

2.3 A cross-national comparative framework

Recent cross-national studies show that within-country migration rates vary across national contexts, with a number of economic, societal, geographic, and cultural factors used to explain such divergence (United Nations 2013; Bell *et al.* 2015). These factors include regional income differentials, housing market dynamics, job growth, labour market flexibility, and earnings dispersion. The increasing prevalence of dual-earner couple arrangements during the last few decades is often held as an explanation of synchronic decreases in internal migration (Cooke 2013). This is because dual-earner couples are substantially less likely to migrate than male-breadwinner couples. Additionally, previous studies from different countries have yielded mixed evidence on how the partners' absolute and relative resources affect couples. Beyond differences in research design, this heterogeneity in study results can be attributed to cross-national variability in migration propensities across couple types. In the following we propose a theoretical framework which suggests that differences in migration rates between male-breadwinner and dual-earner couples (and their micro-level predictors) vary across national contexts due to heterogeneity in national approaches to female employment.

Despite global progress towards gender equality, post-industrialized societies differ greatly with regard to the opportunities that they offer men and women over their life courses. Studies examining demographic processes such as marriage and childbearing have argued that institutional factors such as policies, regulations, and norms influence men's and, particularly, women's capabilities (*i.e.*, attitudes, abilities, and resources) to negotiate work and family decisions (Fahlén 2013). For instance, recent cross-national literature on fertility has established that high female employment and high fertility rates are associated with egalitarian gender ideology and work–family balance policies, as best exemplified by Scandinavian countries (Treas and Widmer 2000; McDonald 2006; Esping-Andersen 2007; Mills 2010).⁶ Specifically, women's capability to negotiate work and family is affected by the degree to which national

⁶ The underlying rationale is that employment protection legislation, generous income-support systems, and publicly funded services aimed at reconciling work and family life (*e.g.*, affordable early childcare, paid parental leave, flexible work schedules, and equal treatment of part-time employees) reduce working women's perceived risks and associated costs of childbearing (Gustafsson *et al.* 1996; Hobson and Oláh 2006). Post-industrialized nations implement these policies to different degrees, and in different ways (Gornick and Meyers 2003).

policies enhance gender equality in labour market outcomes. The higher the gender equality in labour market outcomes, the lower the perceived opportunity costs associated with motherhood. In addition, policies do not influence individual behaviour in a cultural void (Pfau-Effinger 1998, 2004). The normative gender ideology in a country shapes the effect of policies on fertility and maternal employment outcomes. In contexts where gender-traditional attitudes prevail, work–family balance policies do not impact fertility levels as positively as in contexts where gender-egalitarian attitudes are the norm. This is because uncertainty about women’s role leads to dilemmas around women’s participation in work and family life (McDonald 2006; Budig, Misra, and Boeckmann 2012; Esping-Andersen et al. 2013; Boeckmann, Misra, and Budig 2015).

We argue that cross-national variation in the family migration rates of dual-earner couples relative to those of male-breadwinner couples might be influenced by the broader institutional and cultural context in which family migration decisions take place. Particularly, women’s capability to influence intra-household family migration negotiations may be influenced by the level of support towards female employment, and normative expectations about appropriate gender roles. We illustrate these arguments using two hypothetical scenarios, one in a national context in which there is high support for female employment, and another in a national context in which there is scant support for female employment.

In national contexts in which policies offer scant support for female employment and cultural beliefs undervalue women’s work, women’s average labour market resources might be insufficient to influence family migration decisions as much as men’s. Such contexts generate conflict between women’s new work roles and an institutional and cultural environment that favours the reproduction of a male-breadwinner model. Therefore, women in these contexts have limited capability to influence family migration decisions, and so the migration propensities of dual-earner couples might resemble those of male-breadwinner couples. Employed women may often be ‘tied migrants’ due to their relatively worse employment prospects vis-a-vis their partners’. Women’s capability to influence relocation decisions might be particularly low because traditional gender roles are exacerbated by a lack of institutional work–family balance arrangements. In these contexts, the prioritization in family migration decisions of the work career of the male spouse will only be disputed by those few women who have comparable labour market resources. These women will be less inclined to move in contexts in which couples revert to more traditional divisions of labour after family migration. These arguments are consistent with evidence that weak support for female employment and little involvement of men in housework and childcare lead to partnership instability and low fertility amongst couples in which spouses have similar resources (Goldscheider, Bernhardt, and Lappegård 2015).

The expected patterns in contexts featuring policies that support female employment and gender-egalitarian attitudes and practices should be very different. In such contexts, men's and women's resources should influence family migration in a more equitable way. This is because policies that alleviate the tensions between work and family will enhance women's capabilities to negotiate family relocations.⁷ As a result, in these contexts the migration propensities of dual-earner couples should be lower than those of male-breadwinner couples, as the employment prospects of men and women, and the perceived value of these, are more alike. Also, men's relocation proposals should be more equitable where dominant attitudes and practices are more gender-egalitarian. For instance, relocations might only be proposed, or seriously considered, when both partners have a firm job offer at destination before the move, or when it is expected that the current work activity of the tied migrant can be transferred to a new location. Notwithstanding, gender-egalitarian institutions and normative contexts can also boost the relocation propensities of dual-earner couples. For example, public and affordable childcare as well as non-marginal part-time work and flexible work arrangements will reduce tensions between women's employment and family migrations (Mulder and Wagner 1993; Vidal, Perales, and Baxter 2016).

Approaches to female employment across developed countries lie between the two ideal types described above. As is typical in cross-national research, we use our theoretical framework as a general guideline and use several countries as case studies to provide empirical evidence. These case studies are described in what follows.

2.4 Case studies

To examine whether and how national contexts influence gender equality in family migration decisions we use four countries as case studies: Australia, Britain, Germany, and Sweden. Previous comparative studies identify substantial heterogeneity in internal migration rates in these countries, with particularly high rates in Australia (Rees *et al.* 2000). These countries also vary in a number of relevant contextual factors, including the level and type of female employment, policies that support work–family balance, and dominant gender ideology (Treas and Widmer 2000; Gornick and Meyers 2003; Thévenon 2011). Hence, they provide sufficient contextual variation to enable meaningful comparison.

Table 1 shows descriptive statistics for selected contextual factors. Female labour force participation and the share of women in full-time jobs are higher in Sweden than

⁷ This is consistent with research showing that in these contexts social policies reduce the duration and negative impact on earnings of employment interruptions due to childbirth, *i.e.*, the 'motherhood penalty' (Budig, Misra, and Boeckmann 2012).

in the other countries. Additionally, in 42% of families with children aged 0–2 in Sweden, both parents work full-time. This is higher than for the other three countries (11%–23%), where part-time employment and nonemployment are more prevalent amongst mothers. The rates of female and mothers' employment are closely related to the institutional support that countries provide to reconcile work and family. In Australia and Britain state support is limited and targeted towards low-income single-parent families, consistent with their liberal sociopolitical traditions (Esping-Andersen 1990). In these countries, residual state intervention in family matters leads to relatively shorter employment breaks amongst mothers, but also to higher job insecurity and worse work outcomes (e.g., earnings and career prospects) for women who work part-time relative to women who work full-time. As a result, this laissez-faire approach to work–family balance promotes gender specialization within the family, whereby men specialize in market work and women specialize in non-market work (Gornick, Meyers, and Ross 1998, Gornick and Meyers 2003). Particularly, Australia features a traditional normative gender ideology, reflected in the popularity of the male-breadwinner family model among families with young children.

Table 1: Country comparison of relevant contextual factors

	Australia	Britain	Germany	Sweden
<u>Female employment</u>				
Female labour force participation (%)	70	70	67	78
Share of employed women in part-time work (%)	33	35	41	14
Work arrangements of families with children age 0–2 (%)				
Both parents work full-time	11	21	23	42
One parent works full-time, one parent works part-time	33	35	28	28
One parent works full-time	46	33	36	21
<u>Work–family balance policies</u>				
Children age 0–2 in public childcare (%)	5	2	10/34*	33
Parental leave length in weeks (paid weeks)	52 (0)	52 (0)	162 (34.6)	84 (52.8)
<u>Gender ideology</u>				
Agree: "All in all, family life suffers when the woman has a full-time job" (%)	57	33	42/24*	22
Agree: "A man's job is to earn money; a woman's job is to look after the home and family" (%)	24	13	17/11*	5

Notes: Female labour force participation rates are for women aged 15 to 64 in 2005 (source: OECD 2009). The share of employed women in part-time work is the rate for employed women in 2005 (source: OECD 2009). Work arrangements of families with children 0–2 are for 2006–2008 (source: Eurostat Labour Force Survey; Australia, ABS Family Characteristics and Transitions Survey). Children 0–2 in public childcare and parental leave length (i.e., employment-protected leave for parents and maternity leave) are for 2007 (source: OECD Family database). Measures on gender ideology come from Budig, Misra, and Boeckmann (2012) (source: 1994 and 2001 waves of the International Social Survey Programme). *Results separated for West and East Germany.

In Germany and Sweden the dominant gender ideology has played a pivotal role in the implementation of family policies. Gender ideology is highly egalitarian in Sweden, where the welfare system combines policies promoting work–family reconciliation (e.g., high rates of public childcare for children under 3 and paid employment-protected leave) and promotes fathers’ involvement in childcare (Gornick and Meyers 2003; Thévenon 2011). Although occupational sex-segregation is an endemic feature of the Swedish labour market, job conditions in female-dominated occupations are relatively good, as many women are publicly employed and enjoy many work-related benefits (Gustafsson *et al.* 1996). Additionally, gender specialization in paid and domestic work is relatively low amongst Swedish couples. Germany, on the other hand, combines a very generous welfare system with policies supporting the traditional male-breadwinner model. Despite recent policy changes encouraging work–family balance and increased female employment, the overall picture during the study period is that institutions deter women, particularly mothers, from (re-)entering full-time employment. These include factors such as scarce public childcare, a joint taxation system, and long periods of unpaid parental leave (Thévenon 2011).⁸

Altogether, our four country case studies can be broadly grouped into three country models with regards to the degree to which i) policies support female employment over the life course, and ii) gender-egalitarian attitudes are the norm. Sweden belongs to a model in which both policy support for female employment and gender egalitarian ideology are high. Australia and Britain both belong to a second model in which policy support for lifelong female employment is low, and traditional gender attitudes prevail despite the preponderance of women in paid employment. Finally, Germany belongs to a third model, in which there is both cultural and policy support for a male-breadwinner model while work regulations and the corporatist employment-relation model ensure job protection and good working conditions for women.

⁸ Due to its communist legacy, East Germany displays higher female labour force participation rates and egalitarian gender attitudes than West Germany. Nevertheless, East German women still undertake most domestic work (Hofäcker, Stoilova, and Riebling 2013; Arpino, Esping-Andersen, and Pessin 2015). We would expect lower tension between family migration and female employment in East Germany, but small sample sizes restricted our ability to test for this.

3. Method

3.1 Data

We use four self-harmonized, nationally representative, longitudinal datasets: the Household Income and Labour Dynamics in Australia Survey (HILDA); the British Household Panel Survey (BHPS); the German Socio-Economic Panel (SOEP); and a 5% random sample of the register-based Sweden in Time: Activities and Relations database (STAR) (Table 2). These datasets allow tracking individuals and their partners over prolonged periods of time and collect extensive and reasonably comparable information on factors relevant to this research, including family migration, family composition, human capital investments, and occupational characteristics.⁹

We combine information from male and female partners to create dyadic yearly observations of couples (see, e.g., Perales and Vidal 2013). We only consider co-resident heterosexual couples and exclude observations in which a partner is younger than 18 years of age or older than 65 years of age, worked in the armed forces, did not answer the survey, or had missing information on model variables.¹⁰

Table 2: Data sources

Country	Dataset	Data type	Period used	Sample size (rounded)
Australia	HILDA	Annual survey	2001–2011	4,200 couples
Britain	BHPS	Annual survey	1992–2008	3,700 couples
Germany	SOEP	Annual survey	2001–2009	6,300 couples
Sweden	STAR	Register data	1998–2007	51,500 couples

Note: Selected periods reflect data availability on relocations. The sample size refers to the analytical sample, after applying sample exclusions.

Following conventions in the literature, we define migrations as changes in residence between time t and time $t-1$ of over 50 kilometers, and only consider moves in which both partners move together – we disregard moves in which partners move in to live together, or move out to live apart or form separate households (Boyle et al.

⁹ Panel attrition rates are similar across HILDA, BHPS, and SOEP (Watson and Wooden 2011). We assume no sample attrition in STAR.

¹⁰ A data harmonization limitation is that unmarried couples without children cannot be tracked in the Swedish population register, nor is there information on the earnings and occupational characteristics of individuals working in small firms in the private sector. We replicated the analyses for the other countries considering these limitations, and found no substantive differences.

2003; Branden 2013; Lersch 2014; Vidal, Perales, and Baxter 2016).¹¹ There is substantial heterogeneity in couple migration rates across countries, consistent with studies of overall internal migration (Rees et al. 2000). Within the period 2001–2007, yearly migration rates in Australia (3%) were ostensibly larger than in Britain (1%), Sweden (1%), and Germany (0.5%).

We define dual-earner couples as couples in which both partners did salaried work the week prior to the interview at $t-1$, except for Sweden, where both partners did at least one hour of work in November, when the data was collected. Male-breadwinner couples are defined as couples in which the male partner did salaried work the week prior to the interview (or in November for Sweden), while the female partner did not.¹² During the 2001–2007 period, Sweden had the highest percentage of dual-earner couples (75.3% of all couples), followed by Australia (69%), Britain (67.8%), and Germany (61.5%) (see Table A1 in the Appendix). Concerning male-breadwinner couples, Sweden had the lowest rates (13.5% of all couples) and Germany the highest (26.8%), with Britain (21%) and Australia (21.6%) falling in between.

Due to the small number of couple migrations in the survey datasets for Germany, Australia, and Britain, our multivariate models are parsimonious and only adjust for key predictors from family migration theories. These include alternative within-couple employment arrangements (no-earner and female-breadwinner couples), partnership duration (expressed in years), female partner age group (18–34 years, 35–44 years (reference category), 45–60 years), relative partner's age (female partner at least five years younger), relative partner's education (both partners have a degree, only the female partner has a degree, only the male partner has a degree, none has a degree (reference category)), annual couple gross labour income (adjusted for inflation, imputed, and standardized so that it has a mean of zero and a standard deviation of one), female partner's share of couple income (expressed as a percentage), children in the household, children under 5 in the household (under 7 in Sweden), partner-specific indicators of managerial/professional occupation, calendar year, and region dummies. Summary statistics for all variables are presented in Table A-1 in the Appendix.

¹¹ This is based on Euclidian distances between the prior and new places of residence based on Australian, British, and German geo-coded addresses and Swedish Small Area Market Statistics (SAMS). Country-specific Kernel distributions reveal that the distance decay rate levels off between 40–60 kilometers across countries, which confirms the validity of the 50-kilometer threshold.

¹² In SOEP, respondents classify themselves into full-time, part-time, or casually employed.

3.2 Statistical modelling and analytical approach

We analyse the data using event-history methods (Allison 1984). Specifically, we model country-specific discrete-time hazards of family migration, with a particular focus on assessing differences in the hazard rates across dual-earner and male-breadwinner couples. The model fitted can be written as follows:

$$\log\left(\frac{h_{tc}}{1-h_{tc}}\right) = \alpha(t) + \beta' d_{t-1c} + \beta' x_{t-1c} \quad (1)$$

where subscripts c and t stand for couple and time, respectively; h_{tc} is the hazard rate of family migration; $\alpha(t)$ is the baseline hazard fitted as a linear function of years elapsed since partnership formation (until family migration or censoring); d_{t-1c} is a time-varying dummy variable capturing within-couple employment arrangements at $t-1$ (ref. male-breadwinner couple at $t-1$); and x_{t-1c} is a vector of time-constant and time-varying covariates measured at $t-1$.

Our analytical approach involves the estimation of country-specific discrete-time hazard models of family migration.¹³ We first examine the unadjusted odds (i.e., discrete hazards) of family migration amongst dual-earner couples and male-breadwinner couples (reference category). We expect that, across all countries, dual-earner couples will relocate less often than male-breadwinner couples, i.e., the odds ratios on the dual-earner couple dummy variable will be lower than one. We expect differences to be particularly pronounced in Sweden, and less pronounced in the other countries. In the second step we estimate models which adjust for control variables capturing theory-relevant predictors of family migration. We expect to find cross-country differences in the estimated effects of family structure and partner resources on family migration. In the third step we estimate models which further distinguish the employment arrangements of couples, such as the partners' occupational group and over-time changes in partners' employment arrangements. We illustrate key results by estimating predicted probabilities for different types of couples.

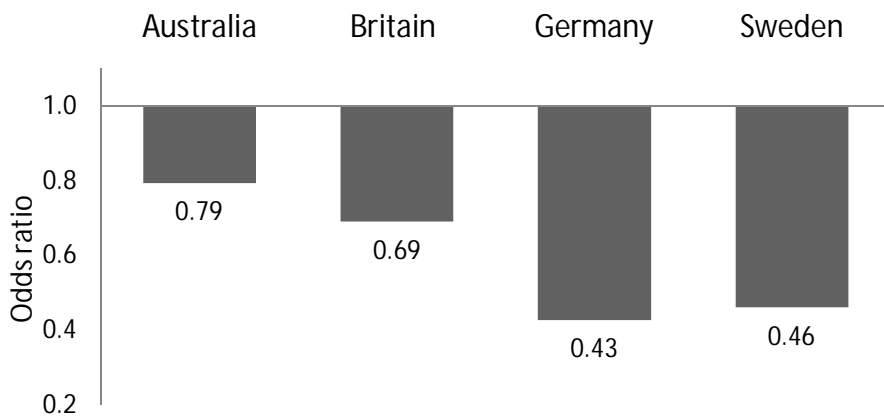
4. Results

We begin by examining the unadjusted family migration rates of dual-earner and male-breadwinner couples in the 2001–2007 period. Consistent with prior studies, we find

¹³ Due to data confidentiality restrictions and comparability issues it was not possible to pool the four datasets. Hence, direct statistical comparisons of the magnitude of the associations across countries is not recommended.

that the migration rates of dual-earner couples are lower than those of male-breadwinner couples across all countries under examination. Figure 1 shows the unadjusted country-specific differences in migration rates of dual-earner and male-breadwinner couples, expressed as odds ratios (OR). Differences are small in Britain (OR=0.69; $p<0.01$) and Australia (OR=0.79; $p<0.05$), and high in Sweden (OR=0.46; $p<0.001$) and Germany (OR=0.43; $p<0.01$).

Figure 1: Unadjusted difference in family migration rates of dual-earner couples relative to male-breadwinner couples



Note: Odds ratios, 2001–2007. All odds ratios are significantly different from 1 at the 5% level.

We now examine differences in migration rates across couple types using multivariate event-history models which adjust for relevant individual-level and couple-level characteristics (Table 3). Estimates from adjusted models show that dual-earner couples migrate less often than male-breadwinner couples. The estimated odds ratios are 0.60 for Britain ($p<0.01$), 0.55 for Germany ($p<0.05$), and 0.44 for Sweden ($p<0.001$). In Australia, migration rates of dual-earner couples are lower than those of male-breadwinner couples, but the difference is no longer statistically significant (OR=0.85; $p>0.05$). Compared to the unadjusted odds ratios shown in Figure 1, the adjusted odds ratios on the dual-earner couple variable in Table 3 remain similar, though slightly smaller in magnitude. This suggests that the theory-driven predictors included as controls in the multivariate models in Table 3 do not fully explain

differences in migration rates between male-breadwinner and dual-earner couples (with the exception of Australia).

Results for the other within-couple employment arrangement variables in Table 3 show that jobless couples (which comprise 4.8%–6.3% of all couples across countries) have the highest odds of undertaking family migrations in all countries but Australia. The relative migration rates of couples in which only the female partner is employed (3.7%–6.8% of all couples) vary across countries. Female-breadwinner couples migrate as often as male-breadwinner couples in Germany (OR=0.92; $p>0.1$) and Sweden (OR=1.11; $p>0.1$), and more often in Britain (OR=2.00; $p<0.05$) and Australia (OR=1.69; $p<0.05$).

The sign, magnitude, and statistical significance of the estimated coefficients of additional model predictors are similar across countries. However, some differences are noteworthy.

Table 3: Adjusted discrete hazard rates of family migration

	Australia OR (St. Err.)	Britain OR (St. Err.)	Germany OR (St. Err.)	Sweden OR (St. Err.)
Couple type				
Male-breadwinner couple	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>
Dual-earner couple	0.85 (0.11)	0.60** (0.11)	0.55* (0.15)	0.44*** (0.04)
Female-breadwinner couple	1.69* (0.44)	2.00* (0.72)	0.92 (0.51)	1.11 (0.17)
No-earner couple	1.68* (0.43)	2.69** (0.96)	3.79*** (1.50)	2.43*** (0.27)
Partnership duration	0.97*** (0.01)	0.98* (0.01)	0.93*** (0.02)	0.96*** (0.01)
Children present in household				
No children	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>
Children present in household	0.55*** (0.07)	0.67* (0.13)	0.70 (0.20)	0.58*** (0.04)
Children under 5	1.44** (0.20)	1.68** (0.33)	1.63 (0.47)	0.93 (0.07)
Female partner's age group				
18-34	1.46** (0.17)	1.43* (0.26)	1.41 (0.36)	1.89*** (0.15)
35-44	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>
45-60	0.77 (0.12)	0.86 (0.20)	1.05 (0.34)	0.75** (0.07)
Female partner is 5 years younger	0.77* (0.09)	1.01 (0.16)	0.83 (0.19)	0.81** (0.06)

Table 3: (Continued)

	Australia	Britain	Germany	Sweden
	OR (St. Err.)	OR (St. Err.)	OR (St. Err.)	OR (St. Err.)
Partner's educational level				
Both partners have degrees	1.23 (0.18)	1.85** (0.35)	1.29 (0.40)	2.19*** (0.18)
Only male partner has degree	1.19 (0.19)	1.68** (0.32)	0.96 (0.29)	1.25* (0.13)
Only female partner has degree	1.04 (0.15)	1.06 (0.25)	0.74 (0.29)	1.31** (0.12)
Neither has a degree	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>
Couple annual labour income	1.04 (0.05)	1.06 (0.08)	0.89 (0.12)	0.96 (0.05)
Female partner's income share	0.68(*) (0.15)	0.77 (0.26)	1.30 (0.60)	1.12 (0.14)
Managerial/professional occupation				
Female partner	1.00 (0.13)	1.46* (0.27)	1.64 (0.52)	1.27** (0.11)
Male partner	1.15 (0.13)	1.55** (0.24)	2.80*** (0.74)	1.60*** (0.13)
N (observations)	18,750	23,488	25,202	178,836

(*) = $p < 0.1$, * = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$.

Notes: Discrete-time event history analyses. The estimates in the table are exponentiated log hazards, and can be interpreted as odds ratios. Standard errors in parentheses. Models have been estimated separately for each country. Observation periods for each country as shown in Table 2. Models include additional controls for calendar period and region dummies. Children under 7 years in Sweden.

The presence of children in the household lowers family migration rates across all countries, though the coefficient is not statistically significant for Germany. By contrast, the odds of family migration are higher when there are very young children in the household in Australia, Britain, and Germany. Interestingly, the odds of family migration in Sweden are not only statistical insignificant but also are very close to one. This indicates that, in Sweden, family migration is not more likely in life stages when traditional gender roles tend to be exacerbated and relative partner resources to widen (in favour of the male partner).

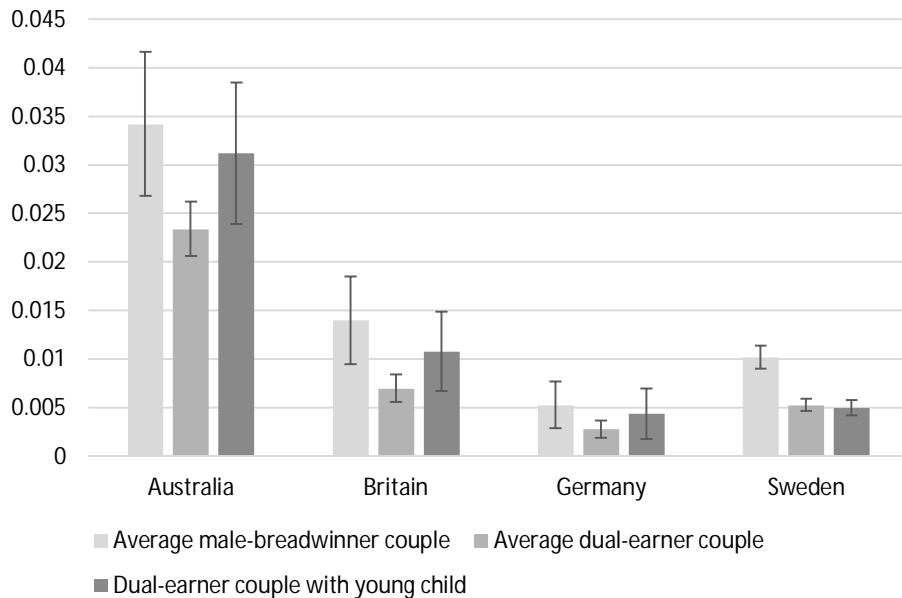
The associations between partners' education and family migration differ across countries. In Sweden, family migration occurs more frequently when one partner is highly educated, or when both partners are (particularly the latter). The pattern of effects is similar in Britain, except that when only the female partner is highly educated the odds of migration are not significantly higher than when no partner is highly educated. Finally, in Australia and Germany the partners' relative educational levels do not influence the odds of family migration. We find no evidence of statistically significant differences in the odds of family migration by absolute or relative income.

As an exception, couple migration is less likely when women contribute a greater share to total couple income in Australia. In all countries except for Britain, couples with a female partner who is at least five years younger than the male partner are less likely to migrate (though the effect is not statistically significant in Germany). We expected coefficients in the opposite direction, but since we control for partners' education and income, these coefficients are probably the result of collinearities between partners' relative ages and resources.

The odds of family migration are higher when either the male or the female partner is employed in a managerial or professional occupation in Britain, Germany, and Sweden. This pattern of results is consistent with propositions from the structural approach to family migration, which poses that migration rates should be higher for individuals working in occupations in which the returns to migration are greater. In Australia the occupation coefficients are small and not statistically significant, which further stresses the lack of association between partners' resources and family migration observed for this country.

Predicted hazard rates help us illustrate how different circumstances are associated with differences in family migration by within-couple employment arrangements. This analysis is based on the results of the models presented in Table 3. The results are presented in Figure 2 and show that, beyond country differences in overall couple migration rates, couples with 'average' male-breadwinner arrangements migrate more often than couples with 'average' dual-earner arrangements. The differences are statistically significant in Australia, Britain, and Sweden, but not Germany. In most countries the migration rates of average dual-earner couples with young children are not significantly different from those of average male-breadwinner couples. This is to be expected, as family migrations tend to take place around the time of family transitions. Additionally, employed women with young children often devote less time to paid work and more time to unpaid family work than their partners. In Sweden, however, dual-earner couples with young children migrate significantly less often than average male-breadwinner couples. Since in Sweden women's employment is supported by work-family balance policies, this result may be due to lower levels of couple specialization following the birth of a child.

Figure 2: Predicted discrete log-hazard rates for selected couples



Notes: Predicted discrete log-hazard rates and 95% confidence intervals (for comparison of groups within countries) are calculated using results of models presented in Table 3. AU – Australia, BR – Britain, DE – Germany, SE – Sweden. The categories *Average male-breadwinner couple* and *Average dual-earner couple* have average levels of partners' tertiary education (Male-breadwinner - AU: .10; BR: .18; DE: .13; SE: .17. Dual-earner - AU: .19; BR: .26; DE: .22; SE: .29), female share of couple income (Male-breadwinner – constrained to 0. Dual-earner - AU: .38; BR: .35; DE: .33; SE: .40) and number of children under 5 in the household (Male-breadwinner - AU: .47; BR: .42; DE: .37; SE: .21. Dual-earner - AU: .19; BR: .15; DE: .09; SE: .17). The category *Dual-earner couple with children* represents average dual-earner couples with young children constrained to 1.

The analyses above reveal important differences in the migration rates of male-breadwinner and dual-earner couples, and substantial heterogeneity across the four case study countries. In a final set of empirical analyses, we further disaggregate dual-earner couples by considering i) the relative occupational standing of partners, and ii) over-time changes in partners' employment arrangements.¹⁴

¹⁴ We also examined whether gaps in migration rates across couple types are due to differences in women's work hours. We do not have this information for Sweden, and therefore we did analyses only for Australia, Britain, and Germany. We separated dual-earner couples into two subgroups: i) dual-earner couples in which the female partner is employed full-time (i.e., works more than 30 hours/week), and ii) dual-earner couples in which the female partner is employed part-time (i.e., works 30 hours/week or less). The pattern of results remained consistent with that in Model 5 in Table 3.

First, we address the proposition that the ability of individuals to improve their careers – or to maximize household income – through migration is linked to partners' relative occupational attainment (Table 4). To do so, we replicate the analyses in Table 3, separating one-earner and dual-earner couples into different subgroups defined by the type of occupation held by each of the employed partners. We consider occupational standing as high if individuals work in managerial or professional occupations, and as low if individuals work in any other occupation. As expected, male-breadwinner couples migrate more frequently when the male partner works in a managerial or professional occupation than when the male partner works in another occupation. Dual-earner couples in which neither of the spouses is in a managerial or professional occupation move less frequently than male-breadwinner couples, with the associated odds ratios being statistically significant for Britain. This suggests that conflict between female employment and family relocations prevails when the migration returns to occupation are low. Only in Sweden do dual-earner couples in which both spouses work in a managerial or professional occupation move less frequently than male-breadwinner couples. This suggests that conflict between employment and family relocation prevails when the migration returns to occupation are high. Interestingly, Swedish dual-earner couples in which only one spouse works in a managerial or professional occupation move less frequently than male-breadwinner couples. By contrast, German couples in which both spouses work in a managerial or professional occupation move more frequently than male-breadwinner couples, but not more frequently than male-breadwinner couples in which the male spouse works in a managerial or professional occupation. In Australia and Britain female-breadwinner couples move more frequently than male-breadwinner couples, particularly when the female partner works in a managerial or professional occupation. Overall, these results suggest that the odds of family migration across couple types are partly explained by the average occupational characteristics of the partners.

Table 4: Adjusted discrete hazard rates of family migration with couple type disaggregated by occupation (selected results)

	Australia OR (St. Err.)	Britain OR (St. Err.)	Germany OR (St. Err.)	Sweden OR (St. Err.)
Male-breadwinner couple				
Not in a managerial/professional occupation	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>
Managerial/professional occupation	1.23 (0.27)	1.56(*) (0.37)	2.79** (1.05)	1.63*** (0.21)
Dual-earner couple				
Neither partner in a managerial/professional occupation	0.90 (0.15)	0.56* (0.15)	0.56 (0.22)	0.87 (0.12)
Both partners in managerial/professional occupations	1.01 (0.23)	1.28 (0.41)	2.65* (1.29)	0.73* (0.10)
Only the male partner in a managerial/professional occupation	0.96 (0.20)	0.99 (0.28)	1.43 (0.64)	0.64** (0.10)
Only the female partner in a managerial/professional occupation	0.83 (0.18)	1.06 (0.36)	0.78 (0.53)	0.42*** (0.05)
Female-breadwinner couple				
Not in a managerial/professional occupation	1.53 (0.52)	2.10 (1.01)	1.01 (0.70)	1.15 (0.19)
Managerial/professional occupation	2.14* (0.81)	2.75* (1.41)	1.04 (1.13)	1.35 (0.27)
No-earner couple				
	1.38 (0.46)	2.59* (1.07)	4.29** (1.90)	2.45*** (0.29)
N (observations)	18,750	23,488	25,202	178,836

(*) = $p < 0.1$, * = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$.

Notes: Discrete-time event history analyses. The estimates in the table are exponentiated log hazards, and can be interpreted as odds ratios. Standard errors in parentheses. Models have been estimated separately for each country. Observation periods for each country as shown in Table 2. Models include additional controls included in models presented in Table 3.

Second, we consider whether over-time changes in partners' employment arrangements help explain the differences in family migration rates across couple types (Table 5). Male-breadwinner and dual-earner couple arrangements can be provisional situations. For example, female partners may leave employment temporarily when they expect to have a child or to relocate because of their partner's job in the near future. Thus, the within-couple employment arrangements that we observe at a single point in time might not appropriately represent couples' longer-term arrangements and their relevance to family migration decisions. Since neither detailed nor complete information on individuals' employment histories is available in a comparable format across our four datasets, we tentatively test how this issue might affect our results by replacing couple arrangement for variables capturing changes in partner employment

arrangements in the models in Table 3. Specifically, we consider change/stability in the employment status of the female partner across adjacent survey waves. We separate the following situations potentially occurring between time $t-2$ and time $t-1$: continuous employment, continuous non-employment (reference), entering employment, exiting employment.

Results are presented in Table 5. In Britain, Germany, and Sweden, couples in which the female partner is continuously employed migrate less often than couples in which the female partner is continuously nonemployed. In Sweden, couples with a female partner entering employment migrate significantly less often than couples with a continuously nonemployed female partner. Thus, the pattern of results in these models is similar to that in the main models presented in Table 3: dual-earner couples migrate less frequently than male-breadwinner couples in all countries (except for Australia). In Australia, couples in which the female partner exits employment are more likely to migrate than couples in which the female partner is continuously nonemployed. This is consistent with literature highlighting that long-distance family migrations tend to require extensive preparation (Vidal, Perales, and Baxter 2016), with the necessary arrangements being typically carried out by the partner with the lowest labour market resources.

Table 5: Adjusted discrete hazard rates of family migration by changes or stability in female partner employment status before migration (selected results)

	Australia OR (St. Err.)	Britain OR (St. Err.)	Germany OR (St. Err.)	Sweden OR (St. Err.)
Female employment transitions across $t-2$ & $t-1$				
Continuous employment	1.01 (0.17)	0.63(*) (0.15)	0.47* (0.16)	0.46*** (0.04)
Entered employment	1.26 (0.25)	0.86 (0.25)	0.95 (0.35)	0.63** (0.09)
Exited employment	1.64** (0.30)	1.02 (0.27)	1.21 (0.41)	0.94 (0.10)
Continuous nonemployment	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>	<i>ref.</i>
N (observations)	18,750	23,488	25,202	178,836

(*) = $p < 0.1$, * = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$.

Notes: Discrete-time event history analyses. The estimates in the table are exponentiated log hazards, and can be interpreted as odds ratios. Standard errors in parentheses. Models have been estimated separately for each country. Observation periods for each country as shown in Table 2. Models include additional controls included in models presented in Table 3 as well as an indicator of male partner employment status.

5. Discussion

Our analyses yield several key results. An initial important finding is that dual-earner couples are less mobile than male-breadwinner couples across countries with very different institutional environments. This is consistent with a wealth of previous empirical research analysing single countries, and it indicates that family migration is a structural force embedded in the production and reproduction of traditional gender divisions of labour in post-industrialized societies. Despite this, we find substantial heterogeneity across countries in the extent of these differences, in the degree to which adjusting for partner resources explains them, and in how different types of absolute and relative partner resources affect couple migration.

We interpret these findings using a theoretical framework emphasising the importance of national approaches to female employment as moderators. We postulated that in national contexts where there is little support for female employment and where traditional gender attitudes are the norm, there should be relatively narrow differences in the family migration rates of male-breadwinner and dual-earner couples. We assessed three country-cases where women have limited capability to influence the outcome of family relocations. In Australia and Britain policy support for female employment is scant, and domestic divisions of labour reflect traditional gender attitudes. In Germany the cultural and policy contexts – with joint household taxation and long, unpaid parental leave – support a traditional male-breadwinner model. After adjusting for theory-based factors that potentially account for differences in the rates of family migration between male-breadwinner and dual-earner couples, such differences remain statistically significant in Britain and Germany. In Australia the odds are not statistically significant. In these contexts the presence of young children in the household and scarce female partner resources are important correlates of couple migration, and partially explain differences in couple migration rates between male-breadwinner and dual-earner couples. This suggests higher gender inequity in family relocations in these countries, as found in previous studies (e.g., Boyle, Feng, and Gayle 2009; Lersch 2014; Vidal, Perales, and Baxter 2016). In Australia and Britain, female-breadwinner and jobless couples also have higher-than-average relocation rates, which could be explained by the higher employment opportunities enjoyed by male partners. In Germany, male-breadwinner and dual-earner couples with a male partner working in a managerial or professional occupation display comparatively high migration rates. The importance of the male partner's occupation reflects contradictions in a social system that combines high employment protection for men and women with family policies supporting the traditional male-breadwinner model.

We expected that in national contexts with high support for female employment, and in which gender egalitarian attitudes are the norm, differences in the family

migration rates of male-breadwinner and dual-earner couples should be large. We found that the odds ratio on the dual-earner couple dummy variable in the fully specified model for Sweden (the most egalitarian country in all respects) was large and statistically significant. Internationally, Sweden is one of the countries that most actively promote female labour force participation and have the most gender-egalitarian practices and attitudes. We interpret this finding as suggesting that a gender-egalitarian institutional context produces more gender-egalitarian family migration. In fact, the presence of young children in the household, which often exacerbates traditional gender roles, was not a determining factor for couple migration in Sweden (as it was in the other countries). However, this higher degree of equity in family migration decisions comes at the expense of lower overall family migration levels, since it is difficult for couples to move under circumstances that benefit the work careers of both partners. In accord with other research (Brandén 2014), our results suggest that in Sweden family migrations are more useful to improve the careers of the male partner, as moves are concentrated amongst male-breadwinner couples where the man is in a managerial/professional occupation. By contrast, dual-earner couples in Sweden migrate less often when at least one partner works in a managerial or professional occupation. Hence, despite pervasive occupational sex-segregation in the Swedish labour market, women still have the capability to influence family migration decisions.

Our analyses are not without shortcomings. First, as in previous research using household panel surveys, the precision of our estimates is sometimes constrained by the relatively small number of family migrations observed in the data. Second, while we have devoted substantial effort to harmonizing our data sources, inconsistencies in the data across countries remain. Most noticeably, we were not able to identify cohabiting couples without a joint child in the Swedish register-based data. In this regard, our analyses could be improved by using data collected as part of the same project (e.g., a cross-national dataset). However, to our knowledge no cross-national panel datasets with the necessary properties are available. Third, we run separate models for each country, which restricts our ability to formally compare the magnitude and statistical significance of model coefficients across countries. Fourth, as we did not have retrospective residential biographies we cannot truly distinguish first-time movers from repeat movers. Finally, further research should consider factors for which we did not have information across all datasets. These include individual-level gender ideology, complete residential and employment trajectories, working hours, and occupational characteristics (e.g., skill level or potential for earnings growth). It is also important to further consider competing alternatives to family migration, such as union dissolution or living-apart-together arrangements.

6. Conclusion

In this paper we have compared the family migration rates of male-breadwinner and dual-earner couples in Australia, Britain, Germany, and Sweden using event history analyses and harmonized, nationally representative panel data. Our study contributes to family migration literature by illustrating how cross-national comparisons are a valuable methodological approach to put prevailing micro-level explanations of the relationship between female employment and family migration in context. Dual-earner couples migrate less often than male-breadwinner couples, but there is a high degree of cross-country heterogeneity. Our findings suggest that the (gendered) opportunity context in which family migration decisions take place plays an important role in determining the conditions under which family migration occurs. While our study does not probe the specific institutional features that increase or decrease the gap in family migration rates between dual-earner and male-breadwinner couples across countries, our findings and theoretical set-up point to some potential mechanisms that deserve further attention. These include the concentration of men and women in different occupations or economic activities, dominant gender ideologies, and the mix of policies supporting female employment over the life course.

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References

- ABS Family Characteristics and Transitions Survey. Canberra: Australian Bureau of Statistics. <http://www.abs.gov.au>.
- Allison, P.D. (1984). *Event history analysis: Regression for longitudinal event data*. Pennsylvania: Sage. doi:10.4135/9781412984195.
- Arpino, B., Esping-Andersen, G., and Pessin, L. (2015). How do changes in gender role attitudes towards female employment influence fertility? A macro-level analysis. *European Sociological Review* 31(3): 370–382. doi:10.1093/esr/jcv002.
- Baxter, J., Hewitt, B., and Haynes, M. (2008). Life course transitions and housework: Marriage, parenthood, and time on housework. *Journal of Marriage and Family* 70(2): 259–272. doi:10.1111/j.1741-3737.2008.00479.x.
- Bell, M., Charles-Edwards, E., Kupiszewska, D., Kupiszewski, M., Stillwell, J., and Zhu, Y. (2015). Internal migration data around the world: Assessing contemporary practice. *Population, Space and Place* 21(1): 1–17. doi:10.1002/psp.1848.
- Bielby W.T. and Bielby D.D. (1992). I will follow him: Family ties, gender-roles beliefs and reluctance to relocate for a better job. *American Journal of Sociology* 97(5): 1241–1267. doi:10.1086/229901.
- Boeckmann, I., Misra, J., and Budig, M.J. (2015). Cultural and institutional factors shaping mothers' employment and working hours in postindustrial countries. *Social Forces* 93(4): 1301–1333. doi:10.1093/sf/sou119.
- Boyle, P., Cooke, T., Halfacree, K., and Smith, D. (1999). Gender inequality in employment status following family migration in GB and the US: The effect of relative occupational status. *International Journal of Sociology and Social Policy* 19(9/10/11): 109–143.
- Boyle, P., Cooke, T.J., Halfacree, K., and Smith, D. (2001). A cross-national comparison of the impact of family migration on women's employment status. *Demography* 38(2): 201–213. doi:10.1353/dem.2001.0012.
- Boyle, P., Cooke, T., Halfacree, K., and Smith, D. (2003). The effect of long-distance family migration and motherhood on partnered women's labour-market activity rates in Great Britain and the USA. *Environment and Planning A* 35(12): 2097–2114. doi:10.1068/a35138.

- Boyle, P., Feng, Z., and Gayle, V. (2009). A new look at family migration and women's employment status. *Journal of Marriage and Family* 71(2): 417–431. doi:10.1111/j.1741-3737.2009.00608.x.
- Brandén, M. (2013). Couples' education and regional mobility: The importance of occupation, income and gender. *Population, Space and Place* 19(5): 522–536. doi:10.1002/psp.1730.
- Brandén, M. (2014). Gender, gender ideology, and couples' migration decisions. *Journal of Family Issues* 35(7): 950–971. doi:10.1177/0192513X14522244.
- Brandén, M. and Ström, S. (2011). For whose sake do couples relocate? Gender, career opportunities and couples' internal migration in Sweden. Sweden: Institute for Evaluation of Labour Market and Education Policy (IFAU working paper; 2011:3).
- Budig, M.J., Misra, J., and 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 & Society* 19(2): 163–193. doi:10.1093/sp/jxs006.
- Cooke, T. (2001). 'Trailing wife' or 'trailing mother'? The effects of parental status on the relationship between family migration and the labour-market participation of married women. *Environment and Planning A* 33(3): 419–430. doi:10.1068/a33140.
- Cooke, T. (2003). Family migration and the relative earnings of husbands and wives. *Annals of the Association of American Geographers* 93(2): 338–349. doi:10.1111/1467-8306.9302005.
- Cooke, L.P. and Baxter, J. (2010). Families in international context: Comparing institutional effects across western societies. *Journal of Marriage and the Family* 72(3): 516–536. doi:10.1111/j.1741-3737.2010.00716.x.
- Cooke, T., Boyle, P.J., Couch, K., and Feijten, P. (2009). A longitudinal analysis of family migration and the gender gap in earnings in the United States and Great Britain. *Demography* 46(1): 147–167. doi:10.1353/dem.0.0036.
- Da Vanzo, J. (1976). Why families move: A model of the geographic mobility of married couples. Santa Monica: The Rand Corporation (R-1972-DOL).
- Duncan, R.P. and Perrucci, C.C. (1976). Dual occupation families and migration. *American Sociological Review* 41(2): 252–261. doi:10.2307/2094472.

- Esping-Andersen, G. (1990). *The three worlds of welfare-capitalism*. Cambridge: Princeton University Press.
- Esping-Andersen, G. (2007). Children in the welfare state. In: Esping-Andersen, G. (ed.). *Family formation and family dilemmas in contemporary Europe*. Madrid: Fundacion BBVA.
- Esping-Andersen, G., Boertien, D., Bonke, J., and Gracia, P. (2013). Couple specialization in multiple equilibria. *European Sociological Review* 29(6): 1280–1294. doi:10.1093/esr/jct004.
- Eurostat Labour Force Survey. Luxembourg: Eurostat. <http://ec.europa.eu/eurostat/web/lfs>.
- Fahlén, S. (2013). Capabilities and childbearing intentions in Europe: The association between reconciliation policies, economic uncertainties and women's fertility. *European Societies* 15(5): 639–662. doi:10.1080/14616696.2013.798018.
- Goldscheider, F., Bernhardt, E., and Lappegård, T. (2015). The gender revolution: A framework for understanding changing family and demographic behavior. *Population and Development Review* 41(2): 207–239. doi:10.1111/j.1728-4457.2015.00045.x.
- Gornick, J., Meyers, M., and Ross, K. (1998). Public policies and the employment of mothers: A cross-national study. *Social Science Quarterly* 79(1): 35–54.
- Gornick, J.C. and Meyers, M.K. (2003). *Families that work: Policies for reconciling parenthood and employment*. New York: Russell Sage Foundation.
- Gustafsson, S.S., Wetzels, C.M., Vlasblom, J.D., and Dex, S. (1996). Women's labor force transitions in connection with childbirth: A panel data comparison between Germany, Sweden and Great Britain. *Journal of Population Economics* 9(3): 223–246. doi:10.1007/BF00176686.
- Halfacree, K.H. (1995). Household migration and the structuration of patriarchy: evidence from the USA. *Progress in Human Geography* 19(2): 159–182. doi:10.1177/030913259501900201.
- Hobson, B. and Oláh, L.Sz. (2006). Birthstrikes? Agency and capabilities in the reconciliation of employment and family. *Marriage and Family Review* 39(3–4): 197–227. doi:10.1300/J002v39n03_01.

- Hofäcker, D., Stoilova, R., and Riebling, J.R. (2013). The gendered division of paid and unpaid work in different institutional regimes: Comparing West Germany, East Germany and Bulgaria. *European Sociological Review* 29(2): 192–209. doi:10.1093/esr/jcr055.
- Lersch, P.M. (2013). Long-distance moves and employment of women in dual-earner couples in Britain and Germany. *Schmollers Jahrbuch* 133(2): 133–142. doi:10.3790/schm.133.2.133.
- Lersch, P.M. (2014). *Residential relocations and their consequences*. Wiesbaden: Springer Fachmedien. doi:10.1007/978-3-658-04257-8.
- Lersch, P.M. (2016). Family migration and subsequent employment: The effect of gender ideology. *Journal of Marriage and Family* 78(1): 230–245. doi:10.1111/jomf.12251.
- Lichter, D.T. (1983). Socioeconomic returns to migration among married women. *Social Forces* 62(2): 487–503. doi:10.1093/sf/62.2.487.
- Long, L.H. (1974). Women's labor force participation and the residential mobility of families. *Social Forces* 52(3): 342–348. doi:10.1093/sf/52.3.342.
- Lundberg, S. and Pollak, R. (2003). Efficiency in marriage. *Review of Economics of the Household* 1(3): 153–167. doi:10.1023/A:1025041316091.
- McDonald, P. (2006). Low fertility and the state: The efficacy of policy. *Population and Development Review* 32(3): 485–510. doi:10.1111/j.1728-4457.2006.00134.x.
- McKinnish, T. (2008). Spousal mobility and earnings. *Demography* 45(4): 829–849. doi:10.1353/dem.0.0028.
- Mills, M. (2010). Gender roles, gender (in)equality and fertility: An empirical test of five gender equity indices. *Canadian Studies in Population* 37(3–4): 445–474.
- Mincer, J. (1978). Family migration decisions. *Journal of Political Economy* 86(5): 749–773. doi:10.1086/260710.
- Mulder, C.H. and Wagner, M. (1993). Migration and marriage in the life course: a method for studying synchronized events. *European Journal of Population* 9(1): 55–76. doi:10.1007/BF01267901.
- Nisic, N. (2009). Labour market outcomes of spatially mobile coupled women. Why is the locational context important? *Schmollers Jahrbuch* 129(2): 203–215. doi:10.3790/schm.129.2.203.

- Nivalainen, S. (2004). Determinants of family migration: Short moves vs. long moves. *Journal of Population Economics* 17(1): 157–175. doi:10.1007/s00148-003-0131-8.
- OECD (2009). *Employment Outlook*. Paris: OECD.
- OECD Family Database. Paris: OECD. www.oecd.org/social/family/database.
- Perales, F. and Vidal, S. (2013). Occupational characteristics, occupational sex segregation, and family migration decisions. *Population, Space and Place* 19(5): 487–504. doi:10.1002/psp.1727.
- Pfau-Effinger, B. (1998). Gender cultures and the gender arrangement: A theoretical framework for cross-national gender research. *Innovation: The European Journal of Social Science Research* 11(2): 147–166. doi:10.1080/13511610.1998.9968559.
- Pfau-Effinger, B. (2004). *Development of culture, welfare states and women's employment in Europe*. Aldershot: Ashgate.
- Rees, P., Bell, M., Duke-Williams, O., and Blake, M. (2000). Problems and solutions in the measurement of migration intensities: Australia and Britain compared. *Population Studies* 54(2): 207–222. doi:10.1080/713779082.
- Shauman, K.A. (2010). Gender asymmetry in family migration: occupational inequality or interspousal comparative advantage? *Journal of Marriage and Family* 72(2): 375–392. doi:10.1111/j.1741-3737.2010.00706.x.
- Tenn, S. (2010). The relative importance of the husband's and wife's characteristics in family migration, 1960–2000. *Journal of Population Economics* 23(4): 1319–1337. doi:10.1007/s00148-009-0253-8.
- Thévenon, O. (2011). Family policies in OECD countries: A comparative analysis. *Population and Development Review* 37(1): 57–87. doi:10.1111/j.1728-4457.2011.00390.x.
- Treas, J. and Widmer, E.D. (2000). Married women's employment over the life course: Attitudes in cross-national perspective. *Social Forces* 78(4): 1409–1436. doi:10.1093/sf/78.4.1409.
- United Nations (2013). *Cross-national comparisons of internal migration: An update on global patterns and Trends*. Technical paper 2013/1, New York: United Nations Population Division.

Vidal, S., Perales, F., and Baxter, J. (2016). Family dynamics of domestic labour across short-and long-distance relocations. *Journal of Marriage and Family* 78(2): 364–382. doi:10.1111/jomf.12269.

Watson, N. and Wooden, M. (2011). Re-engaging with survey non-respondents: the BHPS, SOEP and HILDA survey experience. Melbourne Institute Working Paper Series 1/11. Melbourne: Melbourne Institute.

Appendix

Table A-1: Sample summary statistics (means and proportions) by couple employment arrangements

	Australia	Britain	Germany	Sweden
	Male-breadwinner couples	Male-breadwinner couples	Male-breadwinner couples	Male-breadwinner couples
	Dual-earner couples	Dual-earner couples	Dual-earner couples	Dual-earner couples
	15.11	14.86	15.63	13.64
	16.26	15.69	17.70	16.44
Partnership duration				
Female partner's age group				
18-34	0.33	0.38	0.29	0.31
35-44	0.38	0.31	0.37	0.30
45-60	0.29	0.31	0.34	0.39
Female partner is 5 years younger	0.23	0.22	0.24	0.26
Children present in the household				
Children present in household	0.79	0.72	0.74	0.76
Children under 5	0.48	0.42	0.38	0.21
Partner's educational level				
Both partners have degrees	0.11	0.19	0.13	0.17
Only male partner has degree	0.13	0.22	0.22	0.15
Only female partner has degree	0.09	0.10	0.07	0.11
Neither has a degree	0.67	0.49	0.58	0.57
Couple annual labour income	-0.14	-0.13	0.08	-0.33
Female partner's income share	0.10	0.07	0.05	0.04
Y=1 (long-distance relocations)	166	82	50	325
N (observations)	4,978	5,875	7,199	27,523
	15,679	18,396	15,345	122,610

