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Hook, Jennifer L.

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Incorporating 'class' into work-family arrangements: Insights from and for Three Worlds

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Incorporating 'Class' into Work-Family Arrangements: Insights from and for *Three Worlds*

Jennifer L. Hook

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Incorporating 'Class' into Work-Family Arrangements:

Insights from and for Three Worlds

Jennifer L. Hook*

University of Southern California

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^{*} Please direct correspondence to Jennifer Hook, Department of Sociology, University of Southern California, 851 Downey Way, Hazel Stanley Hall 314, Los Angeles, CA 90089-1059. Tel: (213) 740-4729. Email: hook@usc.edu. I gratefully acknowledge the helpful comments of Joya Misra, Becky Pettit, Lynn Prince Cooke, Paul Marx, Klaus Petersen, Patrick Emmenegger, Jon Kvist.

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Incorporating 'Class' into Work-Family Arrangements:

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Abstract

In response to feminist critics, Esping-Andersen (1999) added family to the state-market nexus

by examining the degree of familialism across regimes. In the absence of the state de-

familializing care, however, it is difficult to predict work-family arrangements without reference

to the overall level of inequality and a family's social location within it. Thus, levels of

familialism interact with levels of economic inequality. I build on existing categorizations of

how two-parent families combine work and care in European countries by adding an explicit

consideration of how these patterns vary within countries by education. I utilize hierarchical

clustering with data for 16 countries (2004-2010) from the Luxembourg Income Study and the

European Social Survey. In some respects, refining country averages by education lends greater

support to the tenets of *Three Worlds*, but also reveals a Southern European pattern distinguished

by inequality in work-family arrangements more characteristic of liberal regimes. Findings also

illustrate how countries that polarize between dual full-time and male breadwinner families

largely polarize by education.

Keywords: women's employment, economic inequality, welfare states, work-family

Introduction

A central critique of Esping-Andersen's (1990) *Three Worlds* was that a typology built around a citizen's relationship to the labor market is blind to gender and family (Orloff, 1993). There were two main responses to this critique—dismiss the typology in favor of one with a central focus on gender and family (Sainsbury, 1996, Lewis, 1992, Lewis and Ostner, 1994), or incorporate gender and family within market- or class-based accounts (O'Connor et al., 1999, Orloff, 1993, Korpi, 2000) and expand the state-market relationship to include the role of families and women's unpaid work (Orloff, 1993). In *Social Foundations*, Esping-Andersen (1999) took up the latter approach by explicitly adding family, but not gender per se, to the state-market nexus and examining the degree of familialism across regimes. He defined familialism as the extent to which families, as opposed to the state or market, "are meant to be the primary locus of welfare" (p. 85), and concluded that the original three-regime typology is robust to its inclusion.

The typology with familialism, however, is still criticized for its lack of fit between regimes and levels of women's employment (Daly, 2000, Lewis et al., 2008). Women's employment has garnered particular attention because it serves as an indicator of both the extent of familialism as well as the commodification of women. Lewis (1992,1997) suggests an alternate gender-focused male breadwinner typology, where women's employment becomes a key outcome of how state policies regard women as wives, mothers, and workers. Esping-Andersen (1999: 51) rejects male breadwinner typologies, arguing that the approach would be "of interest if our focus is on gender relations." But I counter that gendered patterns of breadwinning and caregiving (which I refer to as work-family arrangements) are key indicators of the degree of familialism embedded in the state-market-family triad.

How well do welfare state regimes correspond to observed work-family arrangements? There is not a clean fit. Lewis, Campbell, and Huerta (2008) instead categorize EU-15 countries by the prevalence of different models of work and care in two-parent families with children. The majority of countries – containing both liberal and conservative countries — exhibit the one-and-a-half earner model, where full-time employment for fathers and part-time employment for mothers is the most common pattern for two-parent families. In Southern European countries — members of the conservative regime — families polarize between dual fulltime and male breadwinner families. Finally, the social democratic countries exhibit the dual full-time model with the majority of mothers and fathers working full-time (Lewis et al., 2008). The authors acknowledge that mothers' labor force participation varies by educational attainment, but do not empirically examine how education varies work-family arrangements within countries.

While scholars have long argued for joint consideration of gender, family, and class in cross-national research (O'Connor et al., 1999, Orloff, 1993, Korpi, 2000), the nascent empirical cross-national literature attempting to incorporate class has largely focused on women's employment and gender inequality in employment outcomes (Mandel, 2011, Mandel, 2012, Pettit and Hook, 2009, Korpi et al., 2013, Mandel and Shalev, 2009). Little attention has focused on household-level work-family arrangements (for exceptions see Keck and Saraceno, 2013 and Evertsson et al., 2009 on mothers' employment outcomes, and Cooke, 2011 on distributions of paid and unpaid work among couples).

A focus on household work-family arrangements, as compared to mothers' employment in two parent families, is particularly informative because there is an assumption that fathers in two parent families are employed (and employed full-time). In the aggregate, this may not be a particularly inaccurate or consequential assumption. Lewis and colleagues (2008) estimate that,

across countries, about 14.5% of families do not fit the one-and-a-half, dual full-time or male breadwinner models. When we disaggregate by class, however, we are likely to see that other patterns, particularly workless households, make up a larger portion of some groups than others. Furthermore, I argue that refining average country-level work-family arrangements by class is important because it is difficult to derive predictions about work-family arrangements from theory without reference to the overall level of inequality in a country and a family's social location within it. There are also clear implications for social policy. For example, social policies premised on individual contributions underserve women (Lewis, 2001), but if work-family arrangements are classed, these policies may be most likely to fail specific groups of women.

In this paper I consider how types of familialism combine with levels income inequality to affect families in different social locations. First, I review the concept of familialism in *Social Foundations* along with critiques and further refinements. Second, I consider how types of familialism combine with levels of income inequality to affect work-family arrangements by class. Third, I use micro-level data on employment from the Luxembourg Income Study (LIS) and the European Social Survey (ESS) to examine work-family arrangements in two-parent households in the aggregate and by mother's level of education, as a proxy of her potential class position independent of her husband's. I use mothers' education because a sizeable literature highlights that measures of social class developed from occupations or other aspects of the employment relationship embed the same citizen-as-independent-worker bias for which Esping-Andersen's typology is criticized (Cooke, 2011). Using mothers' education also circumvents the difficulties inherent to assigning non-employed wives their husbands' social class (see Sorensen, 1994) and to assigning non-employed couples.

I use hierarchical clustering to identify groups of countries with similar patterns.

Consistent with Lewis and colleagues (2008), I find support for three groups in the aggregate – the dual full-time model, the one-and-a-half earner model, and the polarization model (families polarize between dual full-time and male breadwinner families). When refined by class, however, the one-and-a-half earner model splits into two groups demarcated by the extent of class inequality. Disaggregating by class also reveals that within the polarization model, families largely polarize along class lines. Some results are consistent with *Three Worlds* and *Social Foundations*. The social democratic regime is distinct, displaying the dual-full time model. The one-and-half-earner model with low class inequality is comprised entirely of conservative countries. The other two models, however, are comprised of a mix of liberal and conservative countries, although disaggregating by class does identify greater similarity among the liberal countries than observed in the aggregate.

Types of Familialism

In 1999's *Social Foundations* Esping-Andersen added family to the state-market nexus and examined the degree of familialism across regimes. He groups the conservative countries as familialist (families are expected to absorb social risks), and the social democratic and liberal countries as non-familialist. Social democratic countries are also explicitly de-familialist because the state lessens families' caregiving responsibilities through state spending. Thus, in this conceptualization the regimes could best be described as familialist (conservative), non-familialist (liberal), and de-familialist (social democratic).

Further refinements have increased the analytical precision of the concept, addressing two main issues – the conflation of welfare state spending on services and subsidies, and the role of the market in de-familialization. Whereas Esping-Andersen used spending on services (such

as day care) and subsidies (such as family allowances) as measures of de-familialization, Leitner (2003) argues for the separate consideration of spending on family services and family subsidies. She contends that family subsidies, in supporting at-home care, are familializing. She creates four categories of familialism by crossing support for family care (high versus low) with support for care services (high versus low). This also creates a fourth category absent in Esping-Andersen's conceptualization: optional familialism, which combines high support for family care and care services. Saraceno and Keck (2008) further refine the concept of de-familialization to include only state-mediated routes to de-familialization. De-familialization by the market is not analogous to social rights to reduced family obligations, especially given that access to the market is dependent on financial resources (as noted by Esping-Andersen 1999). In their final conceptualization, Esping-Andersen's familialist is renamed supported familialism, nonfamilialist is renamed familialism by default, de-familialist remains the same, and optional familialism is added (Saraceno and Keck, 2008). This dovetails with Misra, Budig, and Moller's (2007) four strategies of welfare state support for care and also overlaps with Lewis's (1992, 1997) gender-focused male breadwinner typology. I use these four types of familialism throughout the remainder of the paper.

Types of Familialism and Work-Family Arrangements

How should types of familialism correspond to work-family arrangements? Thinking about the gendered division of labor in two-parent families with children, there is a clear correspondence between de-familialization and dual full-time households, as observed in social democratic countries. In absence of the state de-familializing care, however, it is difficult to predict work-family arrangements without reference to the overall level of inequality in a country and a family's social location within it. Under optional, supported, or default

familialism there are two central questions: (1) what are the alternatives to family care? and (2) how do these alternatives vary by a family's social location? Available alternatives will depend, in part, on the level of inequality in each country. That is, how much de-familialization is available on the market and at what cost (and at what quality)? Under optional and supported familialism, how attractive is the financial support to care? In this section I consider the intersection of overall levels of income inequality with types of familialism and the implications for families by social class.

Following cross-national research on women's employment outcomes (Korpi et al., 2013, Pettit and Hook, 2009, Keck and Saraceno, 2013, Mandel and Shalev, 2009, Mandel, 2012), I use mothers' educational attainment as an indicator of class because this analysis requires a measure that is comparable across countries and is not determined by employment status. Social class is a complex concept, encompassing both material and cultural accounts. I draw on materialist accounts that focus on class divides in opportunities (i.e., the pay and quality of jobs) and constraints (i.e., the cost and quality of care) (McRae, 2003, Crompton, 2006). My focus is on how the states structure the opportunities and constraints that families encounter. Overall, women with higher levels of education are more attached to the labor market, are less likely to work part-time, and have shorter employment interruptions at the birth of a child (Esping-Andersen, 2009). There is substantial variation, however, in the strength of the association between women's education and employment both across countries and over-time (Pettit and Hook, 2009).

De-familialization. State policies that are de-familializing shift family responsibility for care to the state, providing services to families, through full-time public day care for small children, for example. They are work-facilitating (Jacobs and Gerson, 2004), and promote

gender equality in the labor market (Pettit and Hook, 2009). The universal design of services should facilitate employment among all women, although there is evidence that the provision of public day care differentially affects women by educational attainment (Korpi et al., 2013, Keck and Saraceno, 2013, Pettit and Hook, 2009). Overall, however, public care supports high levels of women's employment (Misra et al., 2011).

One consequence of policies that socialize care is a large public sector (Cooke, 2011), which may draw lower skilled women into the labor force because of a high wage floor and wage compression among public employees (Shalev, 2008, Mandel and Shalev, 2009). For example, the wage penalty for carework is lower where there is more public spending on care and a larger public sector (Budig and Misra, 2010). Although there is a lively debate as to whether de-familialization and its resulting feminized public sector adversely affects the employment outcomes of highly educated women (Mandel & Shalev, 2009 argue yes, whereas Korpi et al., 2013 argue no), state care and public sector employment facilitate mothers' employment across class divides. Thus, where de-familialization is high we can expect high rates of dual full-time families and relatively minor differences by mothers' educational attainment (H1).

Supported Familialism. Some policies are familializing in that they provide money for families to care for their own members, such as cash for care schemes. These policies are work-reducing (Jacobs and Gerson, 2004) and reinforce gender inequality (Pettit and Hook, 2009). These policies may also heighten inequalities across families. Morgan and Zipple (2003) argue that low levels of payment combined with career attachment among highly educated women lead to disproportionate use by lower educated mothers, widening the labor force participation gap among women (see also Hegewisch and Gornick, 2011, Keck and Saraceno, 2013). There are

potentially long run effects by diminishing mothers' employment options and reinforcing a traditional division of household labor (Morgan and Zippel, 2003). Korpi and colleagues (2013), however, find that child and home care allowances suppress the employment of women with medium levels of education more so than women on the lower or upper ends of the distribution.

Evidence from Norway indicates that the alternatives to cash for care are an important consideration. Once popular among most groups, cash for care became the province of lower educated and immigrant mothers once day care availability was guaranteed and the benefit declined in real value (Bungum and Kvande, 2013). This highlights that under supported familialism or optional familialism the outcome depends on alternatives, including access to market care.

Income Inequality and Market Care under Supported or Default Familialism. For care to be provided by the market it has to be affordable to parents. Liberal market economies, such as the United States, allow market-based solutions to meet demands for child care through high levels of income inequality (low wage work) and unregulated entrance into the child care profession (Morgan, 2005). Where market solutions dominate, women with higher earnings can purchase care, but women with low earnings are frozen out of purchasing similar care magnifying differences by class (Cooke, 2011, Esping-Andersen, 1999).

In contrast, in more coordinated labor market economies with lower levels of income inequality (higher wages) and stronger labor market protections, the market is not effective at providing child care (Morgan 2005). In Germany, for example, wage equality prevented growth of affordable market-based childcare, inhibiting employment even for highly educated mothers (Cooke, 2011). As childcare costs represent a regressive tax on women's earnings, educational differences should be magnified where care is costly (Keck and Saraceno, 2013), but even highly

educated mothers may face a barrier to employment where there is low availability of both state and market-based care.

The absence of affordable care – provided by the state or market – does not necessarily indicate low employment. It does suggest, however, a high prevalence of part-time employment because part-time is more easily coupled with informal care arrangements, such as grandparental care (Hegewisch and Gornick, 2011). In EU-15 countries, Lewis and colleagues (2008) find slightly over half of children under 7 with employed mothers are in informal care as their usual arrangement, being cared for by a combination of grandparents, parents themselves, or other unpaid relatives or neighbors. Care patterns vary widely across countries, with less than 1/3 of children under 7 with employed mothers in formal care in Austria, the UK, Greece, and Spain, and more than 2/3 in formal care in Denmark, France, and Sweden (Lewis et al., 2008). In the US and the UK, informal care is a disproportionate share of care utilized by mothers who work part-time, work atypical schedules, and have lower levels of educational attainment (Folk and Beller, 1993, Rutter and Evans, 2011). Informal care may lessen class differences in work-family arrangements by facilitating maternal employment, specifically part-time employment and among women with lower levels of education. Thus, to the extent that the market can defamilialize, it should exacerbate educational inequalities in mothers' employment. The use of informal care, however, has the ability to diminish inequalities in employment rates, albeit at part-time intensity.

The above sketch of how types of familialism combine with overall levels of economic inequality motives the following hypotheses:

H2: Under supported or default familialism if income inequality is low we can expect comparatively low rates of dual full-time families, and higher rates of one-and-a-half earner and

male breadwinner families. With both state care and the market for affordable care low, we can expect part-time employment for mothers coupled with informal care. Women with the highest levels of education, however, may be able to purchase care.

H3: Under supported or default familialism if income inequality is high work-family arrangements will vary considerably by class. Women with high earnings potential will be likely to be in dual full-time families, whereas women with lower earnings potential will be more likely to be in male breadwinner or one-and-a-half earner families.

H4: Under optional familialism we can expect a classed response. To the extent that payments to the family will suppress participation of lower skilled mothers more than higher skilled mothers.

Figure 1 maps countries by public spending on services for families with children, a proxy for de-familialization, and the degree of income inequality. Bubbles indicate the relative spending on payments to families, a proxy for supported familialism. Spending on services, as a percent of GDP in 2009, includes funding for childcare as well as residential facilities and family services, including services for families in need (OECD, 2012). This measure assesses services as distinct from child-related financial support provided through cash transfers (e.g., child allowances) or the tax system (e.g. child tax credits), which appear in the figure as supported familialism. Income inequality is measured by the 80/20 percentile ratio (PR 80/20), indicating the ratio of post-transfer disposable household income comparing the 20th and 80th percentiles (LIS, n.d.). The PR 80/20 best reflects the income gap between households with lower and higher levels of educational attainment. The year corresponds to the LIS data used in this analysis.

Figure 1 shows three primary clusters that correspond with the above hypotheses:

- 1) High de-familialization, low income inequality, and medium levels of supported familialism in the Nordic countries (H1). France groups with the Nordic countries, but displays slightly higher income inequality and higher supported familialism. France may be better classified as optional familialism (H4).
- 2) Low de-familialization, low income inequality, and high levels of supported familialism in Austria, Germany and Luxembourg. Switzerland groups with these countries, but displays low levels of supported familialism and less de-familialization. Japan is a potential member of this cluster, but displays higher levels of income inequality (H2).
- 3) Low de-familialization, high income inequality, and low levels of supported familialism in Mediterranean welfare states. The US shares similarities, but with much higher income inequality. Ireland clusters with these countries, but with high levels of supported familialism (H3). The UK would cluster with this group, but shows higher levels of both supported familialism and de-familialization. The UK's high score on spending on services for families is relatively recent; spending on childcare and preschool (as a percent of GDP) nearly doubled from 1998 to 2009 (OECD, 2012). The UK may be better classified as optional familialism (H4).

In the next section of the paper, I examine how well these predictions fit observed work-family arrangements.

Data and Approach

I build on Lewis and colleagues' (2008) typology of work-family arrangements for two-parent families with a child age 0-15, refining this typology by considering variation within countries by class as measured by mothers' educational attainment. Lewis and colleagues use the 2004 European Social Survey (ESS) for EU-15 member states (with the exclusion of Italy and

Luxembourg because of data issues) and restrict the sample to two-parent families with children. Unfortunately, with an average sample size of about 415 families per country the ESS 2004 is too small to refine by educational attainment. Instead, I use data from the Luxembourg Income Study (LIS). LIS is a cross-national data archive containing micro-level data from approximately 40 countries. To facilitate comparative research, LIS harmonizes the datasets into a common template, preserving original country coding, and standardizes data whenever possible to create uniform variable coding across surveys (LIS Database, n.d.). LIS also allows us to include the United States and Japan, two non-European countries included in *Three Worlds*. I use the most recent year available for each country (that contain the data necessary for the analysis). Unfortunately, data from the Nordic countries contained in LIS do not have necessary information on work hours, thus I use the ESS for the Nordic countries. I pool all available years of the ESS 2002-2010 to ensure an adequate sample size. Sample sizes range from 871 to 1,038 in the ESS and 955 to 18,968 in LIS (see Appendix Table 1).

Following Lewis and colleagues (2008), analyses are restricted to two parent families with a co-resident biological, adoptive or step child age 0-15. To categorize families into workfamily arrangements I utilize information on employment status for each partner. LIS creates a dummy variable from current weekly hours worked at a respondent's main job and defines parttime as less than 30 hours per week. A data provider definition may be used in datasets where weekly hours are not available. In France, part-time refers to hours worked at all jobs.

Education is coded, by LIS, into three categories according to the International Standard Classification of Education from UNESCO, (ISCED97). Low corresponds to less than secondary education (levels 0, 1, and 2). Medium corresponds to completion of secondary education (levels 3 and 4) and high indicates completion of tertiary education (levels 5 and 6).

Couples with missing data on work hours are excluded from the analysis. On average, 4.5% of couples are missing data for at least one partner. France is an extreme case, where 12.6% of couples are missing data because the self-employed were not asked weekly work hours. I attempted to retain cases with missing data by creating a separate group, but varying amounts of missing data per country made comparisons of work-family arrangements across countries too complex. I utilize listwise deletion. Analyses are weighted by the household weight. Analyses are replicated in the ESS for Nordic countries.

Work-Family Arrangements

I begin by using hierarchical cluster analysis (method: Ward's linkage) to classify countries. This method identifies clusters of countries that are similar on measured characteristics. This method has been used in recent studies to classify welfare states' distributive outcomes (Kammer et al., 2012), family policy (Wendt et al., 2011), and gender stratification (Mandel, 2009). For this study, countries are grouped using the percentage of two parent families that are: (1) dual full-time or female sole or main employee, (2) male full-time and female part-time (one-and-a-half-earner), (3) male sole earner, and (4) neither employed (see Appendix Table 1 for data). Figure 2 shows a visual representation of clusters, via dendrograms, that reveal the similarity between countries and country clusters. Horizontal lines connect similar countries and clusters and the vertical lines represent the distance or dissimilarity between countries and clusters.

Figure 2 reveals that the social democratic countries form a distinct group, quite dissimilar from all other groupings. In the middle of the dendrogram is a diverse group of countries including the UK and Ireland along with Austria, Luxembourg, Japan, Germany, and Switzerland. Finally, to the right of the dendrogram, the US clusters with France, and the three Mediterranean countries (Italy, Spain, and Greece).

Figure 3 shows work-family arrangements for each country grouped by the clusters identified in the dendrogram. Each bar displays the percentage of families where 1) mothers are the sole or main employees, 2) parents work dual full-time, 3) fathers work full-time and mothers work part-time (one-and-a-half earner), 4) fathers are the sole earner, and 5) neither are employed. The first three categories sum to the overall level of mothers' employment; this percentage is displayed within each bar. Countries are arranged in the order of the dendrogram.

Figure 3 confirms Lewis and colleagues' (2008) categorization of countries into dual full-time, one-and-a-half earner, and polarization models. The social democratic countries are characterized by the prevalence of dual full-time families. In 74 to 86% of families mothers are employed. One-and-a-half earner families are less than 10% in all countries, except Norway where 18% of families are one-and-a-half earner. The second group of countries is distinguished by the prevalence of the one-and-a-half earner model. Mothers' employment ranges from 55% in Japan to 69% in the UK and Germany, but in all cases dual full-time is limited. The final group is characterized by higher levels of dual full-time families than in the second group, but greater levels of male sole earner families than the social democratic countries, and low levels of one-and-a-half earner families. This corresponds to the polarization model.

Overall, there is a clearly distinct social democratic regime, but the liberal and conservative regimes display substantial variation in work-family arrangements. Although informative, these averages obscure variation within countries that may help us better understand these overall patterns as well as gender class inequality within countries.

Work-Family Arrangements by Mothers' Educational Attainment

Figure 4 replicates Figure 2, but incorporates information on work-family arrangements by mothers' level of educational attainment. That is, instead of clustering based on four work-

family arrangements, I cluster countries based on 12 data points – four work-family arrangements by three levels of mothers' educational attainment. The social democratic countries remain a distinct group to the left of the dendrogram. The UK, Ireland, and Austria no longer congregate with other one-and-a-half earner countries, but group with the five members of the polarization group (the US, Italy, France, Spain, and Greece). Disaggregating by class moves the US closer to the other members of the liberal regime. The remaining one-and-a-half earner countries (Germany, Switzerland, Luxembourg, and Japan) now appear at the right of the dendrogram as a distinct group.

Figure 5 replicates Figure 3, but disaggregates work-family arrangements by mothers' educational attainment (see Appendix Table 2 for data). Consistent with hypothesis 1 concerning countries with high levels of de-familialization, the social-democratic regime remains distinct in its pattern of dual full-time employment. There is variation by class, but even in families where mothers' educational attainment is low employment surpasses 60%. Mothers with low educational attainment are a fairly small group in all four countries, comprising 10% or less of partnered families with children. Differentiation among the remaining 90% of families is fairly small, amounting to about a 10 percentage point difference, or less, in employment rates between mothers with medium and high levels of educational attainment. In the social-democratic regime, mothers are employed and the majority of families are dual full-time, although one-and-a-half earner is more common in Norway than in other social democratic countries.

Accounting for variation by class reveals that the one-and-a-half earner model splits into two distinct groups. The first group, comprised of the UK, Ireland, and Austria, displays substantial variation in work-family arrangements by mothers' educational attainment. Around

75% of highly educated mothers are employed, whereas around 40% of mothers with low educational attainment are employed. The one-and-half earner model, however, is prevalent across the educational spectrum. Compared to other countries in the one-and-a-half earner model, these countries have higher rates of dual full-time families, particularly among the highly educated. Nearly 40% of families with highly educated mothers are dual full-time in the UK and Ireland. The UK and Ireland also show a substantial minority of families with neither parent employed among families with low levels of maternal education – 28% in the UK and 20% in Ireland, compared to 9% in Austria (note the observation for the UK is after the start of the Great Recession, whereas the observations for Ireland and Austria are before). The clustering of the UK, Ireland, and Austria is inconsistent with hypotheses. Although the pattern observed for the UK and Ireland is consistent with hypothesis 3 regarding countries with low de-familialization and high inequality, Austria should group with Germany and other countries representing low de-familialization and low inequality (hypothesis 2).

The next group of countries, including the US, France, and the three Mediterranean countries, exhibit the polarization model. Figure 5 reveals that this polarization is driven, in part, by class. Dual full-time is the norm for families with high maternal educational attainment and male sole earner is the norm for families with low attainment. In Italy, for example, 57% of families with high attainment are dual full-time and 15% are male sole earner, compared to families with low attainment where 22% are dual full-time and 55% are male sole earner. Note, the US moves closer to the UK and Ireland when patterns are disaggregated by class. The profile of liberal countries and Mediterranean countries with low de-familialization and high income inequality is consistent with hypothesis 3. The "correct" placement of France is less clear.

higher on supported familialism, exhibiting optional familialism (this is consistent with other categorizations of France (Misra et al., 2007, Lewis, 1992)). Hypothesis 4 suggested that France should show greater class cleavages. Given this, it may be expected that France would group with other countries defined by class inequality.

The remaining four one-and-a-half earner countries from the conservative regime cluster together. Consistent with hypothesis 2 regarding countries with low de-familialization and low income inequality, they are distinct from other one-and-a-half earner countries by virtue of showing little to no variation by class. In Japan, Luxembourg, Switzerland, and to a lesser extent Germany, mothers' educational attainment is not strongly associated with work-family arrangements. Mothers' employment rates are in the mid-50s to mid-60s with a large share of part-time employment. There is some variation in Germany, but it is largely confined to the comparison between those with low educational attainment (13% of families) and those with greater attainment.

Finally, I end on a brief note about the importance of considering work-family arrangements other than one-and-a-half earner, dual full-time, and male breadwinner. When disaggregated by class, there are wide fluctuations in the "other" category, especially workless households, and this is particularly important for families with lower educated mothers. In half of the countries, over 10% of women with low educational attainment are in workless households. In Finland, for example, there is a 10 percentage point gap between the employment rates of low and high educated mothers, but nearly identical proportions of male breadwinner families. This is because mothers with low education are more likely to be in workless households. They are also more likely to be sole or main support for their family than are highly educated mothers.

Discussion

In *Social Foundations*, Esping-Andersen (1999) addressed critiques of *Three Worlds* by adding family to the state-market nexus and focusing on familialism, which is an important conceptual tool for understanding the state-market-family triad. This study reveals that we gain much more from familialism as an analytic tool when we engage it with considerations of economic inequality. In fact, it is difficult to derive hypotheses about how families are likely to behave under varying types of familialism without considering both the overall level of inequality in a country and a family's social location within it. This echoes calls to retain a class-based dimension in the study of gender, family, and the welfare state (O'Connor et al., 1999, Orloff, 1993, Korpi, 2000, Cooke, 2011, Mandel and Shalev, 2009).

Additionally, the concept of optional familialism (Leitner, 2003) is important because it highlights how, in the context of de-familializing policies, a classed response is anticipated alerting us to the importance of alternatives and how these alternatives vary by a family's social location. While this study would suggest that class is an important correlate of work-family arrangements in nearly all contexts, it is of utmost importance in countries with higher income inequality, greater reliance on the market, and optional familialism.

Disaggregating by class sheds additional light on the *Three Worlds* typology. The conservative regime displays a clear split into two groups that largely corresponds with overall levels of income inequality. Scholars have argued that the Mediterranean countries, compared to other conservative countries, are distinctly familialist and this suppresses women's labor force participation (Gal, 2010). The results here suggest that the story is more complex. The higher levels of income inequality in Spain, Italy, and Greece coupled with low levels of spending on either supported familialism or de-familialization put these countries more on par with members of the liberal regime than with their conservative northern neighbors. Disaggregating work-

family arrangements by class reveals that the Mediterranean countries are not distinctly familialist in outcomes, at least not for highly educated mothers.

Disaggregating by class also adds greater clarity to our prevailing understandings of work-family arrangements (e.g. Lewis et al., 2008). Countries that polarize, in the aggregate, between dual full-time and male breadwinner, largely polarize along class lines. This pattern is displayed in countries with high income inequality and low de-familialization, as well as in France, a country displaying optional familialism. In countries with high levels of household income inequality, the polarization in work-family arrangements exacerbates income inequality. That is, highly educated mothers are largely in dual-income households (and partnered to highly educated men), and lower educated mothers are largely in single-income households (and partnered to lower educated men), consolidating economic advantages of more highly educated households. In the US, this phenomenon, coupled with the growth of single mother families among lower educated women, has given rise to "diverging destines" of children, wherein children born to higher educated mothers are gaining advantages, on average, while children born to mothers with lower levels of education are falling behind (McLanahan, 2004). Although, France also displays the polarization model, social policy dampens its effect on inequality. For example, France, Italy, and the U.S. have similarly high levels of child poverty, over 25%, prior to taxes and transfers, but France reduces child poverty to below 10% whereas Italy and the U.S. remain over 20% (United Nations Children's Fund, 2000).

Work-family arrangements in two parent families are an important outcome of familialism, but are clearly only one of the possible measures we should explore. Another vital consideration is the amount of household care performed within families. We must consider the level of unpaid work and how this varies by gender and class across countries to fully understand

the outcome of levels of familialism embedded in welfare states. Few cross-national studies have unpacked unpaid work time by class (for exceptions see Gupta et al., 2010), or the combination of paid and unpaid work (see Cooke, 2011). Another important area of research is the work-family arrangements of single parent families, overwhelmingly headed by women (Misra et al., 2012).

The study has several limitations. Due to data availability, this study mixes observations from before and after the start of the Great Recession, which may impact comparisons of differences in work-family arrangements across countries, particularly among lower skilled workers. Additionally, I focus on educational attainment, which is only one potential measure of class and one aspect of diversity among women. Further attention should be paid to race and ethnicity, immigration, and geographic variation within countries (Misra and Akins, 1998).

Findings have relevance for current policy debates, particularly for policies designed for the "adult-worker model family", that is, policies that assume all adults are in the labor market (Lewis, 2001). Lewis argues that social policy is ahead of the reality in assuming full individualization, particularly since most European countries display the one-and-a-half earner model. She warns that policies premised on individual contributions will underserve women. This study reveals that these policies are most likely to fail women with lower levels of educational attainment, exacerbating class inequalities particularly in countries that polarize between dual full-time among the higher educated and male breadwinner among the lower educated. This study highlights the importance of disaggregating family patterns by class for our understanding of gender inequality.

ENDNOTES

¹ Figure 1 is similar to other recent attempts to map countries by de-familialization (e.g., Korpi et al., 2013). For a recent review of family policy, typologies, and an alternate typology see Wendt et al., 2011.

² It is not the intent of this paper to explicitly engage Esping-Andersen's (1990) decommodification (Bambra, 2006) or stratification dimensions. De-commodification and select stratification dimensions have been linked to redistributive income inequality, which largely supported Esping-Andersen's typology, albeit southern Europe countries displayed higher income inequality than other conservative countries (Kammer et al., 2012).

³ The map is fairly robust to alternative indicators. Spending on family services is strongly correlated with publicly-funded day care coverage for ages 0 to 2 (.957, p<.001) and spending on day care and pre-school (.963, p<.001). Correlations between the 80/20 percentile ratio and other standard measures of income inequality -- including the GINI, Atkinson, PR 90/10, and PR 90/50 -- are highly correlated (all above .940, p<.001).

References

- Bambra, C. 2006. 'Research Note: Decommodification and the Worlds of Welfare Revisited'. *Journal of European Social Policy*, 16: 73-80.
- Budig, M. & Misra, J. 2010. 'How Care-Work Employment Shapes Earnings in Cross-National Perspective'. *International Labour Review*, 149: 441-460.
- Bungum, B. & Kvande, E. 2013. 'The Rise and Fall of Cash for Care in Norway: Changes in the Use of Child-Care Policies'. *Nordic Journal of Social Research*, 4: 31-54.
- Cooke, L. P. 2011. Gender-Class Equality in Political Economies. New York: Routledge.
- Crompton, R. 2006. 'Class and Family'. *The Sociological Review*, 54: 658-677.
- Daly, M. 2000. A Fine Balance: Women's Labor Market Participation in InternationalComparison. *In:* Scharpf, F. W. & Schmidt, V. A. (eds.) *Welfare and Work in the Open Economy*. Oxford University Press.
- Esping-Andersen, G. 1990. The Three Worlds of Welfare Capitalism. Cambridge: Polity Press.
- Esping-Andersen, G. 1999. *Social Foundations of Postindustrial Economies*. Oxford: Oxford University Press.
- Esping-Andersen, G. 2009. *Incomplete Revolution: Adapting Welfare States to Women's New Roles*. Cambridge: Polity Press.
- Evertsson, M., England, P., Mooi-Reci, I., Hermsen, J., De Bruijn, J. & Cotter, D. 2009. 'Is Gender Inequality Greater at Lower or Higher Educational Levels? Common Patterns in the Netherlands, Sweden, and the United States'. *Social Politics*, 16: 210-241.
- Folk, K. F. & Beller, A. H. 1993. 'Part-Time Work and Child Care Choices for Mothers of Preschool Children'. *Journal of Marriage and the Family*, 55: 146-157.
- Gal, J. 2010. 'Is There an Extended Family of Mediterranean Welfare States?'. *Journal of European Social Policy*, 20: 283-300.
- Gupta, S., Evertsson, M., Grunow, D., Nermo, M. & Sayer, L. C. 2010. Economic Inequality and Housework. *In:* Treas, J. & Drobnic, S. (eds.) *Dividing the Domestic: Men, Women, and Housework in Cross-National Perspective.* Stanford: Stanford University Press.
- Hegewisch, A. & Gornick, J. C. 2011. 'The Impact of Work-Family Policies on Women's Employment: A Review of Research from Oecd Countries'. *Community, Work & Family*, 14: 119-138.

- Jacobs, J. & Gerson, K. 2004. *The Time Divide: Work, Family, and Gender Inequality*. Cambridge: Harvard University Press.
- Kammer, A., Niehues, J. & Peichl, A. 2012. 'Welfare Regimes and Welfare State Outcomes in Europe'. *Journal of European Social Policy*, 22: 455-471.
- Keck, W. & Saraceno, C. 2013. 'The Impact of Different Social-Policy Frameworks on Social Inequalities among Women in the European Union: The Labour-Market Participation of Mothers'. Social Politics.
- Korpi, W. 2000. 'Faces of Inequality: Gender, Class, and Patterns of Inequalities in Different Types of Welfare States'. *Social Politics*, 7: 127-191.
- Korpi, W., Ferrarini, T. & Englund, S. 2013. 'Women's Opportunities under Different Family Policy Constellations: Gender, Class, and Inequality Tradeoffs in Western Countries Re-Examined'. *Social Politics*, 20: 1-40.
- Leitner, S. 2003. 'Varieties of Familialism: The Caring Function of the Family in Comparative Perspective'. *European Societies*, **5:** 353-375.
- Lewis, J. 1992. 'Gender and the Development of Welfare Regimes'. *Journal of European Social Policy*, 3: 159-173.
- Lewis, J. 1997. 'Gender and Welfare Regimes: Further Thoughts'. *Social Politics*, 4: 160-177.
- Lewis, J. 2001. 'The Decline of the Male Breadwinner Model: Implications for Work and Care'. *Social Politics*, 8: 152-169.
- Lewis, J., Campbell, M. & Huerta, C. 2008. 'Patterns of Paid and Unpaid Work in Western Europe: Gender, Commodification, Preferences and the Implications for Policy'. *Journal of European Social Policy*, 18: 21-37.
- Lewis, J. & Ostner, I. 1994. *Gender and the Evolution of European Social Policies*. Centre for Social Policy Research, University of Bremen.
- LIS (n.d.). LIS Inequality and Poverty Key Figures. Luxembourg: LIS.

 http://www.lisdatacenter.org/data-access/key-figures/inequality-and-poverty/ (July 1, 2013).
- LIS Database (n.d.). www.lisdatacenter.org (multiple countries; May 1, 2012 to September 15, 2012). Luxembourg: LIS.
- Mandel, H. 2009. 'Configurations of Gender Inequality: The Consequences of Ideology and Public Policy'. *The British Journal of Sociology*, 60: 693-719.

- Mandel, H. 2011. 'Rethinking the Paradox: Tradeoffs in Work-Family Policy and Patterns of Gender Inequality'. *Community, Work & Family*, 14: 159-176.
- Mandel, H. 2012. 'Winners and Losers: The Consequences of Welfare State Policies for Gender Wage Inequality'. *European Sociological Review*, 28: 241-262.
- Mandel, H. & Shalev, M. 2009. 'How Welfare States Shape the Gender Pay Gap: A Theoretical and Comparative Analysis'. *Social Forces*, 87: 1873-1911.
- Mclanahan, S. 2004. 'Diverging Destinies: How Children Are Faring under the Second Demographic Transition'. *Demography*, 41: 607-627.
- Mcrae, S. 2003. 'Constraints and Choices in Mothers' Employment Careers: A Consideration of Hakim's Preference Theory'. *The British Journal of Sociology*, 54: 317-338.
- Misra, J. & Akins, F. 1998. 'The Welfare State and Women: Structure, Agency, and Diversity'. *Social Politics*, 5: 259-285.
- Misra, J., Budig, M. & Boeckmann, I. 2011. 'Work-Family Policies and the Effects of Children on Women's Employment Hours and Wages'. *Community, Work & Family,* 14: 139-157.
- Misra, J., Budig, M. J. & Moller, S. 2007. 'Reconciliation Policies and the Effects of Motherhood on Employment, Earnings and Poverty'. *Journal of Comparative Policy Analysis*, 9: 135-155.
- Misra, J., Moller, S., Strader, E. & Wemlinger, E. 2012. 'Family Policies, Employment and Poverty among Partnered and Single Mothers'. *Research in Social Stratification and Mobility*, 30: 113-128.
- Morgan, K. J. 2005. 'The "Production" of Child Care: How Labor Markets Shape Social Policy and Vice Versa'. *Social Politics*, 12: 243-263.
- Morgan, K. J. & Zippel, K. 2003. 'Paid to Care: The Origins and Effects of Care Leave Policies in Western Europe'. *Social Politics*, 10: 49-85.
- O'connor, J. S., Orloff, A. S. & Shaver, S. 1999. States, Markets, Families: Gender, Liberalism, and Social Policy in Australia, Canada, Great Britian and the United States. Cambridge: Cambridge University Press.
- OECD 2012. OECD Family Database. Paris.
- Orloff, A. S. 1993. 'Gender and Social Rights of Citizenship: The Comparative Analysis of Gender Relations and Welfare States'. *American Sociological Review*, 58: 303-328.

- Pettit, B. & Hook, J. L. 2009. Gendered Tradeoffs: Family, Social Policy, and Economic Inequality in Twenty-One Countries. New York: Russell Sage.
- Rutter, J. & Evans, B. 2011. Informal Childcare: Choice or Chance? London: Daycare Trust.
- Sainsbury, D. 1996. *Gender, Equality, and Welfare States*. Cambridge: Cambridge University Press.
- Saraceno, C. & Keck, W. 2008. The Institutional Framework of Intergenerational Family Obligations in Europe: A Conceptual and Methodological Overview. *Multilinks Project, WP1*. Berlin: WZB Social Science Research Center.
- Shalev, M. 2008. 'Class Divisions among Women'. Politics & Society, 36: 421-444.
- Sorensen, A. 1994. 'Women, Family, and Class'. Annual Review of Sociology, 20: 27-47.
- United Nations Children's Fund 2000. *A League Table of Child Poverty in Rich Nations*. UNICEF Innocenti Research Centre.
- Wendt, C., Mischke, M. & Pfeifer, M. 2011. Welfare States and Public Opinion: Perceptions of Healthcare Systems, Family Policy and Benefits for the Unemployed and Poor in Europe. Edward Elgar.

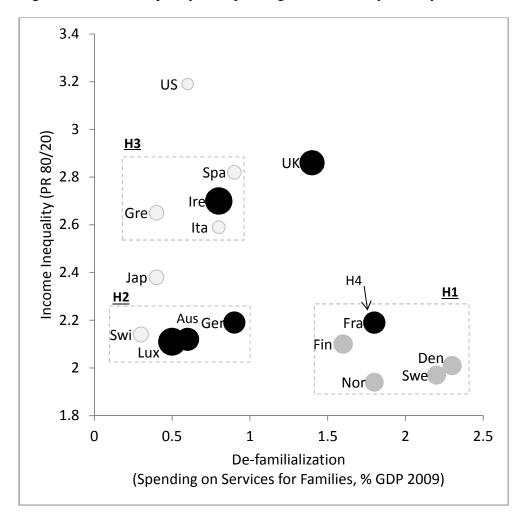


Figure 1. Income inequality and spending on families, by country

Note: Bubble size indicates spending on cash/tax relief for families as a percentage of GDP in 2009. Black shading = high spending (2.17 to 3.51%), medium gray = medium spending (1.55 to 1.67%), and light gray = low spending (0.63 to 1.08%). Percentile ratios are from LIS Inequality and Poverty Key Figures and spending is from the OECD Family Database.

Figure 2. Hierarchical cluster analysis of work-family arrangements

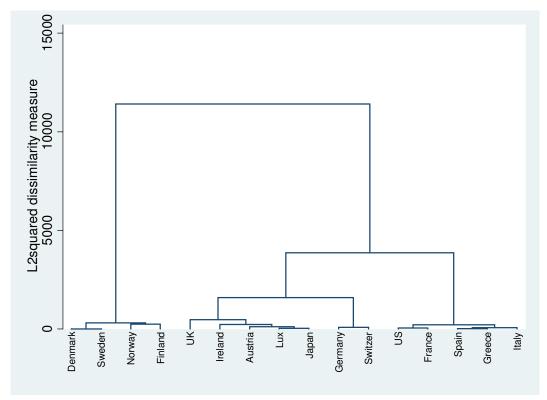
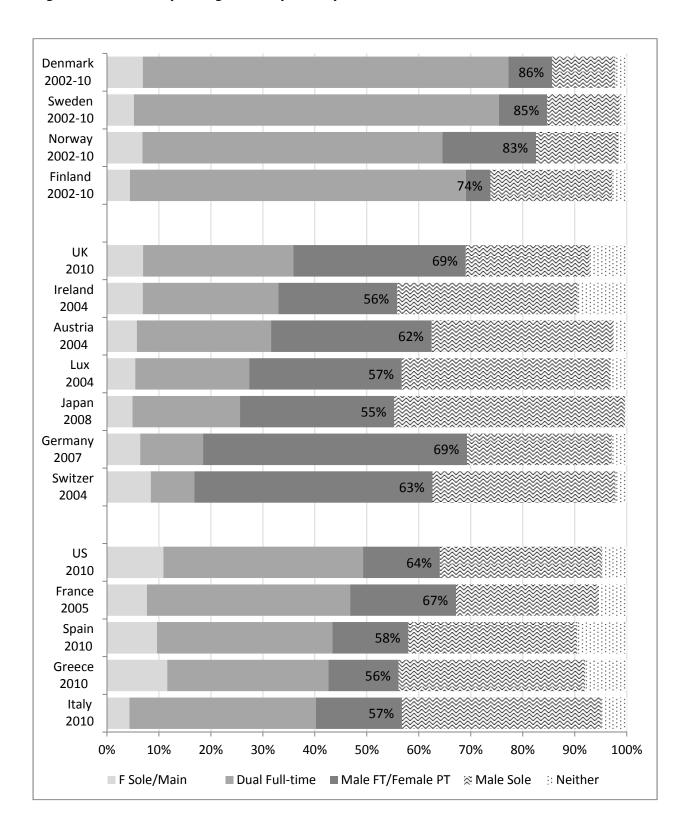


Figure 3. Work-family arrangements by country



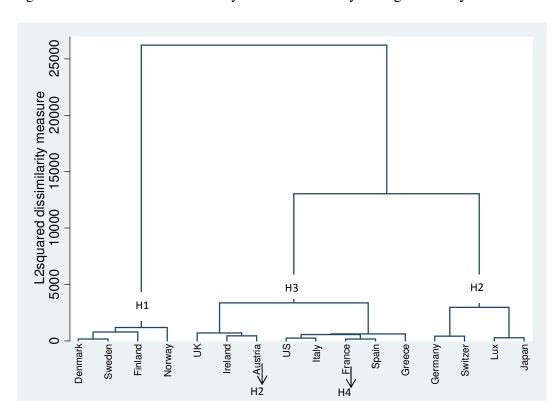
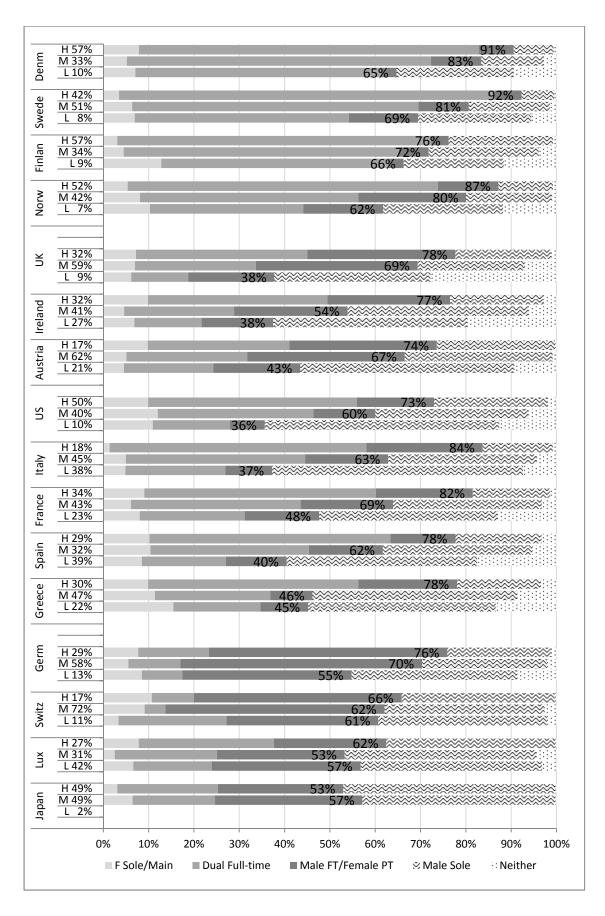


Figure 4. Hierarchical cluster analysis of work-family arrangements by class

Figure 5. Work-family arrangements by educational attainment and country



Note: H = high, M = medium, and L = low educational attainment.

Appendix Table 1. Work-family arrangements in two parent families by country, percentages

					Male				
				Dual	FT/			Sum:	
		Female	Female	Full-	Female	Male	Neither	Mothers	N:
	Year	Sole	Main	time	PT	Sole	Employed	Employed	Families
Denmark	2002-10	5.3	1.6	70.4	8.4	12.2	2.2	85.6	871
Sweden	2002-10	3.5	1.7	70.2	9.3	14.0	1.4	84.7	960
Norway	2002-10	4.6	2.2	57.7	18.0	15.9	1.5	82.6	1,038
Finland	2002-10	3.5	0.9	64.6	4.7	23.4	2.8	73.8	969
UK	2010	4.2	2.8	28.9	33.1	23.8	7.1	69.0	4,947
Ireland	2004	5.0	1.9	26.1	22.8	34.8	9.4	55.8	1,351
Austria	2004	3.4	2.3	25.8	30.9	35.0	2.6	62.5	1,157
Luxembourg	2004	3.8	1.6	21.9	29.4	40.2	3.1	56.7	963
Japan	2008	0.7	4.2	20.7	29.7	44.4	0.3	55.3	953
Germany	2007	3.2	3.2	12.1	50.8	27.8	2.9	69.3	1,701
Switzerland	2004	2.6	5.8	8.4	45.8	35.3	2.1	62.6	860
US	2010	7.9	3.0	38.4	14.8	31.2	4.7	64.1	18,968
France	2005	2.3	5.4	39.1	20.4	27.5	5.4	67.2	2,295
Spain	2010	7.6	2.1	33.7	14.6	32.5	9.5	58.0	2,657
Greece	2010	7.2	4.4	31.0	13.5	35.9	8.0	56.1	1,139
Italy	2010	3.1	1.2	35.8	16.6	38.4	4.8	56.8	1,463
Average		4.26	2.76	36.56	22.68	29.51	4.23	66.26	

Appendix Table 2. Work-family arrangements in two parent families by educational attainment and country

		Female Sole	Female Main	Dual Full- time	Male FT/ Female PT	Male Sole	Neither Employed	Sum: Mothers Employed
	L 10%	4.7	2.4	54.1	3.5	25.9	9.4	64.7
Denmark 2002-10	M 33%	3.8	1.4	67.1	3.3 11.1	13.8	2.8	83.4
	H 57%	6.2	1.4	75.1	7.6	8.9	0.6	90.5
	11 37 70	0.2	1.0	73.1	7.0	0.9	0.0	90.3
Sweden 2002-10	L 8%	6.9	0.0	47.2	15.3	25.0	5.6	69.4
	M 51%	3.9	2.5	63.2	11.1	17.9	1.4	80.7
2002-10	H 42%	2.5	1.0	82.8	6.0	7.2	0.5	92.3
Finland	L 9%	8.1	4.7	50.0	3.5	22.1	11.6	66.3
2002-10	M 34%	4.5	0.0	60.7	6.6	24.3	3.9	71.8
2002 10	H 57%	2.2	0.9	69.3	3.8	23.1	0.7	76.2
Norway	L 7%	4.4	5.9	33.8	17.6	26.5	11.8	61.8
2002-10	M 42%	6.0	2.1	48.1	23.8	19.0	0.9	80.1
	H 52%	3.5	1.9	68.4	13.4	12.1	0.7	87.2
	L 9%	5.0	1.2	12.6	19.0	34.5	27.8	37.8
UK 2010	M 59%	4.2	2.7	26.7	35.7	23.5	7.1	69.4
	H 32%	4.0	3.3	37.9	32.6	21.2	1.1	77.7
	11 32 70	7.0	3.3	31.7	32.0	21,2	1.1	77.7
Ireland 2004	L 27%	5.6	1.2	14.8	15.8	42.9	19.6	37.5
	M 41%	3.5	1.1	24.2	25.1	39.9	6.2	53.9
	H 32%	6.2	3.6	39.6	27.1	20.7	2.8	76.5
Austria 2004	L 21%	2.9	1.7	19.7	19.2	47.3	9.3	43.5
	M 62%	3.4	1.7	26.7	34.8	32.7	0.8	66.5
	H 17%	4.4	5.5	31.3	32.5	26.1	0.3	73.6
US 2010	I 1007	7.5	2.5	17.0	77	5 1 0	10.6	25.6
	L 10%	7.5	3.5	17.0	7.7	51.8	12.6	35.6
	M 40%	9.3	2.8	34.3	13.7	33.7	6.3	60.0
	H 50%	6.9	3.0	46.1	17.0	25.1	1.9	73.0
Italy 2010	L 38%	4.2	0.7	22.0	10.3	55.4	7.4	37.2
	M 45%	3.2	1.8	39.5	18.3	32.9	4.2	62.9
	H 18%	0.7	0.6	56.6	25.7	15.5	0.8	83.7
	11 10 /0	0.7	0.0	50.0	23.1	15.5	0.0	05.7

Appendix Table 2. Continued

		Female Sole	Female Main	Dual Full- time	Male FT/ Female PT	Male Sole	Neither Employed	Sum: Mothers Employed
France 2005	L 23%	7.1	1.0	23.1	16.4	39.5	12.9	47.6
	M 43%	4.3	2.3	40.5	22.1	35.5	3.5	69.2
	H 34%	5.5	3.6	51.1	21.4	17.0	1.5	81.5
Spain 2010	L 39%	7.6	0.9	18.5	13.5	42.0	17.5	40.5
	M 32%	8.6	1.8	35.0	16.3	32.9	5.4	61.7
	H 29%	6.1	4.0	53.2	14.3	19.0	3.3	77.7
C	L 22%	9.5	6.0	19.2	10.5	41.4	13.4	45.2
Greece 2010	M 47%	7.7	3.7	25.4	9.3	45.3	8.6	46.2
2010	H 30%	5.1	4.8	46.3	21.8	18.5	3.4	78.1
Germany	L 13%	6.3	2.2	8.9	37.4	36.6	8.6	54.8
2007	M 58%	3.1	2.5	11.5	53.3	27.6	2.1	70.3
	H 29%	2.3	5.4	15.6	52.6	22.8	1.2	75.9
Switzer 2004	L 11%	0.5	2.8	23.8	33.5	37.2	2.1	60.7
	M 72%	2.7	6.4	4.5	48.4	35.4	2.6	62.0
	H 17%	4.4	6.4	9.3	45.8	33.8	0.4	65.8
Lux 2004	L 42%	5.4	1.2	17.3	32.9	40.1	3.1	56.8
	M 31%	2.4	0.1	22.5	28.2	42.4	4.4	53.3
	H 27%	2.9	4.9	29.8	24.8	37.2	0.3	62.4
Japan 2008	L 2%	_	_	_	_	_	-	-
	M 49%	1.2	5.3	18.2	32.5	42.6	0.2	57.2
	H 49%	0.2	2.9	22.2	27.7	46.8	0.2	53.0