# The Political Economy of Gender: Explaining Cross-National Variation in the Gender Division of Labor and the Gender Voting Gap

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Mainstream political economy has tended to treat the family as a unit when examining the distributional consequences of labor market institutions and of public policy. In a world with high divorce rates, we argue that this simplification is more likely to obscure than to instruct. We find that labor market opportunities for women, which vary systematically with the position of countries in the international division of labor and with the structure of the welfare state, affect women's bargaining power within the family and as a result, can explain much of the cross country variation in the gender division of labor as well as the gender gap in political preferences.

ome of the most notable variance in income, labor market status, and the division of labor is gender based. On average, women participate less in the labor market than men, whereas they assume the lion's share of unpaid work in the household. Women also tend to be less well paid than men when they do work, and they occupy jobs with lower job security, fewer prospects of advancement, and less responsibility. Often, these inequalities spill over into a gender gap in political preferences and voting behavior.

Following Becker's (1964, 1971, 1981, 1985) seminal work on the family, economists have traditionally explained the gender division of labor as the outcome of a coordination game where a more or less complete division of labor is the efficient solution due to increasing returns to human capital. Although the biological advantages of women specializing in household skills are slim in a modern economy, such specialization may be reinforced by childhood socialization in which parents rationally seek to impart values on their offspring that will maximize

their chances of success later in life. Since gender roles are assigned before "true" preferences are observable, the coordination game is solved by using (inherently small) gender differences as the cue.

But while the efficiency model captures some key aspects of the family as an institution, it is incapable of accounting for the stark differences in female labor force participation across economies at comparable levels of development, and it fails to explain why there is so much variance in the distribution of housework between the sexes after controlling for hours spent in paid work and earnings. Building on recent economic bargaining models of the family (Braunstein and Folbre 2001; Folbre 1994; Lundberg and Pollak 1996, 2001; Pollak 1999, 2003), we argue that this division of labor puzzle can only be understood by treating marriage as an incomplete contract that is potentially subject to termination. When this is the case, both men and women have an incentive to cultivate their outside options by entering into paid work, and the distribution of unpaid work is determined

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by bargaining where bargaining power is dependent on political-economic factors outside the family. We make use of recent political economy arguments (e.g., Estevez-Abe 1999; Hall and Soskice 2001; Iversen 2005; Pontusson forthcoming) as a well as macrosociological work on the welfare state (e.g., Esping-Andersen 1990, 1999; Orloff 1999; Huber and Stephens 1999) to tie macrolevel conditions to intrafamily bargaining over the division of labor.

A second puzzle, the rising, but country-specific, gender gap in political preferences and voting behavior, looms large in the political world yet has received little attention by comparativists. In economic efficiency models of the family there is no room for men and women to favor different public policies. Families will differ over social policies depending on their position in the age and class structure and the like, but family members are assumed to have more or less identical preferences. When divorce is a serious prospect, on the other hand, we have to treat family members as individuals with distinct and potentially conflicting preferences. Basically, when outside options are important for long-term welfare, both sexes will prefer social and economic policies that maximize these options, even when this reduces total household income or other measures of aggregate welfare. But whether the distributive game over outside options translates into differences in political preferences depends critically on the risk of divorce, whether women participate in the labor market, and the skill structure of production relies on specific as opposed to general skills and the extent to which the state provides a broad range of social services. Somewhat paradoxically, we find that it is where women are in the weakest position in the economy that their preferences are the least distinct from men's.

The rest of the article is organized as follows. The second section lays out the standard efficiency model of the family division of labor and the bargaining model alternative that better fits today's world. Our empirical findings are that, controlling for a variety of factors, women with stronger outside employment options are able to reduce their share of family work. Such outside options are critically dependent on the skill structure of production and the extent of public service provision. With the starting point in these results, the third section explains the cross-country variation in gender-based political preferences. We show how the gender gap in preferences depends on female labor force participation, the possibility of marriage breakup, and the extent to which women are disadvantaged in the private labor market. Finally, we conclude.

# **Explaining the Gender Division** of Labor

In Becker's efficiency model, couples engage in a division of labor to take advantage of gains from trade. One family member will specialize in marketable skills and paid work, while another will specialize in household skills and unpaid work, on grounds that there are increasing returns to human capital in both domains, and that the care of children cannot be completely subcontracted out without loss to the children's wellbeing. The spouse specializing in household skills may enter the labor market part time if the domestic workload permits this—something that is more likely to be the case early and late in a marriage corresponding to the years before children are born and after they start school or leave the household.

In principle, either the husband or the wife could specialize in market or household skills, but women will almost invariably specialize in the latter because of an initial comparative biological advantage in caring for very young children. This advantage may only last for the first months of a child's life, and it is not hard to imagine distributions of preferences for type of work across the sexes that would lead to a far more even division of family responsibilities and paid work than we actually observe. Becker solves this puzzle in two ways. First, a small comparative advantage is magnified by increasing returns to human capital—people get better at tasks as they accumulate experience. Second, parents have an incentive to prepare their children for responsibilities they will assume later in life, and this may reinforce the gender division of labor by instilling preferences through childhood socialization. Since children are unlikely to reveal their true role dispositions at a very early age, parents choose to socialize their children in skills that they are most likely to be good at, or even more reflexively, that society assigns. If females grow up thinking it is natural for them to stay at home with the kids, this magnifies biological differences and solves the family coordination problem later in life.

In hindsight (Becker developed his argument in the early 1960s), it is easy to ridicule the model as an intellectual justification for the traditional male-dominated family of 1950s. But it is precisely the capacity of the model to account for the stark gender division of labor and the differences in the socialization of girls and boys in the traditional family that makes it so powerful. Still, it is clear that something fundamental has changed in a number of countries in North America and Europe. The division of labor by sex is less pronounced, and socialization less gendered, than a few decades ago. Parents in the United

States, for example, are more likely to teach their girls to be assertive and independent than was the case some decades ago or than is still true in countries where female labor market opportunities are more restricted (Hrdy 1999).

One factor that looms large in the explanation of these changes is the rise in divorce rates. Whether divorce rates are a response to exogenous changes in divorce law, or whether divorce is endogenous to a growth in labor market opportunities for women, divorce is now an accepted part of modern life in most rich democracies. In 1950 the probability that a first marriage would end in divorce was one in five in the United States, and any behavior that could conceivably lead to divorce—infidelity but also overt challenges to established gender roles—were considered taboo by widely held religious and community norms. Today the divorce rate is one in two for first marriages and is now considered an acceptable, even desirable, solution to marital problems. This makes a tremendous difference to the Becker framework because spouses must now concern themselves with what they can do to secure their welfare in the event that the marriage breaks up. In other words, their outside options become crucial. To explain the gender division of labor and patterns of socialization we therefore have to treat family members as individuals with distinct preferences.

The most obvious potential conflict of interest concerns the division of labor—precisely the variable Becker's model was designed to explain. The problem is that heavy investment in household-specific skills is likely to undermine outside options. Not only will such investments crowd out investments in marketable skills, but the value of marketable skills is likely to be seriously reduced by longer absences from the labor market (Polachek 1975, 1978). In principle, household skills can be "sold" on the remarriage market, but since one critical "skill" in this market is to produce and nurture offspring, a woman's position in the remarriage market will be seriously reduced as soon as she has children in another marriage. Adding insult to injury, another valuable commodity in the remarriage market is youth and beauty, which also deteriorates with time. Hence, even in the remarriage market, the only nonperishable commodity is earnings power—and perhaps also the attractiveness that comes with education and an active lifestyle.

Since labor market participation is essential to cultivate outside options, women have strong reasons to resist a complete division of labor in the family. But by the same token men have an incentive to resist taking on more domestic responsibilities. The division of labor, especially the division of household labor, therefore becomes subject to contestation. Bargaining models of marriage capture this by assuming that compromises have to be found

in a bargaining space that is constrained by the outside options. The simplest conception of outside options is whatever utility either party can get outside the marriage. But some models also allow for the possibility of noncooperative outcomes without divorce where spouses recede into separate "spheres" characterized by more or less separate finances, partially divided living spaces, etc. (Lundberg and Pollak 1996).

In either formulation, opportunities in the labor market shape outside options and hence the marriage bargaining space. In a simple Rubinstein bargaining model with identical discount rates and negligible first-mover advantage, the outcome of the game splits the difference between the ideal points at the boundary of the bargaining space. So, for example, if outside options are equally attractive to both sides, and both spouses want to maximize paid work and minimize unpaid work (and thus invest in marketable instead of household skills), we would predict an even distribution of household work. More realistically, since women's outside options tend to be inferior to men's, women will tend to do more of the household work. But they have a strong incentive to resist the complete division of labor that would be optimal in the Becker model (Braunstein and Folbre 2001; Lundberg and Pollak 1996, 2001). This incentive rises with the probability that a marriage will end in divorce, and the division of labor is therefore a function of this probability (which plays no role in efficiency models).

Since household bargaining may lead to a less complete, and hence less efficient, division of labor, it is logically conceivable that a marriage contract could compensate women for the risks of specialization in household skills (and the associated deterioration of marketable skills) by guaranteeing a lump sum severance payment or the sharing of future income streams (such as alimony and child support) in the event of divorce. But to prevent problems of moral hazard, shirking, and other well-known maladies of incomplete information, such prenuptial agreements would have to stipulate all relevant contingencies in advance—including just cause for divorce, fair treatment of the other party in the marriage, the division of custody in the event of divorce, and penalties for noncompliance with any stipulations in the contract. Precisely this type of detailed marriage contracting has reached almost farcical proportions among Hollywood celebrities where the stakes and divorce rates are both very high. But few would claim that prenuptial agreements constitute a general solution to incomplete marriage contracting, and they are in fact rare. Just as in nonstandard economic contracting, comprehensive ex ante agreements are either impractical or prohibitively expensive to write and enforce.

In this article we focus on the bargaining process between two spouses and leave the degree of efficiency loss from the breakdown in specialization as an open empirical question. If, for example, child care could be subcontracted without loss of child welfare, we might expect couples to abandon much of the specialization of labor without efficiency loss. This reduces the need to bargain over household labor. But the cost of childcare is of course very much a matter of public policy, and preferences over these policies, which we *do* examine in the second part of this article, can be understood within the bargaining framework we use. Besides, time budget research (which we discuss below) shows that unpaid household labor continues to make up a very substantial portion of total labor.

With incomplete contracting we expect a woman's bargaining power within the family to be inversely related to the labor market's premium on specific skills. As labor economists point out, women are generally at a disadvantage when competing for jobs with men because they are expected to leave the labor market for purposes of child birth and rearing (Mincer 1958, 1978; Polachek 1975, 1981). Employers will therefore be more reluctant to invest in skills of women, and young women are likewise more reluctant to build up substantial employer-specific assets or even invest in the education that is needed for a specific skills kind of job since these may be forfeited with the birth of their first child (Anderson, Binder, and Krause, forthcoming).

How great the motherhood disadvantage is, however, depends on the nature of skills that employers are seeking, as Estevez-Abe (1999) and Estevez-Abe et al. (2001) have argued. If such skills are highly specific to firms, or even to industries, and if a substantial part of training is paid by the employer, there is a strong disincentive to make these investments in female employees where the average time horizon is comparatively short. This is reinforced by women's own decisions because they are disinclined to invest in specific skills for which they are at a disadvantage. Even if a woman invests to acquire a specific skill, her investment will not be protected to the same degree as a man's. Women are therefore more likely than men to invest in general skills and/or in skills that are less prone to deteriorate when not used for some period of time (lower atrophy rates). This implies a heavily gendered structure of educational choices, and it is not surprising that vocations with more general educational content and low atrophy rates such as commerce, services, and home economics are overwhelmingly female in composition (Estevez-Abe 2002).

In the Becker model, the difficulty of women finding paid work does not matter for the household division of labor so long as the productivity of the husband is greater. The household division of labor is always complete. This is not necessarily the case for paid work because the woman may have time left over to enter the labor market, especially during parts of the life cycle where there are no dependent children. But only the bargaining model implies that the amount of paid work, and the earnings power of the woman, will matter for household division of labor (as long as there are any differences in productivity between the spouses). Also, in so far as skills are specific, paid employment should benefit men more than women because men are in a better position to accumulate specific skills.

The importance of the skill argument for understanding variation in bargaining dynamics inside the family is reinforced by broader cross-national differences in the structure of production. Taking advantage of the international division of labor, some countries have specialized in the forms of production that use specific skills intensely while others have specialized in production that uses general skills intensely (Hall and Soskice 2001; Iversen 2005). In the latter, women are generally better able to compete on an equal footing with men in the labor market because investments in skills are mostly borne by workers rather than by employers (say, through college education) and because general skills do not depend on staying with a particular employer for a long period of time. Because firms seek to strengthen their position in the international division of labor, they will work politically to create and reinforce institutions that are designed either to protect specific skill investments or to encourage investment in portable skills. Institutions that protect private sector specific skills, such as high job security, seniority pay, and generous employer-financed benefits, tend to reinforce insider-outsider divisions, and since women are more likely to be outsiders, they are at a greater disadvantage compared to more flexible labor markets where low protection encourages investment in general skills. Furthermore, because compression of wage differentials is one way to protect investment in specific skills, some specific skills systems are characterized by high minimum wages that tend to push up the cost of daycare and other family-oriented services.

As a result of these differences, the outside options of women in general skills systems tend to be better than in specific skills systems, and so is their concomitant

<sup>&</sup>lt;sup>1</sup>At the other extreme, if the returns to specialization in family work exist but are hard to observe, or are not sufficiently internalized by either parent, we might expect suboptimal levels of child welfare to result from a decline in specialization. We are assuming, though perhaps without justification, that both parents have a full and equal interest in their children's well being, so that their bargaining over paid and unpaid work does not include the possibility of a lower overall level of investment in their children.

bargaining power. This implies that, everything else being equal, female labor market participation tends to be lower in specific skills systems, and the distribution of household work more unequal, than in general skills systems. These effects, however, will be mediated by social and economic policies deliberately designed to counter them, which brings us to a standard argument in the macrosociological literature. In particular, the extent to which the state supports the ability to form an independent household, especially through publicly provided services such as daycare, and through employment for women in these services, it can compensate for the exclusion of women from good jobs in the private labor market (Esping-Andersen 1999; Orloff 1999). The Scandinavian countries in particular have attained high female participation rates by creating a large, and heavily feminized, public sector.<sup>2</sup> A possible alternative strategy is to deregulate the part-time labor market because it is easier for women to combine family and careers in part-time jobs.

# **Empirical Analysis of the Division of Labor**

Data. The data for our analysis are from the 1994 International Social Survey Program, which focuses on the family and gender relations. The data cover most established democracies, a few East European transition economies, and one developing country (the Philippines). We focus on the former since we have macrolevel data for our institutional and labor market variables for these countries. None of these data are available for the east European cases, which transitioned to democracy a few years before the survey and were still in the early phase of privatization. The cases included in the analysis below are Australia, Austria, Canada, Ireland, Italy, (West) Germany, Japan, the Netherlands, New Zealand, Norway, Spain, Sweden, the United Kingdom, and the United States. Two cases, the Netherlands and Spain, are missing data on some of the independent variables, but we show that the key results hold when these countries are included (and the necessary variables omitted).

Since our emphasis is on within-family bargaining, we focus exclusively on married and cohabitating couples. Our dependent variables are the gender division of household and paid labor. The former is an index constructed from a battery of four questions asking who in

the household, the man or the woman, performs a variety of household tasks. For example, one question reads: In your household who does the laundry, the washing and ironing? (1) Always the woman; (2) usually the woman (3) about equal or both; (4) usually the man; (5) always the man. The other three questions ask who cares for sick family members, who shops for groceries, and who decides what is for dinner. One additional question asks who does repair work around the house. But as pointed out by Hochschild (1989), such work is infrequent and often has a leisure or hobby component. This is confirmed by a principal factor analysis performed on all five items, which identifies two dimensions: one where only the first four items have high, and about equally large, factor loadings, and one where only the repair item has a (moderately) high loading.<sup>3</sup>

Based on these results, we created a simple additive division of household labor index based on the first four items, where higher values mean that more of the work is performed by the woman. Since most household labor is done by the woman, one can loosely think of higher values as indicating greater inequality in the division of labor. The variable ranges from 1 to 5, with 3 being an even sharing of work. The mean for the variable is 3.97, which is equivalent to an average response to each question of "usually the woman." None of the reported results below change substantively if we instead use an index based on all five items—or, indeed, if we use any of the component variables separately.

The fact that questions about responsibility for child care are left out of the survey undoubtedly leads to a substantial understatement of the woman's share of work. Research on family work based on time diaries, which do include a category for child care, show that children increase women's overall unpaid work time three to four times more than they increase men's (Bittman et al. 2001).<sup>4</sup> The male–female division of work we sketch out from this survey should therefore be a conservative measure of the woman's family role.

While it is not possible to know with precision how the survey-generated index (without childcare time) maps on to actual hours of work done, we can get a good sense of

<sup>&</sup>lt;sup>3</sup>The complete factor loadings are as follows:

	Factor 1	Factor 2
Laundry	0.51	-0.09
Caring for sick	0.59	0.08
Shopping	0.67	0.01
Dinner	0.66	-0.05
Repairs	0.15	0.22

<sup>&</sup>lt;sup>4</sup>Time diaries, which ask respondents to keep track of how they allocate time during the day, are preferable to less complete surveys of this sort. Unfortunately, they are only available for a few countries.

<sup>&</sup>lt;sup>2</sup>Note that the private sector in Scandinavia is a characteristically specific skills economy. One can view the large services component of the public sector counteracting the effects of the private sector specific skills economy, or as pulling the Scandinavian economies into a general skills direction. Although they are analytically equivalent, we adopt the former approach only for ease of presentation.

this by comparing the index to the results of international time budget research. According to one authoritative study, women on average perform more than two-thirds of total household work (Gershuny 2000). This study also shows that the average adult spends 230 minutes per day on domestic work, equivalent to 460 minutes, or almost eight hours, for a household with two adults. If the answer "always the (wo)man" means that the (wo)man literally does all the work, the index's range of four units is equivalent to 460 minutes, or about 115 minutes per unit (or 14 hours per week) assuming equidistant spacing between the different values. One standard deviation on the index is .67 unites or about 77 minutes of work (nine hours per week).

For *paid work* we use two variables that ask about the employment status of the respondent and of the spouse. It is coded 1 for those who are full-time employed, 0.5 for part-time employed, 0.25 for less than part-time employed, and 0 for those who consider themselves homemakers. Since we are predicting employment intensity as a choice variable, those who are retired, unemployed, or under education are excluded. The variables are coded for men and women separately. Both are included as independent variables in the regressions of unpaid work.<sup>5</sup>

In addition, we use five sets of independent variables to explain the individual-level variance in the division of labor. These are also relevant for the analysis of gender preferences in the next section. One is the (pre-tax) wage income of the husband and wife, measured separately. Since we only have information about the income of the respondent the earnings of the spouse are inferred from information about household income. To do this we have to assume that all income is wage income and that husband and wife are the only wage earners in the household. Since there are nonwage sources of income, and sometimes more than two adult wage earners, this would suggest that income estimates based on the difference between family income and respondent's income exceed the latter on average. In fact, inferred incomes of spouses are slightly lower than respondent incomes, but generally very similar (within 90% of the respondent's income). This suggests that the inferred number is a fairly good proxy for the spouse's income.<sup>6</sup>

There is no direct measure of the *probability of divorce* at the individual level, so we use past divorce as a (very imperfect) proxy since we know that the aggregate likelihood of divorce is higher for those who are previously divorced.

Those who have been previously divorced should at any rate also be more perceptive of the need to think about their outside options. The variable is coded 1 if one of the spouses is previously divorced, 0 otherwise.

Marketable skills are at least partly a (negative) function of time spent on household labor. We capture this logic using a battery of questions about past family-related labor market absences. Specifically, respondents are queried about time taken off during four different phases of child rearing: (1) before the birth of the first child; (2) before the youngest child entered school; (3) after the youngest child entered school; and (4) after the children have left home. The variable takes on the value 1 when the wo(man) did not work during any of these periods, and the value 0 when the wo(man) worked full time during all four periods (part-time work is coded .5). This coding follows Librizzi (2003). Another family-related variable measures the number of dependents. It is calculated by combining information about the number of household members with information about whether the family is headed by one or two adults. In most cases it refers to the number of children, although it will also capture older generations of family members living in the household. In either case, this variable is a proxy for the demand for household labor, and it will tend to raise the share of household labor assumed by the spouse specializing in such labor—i.e., usually the woman.

Age is also a variable of theoretical interest. Although information about age is only available for the respondent, the respondent's age is highly correlated with the age of the spouse and thus serves as a proxy for both. Age does not play any role in efficiency models, except in so far as it affects labor force participation through life cycle effects, or is associated with having dependent family members. We control for these variables directly. By contrast, age plays a role in bargaining models because it differentially affects the position of men and women in the remarriage market. As suggested above there are two reasons. First, the value of household specific skills deteriorates with age because they are so closely related to the bearing and rearing of children. Second, age itself tends to be a liability in the remarriage market, especially for women.

Since we do not have cohort data, we cannot exclude the possibility that age effects are due to generational differences. However, if women in older generations are expected to assume more household labor because of gender norms, this should also show up as a positive effect of retirement on the female share of household work (controlling for labor market participation). The bargaining model would lead to the opposite prediction insofar as retirement marks a relative decline in males outside options. We therefore include a *dummy for retirement*.

<sup>&</sup>lt;sup>5</sup>When used as independent variables, retired people are included.

<sup>&</sup>lt;sup>6</sup>It does at any rate not *systematically* bias the estimates of male and female income since the respondents were roughly equally divided between men and women.

Education is likely to boost labor force participation. In addition, families with highly educated spouses could be expected to share household duties more equitable. This could be seen as an effect of better outside long-term options not adequately captured by current employment and income, or one may speculate that education leads to more equitable gender norms. The variable is measured in terms seven levels of general education ranging from none to a completed university degree.

Religiosity and Catholicism may also be factors of importance because it can be assumed to be related to perceptions of appropriate gender roles, and such roles are closely associated with the sexual division of labor. Following Barro and McCleary (2003) we measure religiosity by frequency of church attendance, which varies from never to at least once a week. Catholicism is measured using the respondent's declared religion.

The final individual level control is the *gender of the respondent* because there may be a tendency for people to exaggerate how much work they do in order to look better in the eyes of the interviewer. The measurement of macrolevel variables, including relative skill abundance, is described below.

At the national level we focus on three variables: part-time employment, skill specificity, and spending on public service provision. Part-time employment is measured as the percentage share of the working age population who are in part-time jobs. The number of part-time employees is from the OECD On-Line Labour Force Statistics Database (http://www.oecd.org/scripts/cde/members/LFSDATAAuthenticate.asp), and the working age population is the number of people between the ages of 18 and 65, obtained from the OECD, Labor Force Statistics (2003).

The emphasis on specific as opposed to general skills in national training systems is measured by an index, which is equal to the mean, after standardization, of vocational training intensity and firm tenure rates. Because both workers and employers want to reap the long-term benefits of specific skills investments, and because workers with such skills will find it harder to move around, firm tenure rates tend to be longer for workers with highly specific skills. This is an imperfect measure of skill specificity, however, because skills may be specific to an industry or occupation, which allows workers to move around between firms in the same industry or occupation. This

problem is avoided by focusing on vocational training intensity. Such training is intended to provide skills that are much more specific to particular jobs than those acquired through general education, but it includes training in skills that are specific to industries or occupations, not just particular firms. Indeed the drawback of using vocational training intensity as a measure is that it does not fully capture training at the firm level. As argued in Estevez-Abe, Iversen, and Soskice (2001) and Iversen (2005), the two measures therefore complement each other, compensating for weaknesses in each. In combination they provide a good summary measure of differences in national training systems described by detailed case studies.

Specific skill systems tend to undermine the employment opportunities of women. Yet, as we have argued, this gender bias can be reduced by deliberate policies to hire women to perform social and personal services through the public sector. While there is no reason to think public service provision plays a role in general skill systems with flexible labor markets—public and private provision will be substitutes in this case—there is good reason to expect public service provision to reduce the labor market disadvantage of women in specific skills systems. The government is, in effect, creating a layer of general skills jobs in an economy where the private sector resembles a specific skills economy. We measure public service provision as government purchases of goods and services, net of government spending on defense, as a percentage of GDP. In practice, the bulk of nonmilitary purchases are social services. The public consumption data are from OECD, National Accounts, Part II: Detailed Tables (Paris: OECD, various years), and the military spending data are from the International Institute for Peace and Conflict Research, World Armaments and Disarmament: SIPRI Yearbook, 1995.

# **Empirical Estimation and Results**

The division of household labor, if the theory is correct, is a function of individual-level characteristics (such as age or religiosity), family situation (such as the extent of caring responsibilities), as well as the availability of good "outside options" for spouses (essentially access to jobs and income). The latter, in turn, vary across countries according to the availability of part-time employment, the skill system, public service provision, and the interaction of the latter two. Yet, since jobs and income are not merely a reflection of labor market conditions, but also individual preferences, caring responsibilities, etc., these variables can be modeled as a function of both individual- and

<sup>&</sup>lt;sup>7</sup>Vocational training intensity is the share of an age cohort in either secondary or post-secondary (ISCED5B) vocational training. *Source*: UNESCO (1999). Tenure rates are the median length of enterprise tenure in years, 1995 (Norwegian figure refers to 1991). *Sources*: OECD *Employment Outlook*, 1997, Table 5.5. For Norway: OECD Employment Outlook, 1993, Table 4.1.

national-level variables. Consequently we use a multilevel modeling approach.<sup>8</sup>

We take our point of departure in the general model presented in Steenbergen and Jones (2002):

$$y_{ij} = \beta_{0j} + \sum_{p=1}^{P} \beta_{pj} x_{pij} + \varepsilon_{ij},$$
 (1)

where *y* is the dependent variable, *x* is an explanatory variable, and *i* indexes individuals, *j* countries, and *p* variables. The dependent variable in our analysis is the gender division of household labor, and the first set of results refers to a model where the predictors are all individual-level variables, using country-specific intercepts (Table 1).

The second set of results (the first two columns in Table 2) separates out paid employment as a key "outside option" variable that is explained as a function of both national- and individual-level variables:

$$x_{qij} = \gamma_{00} + \sum_{r=1}^{R} \gamma_{0r} z_{rj} + \sum_{s=1}^{S} \delta_{sj} x_{sij} + \delta_{ij},$$
 (2)

where  $x_{qij}$  is the subset of individual-level variables measuring outside options (jobs and income in our setup), and  $z_{rj}$  are country-level predictors indexed by r—in our setup, part-time employment, skill system, public services, and the interaction of the latter two. In addition, there are S individual-level variables,  $X_{sij}$ , which are simply the remaining variables from (1) that are not measures of outside options. We focus on paid employment as the dependent outside option variable, although we could also have used market income.

Finally, we substitute Equation (2) into (1) to get a model for y (the household division of labor) that is a function of both individual- and national-level variables. The advantage of doing this, compared to relying on individual-level variables only, is that we can examine how the gender division of household labor depends on national level variables that shape outside options. This will also set the stage for the next section on the gender gap because it will make clear why men and women may have different preferences over policies that affect outside options. Specifically, the multilevel model for the household division of labor is

$$y_{qij} = \mu_{0j} + \sum_{r=1}^{R} \mu_{0r} z_{rj} + \sum_{s=1}^{S} \varphi_{sj} x_{sij} + \zeta_{ij}.$$
 (3)

TABLE 1 Individual-Level Determinants of the Gender Division of Household Work

	(1)	(2)	(3)
Divorce	-0.070***	-0.078**	-0.097***
	(0.021)	(0.028)	(0.031)
Past absence from	0.128***	0.157***	0.176***
paid work	(0.036)	(0.040)	(0.044)
Male labor force	0.228***	0.166***	_
participation	(0.049)	(0.034)	_
Female labor force	-0.172***	-0.145***	
participation	(0.027)	(0.027)	
Male income (log)	_	0.054**	0.075***
		(0.018)	(0.020)
Female income	_	-0.053***	-0.057***
(log)		(0.014)	(0.016)
Number of	0.019*	0.031**	_
dependents	(0.010)	(0.013)	
Age	0.006***	0.006***	0.002**
	(0.001)	(0.001)	(0.001)
Education	-0.026***	-0.034***	-0.041***
	(0.008)	(0.010)	(0.011)
Retired	-0.050	-0.082	-0.087***
	(0.059)	(0.051)	(0.025)
Religiosity	0.006	0.005	$0.014^{*}$
	(0.009)	(0.010)	(0.007)
Catholic	0.059**	0.033	0.012
	(0.019)	(0.029)	(0.033)
Gender of	0.206***	0.209***	0.214***
respondent (female)	(0.036)	(0.043)	(0.035)
N	5719	3570	4939
No. of countries	12	12	13

<sup>\*\*\*</sup>p < .01; \*\*p < .05; \*p < .10.

*Notes:* Entries are maximum likelihood estimates with standard errors in parentheses. All models include country-specific intercepts (not shown).

Note that country-specific intercepts in Equation (1) have been replaced by a single constant. In effect, Equation (3) assumes that these intercepts are also a function of differences in the structure of labor markets captured by our national-level variables. This is a necessary assumption because the national level variables are perfectly collinear with the intercepts and therefore cannot be entered simultaneously.

The effects of all independent variables are estimated using maximum-likelihood regression with robust standard errors, assuming a normal density function for the disturbances. We obtained the estimates in Stata using

<sup>&</sup>lt;sup>8</sup>Pooling data across levels without taking into account the dependence of observations within clusters carries a significant risk that standard errors will be underestimated and that estimated parameter biased (Burton, Gurrin, and Sly 1998; Steenbergen and Jones 2002).

the ml procedure for survey data (countries are treated as clusters).

Because much data for personal income are missing, the first column of Table 1 excludes these variables. In column (3) we have omitted some variables in order to enable the inclusion of the Netherlands (to include Spain would also require omission of religiosity and the income variables). Regardless of specification the results are similar, and we focus on the most complete set in column (2). As expected, the probability of divorce significantly decreases the female share of unpaid work. Presumably worrying about, or at least being cognizant of, the possibility of a marriage breakup makes women inclined to assume a smaller share of household work, and, as we will see shortly, makes them more prone to participate in paid employment.

Women who have sacrificed work for family in the past also end up with a greater share of the household workload in the present. In other words, taking care of children is a principal (proximate) cause of the gender division of labor—a finding that is supported by the positive effect of the "number of dependents" variable. Unsurprisingly, labor force participation reduces the share of household work for both spouses, but more so for men. As we noted above, this is consistent with an interpretation that men are better able to take advantage of opportunities to acquire specific skills in the labor market.

Another consistent result is that age increases the share of household work performed by the woman. The only possible explanation for this effect in an efficiency model is that age reduces labor market participation more for women than for men or that the scope of domestic work rises with age. Yet, the effect of age is *stronger* when we include controls for labor market participation and the number of dependents. In substantive terms, if we compare a newly wed couple at age 20 to a married couple at age 40, and controlling for everything else, the woman in the latter will spend about 14 additional minutes a day on household work.<sup>9</sup>

As noted before, the effect of age is consistent with a bargaining perspective because age differentially affects men and women on the remarriage market. Yet, it is also consistent with a generational hypothesis that younger generations have more equitable work norms. We cannot entirely exclude such an interpretation although it is noteworthy that the division of labor tends to be *more* equitable in families where the spouses are retired (the negative sign on the retirement variable). Also, it is worth pointing out that *if* norms have changed over time, the

bargaining model in fact has something to say about why. When outside options are important, and they *have* become more important over time in line with the rise in divorce rates, there is reason to expect that parents will raise their daughters to have more similar tastes for paid work as their sons. This makes daughters less willing to assume all domestic duties as adults. We consider this a fruitful area for future research.

Finally we note that education, as expected, is a significant predictor of more gender equality in the division of household work. Conversely, the results for paid work in Table 2 show that education significantly raises labor force participation of both men and women. Religion, by contrast, tends to increase women's share of the household labor, whereas women in religious families appear to be somewhat less likely to be in paid employment (see the results for paid work in Table 2). Whether the measure is religiosity or Catholicism, however, these effects are small and rarely significant.

The multilevel results in Table 2 compare paid employment for men and women to the division of household labor. Not surprisingly, past absence from the labor market to care for children has a strong negative effect on women's labor force participation; but it only modestly affect men's participation. A woman who has taken off the maximum amount of time in the past for purposes of child rearing is predicted not to work at all whereas a woman who has not taken time off is predicted to work at least part-time. Very few men exit the labor market to care for children (less than 16%), and when they do it tends to be for very brief periods (less than 2% have taken full-time leaves). This neither appears to much affect their subsequent participation in paid work, nor to increase their share of household work. Indeed, a sensible interpretation of these results is that men take off work only to the extent that it does not hurt their careers.

The effects of age for paid employment are interesting to compare to those for household work. Excluding those who are retired, women increase their participation in the labor market when they age, whereas men substitute work for leisure. These are clearly life-cycle effects, but they imply that women are gaining some financial independence later in life that we know from the results in Table 1 has the effect of reducing their share of household labor. In fact, this indirect effect of age slightly outweighs the adverse direct effect of age on the inequality in the division of household labor. <sup>10</sup> To stretch the interpretation a bit

<sup>&</sup>lt;sup>9</sup>Twenty years in age is equal to .12 units on the dependent variable, and a unit is equivalent to about 115 minutes of work.

<sup>&</sup>lt;sup>10</sup>Multiply the age parameter for paid work in Table 2 by the parameter for paid work in the household regression in Table 1 and compare it to the parameter for age in that regression. The indirect negative effect of age turns out to be greater than the positive direct effect.

TABLE 2 Multi-Level Determinants of the Gender Division of Labor

		Paid W	ork		Househ	old Work	(Female Sha	are)
	Women (1)	(1b)	Men (2)	(2b)	(3)	(3b)	(4)	(4b)
Divorce	0.042*		0.007		-0.098**		-0.134**	
	(0.016)		(0.017)		(0.028)		(0.029)	
Past absence from paid work	-0.737**		-0.152**		0.184**		0.203**	
	(0.045)		(0.035)		(0.031)		(0.049)	
Number of dependents	$-0.017^{*}$		0.008*		0.043**		_	
	(0.009)		(0.004)		(0.008)			
Age	0.004**		-0.011**		0.006**		0.005**	
	(0.001)		(0.001)		(0.001)		(0.001)	
Education	0.022**		0.016**		-0.032**		_	
	(0.006)		(0.004)		(0.006)			
Religiosity	-0.020**		-0.005		0.003			
	(0.006)		(0.004)		(0.010)			
Catholic	0.014		-0.017		0.054		0.028	
	(0.018)		(0.021)		(0.040)		(0.047)	
Retired	_		_		-0.152**		-0.137**	
					(0.037)		(0.047)	
Gender of respondent (female)	-0.002		-0.171**		0.219**		0.209**	
•	(0.018)		(0.015)		(0.037)		(0.027)	
Public sector	0.013	_	-0.102	_	-0.057	_	0.069	_
	(0.208)		(0.057)		(0.394)		(0.595)	
Skill specificity	-0.389*	-0.4**	-0.002	0.08	0.876*	0.9**	0.851	0.8**
	(0.187)	(.10)	(0.073)	(.07)	(0.432)	(.30)	(0.542)	(.30)
Public sector * Skill specificity	0.690	0.7**	0.134	-0.06	-1.302	-1.4**	-1.469	-1.3**
,	(0.431)	(.12)	(0.154)	(.11)	(0.840)	(.46)	(1.108)	(.46)
Part-time employment	0.019**		0.009**		-0.004		-0.025**	
	(0.004)		(0.003)		(0.012)		(0.006)	
N	53	12	30	)45	7	144	9	9520
No. of countries		12		12		12		14

<sup>\*\*</sup>p < .01; \*p < .05.

Notes: Entries are maximum likelihood estimates with standard errors in parentheses.

more, aging appears to reduce the value of women in the remarriage market, but increase their value in the labor market. The net effect appears to be positive—another reason to be skeptical of interpretations that stress the importance of generational differences in norms.

But the most interesting results in Table 2 concern the effects of the macrolevel variables. The gender division of labor, if our argument is right, should be affected by the interaction of skill specificity (which disadvantages women) and the size of the public sector (which compensates for such disadvantages). As we move from general to specific skill countries we expect women, but not men, to be increasingly disadvantaged in the labor market—except if the state steps in to provide jobs and services through the

public sector. Such policies, however, should not matter in general skills systems with flexible labor markets. This is precisely the pattern we find.

When the public sector is small (zero on our standardized variable), the effect of skill specificity is to notably reduce the participation of women in paid work (column (1)). This disadvantage, however, is attenuated by a large public sector, although the extent of public service provision does not matter when skill specificity is low (zero on our standardized variable). Because the effect of the component public sector variable is nil, and because we this result is theoretically predicted, we can safely omit this variable from the regression. This is done in column (1b) which otherwise was estimated with the same set of

variables as in column (1). There are virtually no effects on the estimated parameters for any other variable from doing this, but notice that the standard errors on skill specificity variable and the interaction term are notably reduced (the standard errors on the other parameters are unchanged). This is because there is strong collinearity between the public sector variable, the skill specificity variable, and the interaction term.

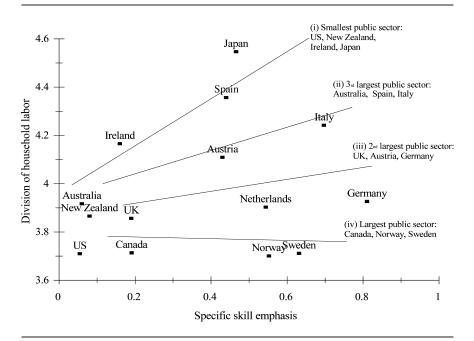
The availability of part-time employment clearly also facilitates the entry of women into the labor market, and this is also true for men (column (2)). In the case of male employment, however, skill specificity is not important. There is a hint that a large public sector may hurt the employment opportunities of men, but the effect is weak at best. If we think of public sector employment as providing a layer of general skills jobs, the conclusion is that skill systems are unimportant for the employment opportunities of men.

Columns (3) and (4) revisit the division of household labor, but now with the national-level variables standing in for the individual-level job and income variables. Column (4) omits variables that allow both the Netherlands and Spain to be included, but this only has an effect on part-time employment, which has a greater impact (mainly due to the Netherlands). Consistent with the re-

sults for paid employment, women assume a larger share of household work in specific skills systems, but this inequality is attenuated by a larger public sector. Again, the size of the public sector only matters in specific skills systems. This allows us to omit the component variable without affecting the estimated parameters, but notably reducing the standard errors on the skill variable and the interaction term (columns (3b) and (4b)).

The estimated relationship between skill specificity and the household division of labor, for different levels of public service provision, is illustrated in Figure 1. The figure shows the predicted female shares of household work when we assume a size of the public sector that corresponds to four groups of countries: (1) the United States, New Zealand, Ireland, and Japan with a small public sector; (2) Australia, Spain, and Italy with the next smallest public sector; (3) the United Kingdom, Austria, and Germany with intermediately sized public sectors; and (4) Canada, Norway, and Sweden with large public sectors. We have also shown the actual location of all 14 countries. Note how the tradeoff between skill specificity and equality in the division of household labor is reduced by a larger public sector. In the countries with the largest public sector the tradeoff disappears altogether. The only outlier is the Netherlands, which has a small public

FIGURE 1 Skills, Public Sector, and the Division of Household Labor



*Notes:* The estimated relationships between skill specificity and the division of household for four groups of countries are based on the results in column (3) of Table 3—with all other variables kept at their (group) means. Lines are not necessarily intersecting when the specific skill variable is 0 because each cluster has different mean values in the controls.

sector (it would belong to category 1) but a fairly egalitarian division of labor. It appears that the Dutch achieve this outcome by having a very large and flexible market for part-time employment.

# **Gender Policy Preferences**

A key issue for any theory of gender preferences over public policy is the question of whether the family can be treated as a unitary actor or as separate individuals. In Becker's efficiency model the interests of family members are fully aligned and so, one should expect, are their political preferences and attitudes. Political conflict over family and other social policies will tend be along lines other than gender. For example, families with incomes below the mean, by the standard Meltzer–Richard argument, would have an incentive to favor policies that are redistributive (Meltzer and Richard 1981).

The possibility of a gender gap in political preferences emerges when marriage contracting is incomplete and termination of the contract is an ever present possibility. In this situation spouses will have conflicting preferences over who receives family benefits, and they will differ over any policies that affect their outside options. This is so not merely, or even primarily, because they could be forced one day to take the outside option, but also, as we have argued, because outside options affect the current bargaining power inside the family.

Starting in the late 1970s in the United States and Scandinavia, and some years thereafter in many other European countries, women have in fact begun moving out of sync with their husbands in their voting behavior, often voting to the left of men in aggregate. Women tend to support activist government across a range of economic policies (Alvarez and McCaffery 2000; Greenberg 2000; Ladd 1997; Shapiro and Mahajan 1986). This move is striking, because in what Inglehart and Norris term the "traditional gender gap," women typically voted to the right of men in these countries, perhaps because their greater longevity put them in greater numbers in the most conservative age bracket; and perhaps because of their social role as protector of family values and perhaps resulting tendency to be more religious (Inglehart and Norris 1999, 2002; Studlar, McAllister, and Hayes 1998).

There are several competing explanations for "the modern gender gap," where women's preferences and voting patterns appear to be moving to the left. Some scholars argue that women are more altruistic than men, and they therefore favor more welfare spending (Conover 1988; Gidengil 1995; Welch and Hibbing 1992). But this argument is a static one that fails to explain the change

in voting behavior over recent decades. Other scholars have pointed out that women are more likely than men to be economically vulnerable (Sears and Citrin 1982). But survey research suggests that women throughout the wage distribution are more likely to vote left than their male counterparts (Carroll 1988; Goertzel 1983; Inglehart and Norris 1999, 2002). Edlund and Pande (2001) get around this problem by arguing that high divorce rates leave women at a higher risk of income loss than before, and that they are therefore voting for more redistribution even before they receive it, as a sort of insurance. Using variation in divorce rates across U.S. states and some European countries, they derive a measure of "divorce risk" and find that it corresponds with the likelihood of women voting farther left than their socioeconomic status warrants.

If Edlund and Pande are right that women vote left as insurance against post-divorce poverty, we would expect that women staying out of the work force are at the greatest risk and hence most likely to vote left. What the data suggest instead, however, is that women in the work force are more likely to vote left than housewives (Greenberg 2000). Since these women have already reduced their economic exposure to the possibility of divorce, this would seem to suggest that demand for insurance cannot be the only motive driving gender preferences.<sup>11</sup>

The data suggest to us that distributive conflict is also important for explaining the gender gap. If household bargaining matters, as our previous results suggest, then working women gain bargaining power at home from the partial socialization of family work such as child care and elderly care, and these are precisely the sorts of policies that parties on the left are more likely to espouse. The logic is that with some of her family burden lifted by the public purse, a woman is better able to invest in her marketable skills. By raising her level of economic independence closer to her husband's, a wife reduces her stake in keeping the relationship going closer to his level. We should observe more equal shares of family work in the household, not only because the government is undertaking part of it, but also because a woman is less willing to give up increasing amounts of her time to keep the marriage from dissolving.

As soon as outside options matter for bargaining power, men and women will differ over policies that affect these options. The most obvious matter of disagreement, perhaps, is over publicly subsidized daycare. Since women are much more likely to end up as primary care givers, their welfare is disproportionately affected by the availability of

<sup>&</sup>lt;sup>11</sup>One could also argue, of course, that there is a selection effect here: only the women who feel at the greatest risk will seek outside employment and that their resulting outside remuneration only partially offsets their perceived risk.

high quality, low-cost daycare. Men may prefer to spare the public purse and hence their tax bill if their wives are default childcare givers. This logic also applies to public care for the elderly and the sick because it helps women escape some of their traditional duties and thereby permit more time to be spent in paid employment. In addition, as we have stressed throughout, the welfare state is an important source of employment for women precisely because so many of the jobs replace caring functions that are otherwise provided "for free" in the family. The importance of public employment is particularly important in specific skills countries where, as we have seen, it powerfully shapes the outside options of women.

Support for employment protection and other forms of social insurance obviously does not come from women alone. In the classic Meltzer-Richards setup, any person with an income below the mean will prefer at least some redistributive spending. And when an insurance motive is added to the model, those exposed to greater risks will also demand more spending. One key source of such risks is the transferability of workers' skills. The harder it is to transport skills from one job to another, the greater the importance of income protection though social insurance programs (Estevez-Abe, Iversen, and Soskice 2001; Iversen 2005). At any given level of income and skill specificity, women should prefer higher social protection than men. On the other hand, women have an incentive to invest in more portable skills (Estevez-Abe 1999), and this will reduce the direct effect of gender on preferences.<sup>12</sup> It is therefore important to control for the specificity of individual work skills.

An important qualification to our argument is that the gap in gender preferences depends on the extent to which women participate in the labor market, as well as on the probability of divorce. Because nonworking women's welfare depend more on the income of men than is the case for working women's, they have a stronger incentive to support policies that raise the take-home pay of males. Nonworking women will still care about their outside options, as argued above, but policies that reduce the relative wage of men also reduce the income of families where the woman does not work. What makes divorce important is that it raises the salience of outside options, and hence sharpens differences in policy preferences between the sexes. This is particularly true where women's opportunities in the private labor market are hampered by a specific skills regime. And since skills regimes, as well

as female labor force participation and divorce rates vary across countries, the macrolevel implication is that the gender gap will vary accordingly.

Using the logic developed in this section we can revisit some claims that are sometimes made about the gender and political preferences. Orloff (1993, 1999) and O'Connor, Orloff, and Shaver (1999), for example, strongly suggest that women are most disadvantaged in countries, such as those in southern Europe and East Asia, where female labor force participation rates are low, stratification on the labor market high, and the distribution of domestic work very unequal. If access to paid work and the ability to form autonomous households are fundamental interests of women, as Orloff and others argue, one would expect gender conflicts to be most intense in these countries. Yet, as we will see below these are countries in which the policy preferences of men and women appear the most similar, and where there does not appear to be a strong gender gap in electoral politics. An explanation for this puzzle is that the family as an institution is heavily protected through labor market regulations, and reinforced by legislation and norms against divorce. The likelihood of a first marriage ending in divorce in Italy is less than one in 10-even lower than the 1950s United States. In addition, female labor force participation rates are very low, which also help to align the interests of men and women.

Another recent controversy surrounds the role of the public-private sector division in Scandinavia. According to some, this division—which concerns issues of public sector size, relative pay, and public sector job protection has emerged as a salient cleavage in electoral politics. But, as Pierson points out, since men in the private sector tend to be married to women in the public sector, there is no compelling reason that spouses should quibble over issues of relative pay (2000, 807). At the end of the day, the income of both spouses simply adds to family income. But this logic only applies when husband and wife have few reasons to concern themselves with outside options. And since pay in the public sector is financed by taxing the private sector, policies affecting relative pay are a perfect example of an area where gender conflict is likely to be intense.

# **Empirical Analysis of Gender Preferences**

**Data.** To test our hypotheses we turn to the 1996 International Social Survey Program on the role of government. These data contain a number of questions about government spending and social policy as well as information on the key independent variables. We have complete data for 10 advanced democracies at (Australia, Britain,

<sup>&</sup>lt;sup>12</sup>This argument implies that women should be more supportive than men of public subsidization of general education. Inexpensive access to good formal education presumably benefits women disproportionately because they have a comparative advantage in general skills. We leave this as a hypothesis for future research.

Canada, France, Germany, Ireland, Norway, New Zealand, Sweden, and United States).

Unfortunately the survey does not ask questions that speak directly to policies that differentially affect men and women. There are no questions, for example, about spending on childcare or care for the elderly, and many of the other spending questions—about pensions, unemployment, etc.—are not clearly related to gender conflict. Three questions, however, address the role of the government in providing job opportunities, and we have argued that this is an important determinant of women's employment opportunities outside the family, as well as their bargaining power within it. It ought to be a matter of gender conflict. The three questions ask whether the government should (a) finance projects to create new jobs, (b) reduce the working week to produce more jobs, and (c) be responsible for providing jobs for all who wants to work. Respondents could express different levels of support or opposition, and we combined the answers into a single public employment support index, which ranges from 1 (strong opposition) to 5 (strong support).

The second dependent variable is declared affiliation or support for a left or center-left party. <sup>13</sup> Although this variable does not directly capture differences in policy preferences, left parties tend to be more supportive of policies that would promote gender equality, and the measure has the advantage of being clearly politically salient. If women are indeed seeking a more active role for the government in securing gender equality, it is reasonable to expect that left support will be greater among women (the average support among all respondents is 43 percent). The variable is coded 1 for center-left, and 0 for center-right, support.

The gender gap in preferences is modeled simply as the difference in preferences between men and women, estimated by a gender dummy variable (1 = women, 0 = men). To test whether the gender gap varies across groups and countries, we interact this variable with labor force participation, risk of divorce, and skill system (see below for details on the model). Labor force participation is measured as before, and so is the skill system. Unlike the 1994 data, however, there is no variable that allows us to gauge the risk, or perceived risk, of divorce at the level of the individual. Instead we use national divorce rates, defined as the percentage of marriages ending in divorce.  $^{14}$ 

In 1996 these rates varied from 10 in Ireland to 67 in Sweden. Because it eases the interpretation of the results, the variable is standardized to vary between 0 and 1. In addition, we distinguish between those who are married and those who are not. One might sensibly expect that unmarried people demand more social protection because they are unable to pool risks within the family. But this should be particularly true of women who tend to be in more vulnerable labor market positions. One can loosely think of being unmarried as a realized risk of having to rely on outside options.

In addition we control for several of the variables used in the previous analysis: age, education, retirement, religiosity, Catholicism, and income (defined the same way). We also add a variable for unemployment, as well as one for the skill specificity of individuals. As explained above, women have less of an incentive than men to invest in specific skills, and such skills tend to increase the demand for social protection. We therefore need to compare men and women with similar skill sets. The variable is based on information on the general education and occupation of the respondent and is adopted from Iversen and Soskice (2001).

Empirical Estimation and Results. The starting point is the general multilevel model in equation (1) above. We begin at the individual level and examine how the gender gap varies across those who are in and outside of the labor market, and those who are married and those who are not. The results are shown in columns (1) and (2) of Table 3 for public employment, and in columns (5) and (6) for left partisanship (the latter uses binomial logistic regression). All regressions use country-specific intercepts, which is particularly important when the dependent variable is about change of policy away from the status quo. The direction of support for such change will depend on a number of situationally specific factors that we are unlike to be able to explain with the current set of variables. Instead, what interests us here is the gender gap in preferences for change—including differences in the gap across countries. We are not trying to explain cross-national difference in the overall level of support for change.

Comparing the baseline models in columns (1) and (5) it is evident that there only exists a net gender gap in preferences for public jobs provision, not for left-party support. The gap in support for public employment policies is quite large, however, with women being considerably more supportive. The difference is equivalent to about 20% of a standard deviation on the dependent variable. Unfortunately, it is very hard to give substantive

<sup>&</sup>lt;sup>13</sup>One could also focus on declared voting choices, but expressed support for a party arguably captures a more stable underlying preference that are not affected by short-term political issues for which we have no measures.

<sup>&</sup>lt;sup>14</sup>The data are from "Society at a Glance: OECD Social Indicators" OECD (2001).

TABLE 3 The Gender Gap in Social Preferences and Left Party Support

		Public Employment	ovment			Left Partisanship	sanship	
	(1)	(6)	(3)	(4)	(4)	(9)	(£)	(8)
	(I)	(7)	(c)	(4)	(c)	(o)	(>)	(o)
Female	$0.174^{***}$	0.057	-0.039	-0.022	0.154	-0.552**	-0.896*	-0.563*
	(0.032)	(0.041)	(0.111)	(0.050)	(0.133)	(0.222)	(0.467)	(0.304)
Female × labor force participation	I	0.113**	0.115**	0.124**	I	0.729***	0.753***	0.731***
		(0.037)	(0.048)	(0.050)		(0.188)	(0.191)	(0.191)
Female $\times$ unmarried	I	0.066**	0.064**	0.062**	I	0.315**	0.312**	0.314**
		(0.029)	(0.029)	(0.030)		(0.111)	(0.112)	(0.113)
Female $\times$ divorce	I	I	0.001	Ι	I	I	0.007	I
			(0.002)				(0.006)	
Female $\times$ skill skill specificity	I	I	0.162	I	I	I	900.0	I
			(0.125)				(0.373)	
Female $\times$ divorce $\times$ skill specificity	I	I	I	0.298**	I	I	I	0.038
				(0.117)				(0.482)
Labor force participation	0.077	-0.017	-0.032	-0.041	0.514**	-0.049	-0.071	-0.052
	(0.045)	(0.044)	(0.048)	(0.050)	(0.214)	(0.292)	(0.303)	(0.296)
Unmarried	0.057***	0.024	0.025	0.026	0.175*	0.011	0.013	0.011
	(0.016)	(0.023)	(0.023)	(0.023)	(0.091)	(0.106)	(0.104)	(0.103)
Income (log)	-0.003***	-0.003***	-0.003***	-0.003***	-0.003	-0.003*	-0.003*	-0.003*
	(0.001)	(0.0005)	(0.0005)	(0.0005)	(0.002)	(0.002)	(0.002)	(0.002)
Individual skill specificity	0.100***	0.100***	0.099***	0.098***	0.240**	0.246**	0.242**	0.246**
	(0.023)	(0.023)	(0.022)	(0.023)	(0.083)	(0.084)	(0.084)	(0.083)
Age	-0.001	-0.001	-0.001	-0.001	0.002	0.001	0.001	0.001
	(0.002)	(0.001)	(0.001)	(0.001)	(0.005)	(0.000)	(0.000)	(0.006)
Education	-0.013	-0.013	-0.015	-0.015	0.080	0.079	0.078	0.078
	(0.020)	(0.020)	(0.020)	(0.020)	(0.081)	(0.080)	(0.080)	(0.080)
Retirement	990.0	0.018	0.005	0.0002	0.120	-0.149	-0.164	-0.150
	(0.056)	(0.052)	(0.061)	(0.061)	(0.288)	(0.309)	(0.305)	(0.302)
Unemployment	0.197**	$0.156^{*}$	0.141*	0.135	0.628	0.427	0.417	0.425
	(0.081)	(0.086)	(0.061)	(0.082)	(0.420)	(0.410)	(0.411)	(0.410)
Religiosity	-0.012	-0.012	-0.011	-0.011	$-0.121^{*}$	-0.122*	-0.122**	-0.122**
	(0.000)	(0.009)	(0.00)	(0.008)	(0.051)	(0.050)	(0.049)	(0.049)
Catholic	-0.019	-0.016	-0.017	-0.017	-0.261	-0.252	-0.257	-0.253
	(0.105)	(0.104)	(0.105)	(0.104)	(0.293)	(0.293)	(0.295)	(0.293)
No. of countries	10	10	10	10	10	10	10	10
Z	7460	7460	7460	7460	5793	5793	5793	5793

\*\*\*p < .01; \*\*p < .05; \*p < .10.

Note: The entries are maximum likelihood estimates with estimated standard errors in parentheses. Left partisanship was estimated using binominal logistic regression. All models have country-specific intercepts (not shown).

meaning to this number because we do not know how any particular level of agreement with any of the questions map onto actual fiscal commitments (unlike the household division of labor). We do know, however, that gender is one of the best predictors of preferences and that there is a statistically significant gender gap in each one of our 11 countries. Again, for reasons that are not clear, this is not true of support for the left, which is very similar across the sexes.

The picture becomes more interesting and consistent across the two dependent variables, when we compare the gender gap across subgroups of respondents (columns (2) and (6)). Among those who participate in the labor market, women are considerably more likely than men to support expansive employment policies and left parties. The same is true of singles (or more precisely "unmarried" since some will be in relationships). By contrast, married women outside the labor market are no more likely than men to support public employment, and they are in fact about 12% less likely than men to support left and center-left parties. After controlling for age, income, etc., married housewives are thus quite conservative—a fact that makes good sense in terms of the theory and helps explain why countries with a traditional family structure and low female labor force participation tend to exhibit small gender gaps.

The other relationships that emerge from the regressions are the negative effect of income, as predicted by the Meltzer–Richard model, and the positive effect of skill specificity, as predicted by the asset model of social policy preferences. General education, however, does not play an independent role. Skills and income are less salient in explaining support for the left (although the effects are in the right direction and usually significant), whereas religiosity, but not Catholicism, assumes a more important role as a significant negative predictor of support for left parties. The negative relationship between religion and left support jibes well with the predictions of Roemer's multidimensional model of distributive politics (Roemer 1998). Religion does indeed appear to reduce support for the left.

The models in columns (3)–(4) and (7)–(8) exploit another possibility in multilevel modeling: cross-level interactions. Again using the Steenbergen and Jones' (2002) setup, the variation in the some individual-level parameters, indexed by q, can be modeled as a function of R national-level variables,  $z_{ra}$ :

$$\beta_{qj} = \gamma_{q0} + \sum_{r=1}^{R} \gamma_{qr} z_{rj} + \delta_{qj}. \tag{4}$$

Specifically, we have argued that the gender gap may vary according to the probability of divorce, which varies across

countries and can only be measured at that level, and we have also suggested that the gap is likely to be bigger in specific skills countries. Indeed, these conditional variables are likely to interact with one another so that skill specificity will cause more serious gender conflict over government policies when divorce rates are also high, and divorce will create more policy contention when women are also in a clear disadvantage in the labor market due to specific skill emphasis. These are the hypotheses examined in the last two columns under each dependent variable in Table 3.

It turns out that the estimated parameters for the cross-level interactions are correctly signed, but in the case of left partisanship they are weak and statistically insignificant. Support for public employment, on the other hand, is quite strongly dependent on especially skill specificity, although the parameters are imprecisely estimated in model (3)—partly a result of multicollinearity. In the version where the national-level variables are interacted—which best reflects our theoretical argument—the gender gap is significantly different across countries with different combinations of divorce rates and skill systems (column (4)).

An intriguing question is why the divorce rate is not more important in accounting for the gender gap in partisanship. The fact that women who work or who are not married are significantly more likely to support both the left and public employment, clearly suggests that concern for outside options is important. But perhaps the political right is quite successful in attracting the support of some women by advocating "family values" that may be seen as a way to reduce divorce and enhance women's security within the traditional family. Our data cannot help us sort this out, but it is an issue to which future research should pay attention.

Figure 2 provides a graphical summary of the results in Table 3 and also suggests the substantive impact of the explanatory variables. For each of four different combinations of marital status, labor market participation, divorce rates, and skill system, the figure shows the gender gap in support for public employment policies and left parties. The gap is measured in standard deviations on the dependent public employment variable and as the probability of supporting a left or center-left party. We see that a married woman outside paid employment living in a country with low divorce rates, or a general skills economy, may well be more conservative in their political preferences than men. Certainly that is the case in terms of left party support. With labor market participation, however, preferences for a more active government intensify, and unmarried women are also notably more "left-leaning" than men. At least for preferences over employment policies the gender gap is particularly large in specific skills countries

0.5 ■Support for Public Employment ■ Support for the Left 0.4 0.3 0.2 Married woman with no labor market 0.1 participation in a general skills or low divorce O Married woman Unmarried Unmarried with full-time job woman with fullwoman with fulltime job in a in a general skills time job in a -0.1 or low divorce general skills or specific skills country with high low divorce divorce rates country -0.2

FIGURE 2 The Gender Gap in Support for Public Employment and Left Parties

*Notes:* The bars show the predicted difference between men and women in their support for public employment policies and left parties, where a positive gap means greater support among women. The gap in support for public employment is measured in standard deviations of the dependent variable. The gap in support for the left is measured in differences in the probability of voting for a left party.

with high divorce rates. Here married women in paid employment are estimated to be nearly one-half a standard deviation more supportive of an active role of the government in employment creation than men, and they are 13% more likely to support a left or center-left party than men (compared to 13% *less* likely when women are married, not working, and living in a general skills or low divorce country).

The results are thus consistent with the argument that the gender gap varies across countries according to divorce rates and labor market conditions. In fact the crosscountry differences are greater than what is readily apparent in Figure 2 because labor-force participation rates vary across countries, and we know that paid employment makes women more "left-leaning." In 1996 (the year of the survey), for example, female labor-force participation was 49% in Ireland but 74% in Sweden. For 25% of women in these countries, therefore, the predicted effect on preferences would be equivalent to the difference between the first and second set of bars in Figure 2. In terms of the probability of supporting the left among these women, this difference translates into a 16% higher probability in Sweden. No wonder the Swedish social democrats are reluctant to give in to perceived pressures to cut back on the public provision of welfare services.

# **Conclusions**

Explaining cross-national variation in income inequality has been one of the greatest preoccupations of modern political economy. But much of this analysis masks, we have argued, inequality within the very unit of analysis that is typically taken for granted: the family. When we abandon the traditional assumption of the family as a welfare-maximizing unit, we confront the reality of strategic interaction between spouses. Because a spouse might claim his or her *share* of family welfare even at some expense of the *total* family welfare, it is important to disaggregate the family to understand the effects of economic institutions and the public policies that govern them.

In this article we examined two areas where the assumption of family as a unit can lead us astray: the household division of labor and political preferences. First, we join a growing chorus of social scientists challenging the idea that the household division of labor reflects an efficient allocation of family resources (Braunstein and Folbre 2001; Lundberg and Pollak 1996, 2001). A husband may resist his wife's outside employment, even if it could increase total family income (or more broadly, family utility including children's well being), because her accumulation of market skills and experience broadens her exit options to the marriage. By ramping up her bargaining

power within the marriage, this greater economic independence can result in the husband contributing more and receiving less in the way of unpaid work in the home.

Economists have already noted, and we have found as well, that female labor-force participation and higher female income do in fact shift the burden of household work a bit farther onto men's shoulders. But economists do not relate this effect to differences in national institutions. In particular, we have argued that institutions that put a premium on the accumulation of specific skills hurt women's ability to gain equality in household work. Because women in specific skills economies typically bear a bigger penalty for career interruptions such as for child rearing, they face more limited work opportunities and may invest less in their market-relevant education as a result. This, in turn, weakens their bargaining power at home, and they get stuck sweeping floors more of the time than their counterparts in economies that specialize in general skills. This occurs unless, as we have argued, the government steps in and adopts policies to counter the disadvantages of women in specific skills countries. This is where the gender gap in preferences enters the story.

Given the overall trend toward more women in the workforce, we are not surprised to find that women as a group seem to be moving to the left politically. Although women actually vote as a group to the left of men only in a few countries, time-series analysis of women's political preferences show a systematic move leftward in rich democracies. Given that women were starting from a position to the right of men, and given that the percentage of women fully integrated into the labor force still lags in many countries, it may take some years before women are actually positioned to the left of men across the board.

But among women who work, especially in countries with high divorce rates, our results suggest that this is already the case, and it is true across the board in terms of social policy preferences. Women everywhere want the government to take a more active role in public employment creation. The reason, we argue, is that partial socialization of family work, even at the cost of higher taxes from the private sector, increases a woman's ability to work outside the home and thereby increases her exit options and her household bargaining position. As a result of their distinct preferences, working women are beginning to have an impact on party platforms and levels of female legislative representation. Indeed, we find preliminary support for a substantial relationship between a country's gender preference gap and the proportion of that country's legislators that are female (Iversen and Rosenbluth, manuscript in progress).

Comparative political economists have largely ignored the politics of gender and the family, but we

hope this article demonstrates the potential for the field to answer the numerous remaining questions in this rich and largely underexplored area of study. A particularly promising area of inquiry, we believe, is changing gender roles in childhood socialization. Political economists rarely venture into this area, yet their models imply that they have much to contribute.

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