

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

Abstract

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.

1. Introduction

Some 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 Gary 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 maximize the success of children 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 (Folbre 1987; Braunstein and Folbre 2001; Pollak 1999; 2003; Lundberg and Pollak 1996; 2001), 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 by bargaining where bargaining power is dependent on political-economic factors outside the family. We make use of recent political economy arguments (e.g. Hall and Soskice 2001, Pontusson forthcoming; author1 forthcoming, Estevez 1999) as well as macro-sociological work on the welfare state (e.g., Esping-Andersen 1990, 1999, Orloff 1993, Huber and Stephens 2001) to tie macro-level conditions to intra-family bargaining over the division of labor. Because some countries take advantage of opportunities in the international economy by specializing in production where women have a comparative disadvantage, the gender division of labor is tied to the international 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 structure of the economy. The

key, we argue, is the extent to which the political economy facilitates female labor force participation, which in turn depends on whether production relies on specific as opposed to general skills and the extent to which the state provides a broad range of social services. Following a standard trade argument, whether firms make intensive use of specific skills depends on the relative abundance of such skills, and this is in turn determined by the broader national institutional framework -- what Hall and Soskice refer to as comparative institutional advantage. 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 paper is organized as follows. Section 2 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. Section 3 explains the cross-country variation in gender-based political preferences. We show that the gender gap in preferences is dependent on female labor force participation and the possibility of marriage breakup. Section 4 concludes.

2. 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 normal 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 Becker's model as an intellectual justification for the traditional male-dominated 1950s family. 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. Families in U.S., 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 U.S., 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. And if we want to understand the implications of this for the division of labor and patterns of socialization, we have to treat family members as individuals with distinct preferences. The short hand of treating the family as a unitary actor is less useful than it may once have been.

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 re-marriage market, but since one critical “skill” in this market is to produce and nurture offspring, a woman’s position in the re-marriage market will be seriously reduced as soon as she has children in another marriage. Adding insult to injury, another valuable commodity in the re-marriage market is youth and beauty, which also deteriorates with time. Hence, even in the remarriage market, the only non-perishable 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 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 non-cooperative 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; author2 forthcoming). 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).¹

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 non-compliance with any stipulations in the contract. Precisely this type of detailed marriage contracting has reached almost farcical complexity among Hollywood

¹ For a formal proof of this using a standard bargaining model, see author1 and 2, 2004.

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. Just as in non-standard economic contracting, comprehensive ex ante agreements are either impractical or prohibitively expensive to write and enforce.

In this paper 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.² 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 paper, can be understood within the bargaining framework we use. Besides, time budget research (which we discuss below) show 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

² 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.

expected to leave the labor market for purposes of child birth and rearing (Mincer 1962; 1978; Polachek 1975; 1987). 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. (2000) 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). Women facing tough labor market constraints may be better off aiming as high as possible in the marriage market, and educating themselves in the "gracious arts" rather than in marketable skills.

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 2000, author1 forthcoming). 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, though 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 specific skills ~~Protective institutions~~, 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.

Because 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 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 macro-sociological literature. In particular, the extent to which the state support the ability to form independent household, especially through publicly provided services such as daycare, and through employment for women in these services, can compensate for the exclusion of women from good jobs in the private labor market (Orloff 1993; Esping-Andersen 1999). The Scandinavian countries in particular have attained high female participation rates by creating a large, and heavily feminized, public sector.

2.1 Empirical Analysis of the division of labor.

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 macro-level 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 UK, and the U.S. One case, Spain, is missing so many of the key independent variables that it had to be excluded from the individual-level analysis (but we kept it in the macro-level analysis).

We focus exclusively on married and cohabitating couples. The dependent variable 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.³

³ 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

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 more 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.

The fact that child care is left out of these questions 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 of all ages increase women’s overall unpaid work time three to four times more than they increase men’s (Bittman, England, Folbre, Matheson 2001).⁴ But we expect, at least, that the male-female division of childcare responsibilities will parallel the way they divide other family tasks.

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 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

⁴ 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.

domestic work, equivalent to 460 minutes, or almost 8 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 4 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 or about 77 minutes of work (9 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 or who are retired. Unemployed and students are ignored. The variables are coded for men and women separately. They are included as independent variables in the regressions of unpaid work.

In addition, we use five sets of independent variables to explain the individual-level variance in the division of labor. 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 non-wage 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 percent of the respondent=s income). This suggests that the inferred number is a fairly good proxy for

the spouse's income.⁵

We measure the *probability of divorce* in two different ways. 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. The variable is coded 1 if one of the spouses is previously divorced, 0 otherwise. At the aggregate level we simply use national divorce rates as a proxy for the society-wide probability of divorce.

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, the questions inquire about time taken off during four different phases of child rearing: i) before the birth of the first child, ii) before the youngest child entered school, iii) after the youngest child entered school, and iv) 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 (2002).

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,

⁵ 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.

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.

The final variable of theoretical interest is age. 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 or is associated with having dependent family members, and 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 re-marriage 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 re-marriage market.

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 macro-level variables, including relative skill abundance induced by international competition, is described below.

2.2 Empirical Results

The results reported in Table 1 have been pooled across data from our 12 cases, using country dummies to capture national differences in the division of household labor. The evidence in this

table is thus purely for individual-level differences within countries. To explore aggregate-level effects, we will subsequently drop the dummies in favor of national-level variables for skill specificity, public sector size, and divorce rates.

Table 1: Individual-level determinants of the gender division of labor

	Unpaid work (female share)		Paid work Women Men	
Divorce	-0.087*** (0.023)	-0.083*** (0.027)	0.060*** (0.017)	0.027** (0.011)
Past absence from paid work	0.155*** (0.032)	0.175*** (0.044)	-0.555*** (0.023)	-0.021 (0.015)
Male labor force participation	0.253*** (0.025)	0.225*** (0.036)	-	-
Female labor force participation	-0.173*** (0.017)	-0.130*** (0.026)	-	-
Male income (log)	-	0.033** (0.017)	-	-
Female income (log)	-	-0.065*** (0.014)	-	-
Number of dependents	0.026*** (0.007)	0.035*** (0.009)	-0.012*** (0.005)	0.028*** (0.003)
Age	0.006*** (0.001)	0.006*** (0.001)	-0.007*** (0.001)	-0.019*** (0.000)
Gender of respondent	0.207*** (0.015)	0.204*** (0.019)	-0.023*** 0.011	-0.049*** (0.007)
Adj. R-squared	.191	.178	.239	.464
N	5942	3718	6523	6688
No of countries	12	12	12	12

Note: All models include a full set of country dummies (not shown).

Key: *** p<.01; ** p<.05

The first two columns are for household work, the latter two for paid work. Because there is a lot of missing data for income, the first column excludes these variables. But it makes little

difference to the results. As expected, the probability of divorce decreases the female share of unpaid work and increases their share of paid work. Divorce also makes men somewhat more prone to be in paid work, but the effect for women is twice as high. Women in families with one previously divorced spouse also spend about 1 hour less a week on household work.

Past absence from the labor market to care for children has a strong negative effect on women's labor force participation (column 3); but it has virtually no effect on men's participation. A woman who has taken off the maximum amount of time for child rearing is predicted not to work at all whereas someone 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 percent), and when they do it tends to be for very brief periods (less than 2 percent have taken full-time leaves). This neither appears to affect their subsequent participation in paid work, nor to increase their share of household work. Indeed, men seem to take off work only to the extent that it does not hurt their career. By contrast, women who have sacrificed work for family in the past end up with a greater share of the household workload. 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 effects 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 where men are better able to take advantage of opportunities to acquire specific skills in the labor market.

Interestingly enough, however, this effect is partly (but only partly) offset by a smaller effect of income for men. In other words, women get a greater reduction in household work for every dollar they earn than men. Why this is so is unclear, but it appears to be at least partly accounted

for by a declining marginal effect of earnings on bargaining power (with men earning more than women on average).

Another consistent result is that age increases the share of work performed by the woman. The only possible explanation for this effect in an efficiency model is that age is correlated with labor market participation or the scope of domestic work. Yet, the effect of age is *stronger* when we include controls for labor market participation and the number of dependents. Specifically, 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 work about 14 additional minutes a day.⁶

As noted, this effect of age is consistent with a bargaining perspective because age differentially affects men and women on the re-marriage market. Yet, it is also consistent with a generational hypothesis that younger generations have more equitable work norms. The data does not allow us to distinguish between these interpretations. But *if* norms have changed over time the next question is the cause of this change, and the bargaining model in fact has something to say about that. 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.

⁶ 20 years in age is equal to .12 units on the dependent variable, and a unit is equivalent to about 115 minutes of work.

To gauge the effect of aggregate-level variables, we substitute the country dummies for measures of national divorce rates, national abundance of specific skills, and size of the public service sector. Division of household labor, if the model is right, should be affected by the interaction of skill specificity (which disadvantages women) and the size of the public sector (which compensate for such disadvantages). As we move from general to specific skill countries we would expect the division of household labor to become increasingly inegalitarian, except where the state steps in to provide jobs in the public sector. This is what is being tested in Table 2.

Public sector size is not included as a component variable because it turns out to have practically no effect on either dependent variable, yet produces serious problems of collinearity (95 percent of the variance in the interaction term is explained by its components). With that qualification, all the relationships turn out as expected. Divorce at the macro-level plays the same role as at the micro-level, raising women's paid employment and reducing their share of unpaid work. The effect is quite strong, increasing female labor force participation by one half of a standard deviation, which, if we use actual participation data is equivalent to about 5 percent of all working age women. Like before, labor force participation reduces the share of household work, but more so for men than for women – partly offset by a stronger effect of income for women.

Table 2: Aggregate-level determinants of the gender division of labor

	Unpaid work (female share)	Women	Paid work Men
Divorce (micro-level variable)	-0.098*** (0.027)	0.045*** (0.017)	0.021* (0.011)
Divorce (macro-level variable)	-0.004*** (0.001)	0.004*** (0.001)	0.001*** (0.000)
Past absence from paid work	0.148*** (0.045)	-0.577*** (0.023)	-0.028* (0.015)
Male labor force participation	0.244*** (0.035)	-	-
Female labor force participation	-0.109*** (0.026)	-	-
Male income (log)	0.034*** (0.012)	-	-
Female income (log)	-0.073*** (0.011)	-	-
Skill specificity	0.242*** (0.066)	-0.155*** (0.034)	0.057** (0.023)
Public sector * Skill specificity	-0.401*** (0.106)	0.248*** (0.056)	-0.163*** (0.038)
Number of dependents	0.040*** (0.009)	-0.007 (0.005)	0.033*** (0.003)
Age	0.008*** (0.001)	-0.007*** (0.001)	-0.019*** (0.000)
Gender of respondent	0.199*** (0.019)	-0.016 (0.011)	-0.048*** (0.007)
Adj. R-squared	.143	.221	.452
N	3718	6523	6688
No of countries	12	12	12

Key: *** p<.01; ** p<.05

The key new finding in Table 2 concerns the effect of skill specificity. 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.⁷ We assume that skills tend to be more specific the more training systems emphasize vocational training and the longer workers stay with particular firms (see Estevez et al., 2000 and author1, forthcoming). In turn, relative abundance of specific skills give firms a comparative advantage that they will exploit in a manner that is disadvantageous to women. The results show that skill specificity unambiguously hurts the labor market participation of women when the public service sector is small. The opposite is the case for men who appear to thrive when the production system relies heavily on specific skills (although the effect is smaller).

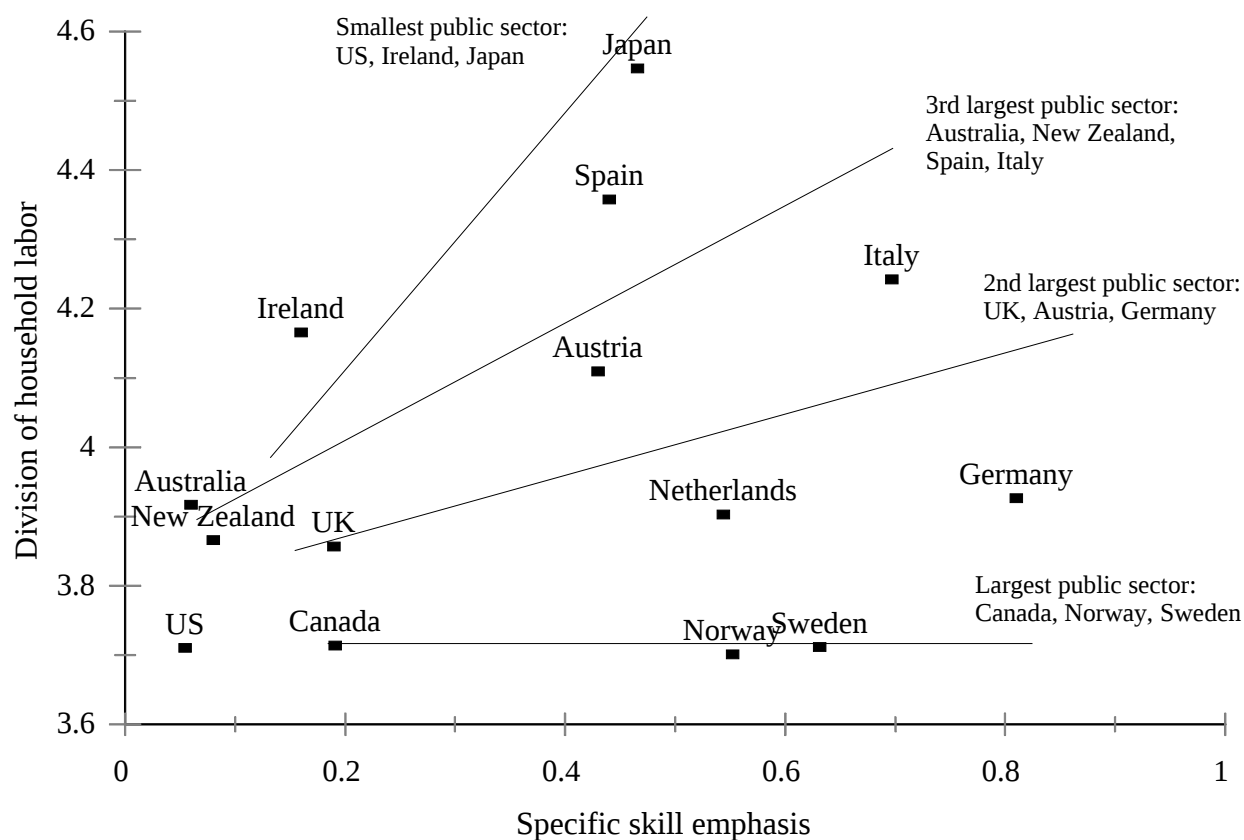
For example, in an economy with the smallest public sector in the sample (Japan at 8.6 percent of GDP), going from an economy with little emphasis on specific skills to one with a high emphasis, is predicted to reduce female employment by about one third of a standard deviation on the dependent variable (about 3 percentage of the female working age population), and to raise unpaid work by between one third and one half of a standard deviation (about 4 hours per week).

Crucially, however, the relationship between skills and the division of labor is attenuated by a larger public sector, measured here as public consumption as a percent of GDP (standardized to vary between 0 and 1 for ease of interpretation). This is illustrated in Figure 1. The relationship between specificity of skills and a less favorable division of labor for women disappears when government spending is about one standard deviation above the mean. Clearly, while specific

⁷ Vocational training intensity is the share of an age cohort in either secondary or post-secondary (ISCED5) 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:

skills undermine private sector employment, the government can eliminate the effect, and potentially reverse it, by increasing the public service sector and the number of women employed in it.

Figure 1: Skills, public sector, and the division of household labor



3. 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 to 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 case 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 U.S. 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 (Shapiro and Mahajan 1986; Ladd 1997; Greenberg 2000; Alvarez and McCaffery 2000). 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 and 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; Welch and Hibbing 1992; Gidengil 1995). 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 (Tedin 1994; Sears and Citrin 1982). But survey research suggests that women throughout the wage distribution are more likely to vote left than their male counterparts (Goertzel 1983; Carroll 1988; 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 socio-economic 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). This would seem to damage the insurance argument, since these women have already reduced their economic exposure to the

possibility of divorce.⁸

The data suggest to us an alternative explanation based on household bargaining: 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 high quality, low-cost daycare. Men may prefer to spare the public purse and hence their tax bill if their wives are default child care 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

⁸ One could 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.

are otherwise provided “for free” in the family.

Men and women are also likely to disagree about a range of social transfer programs. First, research based on the Luxembourg Income Study has shown that transfers typically result in a reduction of inequality (Bradley 2002), and since women are on average paid less than men they tend to have a stronger interest in redistributive spending (assuming again that they care about their outside options).⁹ Social transfers are also important in so far as they allow women temporary career interruptions without significant loss of income. As Estevez-Abe (1999) has argued, social protection for women involves two factors that are not equally relevant for men: (i) protection against dismissal during and after pregnancy, such as maternity, parental and family leave policies; and (ii) income maintenance during leaves and guarantees of reinstatement to the same job at the same wage level upon return to work.

Support for redistribution and social insurance obviously does not come from women alone. In the classic Meltzer-Richard 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

⁹ The gap in income between men and women may be due to “statistical discrimination” where employers pay women less than men because women are on average more likely than men to leave the labor market for purposes of child birth and rearing, and because women are more likely than men to trade off working time for time on domestic duties, including care for sick family members (see Daly 1994; Rubery, Fagan and Maier 1996). There is a vicious circle here because the less well paid women are the weaker their bargaining position in the family and the more time they will spend on household duties to the detriment of their attractiveness to employers.

greater the importance of income protection through social insurance programs (guaranteed health care, pensions, unemployment benefits, job security, etc). This argument implies that position in the international division of labor matters for the size and structure of the welfare state – but through a mechanism that is not identified in existing arguments about the relationship between the international economy and social protection (see Garrett 1998; Rodrik 1998).

This mechanism also has implications for understanding gender preferences for social protection. As suggested above, the reason is that women will find it harder to enter into occupations that require extensive specific skills (Estevez-Abe 1999). For a woman to invest in specific skills she has to be assured that potential career interruptions, if temporary, will not lead to dismissal or reduce her wage level in the long run. A high probability of dismissal reduces the incentives to acquire firm-specific skills. Likewise, a high probability of reduction in wages after becoming a mother reduces the incentives to invest in either firm-specific or industry-specific skills (Estevez-Abe 2002).

The key implication of our argument is that women at any given level of income and skill specificity will prefer higher social protection than men. This gender gap is magnified by an indirect effect through income since women earn less than men. On the other hand, the effect is reduced to the extent that women invest more in general than in specific skills. An interesting corollary of this argument is that women should be more supportive than men of public investment in 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.

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 non-working 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. Non-working 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. Since both female labor force participation rates and divorce rates vary across countries, the macro-level 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 et al. (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 conditions, 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 US. As we have argued, if divorce is a highly unlikely prospect, men and women are much less likely to adopt conflicting policy preferences.

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. The high gender segregation in the public sector also helps explain a widening gender gap. Paul Pierson points out that 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 (Pierson 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.

3.1 Empirical Analysis of Gender Preferences

To test our hypotheses we turn to the 1996 International Social Survey Program on the role of government. The data contain a number of questions about government spending and social policy as well as information on the key independent variables. We have more or less complete data for 11 advanced democracies at the individual level (Australia, Britain, Canada, France, Germany, Ireland, Italy, Norway, New Zealand, Sweden, and United States) and for 13 (adding Japan and Spain) at the macro level.

We use three dependent variables. The first is an additive index intended to tap preferences for social transfers and based on three questions about whether the respondent want more or less government spending on a) unemployment benefits, b) health care, and c) pensions. The variable ranges from 1 to 5, where 5 means a strong preference for more spending. The second variable is an additive index based on three questions about the role of the government in providing employment: a) should the government finance projects to create new jobs?, b) should the government reduce the working week to produce more jobs?, and c) should the government be responsible for providing jobs for all who wants to work? The variable ranges from 1 to 5 where 5 indicates a strong preference for job creation. The final variable is based on a single question that asks whether the respondent wants the government to spend more or less money on public education. Like the other two variables, this one varies between 1 and 5 with the latter indicating strong support for additional spending.

The key independent variables are gender (0=male; 1=female), income (logged), skill specificity, and labor market participation (as defined in the previous section). We also control for public sector employment, but the results for this variable are presented separately because data are not available for the US. Skill specificity is based on the ISCO job classifications, the respondent's formal education, and a question about the difficulty the respondent would face if having to find a similar job. Higher values mean that the respondent's specific skills are extensive relative to his or her general skills. The measurement strategy is described in detail in author1 (2001). The regressions also include controls for age and unemployment, and as in the previous section we use pooled regressions with a full set of country dummies (not shown).

3.2 Results

Model 1 in Table 3 shows the results of a simple linear model predicting support for social transfers. All variables have the expected signs and, with the exception of labor force participation, all effects are statistically significant at a .01 level or better. Most importantly, women are more supportive than men of social transfers (i.e., want to increase them more, or decrease them less). On average, the effect is equivalent to 20 percent of a standard deviation on the dependent variable. Unfortunately, it is very hard to give substantive meaning to this number because we do not know how any particular level of agreement with any of the questions map onto actual monetary commitments. 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.

In model 2 we have included an interaction term for gender and labor force participation. Doing so creates problems of collinearity, with 83 percent in the variance in the gender variable being explained by the other variables. Still, the difference between men and women who work is statistically significant, and the substantive results make perfect sense in terms of the theoretical argument. Thus, when women are not working (the value on the labor force participation variable is zero), their predicted preferences are no different than men's. When a woman is working full time, by contrast, the difference between men and women is .164, which is greater than the direct effect in the non-interactive model. In other words, women vote together with men, and presumably in the collective interest of the family, when they are not working. But

Table 3. Social preferences and gender

	Public employment			Social transfers			Education		
	1	2	3	4	5	6	7	8	9
Female	0.158** (0.019)	0.052 (0.041)	0.138** (0.020)	0.116** (0.016)	0.048 (0.035)	0.100** (0.017)	0.107** (0.020)	0.088* (0.043)	0.091** (0.021)
LF participation	0.052 (0.032)	-0.025 (0.042)	0.028 (0.034)	0.057* (0.027)	0.007 (0.035)	0.058* (0.028)	0.016 (0.034)	0.002 (0.044)	0.030 (0.035)
Female*LF part	-	0.137** (0.047)	-	-	0.088* 0.040	-	-	0.025 (0.049)	-
Income (log)	-0.003** (0.000)	-0.003** (0.000)	-0.003** (0.000)	-0.002** (0.000)	-0.002** 0.000	-0.002** (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Skill specificity	0.115** (0.012)	0.115** (0.012)	0.126** (0.012)	0.128** (0.010)	0.129** 0.010	0.123** (0.010)	-0.001** (0.012)	-0.001 (0.012)	0.001 (0.013)
Age	-0.001* (0.001)	-0.002** (0.001)	-0.001 (0.001)	0.003** (0.001)	0.003** 0.001	0.004** (0.001)	-0.004 (0.001)	-0.004** (0.001)	-0.003** (0.001)
Unemployment	0.177** (0.055)	0.152** (0.056)	0.184** (0.057)	0.102* (0.047)	0.086 0.047	0.099* (0.047)	0.044 (0.057)	0.040 (0.058)	0.056 (0.059)
Public sector	-	-	0.198** (0.020)	-	-	0.044** (0.017)	-		0.098** (0.021)
Adj. R-sq	.188	.189	.191	.187	.197	.211	.068	.068	.069
N	7933	7933	7129	8140	8042	7311	8260	8260	7417

Key: ** p<.01; * p<.05

Note: Regressions included a full set of country dummies

when women enter the labor market, they express social policy preferences that are clearly distinct from men's. This is also true for social transfers (models 5 and 8), and the magnitudes of the effects are very similar (but again with the qualification that it is difficult to give substantive meaning to the numbers). The results are not sensitive to control for public sector employment (columns 3, 6, and 9), but public sector employment not surprisingly raises the support for spending.

The other two relationships that emerge from the regressions on social policy preferences 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. These variables, however, do not appear to matter much in explaining support for educational spending (model 5 and 6) where age and gender are the most important predictors. Again, an explanation for the gender effect that is consistent with our argument is that women have a stronger incentive than men to invest in general skills, hence also a greater interest in public subsidization of education. The alternative, or perhaps complementary, explanation is that women are biologically forced to invest more in their children, and manifest this by spending more resources on them (Hrdy 1999; Schultz 2000).¹⁰

In Table 4 we examine two predicted *indirect* effects of gender. Model 1 uses income as the dependent variable and shows that women, not surprisingly, earn less than men. On average they make 652 dollars less than men (in 1996), and this figure roughly doubles if we also take into account that women participate less in the labor market. Since lower income translates into greater support for social spending, the effect of gender is obviously magnified by income. However, about half of this effect is canceled out by another indirect effect: the greater propensity of women to invest in general skills (model 2). Both effects are, of course, entirely consistent with the theory.

¹⁰ The most likely explanation for the effect of age is that the older you are the less you will benefit from spending on education.

Table 4. Skill specificity, income, and gender

	Income	Skill specificity
Female	-23.59 (0.95)	-0.287 (0.016)
LF participation	56.53 (1.62)	-0.217 (0.025)
Skill level	16.71 (0.47)	-
Age	0.67 (0.04)	0.004 (0.001)
Unemployment	11.16 (3.32)	0.193 (0.048)
Adj. R-sq	.470	.435
N	6830	9610

Note: Regressions included a full set of country dummies

Exploring the macro level implications of our argument is hampered by the limited number of cases (13), as well as by high colinearity between divorce and labor force participation rates (.90). However, the relationship between divorce rates and the size of the gap in gender preferences (measured as an average across issues) is indeed positive, with a correlation coefficient of .6. The same is true for labor force participation and the gender gap ($r=.5$). More specifically one cluster of countries, consisting of Ireland, Italy, Japan and Spain have relatively low divorce and female participation rates, with small differences in gender preferences, whereas another, consisting of Canada and the Scandinavian countries, have high divorce and participation rates, with relatively large gender differences in preferences. We know from the analysis in the previous section that female labor force participation is explained by the interaction of countries' position in the international division of labor (skill specificity) and the size of the public sector, while the probability of divorce affects the importance women assign to public policies that strengthen their outside options. That divorce, labor force participation, and the gender gap are related is therefore not surprising.

4. 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 favor 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 paper 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 (Lundberg and Pollak 1996, 2001; Braunstein and Folbre 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, and the way these institutions are embedded in the international economy. 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 state steps in and adopt policies to deliberately counter the disadvantages of women in specific skills countries. This is where the gender gap in preferences enter the story.

Given the overall trend towards 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 (most dramatically in the US), time series analysis of women's political preferences show a systematic move leftwards 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.

In terms of social policy preferences, however, women have already arrived. Our data show unambiguously that women desire more spending on transfers, public employment creation, and education. 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. Public investment in formal education also benefits women disproportionately because they have a comparative advantage in general skills.

Political economists have largely ignored the politics of gender and the family, but we hope this paper demonstrates the potential for comparative and international political economy to answer the numerous remaining questions in this rich and largely underexplored area of inquiry. 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 potentially have much to contribute.

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