

# **Gender Socialization: How Bargaining Power Shapes Social Norms and Political Attitudes**

Torben Iversen and Frances Rosenbluth

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## **Abstract**

Most studies of gender socialization start with patriarchy and explore its effects on female social, economic, and political status. In this paper we turn the causal arrow the other way to understand where patriarchal values come from in the first place. We argue that the relationship between the mobility of male economic assets to the mobility of female economic assets goes far in explaining intra-family bargaining power, and by extension, in explaining the norms that become societally dominant. We investigate this proposition empirically by looking at mate choice preferences between agricultural, industrial, and post-industrial societies, and by looking at the gender gap in political attitudes.

## 1. Introduction

Patriarchy—the dominance of males in social, economic, and political organization—characterizes much of human history. Indeed, its very universality has made it invisible to otherwise perceptive philosophers and social critics from ages past. Jean Jacques Rousseau, an early modern champion of equality, applied his logic only to men. Not only did Rousseau fail to argue for gender equality, but as Nannerl Keohane has pointed out, he elevated the power differential between men and women “into a ‘moral’ principle that becomes the foundation of an immense and complicated argument about how men and women should behave in all aspects of their lives” (Keohane 1980: 139). We single out Rousseau not because he was unusually chauvinistic. Our point is rather that his disparaging attitude towards women was so utterly common that he mistook convention for natural law.

Much of the literature in gender studies is concerned with explicating patriarchal conventions and exploring their effects on all aspects of women’s lives. We do not deny the importance of social construction, but are dissatisfied with much of the existing theorizing about the origin and stability of social values. In this paper, we turn our focus backwards through time to understand where patriarchal norms came from in the first place, and why they are both ubiquitous and persistent.

We argue that there is both an efficiency and bargaining power basis for patriarchy in labor-intensive agriculture: the premium to male brawn in such an economy encourages a gendered specialization of labor that gives males command over assets that are more mobile than the female’s family-specific investments. Regardless of the importance of

the woman's contribution to the family wellbeing, the man is in a position to appropriate the returns of her work because his assets—his farming ability and experience—is more mobile than her family-specific investments, particularly her children. Our analysis therefore suggests a giant U-shape curve of gender equality in human history, starting with relatively egalitarian hunter-gatherer societies in which females were economically self-sufficient from their gathering role; falling into a trough of inequality when females became specialized in family work in agrarian societies; and then moving into more equality as females gained access to market opportunities for which brawn was no longer at a premium. Contrary to a similar U that Friedrich Engels drew (1884), we do not believe markets and commodification to be the culprit, but the way particular kinds of markets allocate bargaining power across the sexes.

In the section that follows, we lay out our argument about differential asset mobility within families and the implications of that differential for societal norms. This model has a timeless quality, though the differences in asset mobility between men and women are starkest in agricultural societies. In Section 3 we therefore focus on how we expect different modes of economic production shapes the intra-household bargaining environment and, by extension, how they are likely to influence gender socialization. In Section 4, using data from David Buss's research on mate selection preferences, we present evidence that families choose to socialize their daughters in more gender-neutral ways in post-industrial societies, as our model would predict. Section 5 extends the logic to policy preferences, demonstrating the political implications of our argument. Section 6 concludes.

## 2. Efficiency, Bargaining, and Patriarchy

It is tempting to think that men, on account of their strength advantage over women, have been able collectively to write the rules of the game in their favor. While there may be some truth to this belief, a collective action account based on brute strength fails to explain the stability of that equilibrium given that males compete with each other for females. Males competing with other males may use various strategies to appeal to potential female mates, of which forcible sex or female subordination more generally is only one. Since females bear by far the larger burden from sexual reproduction than males, females should be the choosier sex by Trivers' law (1971); and, as Adrienne Zilhmman (1989) writes, female selection could well favor kind, nurturing males. The stability of patriarchal values that valorize female subordination against the backdrop of female-led sexual selection is therefore a puzzle and not as obvious as many writers assume.

Arguably, patriarchy—along with, perhaps, respect for authority more generally--is the most encompassing and persistent set of social conventions that has governed human society. Our contribution to this line of analysis is to consider how patriarchal norms became virtually universal, and to explore the conditions under which patriarchy remains stable. John Tierney, in a recent *New York Times* article, resurrected an old argument about “tastes”: perhaps women are less successful in the professional world because they have less appetite for competition than men do. This is an ancient proposition, but one endorsed in 1985 by economists who suggested that “equally qualified men and women may evaluate the same job characteristics differently when choosing jobs” (Corcoran and Courant 1985). Furthermore, one economic model reviewed by Corcoran and Courant

posits that under conditions of costly job search, individuals will be influenced not only by tastes, but also by perceptions of possible discrimination in the workplace under consideration. These taste and perception hypotheses operate on the supply-side (employee side) of the labor market. A complete model explaining labor market outcomes should also allow for the impact of employer preferences and prejudices (the demand-side of the market).

Our argument begins with an observation that, in agricultural society, households could secure efficiency gains by organizing themselves around a gendered division of labor in which males specialized in labor-intensive agriculture and females specialized in family work including, primarily, the bearing and rearing of children (Becker 1964, 1965, 1971, 1981, 1985).

### **Conceptualizing Power between the Sexes**

Bargaining theory implies, and casual observation confirms, that power often flows from the ability of people to credibly threaten to walk away from a deal. This is true whether we talk about haggling over the price of a used car, bargaining over wages, or deciding the division of household labor in the family. In bargaining theory the ability to walk away is captured by the concept of “outside options.” and the outside options of bargainers define the bargaining space within in which the outcome will be found. Between otherwise identical individuals, those with the better outside options can more credibly threaten to walk away from a deal unless it is tilted towards them. This is not the whole story about power, because it also depends on who gets to make the first offer, how patient people are, and, less easy to pin down, norms of fairness as well as ability to manipulate or persuade others. Still, we are likely to learn a lot about power, especially

over long stretches of historical time, if we can identify variables that affect the relative ability of people in a bargaining relationship to walk away.

The bargaining relationship that concerns us in this paper is that between the male and female in the household, and, by implication, the relationship between men and women in the broader economy and the polity. In modern times, the obvious equivalent of “walking away” from a family is divorce, and much recent scholarship is in fact centered around that notion (Braunstein and Folbre 2001; Lundberg and Pollak 1996). But marriage is not a precondition for forming households, and nor is divorce the only way to walk away from a marriage. In hunter gatherer societies, men and women formed households, or families, but they did not get married in the modern meaning of the term. Still, they were clearly in a bargaining relationship. In agricultural societies marriage was ubiquitous, and the norm against divorce was strong. Still, it was common for men to withdraw from their family responsibilities, not merely through infidelity and diversion of time and resources, but sometimes by altogether leaving the family to its own devices, physically and economically.

The ability to walk away in this sense depends critically on having skills and assets that can be applied easily outside the household. If all of one’s assets are tied to the family, the loss of leaving can be prohibitive. In agricultural societies, as we have argued, physical capacity for hard labor is an asset that can be applied outside the household as well as inside it, whereas investments in children are specific to the household (certainly until children are old enough to work for others). Leaving or neglecting the family, however, also means that any household-specific investment will be lost, or at least seriously devalued. Whatever time and money the male has spent on

the family in the past is not likely to yield much of a return in the future unless he remains in the household. To the extent that children's economic or emotional stability requires continuous investment through a certain age, the departure of their father prior to that age reduces all previous investment in their wellbeing.

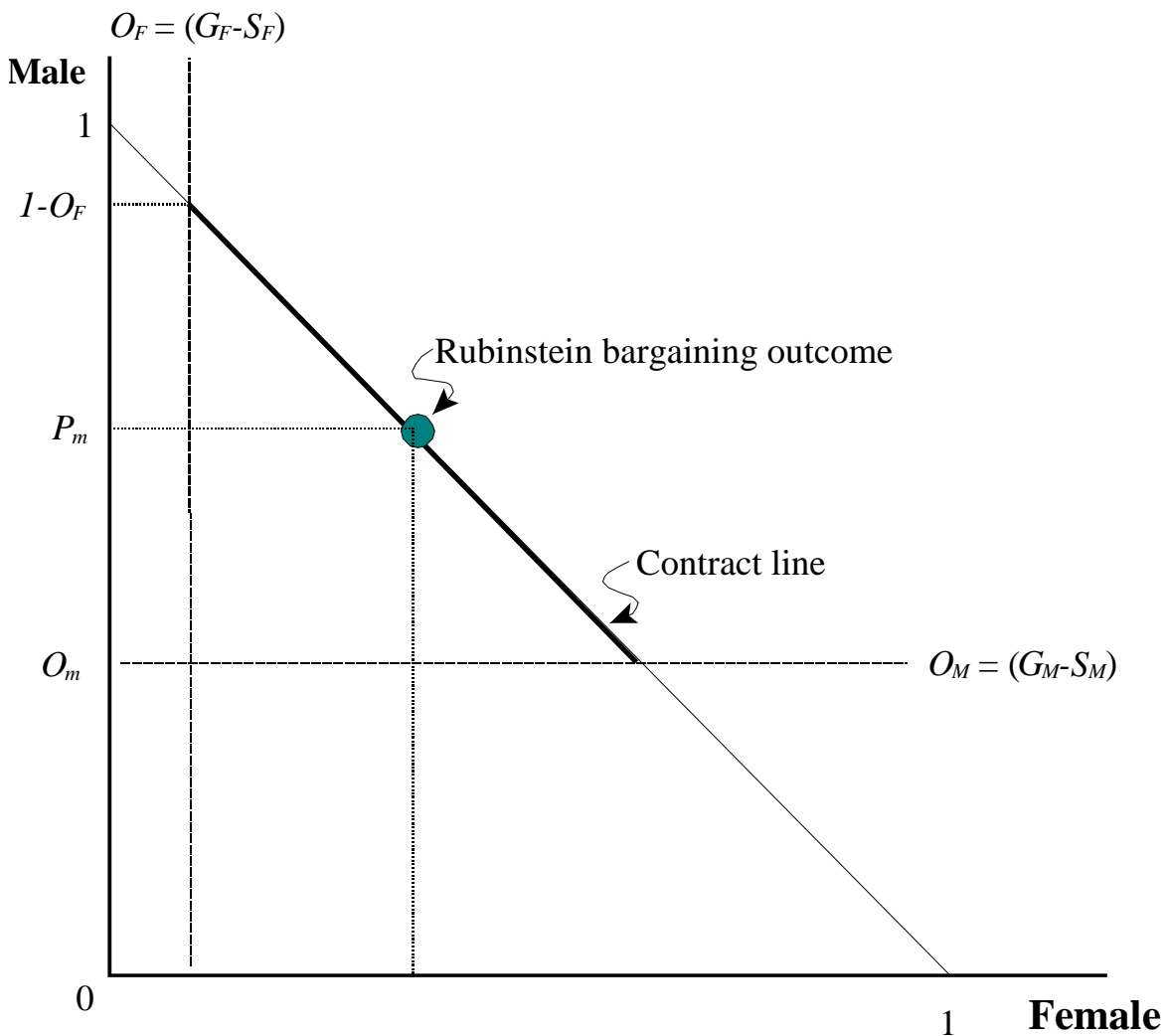
Figure 1 shows a very simple bargaining game between a male and a female in a household. The total product of the household (broadly conceived to include all material and non-material benefits) is normalized to one and assumed to be completely divisible. The thick contract line is the feasible set of bargained outcomes (assuming that households produce a positive output). It is bounded by the "outside options", which are the payoffs for each "spouse" if he or she leaves the household. The outside options, in turn, can be conceptualized as the returns on mobile or general assets (which are marketable) *minus* forgone returns on any household-specific assets (which are not marketable). If the first mover advantage is small (or alternates), and there are no systematic differences in the rate that household members discount the future, the Rubinstein bargaining solution is simply the midpoint on the contract curve. This point is simply a function of the outside options, and it can be viewed as a measure of the relative bargaining power ( $P$ ) of the male or female. Because of the symmetry of the game this can be expressed in a very simple equation (the terms are shown in Figure 1):

$$(1) \text{ Power of male } (P_M) = \frac{1}{2} \square (1 - O_F - O_M) + O_M = \frac{1}{2} \square [1 + (G_M - G_F) + (S_F - S_M)],$$

where  $G_M$  and  $G_F$  are the mobile or general assets of the male and female, respectively, and  $S_M$  and  $S_F$  are the household-specific assets for the male and female, respectively. If

the general and specific assets are identical for the male and female, they share the household product equally and  $P=1/2$ . If the male has only general assets and the female only family-specific ones,  $P$  can approximate one (while it would be zero for the female).<sup>1</sup>

**Figure 1. A simple household bargaining game**



<sup>1</sup> We can introduce concavities in the utility functions by taking the log of  $G$  and  $S$ . We then get the power equation as a fraction instead of a sum:  $P_M = \frac{G_M \cdot S_F}{S_M \cdot G_F}$ . But the logic is not altered.



We conjecture that  $P$  has been greater than  $\frac{1}{2}$  throughout much of history because women, by most accounts, have a *comparative* advantage (though not necessarily *absolute* advantage) in household-specific assets, while men has a comparative advantage in physical capacity for hard labor, which is a mobile asset. When the production technology, or mode of production, generates high demand for physical labor and a premium on having many children, as in agricultural societies, the gain from having a more or less complete division of labor is high and bargaining power will heavily advantage the male. Male bargaining power will also rise if production is based on firm-specific skills because these require uninterrupted careers that are difficult for women to commit to (Estevez-Abe 1999; Estevez-Abe et al. 2001; Iversen 2005). But there is no reason that either sex should have a comparative advantage in mobile assets that require little or no hard physical labor, such as social and intellectual skills that are used intensely in most service production. The gain from a complete division of labor in the household will therefore be smaller, and women will have a reason to avoid it precisely because specialization for women means less power.<sup>2</sup> The result is that the outside options of women improve, and men consequently have a smaller bargaining advantage. This also implies that girls who are brought up to believe that they should participate on an equal footing with men in the labor market will tend to do better. Caring parents will therefore socialize their children to have more equitable gender norms.

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<sup>2</sup> This implies that the game is in fact a good deal more complicated than in Figure 1 because the endowment of assets, which depends on specialization, is partly a function of prior choices by the household members. But as long as some specialization occurs when there are efficiency gains to be made from such specialization, our mode of production argument holds.

The “mode of production” argument can be summarized in the following table, which distinguish political economies according to their demand for hard physical labor and household- (or firm-) specific skills, which tend to covary, and demand for non-manual, general skill, labor. The argument implies a curvilinear relationship between economic development and gender equality. Historically there was a sharp rise in inequality from hunter-gatherer societies to agricultural societies, and then a gradual reduction of inequality as we move to industrial and then postindustrial societies. We do not deny, of course, that political mobilization or institutions are unimportant. Indeed Section 5 underscores their importance for modern democracies. But in the long sweep of historical time, this line of argument emphasizes the political and institutional effects of underlying power relationships between men and women.

		Demand for non-manual, general skill, labor	
		Low	High
Demand for hard physical labor (“brawn”) and (household-)specific skills	Low	<b>Hunter-gatherer:</b> High equality between the sexes ( $P \sim 1/2$ )	<b>Postindustrial society:</b> High equality in bargaining power ( $P \sim 1/2$ ). Modest division of labor, and equitable gender norms
	High	<b>Agricultural society:</b> Male dominance (high $P$ ). Sharp division of labor, and patriarchal norms.	<b>Industrial society:</b> Sharp division of labor, but emerging opportunities for women outside the family (intermediate $P$ )

### 3. Modes of Production

In this section, we consider in more detail how different modes of production affect inter-gender bargaining power, and by extension, we propose, the evolution of social norms. As we have argued, both the male and female roles may be equally vital to the survival of the family but the relative bargaining power of the man and the woman is shaped instead by the reversion point for each in the event of family dissolution.

Agrarian production generates sharp asymmetries between the sexes in life prospects upon the break down of a family, which should lead to pronounced differences in gender norms. These asymmetries are less pronounced in hunter-gatherer and in industrial and post-industrial economic systems, leading us to expect gender norms to be the most stark in agrarian societies. We consider the bargaining implications of each type of economic system in turn.

### **Hunter Gatherer Economies**

Our knowledge of hunter-gatherer systems is limited to archeological evidence and ethnographic reports of times past, and to information about a few extant hunter-gatherer societies that survive at the edges of agrarian communities in Africa, Asia, and Latin America. But from what we have gleaned about these societies, women seem to have had the ability to survive independently of a male provider (Leacock 1978; Zihlman 1989). In their book *Woman the Gatherer* (1981), Frances Dahlberg and her collaborators revised the conventional wisdom that *Man the Hunter* (Lee and Devore 1968) provided the food, pointing out that women typically provided three quarters or more of the daily caloric intake of the community with the tubers and other plant foods they gathered. The protein provided by men might have been particularly desirable, and

men might have been able to gain status and access to women by sharing meat; but the meat was not strictly necessary for survival, particularly in areas with protein-rich pulses. Moreover, because meat would have been hard to store, hierarchies among men are likely to have been relatively flat and fluid, and based on hunting skill or (with population density) warrior prowess rather than on heredity.

Physical anthropologists characterize hunter-gatherer family structure as serial monogamy, in which a couple might break up at the instigation of either side and either partner may remarry several times in a life time. Divorce does not seem to be particularly discouraged or uncommon in the hunter gatherer societies we know about, and divorce does not lead to a sharp drop in the woman's livelihood. Women share child care duties among themselves, and grandmothers, by providing supplemental childcare and food gathering, may be more important than husbands to the survival of the young (Hawkes 1993; Hill and Murtado 1997; Hrdy 1981, 1999; Pinker 1997).

For the purposes of our bargaining model, it is crucial that divorce has a roughly symmetrical effect on both members of a couple in a hunter-gatherer society. The woman's livelihood and child care arrangements would be largely unchanged, though she might have an incentive to remarry to have privileged access to meat. She continues to rely on her gathering work for nourishing herself and her children, and having existing children does not seriously damage her chances in the remarriage market because she and her circle of female kin and friends continue to bear primary responsibility for their care. Neither does the presence of these children seriously impede her ability to gather food.

Although this picture is somewhat idealized, the crucial point is that, to the extent that women are, along with men, economically viable outside of marriage, the bargaining

relationship between men and women is likely to be relatively equal within marriage. Both have investments—he in hunting, she in gathering and child care—that are more or less equally mobile across family units. Although a new husband will not likely value her children from a previous marriage, she retains the ability to provide for them and for herself across marriages.

To the extent that women are economically viable without a male patron, we expect parents to have no particular reason to socialize their daughters to behave differently from their sons, apart from the economic specialization entailed in hunter-gatherer societies. Where marriage is not necessary for livelihood, it need not last a life time; and parents worry less to ensure that their daughters marry the best possible mate. Because female economic autonomy puts males in a weaker position to demand the “female virtues” of virginity, chastity, and quiet subservience, we expect social norms will less likely form around these male preferences.

### **Agrarian Economies**

Though gradual, the shift from hunter-gatherer to sedentary agriculture introduced a profound shift in the bargaining relationship within families. By extension, we argue, the Neolithic revolution set the stage for a very different set of social norms. With population growth and land scarcity, cultivation of food became more labor-intensive, bringing with it a premium on male brawn in plowing and other heavy farm work. Within the family unit, an efficient division of labor utilized the man’s physical strength to cultivate food, while the woman specialized in bearing and rearing children, processing and preparing food, making clothes, and other family duties. Though a woman’s work

was crucial to the survival of the family, her role no longer gave her economic viability on her own.

We argue that it was the loss of economic independence that gave rise to social norms that made marriage the ultimate goal for a woman, for without marriage, a woman's survival was at risk. If the family were to break up, the man could take his brawn and start a new family. The women, having invested her human capital in children specific to that marriage, would have less rather than more value on the marriage market after making her investment. While the male's human capital increases with the experience of farming, the external value of the female's human capital declines with every child.

This bargaining power differential translates into norms as parents socialize their children to make the best use of opportunities available to them. In an agrarian society where male brawn commands a premium, a family would risk genetic obliteration in one generation if it reared daughters to resist male authority and to enjoy their sexuality on their own terms. Because in an agrarian society a woman's peak value is when she is young, fertile, and unencumbered with another man's progeny, parents would want to instill in their daughters the importance of preparing for the marriage market, for that is her single chance to secure her livelihood. Where economic efficiency gives males a bargaining advantage on account of greater mobility of their human capital from a gendered division of labor, families do best by socializing their daughters to cultivate the femininity that will help her win her a good man, and the docility that will help her to keep him. Because human history has been agrarian for most of recorded time, these are the values—let's call it patriarchy--most familiar to humanity.

## **Industrialization**

Mechanization and the widespread introduction of labor saving devices have ushered in a new era of complex and interdependent markets; but for our purposes, the most important effect of industrialization has been to increase female bargaining power by reducing the premium to brawn. Claudia Goldin (1991) has shown, however, that early industrialization may actually *reduce* rather than increase female labor force participation, if we include piece work by farmers' wives as market labor, and given that in early stages of industrialization the available work is often loud, dirty, and dangerous—perhaps still claiming a premium on male brawn. Goldin describes a gradual process by which the emergence of more varied kinds of market work eventually draws women into the labor market, **particularly with the rise of service jobs in retail, banking, insurance, and clerical work that accompany later phases of industrialization.** In time, the opportunity costs of keeping women at home overwhelm the inertial attachment to a gendered specialization of labor.

We take the growing acceptance of gender equality in industrialized societies to reflect the diminution of the male brawn premium that existed for millennia of agrarian history. By the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, women in developed countries were no longer owned, literally, by their fathers and husbands; and they were given the right to vote. As women moved increasingly into labor markets, the idea that both parents are responsible for child rearing has gained acceptance, and views that women are less capable than men have become taboo. According to Geddes and Lueck (2002), men finally found it in their interests to allow women to work in order to supplement the

family income as remunerative opportunities for female labor increased. We would stress, in addition, the growing female bargaining power in families as their exit options to marriage have improved. In response to this different opportunity structure for females, parents have responded by providing their daughters with more educational preparation and by teaching girls how to survive in a competitive labor market, not just to snare a husband for life.

A male premium lingers, however, in industrial societies. Not only do some manufacturing processes utilize human strength; more importantly, many manufacturing processes can make use of increasing returns to human capital where, the longer one does the job, the better they get at it. Firms may want to exploit this phenomenon by committing to long term employment contracts and investing in the employee's on-the-job training and skills acquisition. This can hurt the employment chances of women, given their higher probability of quitting or reducing their hours to bear and rear children. Elsewhere, we have argued that economies with strong specific-skills production processes will discourage women from the labor market by increasing the costs to the employer and employee of career interruption on account of family work (Iversen and Rosenbluth 2006; Iversen, Rosenbluth and Soskice forthcoming). We expect that subtle differences in social norms might follow from these differences in opportunities across the sexes. Japanese girls, for example, are still taught to speak in a feminine and deferential way—two characteristics that remain virtually synonymous in Japan. This is not surprising given the expectation of lifetime employment in Japan's labor markets, and therefore the strong preference for employees that will not burden the company with time off for child birth and rearing.



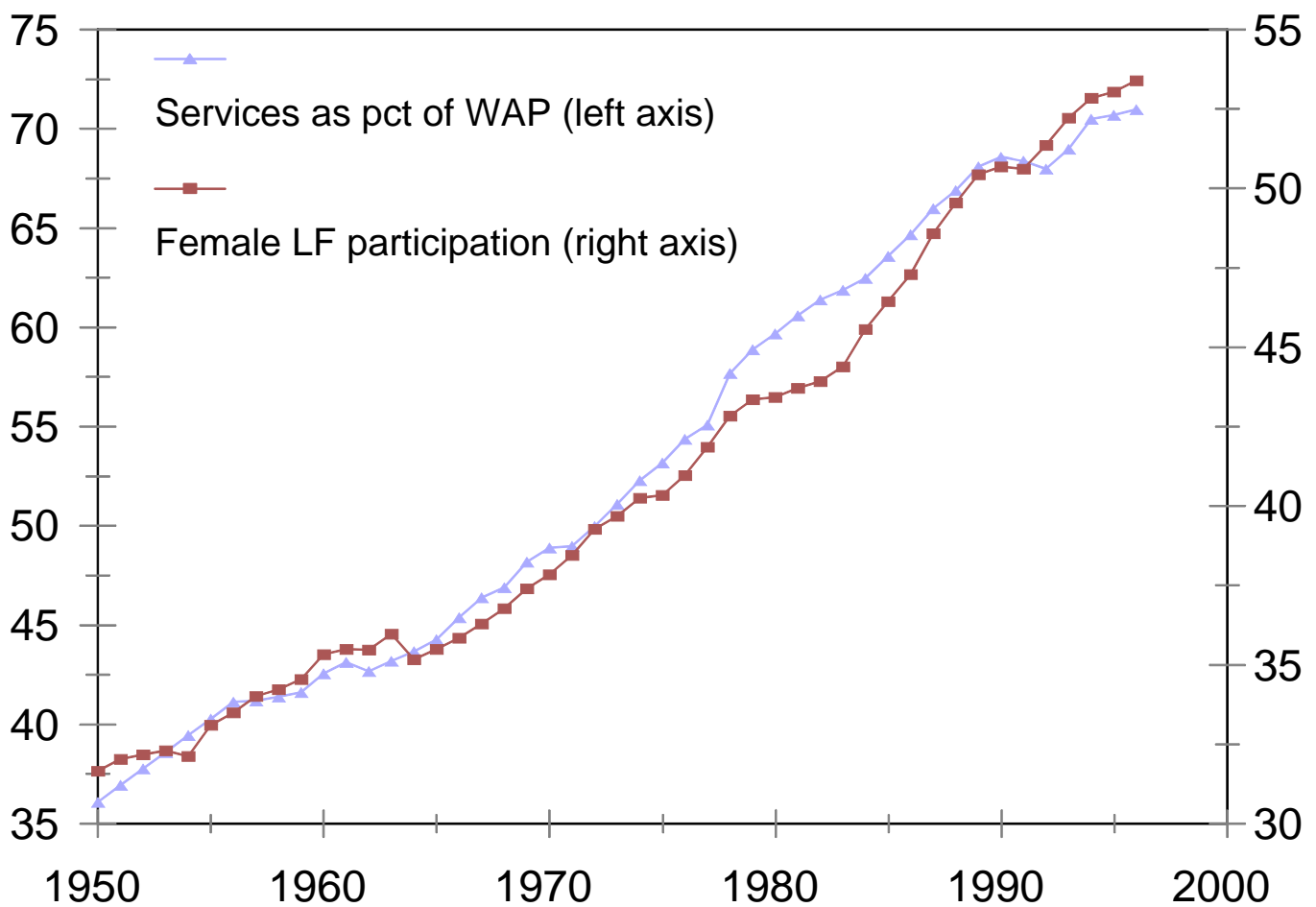
## Post-Industrial Service Economies

Women's work opportunities expand even further in post industrial service economies with the availability of general skills jobs not characterized by increasing returns to human capital and that therefore do not penalize women for career interruption on account of child bearing and rearing. Post industrial employment includes for us both jobs in the service sector, such as retail, finance, insurance, health care; as well as clerical work in the manufacturing industry. **But whereas industrialization was accompanied by an expansion of service employment, the rise of post-industrial societies is characterized by service sector employment growth – especially social and personal services – while industrial employment declines (a pattern we document below).** Female clerical work in the manufacturing sector may be suppressed in countries with strong labor protections, because companies need to deploy the males to whose employment they are committed. Much of Japan's clerical work, for example, is done by men in "lifetime employment" careers (Brinton forthcoming). **But the move towards a post-industrial economy creates an irresistible force of change:** when employing women became as efficient as hiring men—or more to the point, when not employing capable women became inefficient—women began to move into the work force.

The following figures and tables illustrate the close connection between service sector employment and female labor force participation. **Figure 1 shows how the rise in female labor force participation very closely tracks the rise in service employment – a pattern that is replicated in other advanced economies. The link between service employment and female labor force participation is also clearly evident in the cross-**

sectional data in Figure 2. We have explained this in terms of two factors: a smaller brown premium in the services industry, and the general skills required in much of the services industry which reduces the costs to employers of career interruption associated with specific skills manufacturing.

**Figure 1. Service employment and female labor force participation, 1950-1995 (US)**

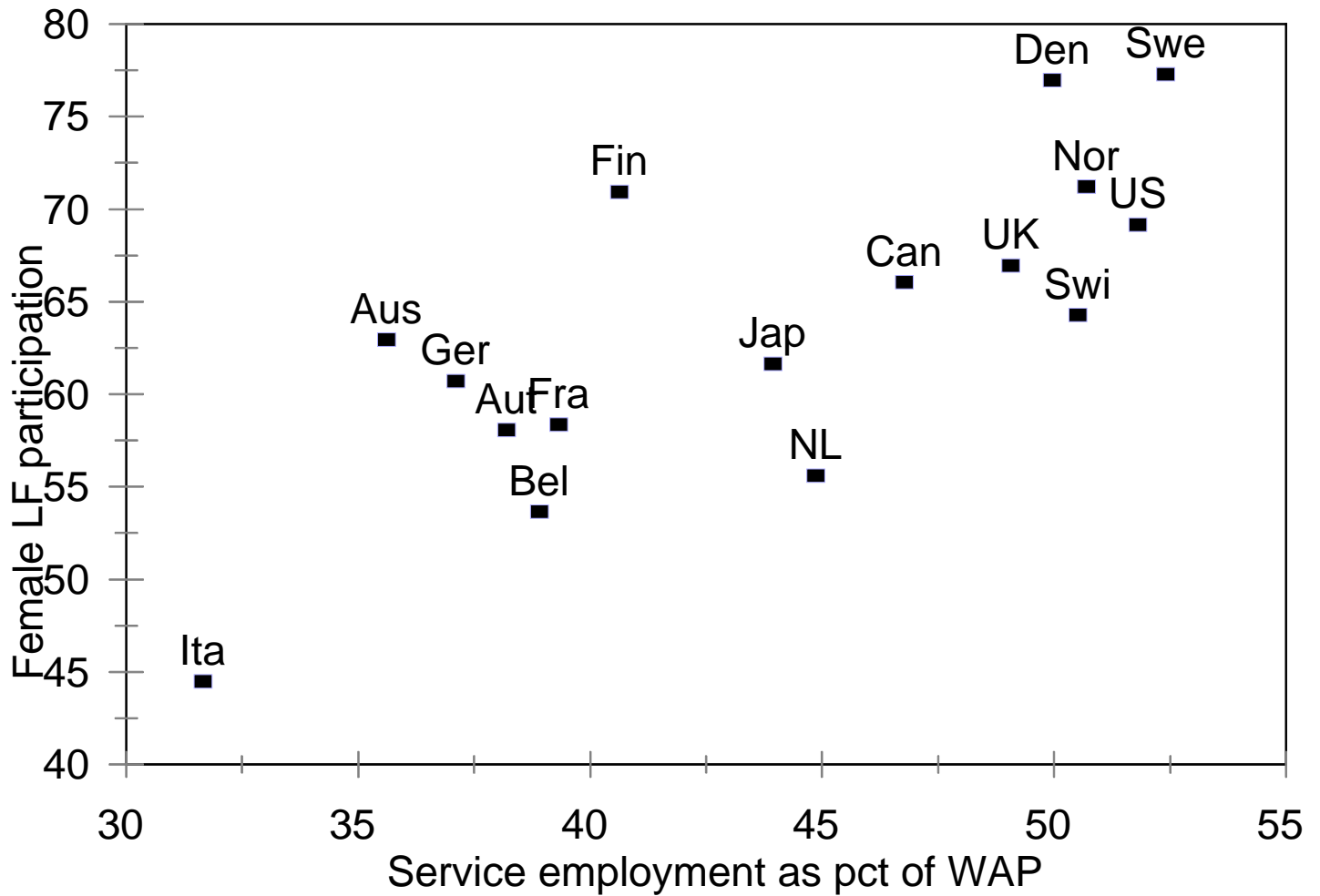


Source: OECD, *Labour Force Statistic* (Paris: OECD, various years).



**Figure 2. Service employment and female labor force participation (1990s)**

Source: OECD, *Labour Force Statistic* (Paris: OECD, various years).



The clearest evidence for the latter thesis comes from data on the gender composition of particular occupations, based on ILO's standard classification of occupations (ISCO-88). Ignoring military personnel, ISCO-88 contains nine broad occupational groups, which are

subdivided into numerous sub-groups depending on the diversity of skills represented within each major group. The number of detailed groups (called “unit groups”) in each major group varies according to a) the size of the labor market covered by that major group, and b) the degree of skill-specialization within each group. By dividing the share of unit groups in a particular major group by the share of the labor force in that groups we can get a rough measure of the degree of specificity of skills represented by each major group.<sup>3</sup> In Figure 3 we have related this measure to the percent share of women in the different occupations for the most recent year available (2000). The numbers are averages for the 13 countries where we have comparable ISCO-88 data. Bolded occupations are those that have disproportionately large numbers of low-skilled and low-paid jobs.

Note the strong negative relationship with men dominating occupations that require highly specialized skills – a pattern that is repeated in every one of our 13 cases. These jobs are in agriculture and manufacturing rather than in services. Conversely, while men on average participate more in the labor market than women, women are relatively overrepresented in service sector jobs that require general skills – a clear sign of comparative advantage (even as many of these jobs are low skill as indicated in bold). The link to the previous two figures is straightforward: the occupations in which women are well represented are the ones that have expanded most rapidly over the past 30-40 years, propelling women into the labor market and unambiguously improved their economic independence from men, as argued by Goldin and others.

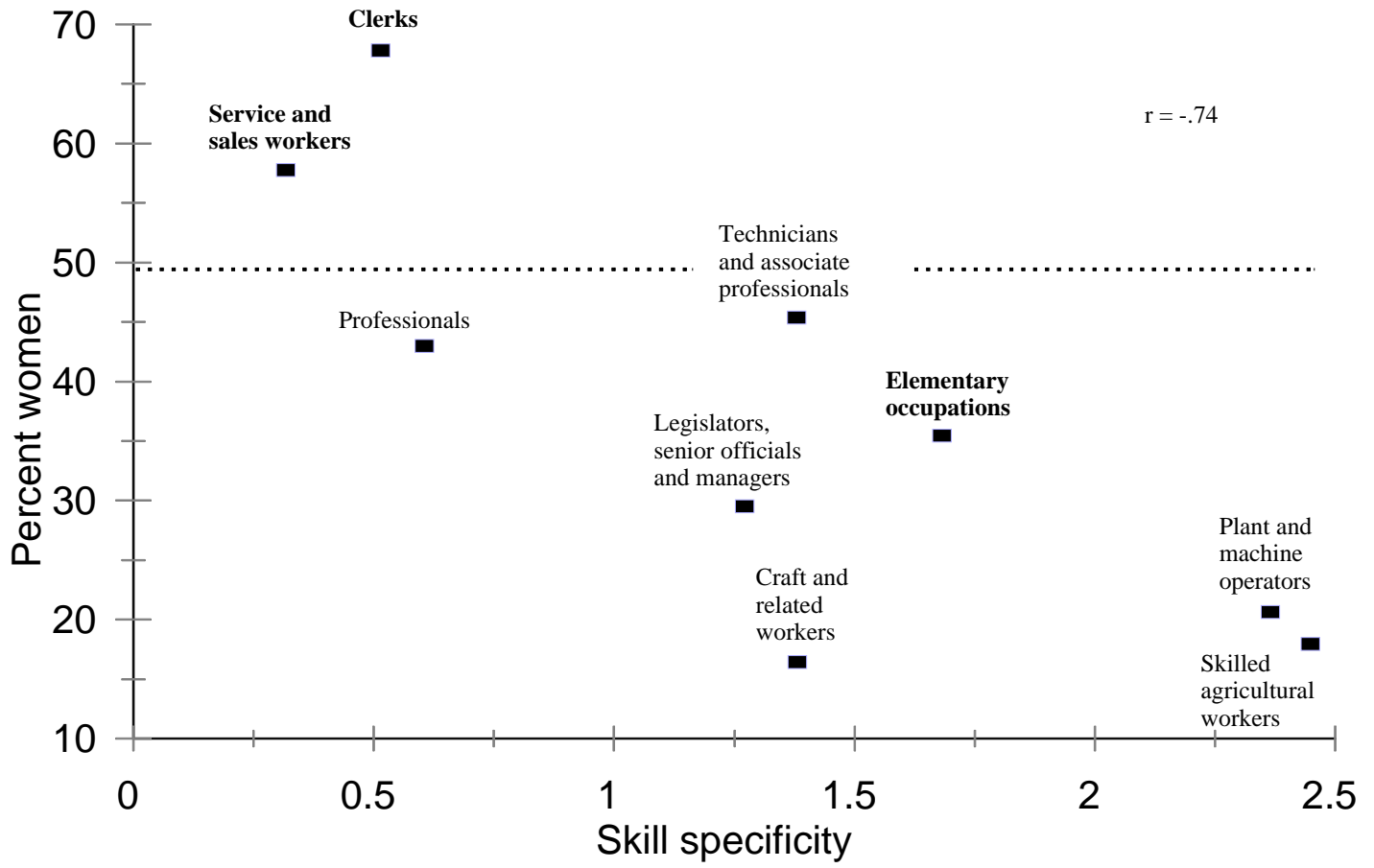
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<sup>3</sup> It may be objected that since occupational distribution of workers have changed since the introduction of ISCO-88 the skill-specialization of each group may simply reflect the depletion of some groups and expansion of others. However the patterns present below are very similar if we instead use employment data from the 1980s.

**We should note that** some service sector employment, like public sector employment, is clearly politically constructed, as we will discuss in Section 5. The point we wish to make here is that the jump in female employment between manufacturing and services may be as large as that between agriculture and manufacturing, with profound implications for social values.

As with the other economic systems we have reviewed, post industrial societies tend to have a set of gender norms that reinforce the most efficient strategies for securing a stable livelihood for children of both sexes. With the possibility of independent livelihood outside of marriage, the bargaining position of women has improved, leading to a steady assault on patriarchal norms. Parents in developed economies no longer fear that assertive daughters will be consigned to lifelong poverty and misery on account of losing out on marriage, no longer a prerequisite to her survival. We expect instead for them to teach their daughters to optimize across the marriage and work markets to ensure their happiness; and for the marriage market to be a smaller part of the happiness equation in the minds of most parents.

**Figure 3. Skill specificity and occupational gender segregation.**



Source: International Labour Organization, "Labour Statistics Database. ILO 1998-2004.

#### 4. Gender Norms and Human Mate Selection

This section introduces empirical data to test the proposition that norms follow economic structure and organization, and the bargaining relationships that accompany it. Ideally, long-run panel data on gender stereotypes would allow us to evaluate how labor market structures shape attitudes towards women and their “proper roles” across countries and within countries over time. No such data exist. Instead, we make use of David Buss’s study of human mate preferences in 37 cultures (Buss 1989) to see how labor market opportunities for women affect gender stereotypes with respect to the ideal mate.<sup>4</sup> David Buss, an evolutionary psychologist, used his data to make the point that human mate preferences are hard wired and are therefore remarkably uniform across cultures. While this is undoubtedly true for many aspects of mate preferences -- including good looks, emotional stability, good health, favorable social status, and even good financial prospect -- some of Buss’s variables refer to social aspects of gender relations that are clearly more malleable and that our argument is designed to explain. As the economic independence of women increases, we expect socially malleable norms about desirable mate attributes to change as well.

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<sup>4</sup> The 37 cultures are: Nigeria, South Africa (whites), South Africa (Zulu), Zambia, China, India, Indonesia, Iran, Israel (Jewish), Israel (Palestine), Japan, Taiwan, Bulgaria, Estonia, Poland, Yugoslavia, Belgium, France, Finland, West Germany, Great Britain, Greece, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Canada (English), Canada (French), USA (mainland), USA (Hawaii), Australia, New Zealand, Brazil, Colombia, Venezuela.



**Table 2. Mate preferences as a function of economic sector**

	<b>Dependent variable</b>					
	Good cook and housekeeper		Desire for home and children		Chastity	
Industrial employment	-0.003 (0.005)	0.002 (0.008)	-0.004 (0.009)	0.013 (0.013)	-0.018 (0.010)	-0.001 (0.013)
Service employment	-0.014** (0.004)	-0.014 (0.004)	-0.016* (0.006)	-0.011* (0.007)	-0.027*** (0.007)	-0.017** (0.007)
Western culture	-	0.084 (0.170)	-	-0.348 (0.278)	-	-0.923*** (0.280)
Fertility rate	-	0.085 (0.054)	-	0.100 (0.089)	-	-0.069 (0.089)
Constant	2.293** (0.160)	1.858 (0.332)	3.006** (0.259)	2.325*** (0.544)	2.823** (0.289)	2.584*** (0.547)
Adj R-Squared	.451	.481	.262	.297	.576	.651
N	31	31	31	31	31	31

Key: \* Significant at .05 level; \*\* significant at .01 level (two-tailed test)

There are three variables in the Buss data that are particularly good candidates for such an interpretation: chastity, good cook and housekeeper, and desire for home and children. In male-dominated societies, especially agricultural ones, chastity is a norm that restricts the use of the only mobile “asset” of women: their sexuality. An inviolable norm of chastity restricts sex to an activity that can only occur inside the marriage, and thereby also restricts the ability of women to use sex for bargaining purposes. Of course, the limits of norms are constantly tested and sometimes broken – much of world literature would not exist otherwise! – but societies where men hold most of the power can be expected to develop norms of chastity. In postindustrial societies where women have high mobility out of a marriage, on the other hand, chastity is an unsustainable, and

inefficient, norm. If men insisted on virginity in this context, they would severely limit the pool of potential mates. Hence, the movement from agricultural to postindustrial economies should be associated with a decline in the importance placed on chastity.

If we are right that females were economically viable without a male patron in hunter-gatherer societies, and this is the “environment” of early evolutionary adaptation, there is also no reason men and women are genetically coded to have mate preferences that reflect a particular sexual division of labor. It makes good sense for men to seek women who are good cooks and housekeepers, or have a strong desire for home and children, in societies where the structure of the economy induces a strict “traditional” gender division of labor, but not in societies where women have economic opportunities outside the family that rival those of men. In these cases, men who only consider women with traditional homemaker skills will again limit the available market for desirable mates.

The malleability of sexual norms, and certain mate preferences, is reflected in the Buss data. For example, when respondents are asked about the importance of female chastity on a scale ranging from “3” (indispensable) to “0” (irrelevant or unimportant), the average for Yugoslavia is 0.08 while the average for China is 2.61 (referring to the mid-1980s). The variation in the variables “good cook and housekeeper” and “desire for home and children” is somewhat lower, but still considerable: Between 1.1 and 2.1 for the former and 0.9 and 2.8 for the latter (again, the feasible range is from 0 to 3). Variation of this magnitude invites for explanations such as ours that relate variability in gender stereotypes, including mate preferences, to the relative economic resources available to men and women.

The Buss data were collected from 37 “cultures,” which generally coincide with the boundaries of nation-states and represent a range of geographic regions, ethnicities and levels of development. The dataset consists of 10,047 individual-level observations, which are averaged for each of the 37 cultures. We focus on 31 of these cases because they refer to countries (not ethnicities) for which we have comparative data on potential independent variables. In the case of the U.S., Buss, Shackelford, Kirkpatrick, and Larsen (2001) build a data set from existing surveys dating back to 1939, and we will make some use of these longitudinal data to examine cross-time trends. The individual-level data are unfortunately of little use for our purposes because they contain virtually no relevant political economy variables.<sup>5</sup>

Buss and co-authors emphasize the cultural universality of mate preferences (including male preference for chastity and beauty and female preference for males with more resources), while we emphasize the very significant changes in the three variables. Buss, Shackelford, Kirkpatrick and Larsen speculate briefly about the causes of these changes (the pill in the case of chastity and increased use of domestic help in the case of the good cook and housekeeper variable), but we see the changes to be closely related to broad structural-economic differences across time and space. In particular, mate preferences are very different in agricultural societies compared to industrial and especially service-intensive economies. These differences, we submit, are systematically related to the economic position of women. Where women face good labor market prospects, they are less reliant on finding a spouse who can support them, and attributes

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<sup>5</sup> While an invaluable data source, there are other limitations of the data. The samples are not representative of the populations in each country, and rural, less-educated and lower-income areas in particular are under-represented. Furthermore, sampling techniques varied widely across countries; in some countries only high school students were interviewed. In another, surveys were taken of couples applying for marriage licenses, and in another, respondents were gleaned from newspaper advertisements.

such as chastity or desire to care for the family ought to decline in importance as male mate selection criteria.

Using the sectoral composition of the economy as explanatory variables, the OLS regression results in Table 2 shows how mate preferences change with the structure of the economy. The sectoral variables are the shares of total employment in industry and services. Since those not employed in these sectors are engaged in agriculture, agriculture serves as the reference group. Omitting other controls, industrial and service employment always reduces the emphasis adults place on traditional values, although the effect is much stronger (and statistically significant) for services. While this seems to suggest that it is the service economy, not the industrial economy, that transforms norms, one has to be cautious with such an interpretation because industrial and service employment are compositional variables that change in tandem. As we discuss in a moment, the initial rise of services came *as a result of* the industrial revolution, and it was in fact not until the 1960s that the expansion of services started to be associated with a decline in industry. But the lack of any strong effects of industrial employment *does* tell us something useful about causal mechanisms. As we showed above (see Figure 3), the rise of manufacturing jobs has not been a boon to female employment because these jobs tended to emphasize brawn or specific skills (with the exception of some low-skill occupations). The lack of any significant effect of industrial employment on mate preferences underscores this point.

Note that the results do not change notably when controlling for Western culture (meaning simply countries that are commonly assumed to belong to “the West”) and fertility rates. The first is included because it might be supposed that the decline in

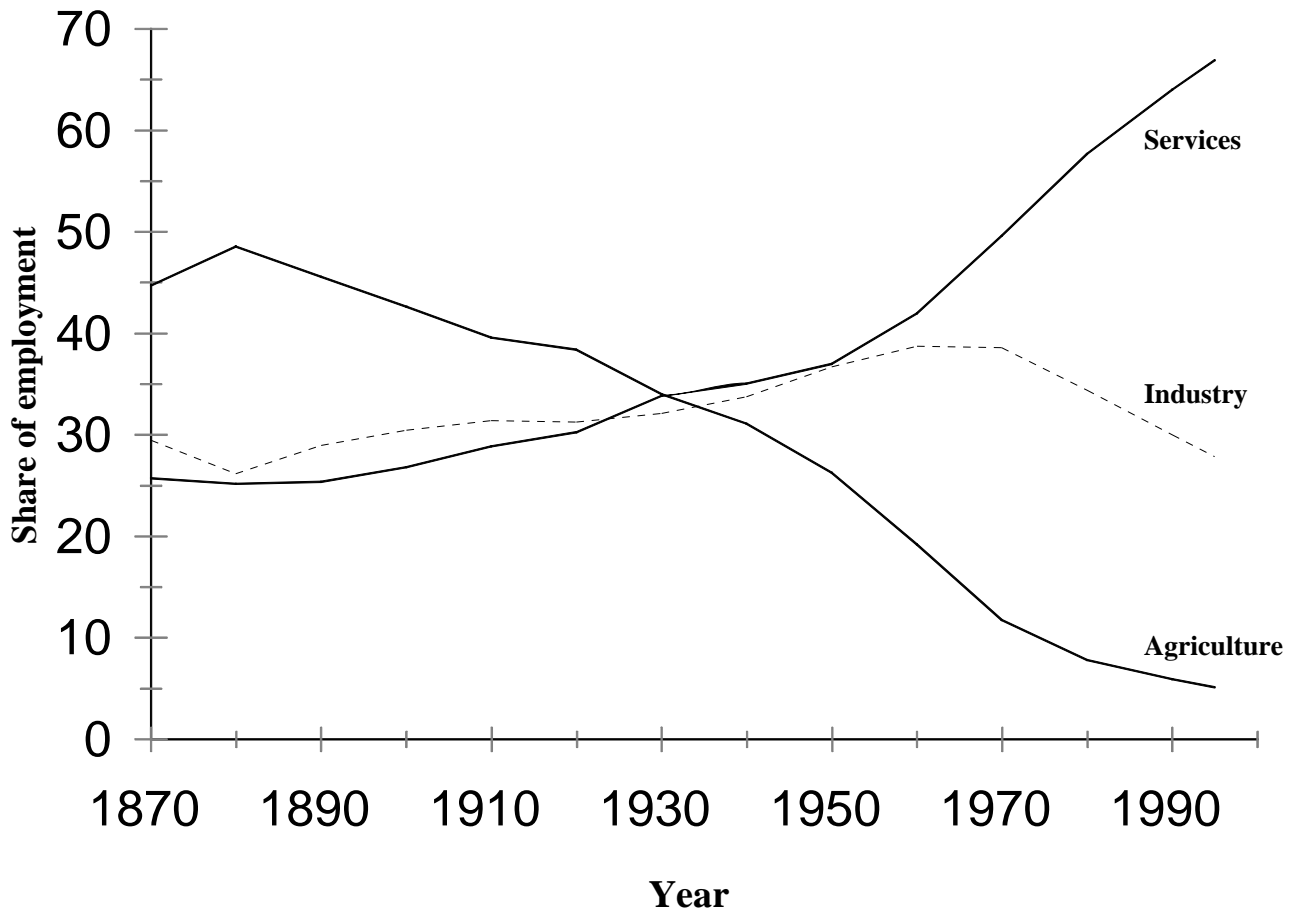
traditional gender norms reflects the rise of a secular and decadent Western culture, occasioned not by any economic laws of change but by excessive individualism, an explosion of popular culture, and lack of moral leadership. Yet it is only in the case of chastity that the Western dummy seems to add explanatory power, and even here it does not eliminate the importance of economic sector. Fertility rates seem to matter even less, although it is common to suppose that it is the pill, and the accompanying decline in fertility, is what has caused a transformation in gender norms. In the case of chastity, the effect of the fertility variable is actually in the wrong direction.

While the importance of the employment structure stands up to these controls, it is true that this structure is almost perfectly co-linear with economic development, which renders regressions that include controls for development impossible. One may therefore say that a broader process of economic development drives the story, and certainly economic development is correlated with female labor market opportunities. Yet we think it is instructive to distinguish the effects of industry and services on norms because they matter in quite different ways as we have shown. For more than a century, industrialization was the engine of economic development in Europe, but the transformation of gender norms was glacial compared to the effect of postindustrialization in the past four decades. Considering that many manual jobs in manufacturing were as unappealing to women as agricultural labor, this is not surprising, and it shows why it is not sufficient to simply focus on economic development.

Industrialization, however, did not merely replace agricultural labor with tough manual jobs in the manufacturing sector. It also vastly expanded the number of secretaries, retailers, maids, accountants, insurance agents, merchants, and bankers. In

other words, industrialization created a range of jobs for which women were as well equipped, in terms of natural ability, as men. This is illustrated by the long-term employment data in Figure 4. Starting around the beginning of the industrial revolution in 1870, the graph shows how the rise of industrial and service employment went hand in hand, at the expense of agricultural employment, until the 1960s. From then on industrial employment begins to decline (along with agriculture), while service employment expands at an even faster rate. Figure 5 illustrates this curvilinear relationship using both the intertemporal data on employment from Figure 4 and the cross-sectional figures from the Buss data. Note how employment in industry and services rise in tandem until industry employs about 40 percent of the labor force. At that point services grow at the expense of industry. Given the very similar pattern for the time-series and cross-sectional data, it is sensible to treat countries in the Buss et al. data as if they are on different developmental stages. We can then use the cross-sectional regression results to simulate mate preferences through time. Since some data on mate preferences are available over time in the U.S. case, we are able to check the historical simulations against actual data for this country.

**Figure 4 The sectoral composition of employment in 17 OECD countries, 1870-1995.**



**Figure 5. The relationship between service and industrial employment**

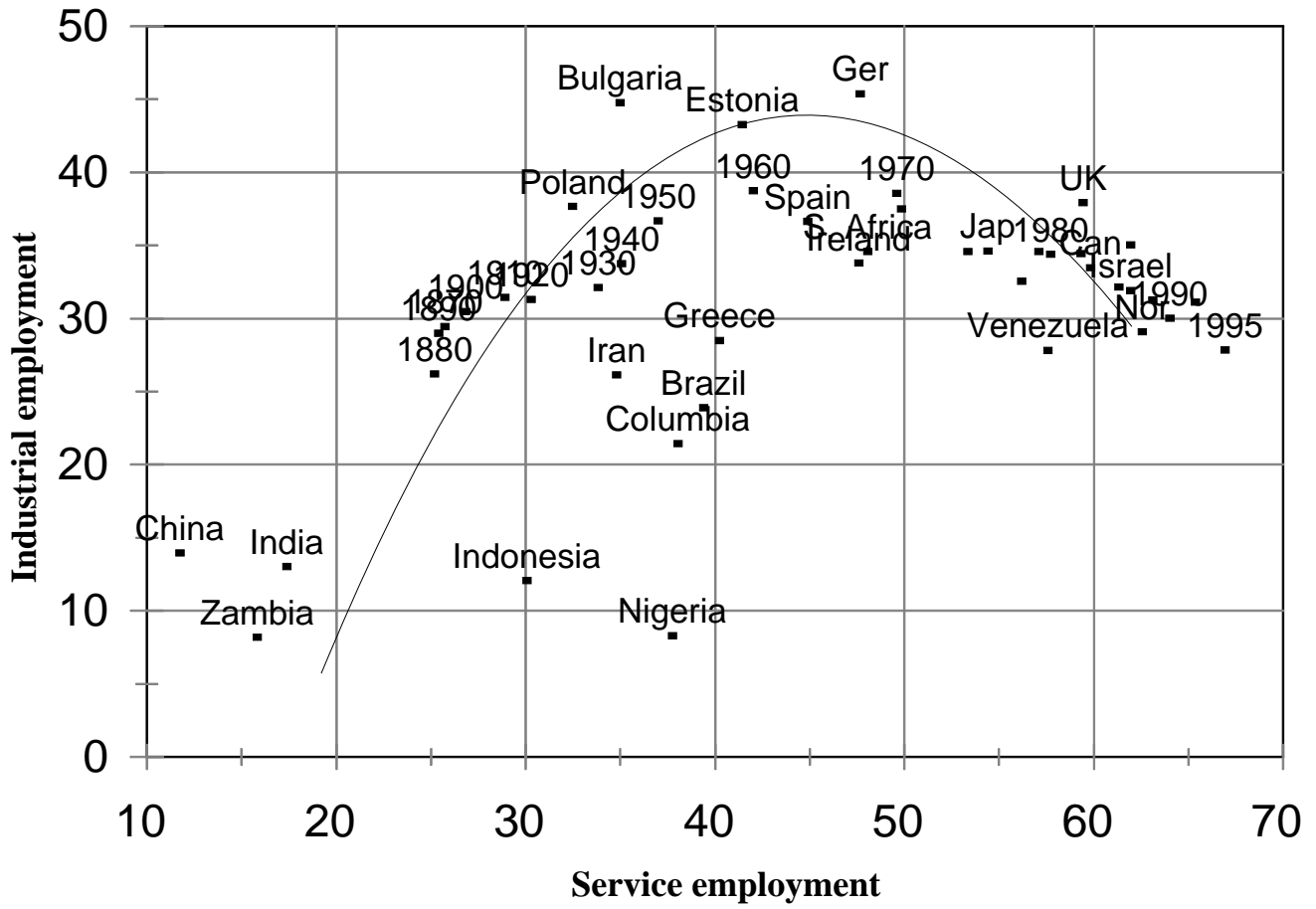
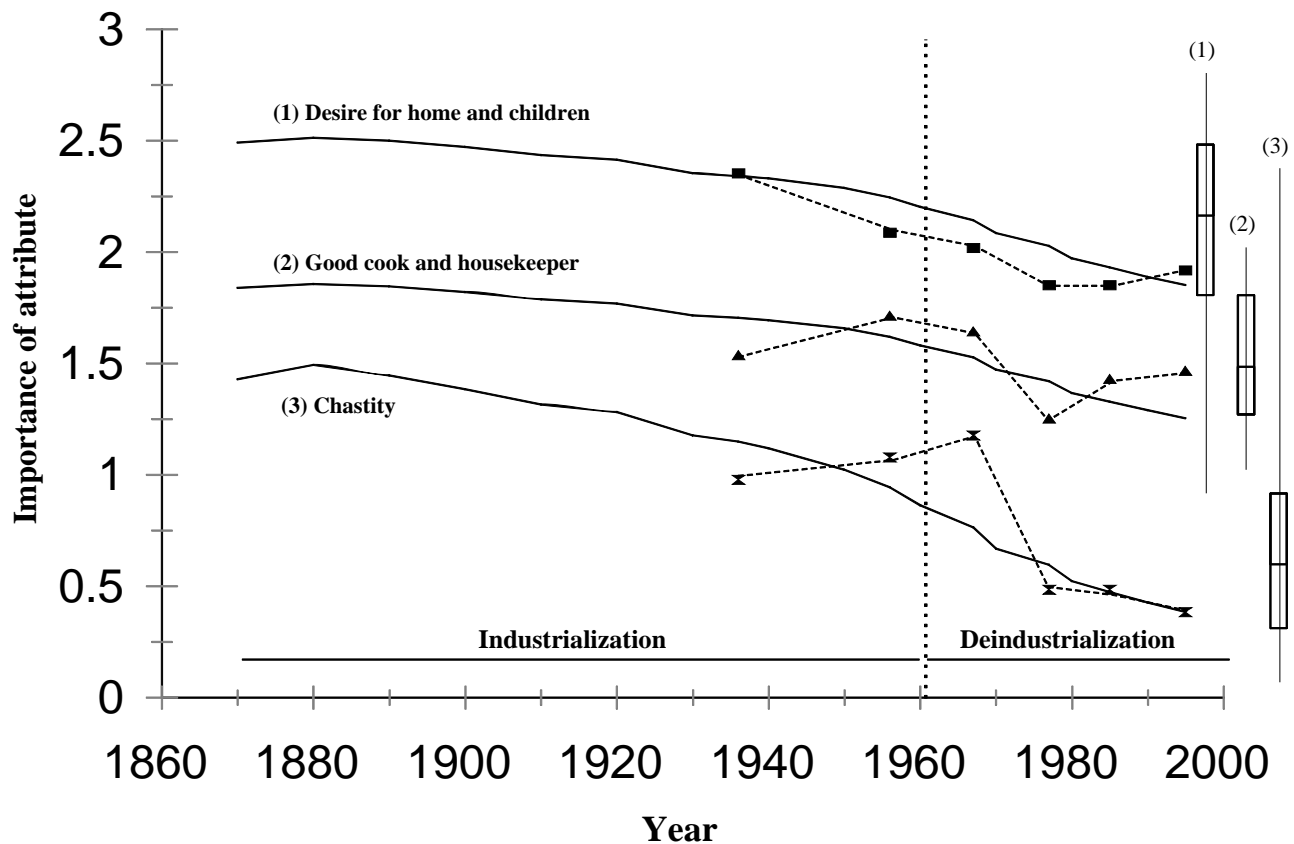




Figure 6 shows the results on this simulation. As can be seen, although manufacturing employment has not been particularly conducive to the economic empowerment of women, or gender equality, the expansion of services that accompany industrialization has. Roughly half (49%) of the total estimated change in mate preferences since 1870 occurs during the 90 years of industrialization from 1870 to 1960. The rest occurs during the 35 years from 1960 to 1995. So while industrialization helped transform gender norms, this transformation was notably accelerated by deindustrialization. This adds to the recent literature on deindustrialization, which argues that the rise of services has transformed the welfare state and redistributive politics (Esping-Andersen 1990; Iversen and Wren 1998, Iversen and Cusack 2000) and led to a rising gender gap in social policy preferences (Iversen and Rosenbluth 2005). In addition, we argue, deindustrialization has caused a rapid transformation in gender norms and socialization patterns. The total estimated changes in values as a result of changes in the employment structure correspond to roughly one inter-quartile difference on each of the preference variables in the cross-sectional data (see the “box and whisker” plots in Figure 6). Tracking the sectoral structure of the economy thus gives a lot of leverage on predicting mate preferences.

**Figure 6. Simulated mate preferences in 17 countries, 1870-1995.**



*Notes:* The solid lines are the predicted preferences for particular attributes in potential mates based on the regression results in Table 2 and historical data on the average sectoral composition of employment. The dotted lines are the averages for the U.S. based on historical data on the rankings of preferred attributes. The scale on the y-axis uses the entire range of the preference variable. The “box and whisker” plots on the right show the median, the range, and the inter-quartile difference for each variable.

Of course, our simulations assume that the cross-sectional regression results are applicable across time. There are no comparative survey data going back to the previous century that would allow us to test this assumption (what a tantalizing thought!), but we do however have mate preference data for nearly half a century (1939-1996) in the case of United States. The evolution of preferences across the three variables in this case is

shown by dotted lines in Figure 6. They generally follow the simulated trend, and one should not make too much of deviations for individual years since the samples are small, unrepresentative, and not consistently polled over time. In 1956, for example, the numbers are based on just 120 undergraduate students at University of Wisconsin at Madison. Other samples have different sizes and are from different universities. What is remarkable is the changes in the US are so similar to the simulated changes based on the cross-sectional data.

It should be added that since the U.S. is an early industrializer, with only 18 percent of the labor force in agricultural employment by 1939, employment in industry and services are almost perfectly negatively correlated ( $r = -.85$ ). We can therefore use service employment as a good proxy for the employment structure in this period, and it turns out to be strongly positively correlated with the dependent variables ( $r = .8, .6, \text{ and } .9$  respectively). Of course, we cannot exclude other causes based on such a small number of observations, but the combination of evidence tells a story that is very supportive of the view that gender norms change with the relative economic mobility of men and women, which is in turn determined by the skills required to participate effectively in the economy.

We have shown that economic structure, and in particular, the demand for female labor, is linked to changing attitudes about desirable attributes in a marriage partner. This is so, we have suggested, because the availability of remunerative employment for women changes the dynamics of gender socialization. Instead of rearing daughters solely for the marriage market, families begin to think of their children's economic chances more equally. The social glorification of virginity declines as it loses its economic grip.

Being a good cook and a good parent, while perhaps also always desirable attributes in a mate, become less the sole province of the female partner.

In the following section, we consider the implications of norm changes for legislative politics. We two related points: that government policies can influence female labor force participation by altering the mix of industrial and service jobs; and that this mix, in turn, shapes the policy preferences of female voters.

## **5. The Politics of Gender: Economic Opportunities and Political Preferences**

It seems clear that economic modes of production, by increasing or reducing the premium on a household sexual division of labor, have exerted a powerful influence on gender norms in historic time. In the highly interventionist politics of the modern world, a focus on economic structures is likely to miss a big part of the story. We highlight here the importance of government policies, in particular, those that influence the demand for female labor, in shaping women's political preferences. While government policies that protect industrial jobs may depress labor market opportunities for women, government spending on childcare and elderly care and public sector service jobs can offset the weak private sector demand for female labor. This matters for politics: women who work outside the home vote to the left of working men and at-home women because they value the government spending that make their jobs possible. The broader point, for the purposes of this paper, is to highlight the unifying logic underlying gender norms and policy preferences. There is also likely to be a direct link between norms and policy preferences. Not only will those who seek to strengthen the position of women in the labor market be inclined to teach their sons and daughters gender equality. They will also

be pre-disposed to favor educational policies that incorporate such equality into the public school curriculum.

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. 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).

We can relate this argument back to our general theoretical model. Recall that the relative bargaining power of the male and female is a function of demand for assets outside the household in which men and women hold a comparative advantage. Women have a comparative *disadvantage* in specific labor market skills just as they have a

comparative disadvantage in hard manual labor. Economies that place a premium on specific skills therefore put women at a disadvantage compared to economies that emphasize general skills (in which women are at an equal footing with men if we assume that labor is not physically highly challenging and that women do not have a strong absolute advantage in household skills). Modern comparative political economy emphasizes that there are indeed cross-national differences in the demand for specific skills. 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). Our argument implies that women in the latter 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. This implies that, everything else being equal, female labor market participation tends to be lower in specific skills systems.<sup>6</sup>

These effects, however, will be mediated by social and economic policies deliberately designed to counter them. 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

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<sup>6</sup> 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.

attained high female participation rates by creating a large, and heavily feminized, public sector.<sup>7</sup> This, then, implies a role for democratic politics in affecting the bargaining power between the sexes, and this in turn suggests that policy preferences between the sexes diverge. With universal suffrage this turns gender politics into a potential independent variable in explaining power between the sexes (Lott and Kenny 1999).

The possibility of a gender gap in political preferences emerges when spouses have conflicting preferences over the household sexual division of labor: whether or not women should work outside the home, and at what cost to the husband's bargaining power and leisure time (Iversen and Rosenbluth, forthcoming; Iversen, Rosenbluth, and Soskice, forthcoming). 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).<sup>8</sup>

We explain this gender gap in policy preferences by way of the distributional effects across the sexes of government spending. With some of her family burden lifted

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<sup>7</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.

<sup>8</sup> 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).

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. In terms of the theory this is the same as saying that the woman increases the mobility of her economic assets, causing her bargaining power to rise.

Since women are much more likely to end up as primary care givers, their welfare is disproportionately helped 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 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 argued, it powerfully shapes the labor opportunities of women.

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 may still care about their outside options, but policies that reduce the relative wage of men also reduce the income of families where the woman does not work.



We illustrate our argument by replicating some results from a multi-level analysis of the gender gap in 10 OECD countries (Iversen and Rosenbluth, forthcoming).<sup>9</sup> The data are from the 1996 International Social Survey Program on the role of government, and we focus on gender preferences for government employment and the political left. The former is measured by three questions that 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 partisan variable is declared affiliation or support for a left or center-left party.<sup>10</sup> 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 a measure of the skill system which is equal to the mean, after standardization, of national vocational training intensity and firm tenure rates.<sup>11</sup> The risk of divorce is proxied by national divorce rates, defined

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<sup>9</sup> Australia, Britain, Canada, France, Germany, Ireland, Norway, New Zealand, Sweden, and United States

<sup>10</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>11</sup> 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: *OECD Employment Outlook*, 1993, table 4.1.

as the percentage of marriages ending in divorce.<sup>12</sup> 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.

The gender gap is estimated using multilevel regression with country-specific intercepts, including a number of plausible controls. The full set of results is in Appendix A.<sup>13</sup> Here we focus on the effect of the key variables mentioned above, which are illustrated in Figure 7. 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 with high divorce rates. Here married women in paid employment are estimated to be nearly one half a standard deviation more

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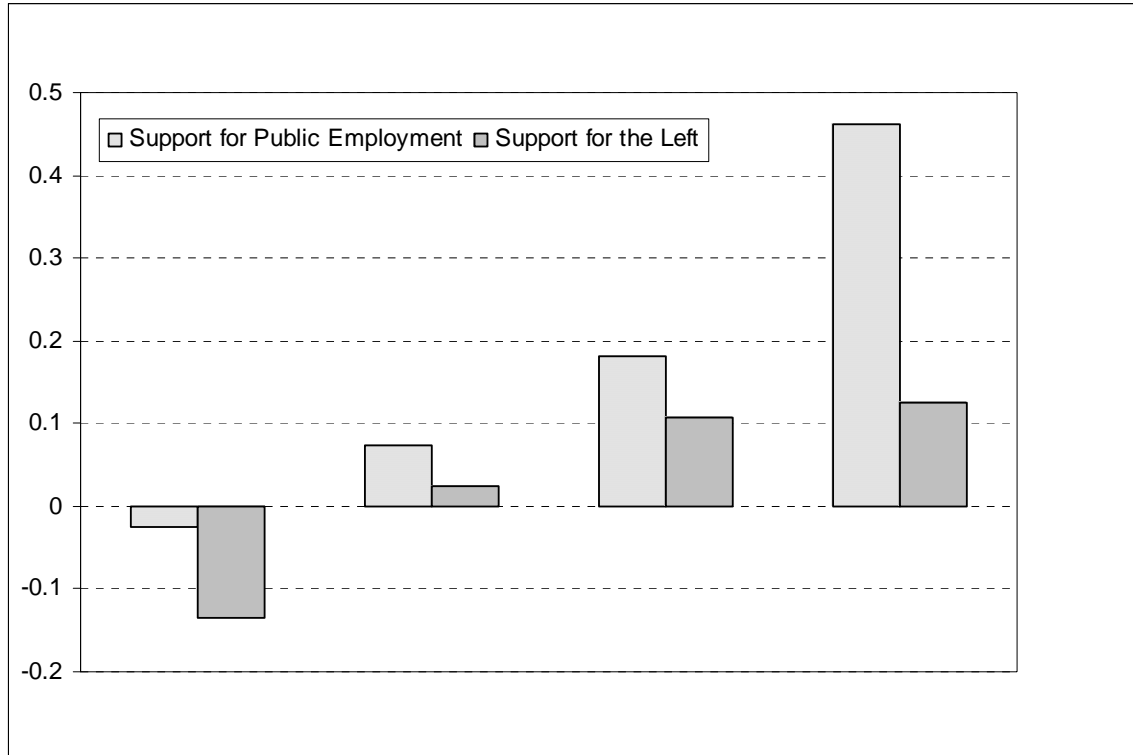
<sup>12</sup> The data are from “Society at a Glance: OECD Social Indicators” OECD 2001.

<sup>13</sup> We used maximum likelihood regression with robust standard errors, assuming a normal density function for the disturbances. We obtained the estimates in Stata using the ml procedure for survey data (countries are treated as clusters).

supportive of an active role of the government in employment creation than men, and they are 13 percent more likely to support a left or center-left party than men (compared to 13 percent *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 how conducive the economy and public policies are to female labor market participation. When women are exposed to the risk of divorce, they rationally favor policies that increase the demand for assets in which they have a comparative advantage – which means general skills with no premium on brawn. As we have argued, and as Figure 3 above nicely illustrates, such jobs are much more prevalent in services, especially in social and personal services. Women, therefore, tend to support policies that promote such services. They also do this because availability of caring services outside the household reduces their reliance on household specific assets --  $S_F$  in the theoretical model – increasing their bargaining power vis-à-vis men.

**Figure 7. 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.

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, 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 United States. In addition, female labor force participation rates are very low, which also help to align the interests of men and women.

Another 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.

A third puzzle concerns the persistent and widespread tendency of women to be less likely than men to support global economic integration. In a very careful empirical paper, Burgoon and Hiscox (2004) suggest that the “gender gap” in trade preferences

might reflect economic illiteracy of women compared to men, and that the trend towards education equality might, in time, eliminate the gap. Our analysis of the political gender gap, which includes a control for education, invites skepticism about this conclusion. We expect that the gender gap in trade preferences reflects, as we have suggested, a greater likelihood that women are employed in the public sector. Whether or not it is sensible to think that economic integration will hurt public employment, it seems that both men and women tend to think that this is the case, suggesting that the gap is due to differences in policy preferences rather than in macroeconomic theorizing.

## **6. Conclusions**

Patriarchal values, we have suggested, may be thought of as an internalized reckoning of relative bargaining power. When the alternatives to marriage are systematically weaker for females than for their male partners, it does not require a brutish man to keep his wife in submission. If her parents and social community have done their job, she will have learned as a girl the importance of virginity until marriage (though she may not think of it as a strategy for marrying “up”) and she will have cultivated many qualities to keep her husband pleased with her (though she may not consider these qualities as a means to maintain her livelihood). For her, as perhaps for her forebears, these are not schemes but are normal, commonsensical, perhaps even morally mandated ways to live. Patriarchy, when other options are unworkable, does not require a big stick.

The ability to walk away from the status quo confers bargaining power that is not available to women in agricultural economies where the premium to male brawn makes inefficient, perhaps even unviable, female employment on a par with a man’s. We have

argued that industrialization, and even more dramatically, the rise of the service sector, are transforming social values by providing women with alternatives to unsatisfying marriages. Once employment opportunities for women have approached those of men in quantity and quality, socialization has begun to shift away from “playing the marriage market.” The declining importance of virginity, along with lower male expectations of homemaking skills in a spouse, reflect a change in the way parents are preparing their children for life and livelihood.

The gender gap in policy preferences reflects the same logic, for working women rely on government services, and in some cases government employment, to maintain their bargaining position in marriage. Because of democracy and universal suffrage, coupled with the rise of state power, gender relations have become politicized. While mate preferences in agrarian societies seemed to reflect an inevitable female resignation to their subordination, modern mate preferences are more egalitarian, and the gender gap in policy preferences suggest that many women are hoping to use the democratic state to make them more egalitarian still.

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## Appendix A

### The Gender Gap in Social Preferences and Left Party Support

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	Public employment				Left partisanship			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

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Female	0.174*** (0.032)	0.057 (0.041)	-0.039 (0.111)	-0.022 (0.050)	0.154 (0.133)	-0.552** (0.222)	-0.896 * (0.467)	-0.563* (0.304)
Female x Labor force participation	-	0.113** (0.037)	0.115** (0.048)	0.124** (0.050)	-	0.729*** (0.188)	0.753*** (0.191)	0.731*** (0.191)
Female x unmarried	-	0.066** (0.029)	0.064** (0.029)	0.062** (0.030)	-	0.315** (0.111)	0.312** (0.112)	0.314** (0.113)
Female x divorce	-	-	0.001 (0.002)	-	-	-	0.007 (0.006)	-
Female x skill skill - specificity	-	-	0.162 (0.125)	-	-	-	0.006 (0.373)	-
Female x divorce x skill specificity	-	-	-	0.298** (0.117)	-	-	-	0.038 (0.482)
Labor force participation	0.077 (0.045)	-0.017 (0.044)	-0.032 (0.048)	-0.041 (0.050)	0.514** (0.214)	-0.049 (0.292)	-0.071 (0.303)	-0.052 (0.296)
Unmarried	0.057*** (0.016)	0.024 (0.023)	0.025 (0.023)	0.026 (0.023)	0.175* (0.091)	0.011 (0.106)	0.013 (0.104)	0.011 (0.103)
Income (log)	-0.003*** (0.001)	-0.003*** (0.0005)	-0.003*** (0.0005)	-0.003*** (0.0005)	-0.003 (0.002)	-0.003* (0.002)	-0.003* (0.002)	-0.003* (0.002)
Individual skill specificity	0.100*** (0.023)	0.100*** (0.023)	0.099*** (0.022)	0.098*** (0.023)	0.240** (0.083)	0.246** (0.084)	0.242** (0.084)	0.246** (0.083)
Age	-0.001 (0.002)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	0.002 (0.005)	0.001 (0.006)	0.001 (0.006)	0.001 (0.006)
Education	-0.013 (0.020)	-0.013 (0.020)	-0.015 (0.020)	-0.015 (0.020)	0.080 (0.081)	0.079 (0.080)	0.078 (0.080)	0.078 (0.080)
Retirement	0.066 (0.056)	0.018 (0.052)	0.005 (0.061)	0.0002 (0.061)	0.120 (0.288)	-0.149 (0.309)	-0.164 (0.305)	-0.150 (0.302)
Unemployment	0.197** (0.081)	0.156* (0.086)	0.141* (0.061)	0.135 (0.082)	0.628 (0.420)	0.427 (0.410)	0.417 (0.411)	0.425 (0.410)
Religiosity	-0.012 (0.009)	-0.012 (0.009)	-0.011 (0.009)	-0.011 (0.008)	-0.121* (0.051)	-0.122* (0.050)	-0.122** (0.049)	-0.122** (0.049)
Catholic	-0.019 (0.105)	-0.016 (0.104)	-0.017 (0.105)	-0.017 (0.104)	-0.261 (0.293)	-0.252 (0.293)	-0.257 (0.295)	-0.253 (0.293)

No of countries	10	10	10	10	10	10	10	10
N	7460	7460	7460	7460	5793	5793	5793	5793

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