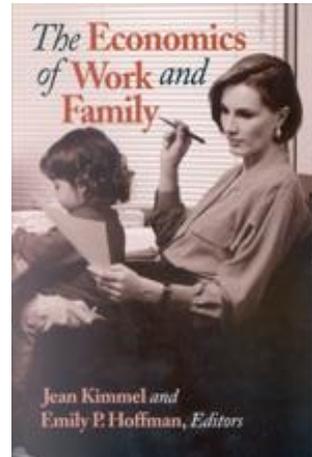

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The chapter title appears self-evident—of course family structure matters! Surely the quirks and turns of one’s personal life—which for almost everyone is inextricably commingled with their family’s lives—would have measurable effects on almost everything that you do, including whether or not you work, how much you earn, and a host of other facts about your work experience. It would have seemed unreasonable to have instead titled this essay: How family structure *doesn’t* affect labor market outcomes.

But it turns out that uncovering exactly how family structure matters is not a trivial undertaking. Because economics is not in general an experimental science, it is difficult to make a convincing argument that family structure matters, holding all other factors constant that are potentially correlated with family structure. We can’t just randomly assign people to different family structures in which to spend their lives and see what happens. Untangling the actual “family assignment” mechanism from the outcome is a difficult problem that researchers have tackled using a number of methodological approaches. We will gauge how convincing their solutions are, and the degree to which taking this problem seriously modifies the raw numbers that we see in the unmassaged data.

In this chapter I will first define family structure and labor market outcomes, and show you examples of the kinds of patterns that lead people to believe that family structure influences labor market outcomes. I will briefly outline the theoretical reasoning that leads one to believe that family structure would matter, as well as the reasoning that can lead one to believe that it matters less than most people might think. In the next section I consider the evidence from a number of studies that attempt to measure carefully the effects of family structure—particularly marital status and presence or absence of children in

the household—on labor force participation and earnings measures. I conclude by looking at a few studies that consider aspects of family structure more broadly defined, and by discussing whether the results shown have relevance for any particular policy initiatives.

WHAT IS FAMILY STRUCTURE?

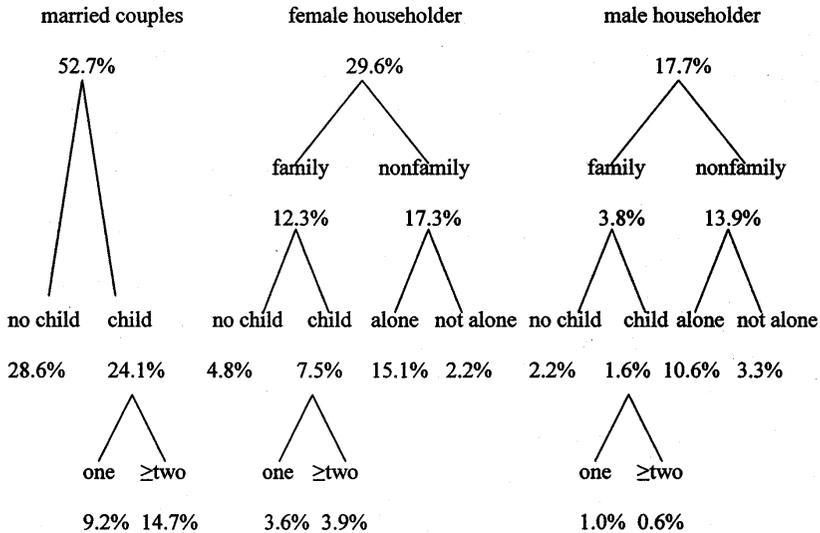
Family structure can refer to anything about a person's past and present living conditions and relational structure. But we need a narrow definition of a family to understand the way data are commonly collected by statistical agencies. Let's look at the U.S. Census Bureau/Department of Labor definition, which relies on both relation and co-residence: "A family is a group of two persons or more (one of whom is the householder) residing together and related by birth, marriage, or adoption. All such persons (including related subfamily members) are considered as members of one family." Hence, while a household "consists of all the persons who occupy a house, an apartment, or other group of rooms, or a room, which constitutes a housing unit," a family household "is a household maintained by a family (as defined above), and may include among the household members any unrelated persons (unrelated subfamily members and/or unrelated individuals) who may be residing there" (U.S. Department of Labor 1995).

Using these definitions, in order to see how families might vary and how they overlap with households, consider the concrete case of the United States population as of March 1999 (most of the results I present in this paper are based on U.S. data, and the remaining results come from other developed countries; I do not argue that the results are necessarily more widely applicable). Let us consider three widespread phenomena (and their absence): people living more than one to a household, people living with someone they are married to, and people living with their own children (under 18) in a household.

Figure 1 displays the proportions of households that fall into these types of categories and shows how these numbers vary by sex. The convention is to define either an individual or a married couple as the householder(s), i.e., the person(s) in whose name(s) the housing unit is owned or rented. We see that out of the 100 million U.S. households in

Figure 1 The Proportional Distribution of U.S. Households, by Various Characteristics, 1999

103,874,000 households (all percentages are out of this total)



NOTE: "Child" refers to own child under 18.

SOURCE: U.S. Department of Commerce, Bureau of the Census (2000, Tables 60, 62, 65).

1999, slightly more than half were headed by a married couple and more than one-quarter were female-headed; the remaining 18 percent were male-headed households. Female- and male-headed households can be further subdivided into family and nonfamily households, of which a majority are nonfamily households (i.e., do not contain related persons). Nonfamily households can consist of one or more nonrelated persons; 5.5 percent of all households consisted of unrelated persons, while over a quarter of all households (25.7 percent) contained only one person. Hence, about two-thirds of all households are family households. Only 1.9 percent of married couples do not have their own household, so being married is highly related to maintaining a family

household (U.S. Department of Commerce, Bureau of the Census 2000, Table 60). Neither households nor families are particularly large in general: the average household size is 2.61 persons and the average family size is 3.18 persons (U.S. Department of Commerce, Bureau of the Census 2000, Table 60). Notably, the idealized view of the “nuclear family” as consisting of a married couple with two or more children is found in less than 15 percent of households—about one of every seven—although potentially many more of us are in such households for at least some percentage of our lives.

Even while maintaining the U.S. statistical agencies’ narrow definition of a family, one might further refine one’s view of living conditions that might matter in a number of ways. For instance, one might examine more closely the different types of “nonmarriage”: cohabitation; previously married, but now widowed, divorced, or separated; living alone; or living with other persons in a nonsexual relationship. One might also want to know if previous structure has lasting effects; for example, does a divorced person appear quite different from a widowed person, and do both of those appear different from someone who has never married?

One might also want to know more about the type of marriage that one is in. Do the spouses largely conform to traditional roles within the marriage? Do both spouses work? Which spouse earns more? One might also want to know more about the age structure of the family, including the ages of the children and, potentially, also of the spouses.

One might also be interested in how one relates to other family members who may reside in other households. One might be in a caregiver relationship with an elderly and/or disabled family member who lives elsewhere. One might have a dependent who does not live in the household but who still represents some level of financial (and emotional) obligation.

In addition, one might wonder how family structure in the past affects one today. Perhaps one’s siblings continue to exert an influence even after one no longer interacts with them daily. Children, grandchildren, parents, siblings, aunts, uncles, cousins, and in-laws all potentially affect your current life in measurable ways, whether or not you currently interact with them regularly.

WHAT ARE LABOR MARKET OUTCOMES?

What sorts of outcomes might we measure? As an economist, my mind naturally turns to observable, independently verifiable outcomes such as earnings and hours worked. For the purposes of this chapter, we will consider three outcome measures: two measures of labor supply, labor force participation (work/not work), and hours worked; and hourly earnings. This by no means exhausts the range of outcomes. Netz and Haveman (1999) make a good case for including family structure variables as potential controls/predictors for studying a wide range of labor market outcomes—such as unemployment duration—where researchers have not normally thought to include such variables. However, much of the extant empirical work has in fact considered one or more of these three outcomes.

First let's see what the raw numbers can show us. Table 1 shows some calculations for prime-age adults (ages 25 to 54) for the United States in March 1999. For this group, consider first their labor force participation rate (i.e., the proportion that is either currently employed or actively looking for paid work). Women are less likely to be participating in the labor force if married, while the opposite holds for men. The hours effect for those who are working goes in a similar direction. Women in larger families, measured by either number of persons or number of children, have reduced participation and hours. Men in larger families have higher participation but little variation in hours, and men in very large families have reduced values for both measures. Married persons earn more per hour worked than do unmarried persons, but the effect appears to be much stronger for men than for women. Women in larger families have substantially reduced hourly earnings, while for men in very large families hourly earnings first rise and then fall, with little difference in the midrange (two to five people; one to three children).

Before taking these hourly earnings rates as given, we might first want to consider how aggregation affects these patterns. For instance, maybe married and unmarried persons have very different demographic characteristics, like their age distribution (which could relate both to generic lifecycle differences and differences by birth cohort). By showing results only for persons between 25 and 54 in Table 1, I

Table 1 Labor Market Outcome for Prime Age Workers, by Sex and Family Structure Characteristics

	Women					Men				
	Labor force participation rates (%)	Weekly hours	Hourly earnings (\$)	Family earnings (\$)	<i>n</i>	Labor force participation rates	Weekly hours	Hourly earnings (\$)	Family earnings (\$)	<i>n</i>
All persons	77	38	11.53	43,000	29,573	92	44	15.38	46,000	27,360
Currently married	74	37	11.54	56,000	19,339	94	45	16.83	56,000	18,126
Currently unmarried	82	40	11.11	23,000	10,234	87	43	12.82	30,000	9,234
Number of persons in family										
1	85	41	12.82	24,000	4,319	89	44	13.75	27,000	5,955
2	81	39	12.02	44,000	6,925	90	44	15.38	50,000	5,423
3	79	38	11.43	47,000	6,280	92	44	15.38	53,000	5,178
4	74	36	11.11	54,000	6,762	95	45	16.53	58,000	6,066
5	68	35	10.00	52,000	3,360	94	45	16.35	56,000	3,042
≥6	62	35	8.65	44,000	1,927	90	44	13.00	48,000	1,696
Number of children in family										
0	81	40	12.02	40,000	13,912	89	44	14.42	40,000	14,552
1	79	38	11.54	47,000	5,980	94	45	16.48	55,000	4,741

2	74	36	10.99	48,000	6,050	96	45	16.83	55,000	5,110
3	66	34	9.62	42,000	2,610	95	45	16.73	51,000	2,164
≥4	55	33	7.92	32,000	1,021	92	46	14.42	41,000	793

NOTE: Hours and hourly earnings are calculated only for those persons reporting nonzero values.

SOURCE: Author's calculations using data from the U.S. Department of Commerce, Bureau of the Census (1999).

have already controlled for age to some degree, but it could be done more carefully. It turns out that the same patterns appear if I look within narrower age ranges, say 10-year age ranges (25–34, 35–44, 45–54). I might also want to consider different types of non-marriedness, such as widowed, divorced, separated, or never married. For these middle-aged persons, the differences in outcomes between these categories is quite small; current marital status (rather than past marital history) becomes the important distinction.

We might also want to control simultaneously for marital status and family size using a multiple regression framework to see the effects of each factor while holding constant the other factor. Let's consider the family structure effects on earnings using this idea. Applying a simple model to the hourly earnings data described in Table 1 (using the natural log of hourly earnings as the dependent variable, and with no other controls except for age and age-squared), for men, being married is associated with a 22 percent higher earnings rate, while the number of children has no effect; for women, being married is associated with 5 percent higher hourly earnings, while *each child* is associated with a 6 percent drop in hourly earnings.

WHY ARE FAMILY STRUCTURE AND LABOR MARKET OUTCOMES RELATED?

For both men and women, but particularly for men, marriage is associated with higher hourly earnings. For women, each additional child is associated with lower hourly earnings. Why do we see these patterns?

I derived these percentages from a very sparse regression specification, in which many of the usual variables that we would associate with earnings rates, like one's education and work experience, were missing. So one obvious answer is that marriage and number of children are serving as proxies for a number of omitted variables that are directly related to productivity as rewarded in the labor market. Indeed, these variables are often included in regressions, particularly for data sets where not many other variables are available, in order to serve as proxy for these other measures (Hill 1979). These might

include labor force attachment, pre- and postschool human capital investments, stability, restrictions on work location and hours, absenteeism, and turnover. Hence, studies that include a longer list of control variables should drive these family effects toward zero.

One problem with this approach is that not all variables that are related to labor market productivity are available in the kind of data sets that are generally available. For instance, many measures of ability or effort might be important to employers but are not collected in surveys. The person surveyed might not even know how other people view his or her actions and abilities. And these unobservable differences across persons are potentially correlated with whether or not they marry and how many children they have.

We could get away from the omitted variable problem completely if we could randomly assign people to marry or not marry (and whom to marry!), and randomly assign people to have different numbers of children. Indeed, if you think that marriage markets are like a lottery in the sense that love strikes almost randomly, this would not be a problem. But as we will see shortly, there is evidence that people do not randomly marry with respect to economic factors. Indeed, exactly the opposite occurs: currently, potential high earners are likely to marry other high earners. Similarly, if you think that the number of children a family has is basically an act of God, then we have a natural experiment as to how children affect labor market outcomes.

Another problem is that even if you find that persons with certain features are both more likely to marry and to make more money, this could still be due to either effort or discrimination. How could this be? Let's consider the theoretical arguments for the two main phenomena we have observed with respect to earnings: 1) women with children earn less than women without children, and 2) married men earn more than unmarried men. This will also help us understand why labor force participation and hours might vary in the ways shown in Table 1.

One of the main arguments economists will give for why people marry (or at least for why they live together) is that marriage allows for gains in household output due to increasing the spouses' ability to specialize. Hence, a couple's total household output would likely be greater than the sum of what they were able to produce separately, particularly if they can increasingly specialize over the course of the marriage. If women have comparative advantage (i.e., are relatively

better) at home production, they will be less likely to work for pay after marriage. Children raise the value of time spent in home production, so children can amplify this effect considerably. Meanwhile, married men can specialize in market-related human capital investments, thereby increasing their productivity over time. In some cases, the woman may choose to devote her time to forwarding the man's career, again in cases where this time investment has a higher payoff than either her working in the market herself, or spending the time in other forms of nonmarket production.

But what about cases where we observe both spouses working for pay? The argument must then be extended to say that women with children are less productive than both childless women and all men per hour worked in the market. This could happen for a number of reasons. They may be directly less productive because they have invested less in the past in market-related human capital. Many women take time off to raise children before reentering the labor market; hence, women on average have less total work experience than do men, as well as less time with their current employer. Even if they had the same amount of total work experience or total job tenure, leaving the labor force for more than six months in order to raise children is in and of itself associated with lower hourly earnings (Jacobsen and Levin 1995), possibly because their human capital has depreciated during their absence from the labor market. Also, anticipating discontinuous employment, they may have invested in forms of human capital that were less likely to depreciate, or that might be more useful in a variety of geographic locations if they will be moving to further their spouse's career.

Another possibility is that rather than less human capital being applied per hour of work, women with children are applying less effort per hour of work. If at-home production requires a certain amount of one's fixed daily stock of energy, the person doing more at-home production may exert less effort per hour of market production. Note that the opposite effect potentially occurs for men who are freed from responsibilities for at-home production, and for men whose wives are actively supporting their career (throwing parties for their colleagues and customers, accompanying them on trips), the employer may really be receiving twice the effort per hour of work.

Alternatively, women may be applying equal amounts of both effort and human capital per hour but may be constrained in their selection of jobs to those that have flexible and/or part-time hours. It is well documented that such jobs generally have lower earnings rates, potentially because these are desirable features, or because such jobs are less valuable to employers. Hence women's desire to reduce hours of paid work so as to spend more time in nonmarket production leads to their lower earnings per hour. Meanwhile, married men may select jobs that have fewer amenities (including but not limited to flexibility) but higher wages (Reed and Harford 1989). In other words, there exist jobs with higher pay but fewer amenities and jobs with lower pay but greater amenities, and people sort systematically between them based on gender and family structure.

That outlines the basic neoclassical economic argument for why marital status and number of children would have effects on labor force participation, hours, and earnings: marriage and children alter one's relative productivity between home and work and potentially one's choice of pecuniary and nonpecuniary amenities related to work. Note, however, that for any point made above, it is possible to make an alternative argument that marital status and number of children either won't or will matter in the opposite direction. For example, the potential endogeneity of the human capital investment decision will make it hard to measure the full effects of marriage and children on current earnings; there may be no current effect, but past anticipation of becoming married with children will have led women to invest in less human capital than they would have otherwise. However, if most women plan to (or assume that they will) become married and have children, this will depress women's earnings relative to men but will have little effect on the differential earnings between married and unmarried women.

It is also possible to derive alternative explanations for why these phenomena occur. In particular, marriage and children might alter not only one's choice set but also one's preferences. For example, married men might work harder because now there are other people—people whom they care about—whose well-being is affected by their level of income.

Another alternative explanation is that society (broadly defined, but also narrowly defined as employers) prefers certain familial configurations to others, potentially for economic reasons, and attempts to

reward persons who conform to these norms while penalizing those who do not. So married men, particularly those with stay-at-home wives, receive higher pay raises and more frequent promotions. Meanwhile, women find it difficult to combine work with home duties, and employers make it no easier for them. Employers may favor the traditional style of marriage out of simple prejudice and a desire to replicate the male-dominated management structure that they have become accustomed to. An alternative, statistical, discrimination theory would be that employers use family structure as a proxy for the unobservable factors of effort, emotional stability, and turnover (i.e., marriage and children are good for men but bad for women).

To sum up, we see that there are four main categories of explanations for why there might be differences in earnings and labor market work associated with changes in family structure: both absolute and relative productivity in market work may be affected; preferences are altered; trade-offs between higher pay and higher job amenities are in part based on family structure; and discrimination—either prejudicial or statistical—occurs. It is not necessary to pick one of these explanations over the others; rather, they might all be operating simultaneously, each accounting for some proportion of the wage and employment differences.

In addition, we see that there are a number of reasons why it would be hard to observe these effects cleanly using nonexperimental data: selection into marriage and into child raising must be taken account of to the degree that both observable and nonobservable factors affecting selection are correlated with either productivity or preferences regarding market versus nonmarket work. Various studies have taken these different theoretical and empirical considerations seriously. We will see how they have reduced—or strengthened—the marital wage premium for men and the family wage penalty for women. I will briefly summarize the range of results and sum up my views in each of these two cases.

THE EFFECTS OF MARRIAGE

Many studies have considered the puzzle of why married men earn more. This premium varies across studies from zero to 30 percent, depending on the particular data set and time period studied and on the nature of the empirical methodology. The premium clearly persists if standard, observable controls for productivity are added, such as educational attainment and actual or estimated work experience (Hill 1979), and is larger for persons in professional and managerial occupations (Pfeffer and Ross 1982). Following people over time, which is a way of controlling for unobservable variables, indicates that wages rise after marriage, and that the managerial and professional effect appears to be related to receiving higher performance ratings and therefore being more likely to be promoted to higher, better-paying jobs (Korenman and Neumark 1991). These results are all consistent with both the higher productivity and the discrimination arguments.

However, in controlling for unobservables that affect both wages and marital status, a number of studies have found that the marital status premium is greatly reduced or eradicated (Cohen and Haberfeld 1991; Cornwell and Rupert 1995; Nakosteen and Zimmer 1987, 1997; Loh 1996). There is also some reason to believe that the marital premium is declining over time. This may be related not only to reduced differences in human capital investment between married and unmarried men (Blackburn and Korenman 1994), but also to reduced specialization in market work during marriage, possibly related to rising divorce probabilities (Gray 1997; Gray and Vanderhart 2000). On the other hand, a recent study using the 1999 March CPS finds that even after controlling for endogeneity of marital status, married men have a 13 percent wage premium (Chun and Lee 2001).

A number of studies (Chalmers 1996; Jacobsen and Rayack 1996; Blackaby, Carlin, and Murphy 1998; Hotchkiss and Moore 1999; Chun and Lee 2001) have considered differences among married men in the marital wage premium, specifically how their spouse's work hours might affect the wage premium. These studies generally find differences, after controlling for observable productivity-related characteristics, of approximately 15 percent between married men whose wives do not work and married men whose wives work full time. By the

effort argument put forth above, we should observe that a man who has a nonworking wife will have higher wages because his wife is free to dedicate relatively more time to furthering his career, either directly through career-related activities, or indirectly by freeing him from almost all home production obligations. However, this effect could also be due to one or both of two alternative explanations: the assortative mating effect, in this case leading to matches between men who have high market productivity and women who have high nonmarket productivity; and the endogeneity of spousal work hours. In other words, if a man is a high earner, his wife reduces her paid work time, even potentially increasing leisure time rather than home production. Jacobsen and Rayack (1996) find that the effect disappears in U.S. data (the Panel Study of Income Dynamics) when either of these two alternative explanations is controlled for and Chalmers (1996) finds that controlling for endogeneity alone is enough to eradicate the phenomenon in five different data sets (data from the Luxembourg Income Study for Australia, Canada, Netherlands, Sweden, and the United States). However, Hotchkiss and Moore (1999) find that the effect persists in U.S. data for managerial occupations, as do Blackaby, Carlin, and Murphy (1998) for a United Kingdom data set; and Chun and Lee (2001) find that the effect persists in a broader sample of men in the United States even when controlling simultaneously for marital endogeneity and hours endogeneity.

The effects of marriage on women have received less attention, but the slight positive wage premium related to marriage appears to persist even when heterogeneity and endogeneity bias are accounted for. Neumark and Korenman (1994), using data on sisters to control for these factors, find a positive marriage premium for white women. Using a different data set, however, they previously found no direct effect on women's wages (Korenman and Neumark 1992). Jacobsen and Levin (1995) find no statistically significant effect of current marital status once fairly detailed controls for work experience, including intermittency spells, are included.

The difficulty of considering all explanations simultaneously, using a data set that has good controls for human capital variables (particularly work experience and intermittency measures) and controlling for heterogeneity and endogeneity, shows up in these differing results. Based on the current studies, I am not completely willing to concede

that there is currently in the United States any marital wage premium for men or women. This is clearly an area of active research, and one where more research, including more replicative and summarizing studies, is needed.

THE EFFECTS OF CHILDREN

A topic that has received even more ink and has been equally controversial has been the effects of childbearing and child raising on female labor supply and earnings. The reduced earnings effect operates largely through the reduced labor supply effect and is more relevant for total family earnings than on hourly earnings. However, there does appear to be an effect even on the hourly earnings rate, as we saw in Table 1. Waldfogel (1998) argues that there is still an effect in U.S. data, and that the penalty is in the 10 to 15 percent range in comparing women with children to women with no children. Again, as with the men, we might first want to know how adding traditional observable controls for productivity affects this finding. Indeed, studies that have added such controls, particularly for work experience and job tenure, have reduced considerably the effect of children on wage, adding credence to the idea that the presence of children in the household is to a large degree a proxy for these direct productivity effects (Hill 1979; Jacobsen and Levin 1995; Lundberg and Rose 2000). But how to treat the endogeneity of work experience and job tenure is contentious. Korenman and Neumark (1992) argue that if this endogeneity is not controlled for (i.e., the effects of children in reducing these measures is taken into account), the negative effect of children on wages is understated.

One study that considered the family gap across seven developed countries (Australia, Canada, the United Kingdom, the United States, Germany, Finland, and Sweden) finds much variation in the effects of children on both employment and wages, with the largest wage penalty for children in the United Kingdom (Harkness and Waldfogel 1999). In the United Kingdom, the presence of children still strongly inhibits full-time employment, and the low pay in part-time work appears to be an important explanation of the “family gap” in wages (Joshi, Macran,

and Dex 1996; Joshi et al. 1999). These findings raise the question of how institutional differences across countries can affect this gap, potentially through the indirect link of children to wages through reducing labor force attachment.

A method that avoids the endogeneity and heterogeneity problems is to use natural experiments involving multiple births and the gender mix of children. In other words, to the extent that multiple births are not planned and that people aim to have children of specific genders and therefore might have additional children if the first one or two are not of the desired sex, these outcomes cause increases in the number of children in a family over what the family might have desired. These studies generally find rather small additional child effects on both labor supply and earnings (Rosenzweig and Wolpin 2000). Another study in this vein (Jacobsen, Pearce, and Rosenbloom 1999) finds small effects of total fertility on married women's labor supply and earnings, depressing labor supply by 2.5 percent and hours worked by two per week per additional child, and essentially no effect on hourly earnings, which is consistent with the raw numbers in Table 1.

Another method that attempts to measure directly whether time and effort spent on household production affects labor market outcomes is to measure the effects of household production directly. Studies using a variety of econometric specifications (Hersch 1991a,b; Hersch and Stratton 1997, 2002) have indeed found a significant negative effect on women's wages of time spent on housework; approximately 10 weekly hours of housework reduces hourly earnings by about 2 percent (Stratton 2001). Housework hours variations by marital status are fairly large for women and may even be relevant in explaining the negative wage differentials related to the presence of children (although this particular specification was not tested by the mentioned studies). In contrast, results have been inconclusive for men, with the possibility of a smaller negative impact or no effect (Hersch 1991b; Hersch and Stratton 1997, 2002), while the other study (Hersch 1991a) actually found a slight positive effect of time spent on housework on men's wages. Notably, Hersch and Stratton (2000) find that married and single men spend virtually the same amount of time on home production, "albeit on different types of housework"; not surprisingly, they also find no effect of housework on the marital wage premium for men.

Note that while one interpretation of these results is that time spent on housework reduces one's ability to do well in the labor market, another interpretation is that time spent on housework is a proxy negatively correlated with drive or ambition in the labor market. In addition, the negative effect can operate through creation of a constraint (i.e., picking part-time positions with lower wage rate) rather than through effort or flextime (Stratton 2001).

Another line of research has attempted to measure attitudes toward family life directly and use these attitudinal measures as control variables. Interestingly, while Rose and Winkler (2000) find that women's inclinations toward traditional roles in the family are correlated with lower labor force attachment and earnings, Cappelli, Constantine, and Chadwick (2000) find that persons placing a high priority on family before entering the labor market earn more; women who place a high priority on family do not suffer in terms of subsequent earnings.

Fewer studies have bothered to consider the effects of children on men, given the apparent absence of a strong effect in the raw data on either hours or earnings (although Hersch [1991b] finds a positive effect of presence of children on both male and female wages). However, Carlin and Flood (1997) consider this question in the context of the contemporary Swedish experience and find a small reduction in male labor supply (2.6 to 3.4 hours per week) related to the presence of one or more young children in the household. Lundberg and Rose (2000) find that in U.S. households where the mother continues to work, the father reduces hours worked substantially. Preston (2000) presents an interesting statistical discrimination model in which employers are unable initially to observe long-term career prospects, but once parenthood occurs, true child care responsibilities are observed and both women and men are tracked correctly into high- or low-career orientation paths. In her data, earnings differentials between men and women fall to zero once the share of child care responsibility is included in the analysis.

To sum up, again there is difficulty in considering all explanations simultaneously, using a data set that has good controls for human capital variables (particularly work experience and intermittency measures) and controlling for heterogeneity and endogeneity. In addition, the philosophical question arises of whether children's indirect effects in reducing labor force attachment should be credited to the children *per*

se. However, without crediting these indirect effects, the effects of children on female labor market behavior appear to be relatively small.

OTHER FAMILY STRUCTURE EFFECTS

Now that we have considered the two main veins of the research literature on family structure effects, we turn briefly to outlining other topics that are of interest but have received less focus by researchers. A number of persons have been interested in the recent rise in cohabitation, particularly in this country and in Western Europe, particularly in Sweden (Waite and Gallagher 2000). Cohabitation appears to have some of the productivity advantages of married life, such as the possibility of day-to-day specialization. But it lacks the ones that rely on a long-term relationship, as such couples are not willing to specialize more completely, given the uncertainty inherent in a nonformal relationship.

Another phenomenon of some interest is the increased number and proportion of dual-earner couples, mainly in the United States, in which the wife earns more than the husband (Winkler 1998). While this is an outcomes measure, it also has implications for how bargaining in the home is affected, an area of increased research in general by theoreticians. Another phenomenon of interest concurrent with the increase in dual-earner couples is the apparent rise in correlation between husbands' and wives' earnings. This is in contrast to the earlier argument that high-earner husbands might well pick wives who had relatively high nonmarket production capabilities, a feature that was assumed to be generally negatively correlated with high market production capability (Nakosteen and Zimmer 2001). This has been of particular interest for its implications regarding income inequality between families, although so far changes in wives' earnings do not explain a substantial portion of the rise in family income inequality that has occurred since the 1980s (Cancian and Reed 1999).

Another topic that has been barely studied yet in a systematic empirical way is the implications of the rising number of elderly and how they may be cared for in both resident and nonresident settings by their close relatives. A related topic is how families deal with disabled

members of any age. It is known that a majority of caregivers for both household members and persons outside the household are women (Schmittroth 1991, Tables 111, 113). It appears that the existence of a dependent elder in a family household is negatively correlated with earnings of adults in their immediate family (Tilly and Albelda 1994); linkages with nonresident dependent elders, where effects may operate through the need to provide both time and money toward their care, have yet to be clearly measured in terms of their effects on labor market outcomes for caregivers. For instance, one study finds no evidence of reduced employment among married women caregivers (Wolf and Soldo 1994), while other studies find that caregivers have significantly reduced employment (Ettner 1995; White-Means 1992).

Finally, a number of studies have considered labor market effects related to the situation of one's birth family rather than one's current family. While some studies (Neumark and Korenman 1994) have exploited sibling and parental relationships in an attempt to control for unobservables that are correlated across family members, others have considered directly the effects of family size, birth order, and/or sibling gender mix on one's own outcomes. These effects have in large part been modeled as affecting one's human capital investments, such as educational attainment, prior to entering the labor market. Regarding family size, Kessler (1991) finds no effect on wages but finds some relation to labor supply for women—women from small families work less when young, more when older. Regarding birth order effects, Behrman and Taubman (1986) find favorable labor market outcomes for first-born children, Kessler finds no effect on wages of birth order, and Oettinger (2000) finds that older sibling educational achievement positively affects younger sibling educational achievement. Regarding sibling gender mix, Butcher and Case (1994) find that women raised only with brothers received more education than women raised with any sisters. In contrast, Kaestner (1997) finds no such effect among whites, and finds that among blacks, sisters are positively related to educational attainment, while Hauser and Kuo (1998) find no effect of sibling gender composition on educational attainment.

While the aforementioned studies all use contemporary U.S. data, these topics have also been considered using historical data (Sassler 1995) and data from developing countries—indeed, birth family structure effects appear to be of increasing interest now that more data are

available from these countries that allow for empirical research. In the developing country context, interest has centered on health indicators as well as educational indicators, and effects appear larger. For example, Garg and Morduch (1998), using Ghanaian data, find that children with sisters but no brothers score 25 to 40 percent better on measured health indicators than if they have only brothers. A final topic, continuing linkages to one's birth family (without necessarily implying any type of direct income or hours transfers), has barely been considered, although Neumark and Postlewaite (1998) find that relative income comparisons to one's sisters and sisters-in-law are significant in explaining the increase in female labor supply.

POLICY-RELEVANT CONCLUSIONS

In conclusion, let us briefly consider two questions. Does family structure matter enough for labor market outcomes that we should do anything about it? If so, what should we do? From my preceding discussion, it is clear that I think it is far from obvious that these effects are large enough to cause concern. But even if they were large, the issue of whether there is anything amiss here is not obvious.

If the premia and penalties we observe were clearly the result of prejudicial discrimination, as opposed to being based on productivity differences, compensating differentials, or marriage market matching, then we would want to eradicate it. This is the argument given for making sex and race discrimination illegal, and indeed, we also make questions regarding one's family status illegal for employers to ask. However, unlike sex and race discrimination, because family status is a choice variable and is changeable, it is less obvious that anything should be done. The usual argument that discrimination is distortionary would hold, but it is apparently discrimination against women as a whole that is problematic, not necessarily against women who are married mothers. Policy proposals that reduce discrimination against women in general would have the effect of raising the return to investments in their human capital, regardless of either their expectations or outcomes regarding marriage and child rearing.

One conclusion we can draw from positive marriage premiums for both working men and women (and potentially positive premiums achieved by those who specialize in nonmarket production as well) is that marriage is an efficiency-raising device, which might be encouraged therefore on efficiency grounds alone. Indeed, Waite and Gallagher (2000) argues a strong case for taking societal actions to strengthen society's commitment to the institution of marriage, in part on economic grounds, and in part on a number of other grounds, including its apparent causal linkage to better mental, physical, and emotional health.

But most work/family policy initiatives are suggested in order to reduce the negative outcomes associated with child raising, particularly with raising children while unmarried. These include high rates of poverty and near-poverty for female-headed families, whether created through out-of-wedlock birth or divorce. Direct income transfers and attempts to increase the human capital of such families are two such policies. Note that neither of these need be directly associated with the family structure so much as with the low state of human capital investment in these persons to begin with. Another set of policies attempts to reduce the income penalty associated with taking parental leaves from one's career, or stepping down to part-time work. Paid parental leaves and child care subsidies can have measurable effects, both directly by increasing a family's income, and indirectly by increasing labor force attachment. To the extent that these preserve human capital investments and encourage such investments, they may be viewed as desirable. But prices may also be distorted in a way that reduces the value of nonmarket labor, including child care performed in the household. A clearer case would need to be made, either on the grounds of offsetting current distortions overvaluing such labor, or on the grounds that work/family policies internalize positive externalities of family structure, in order to justify them.

Finally, dependent care assistance, whether for children, the elderly, or the disabled, which could be paid directly to either the dependent or to the caregiver, would reduce the income strain associated with these situations. The latter two, particularly to the degree that elderly persons have high disability rates, appear to be a reasonable form of insurance in cases where various problems causing incomplete insurance markets have made it difficult for individuals and families to

self-insure. The former is less defensible on insurance grounds if one believes that child raising is a freely chosen option, with many of its benefits accruing to the family itself.

However, insuring against negative outcomes caused by the circumstances of one's birth is a reasonable policy to consider. Assistance targeted to those children who receive negative outcomes (such as low educational attainment) because of parental investment decisions (and potentially lack of investment funds due to capital market constraints) would be defensible as a social insurance program against being born in a family situation where you do not receive as good an outcome as those in other, more fortunate family situations. For instance, for a society in which there is systematic underinvestment in girls by their families, societal leaders could make the decision to offset this underinvestment. This is clearly an area that needs consideration in a number of developing countries.

The issue therefore appears to come down to choice: To what degree is the choice of family situation made freely? What sorts of constraints (in the usual economist terms of relative prices and endowments) operate on that choice? In all societies, one does not choose what family to be born into, and we have strong equity grounds for minimizing the differences caused by birth family circumstance. In some societies, arguably including our own, one does choose what family to create, and the equity grounds for minimizing differences in labor market outcomes related to that choice are therefore much less clear.

In conclusion, while the robustness—and policy relevance—of the findings presented in this chapter is ambiguous, I have found the effects of family structure on labor outcomes an intriguing area to explore. Much remains to be done on this topic, and I look forward to reading, as well as doing my own research, in this area for years to come.

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