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The American Economic Review, Volume 82, Issue 3 (Jun., 1992), 671-678.

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Unilateral Divorce and the Labor-Force Participation Rate of Married Women, Revisited

By Allen M. Parkman*

Two recent articles in this Review by H. Elizabeth Peters (1986) and William R. Johnson and Jonathan Skinner (1986) address an anomaly recently observed by labor economists. James P. Smith and Michael P. Ward (1985) have noted that real wage growth explains most of the increase in the female labor supply between 1950 and 1980. However, in the period after 1970, the female-labor-supply growth rate rose, while the real-wage growth rate fell. Robert T. Michael (1985) provides a partial explanation by identifying the effect of divorce on the labor-market decision of married women. In that article, a lagged relationship is observed between increases in the divorce rate and increases in the labor-force participation rate (LFPR) of married women with young children during the post-World War II period. Since the divorce rate rose in the period after 1960, it could explain part of the increase in the growth rate of the LFPR of married women observed after 1970.

The articles by Peters and by Johnson and Skinner provide additional insights into this anomaly. They recognize that the introduction of no-fault grounds for divorce after 1970 may have contributed to the increase in the labor supply of married women after that date. The no-fault grounds for divorce

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¹Before 1970, most states had grounds for divorce that were based on fault, such as adultery or mental cruelty. Between 1970 and 1985, all the American jurisdictions enacted some form of no-fault divorce. The no-fault divorce statutes generally make either irretrievable breakdown or incompatibility the sole

created what has been called "unilateral divorce." The shift in female labor supply also could explain the slower real wage growth. Using 1979 data, Peters concludes that residence in a unilateral-divorce state had a statistically significant positive influence on whether a married woman was in the labor force. Johnson and Skinner use 1972 data to conclude that being in a unilateral-divorce state in that year had a negative effect on the labor supply of married women.

Unilateral divorce was introduced in the United States in 1970, when California adopted its no-fault divorce statute. Therefore, Peters's data are probably more useful for testing the impact of unilateral divorce laws on married women's labor-force participation. In her article, the lack of compensation for marriage-specific investment at divorce creates an incentive for married women to increase their more general market capital during marriage by entering the labor force.² A lack of compensation for marriage-specific investment implies that women are not being compensated for being good housewives and mothers. Given the range of commodities produced by housewives and mothers, marriage-specific investment should not necessarily vary with characteristics of women such as age, race, or education. If the impact of unilateral divorce on the LFPR of married women is due to the lack of compensation for mar-

ground for divorce or add one of them to the fault grounds. While no-fault divorce is often called unilateral divorce, that is not technically correct, since some states require mutual consent to the no-fault grounds (see Doris J. Freed and Timothy B. Walker, 1990).

²While it was recognized by Peters (p. 443) that women who invest in marriage may face lower wages in the future, based on Gary S. Becker (1981 p. 15), marriage-specific investment has value based on its ability to increase household production.

riage-specific investment at divorce, one would expect unilateral divorce to have similar effects on all married women residing in a given state.

This paper agrees with Peters that unilateral divorce has increased the LFPR of married women. However, it argues that this response is due to a lack of compensation at divorce for married women's reduced human capital (i.e., their future earning capacity), rather than their marriage-specific investment.³ This reduction in human capital can occur when married women reduce their labor-market activities and increase their specialization in household production during marriage. At divorce, the courts do not recognize the reduced human capital of married women. When making property divisions, the courts tend only to recognize physical and financial assets and to ignore human capital.⁴ Alimony, even when awarded, has not been based on the women's reduced human capital. If decisions made jointly during marriage result in a loss of human capital for one spouse, that loss has not been the basis for compensation at divorce.⁵

The lack of recognition of the effect that marriage has on women's human capital was not a major problem under fault-based divorce, because the courts played only a minor role in the financial settlements. One

³The loss of human capital by married women who work at home is recognized in Elizabeth M. Landes (1978).

⁴When the courts have attempted to recognize human capital at divorce, their decisions have often violated fundamental financial principles. For example, a number of courts have recognized the reputation of a professional as an asset called "professional goodwill." However, the courts have held that the returns to it, after the dissolution of the marriage, are not to be considered in its evaluation at dissolution (*Hurley v. Hurley*, 615 P.2d 256, 259 [1980]). For discussions of the courts' attempts to recognize human capital at divorce, see Parkman (1984, 1987).

⁵The loss of human capital could be introduced into the traditional legal definition of property by the use of an implied contract of indemnification. The decision by a couple for one spouse, usually the wife, to specialize in household production can result in a substantial reduction in her human capital, if the marriage is dissolved. If this loss is recognized as the basis for indemnification, the loss would be a debt of the couple and an asset of the person incurring the loss.

spouse could not easily obtain a divorce, and therefore, most divorces were the result of negotiated settlements. In those negotiations, the spouse who did not want to dissolve the marriage (often the wife) had substantial power. The negotiations could ignore the applicable laws controlling the allocation of property and alimony and, thereby, give the wife a more generous settlement.

Unilateral divorce reduced the negotiating power of married women and placed a greater emphasis on the legal rules governing property division and alimony. Since these legal rules tend to ignore human capital, the new emphasis has effects that can vary among married women. The variation occurs because reduced participation in the labor force affects women's human capital differently. The courts do not recognize the reduced future-earning capacity of the woman who would have been an accountant but, due to joint decisions during her marriage, becomes a bookkeeper or full-time housewife. Alternatively, the woman who would have been a clerk at a supermarket may not have been adversely affected by this omission. Even if the clerk left the labor force to become a housewife, she might qualify for a job after a divorce that is not dissimilar from the job she would have had if she had worked throughout the marriage. The marriage did not have a substantial effect on her human capital. The greater the potential loss of human capital due to reduced labor-market participation, the greater is the incentive for married women to remain active in the labor market in unilateral-divorce states.

Therefore, there are two potential explanations for the increase in the LFPR of married women after the introduction of unilateral divorce. One explanation is based on the lack of compensation for marriage-specific investment during marriage. Since all married women have the potential to make that investment, one would not expect the labor-market response to vary among married women. As an alternative, this paper argues that the increase in the LFPR of married women under unilateral divorce is due to the lack of compensation at divorce for reduced human capital based on sacri-

ficed opportunities to acquire and maintain market skills. The reduction in human capital and, therefore, the incentive to enter the labor force vary based on the characteristics of married women.

These alternative hypotheses are tested using a model that identifies characteristics of married women that result in larger declines in human capital due to reduced labor-market participation. The married women who could experience larger losses of human capital at divorce have an incentive to participate in the labor force more actively in unilateral-divorce states. A second test uses the courts' flexibility in property divisions. The empirical results suggest that participation in the labor force by married women varies with the potential impact of the unilateral-divorce laws on their human capital, rather than with their marriage-specific investment.

I. The Human Capital of Women

A woman's human capital is acquired and maintained through investment and is based on her potential earnings. To the extent that decisions during a marriage reduce investment; they reduce future earnings and human capital. This process can be analyzed in a manner similar to the one used by Jacob Mincer and Solomon Polachek (1974) and Becker (1975). A woman's potential net earnings at a given age equal the earnings she would have had at that age if no investment had been made in her plus the total returns on the net investment made in her earlier, minus the current cost of the investment. The total returns on the net investment made in her earlier are positively related to the amounts of the earlier investments and their rates of return, and they are negatively related to the depreciation rate of those investment. It is assumed, as in Becker (1975), that earnings unrelated to human capital are zero. Therefore, the value of a woman's human capital at age t, H_t , is the discounted value of her future net earnings.

If a woman never marries or, if she marries, never makes any career adjustments to accommodate her spouse; her human capital at time t will have a value of H_t^* .

Alternatively, she may marry and make career adjustments to accommodate her spouse to maximize their joint utility under the assumption that the marriage will last a long time. Under these circumstances, the value of her human capital at t will be H'_t . If a marriage is dissolved at age d, the spouse who has restricted her labor-market activities will find that the value of her human capital at that age has been reduced by $H_d^* - H'_d$.

This analysis suggests some characteristics of married women who face substantial losses in human capital if they reduce their labor-market activities. To be specific, the larger the potential returns on investments, the amounts that would have been invested, and the depreciation rate on prior investments, the larger will be the loss that is incurred by a woman.

This analysis can be illustrated with two examples. First, consider a woman who has the potential to be an accountant. She can generate a high return on human-capital investments, she can expect substantial onthe-job training, and her skills have a high depreciation rate. Her human capital is reduced substantially by absences from the labor force. If she no longer has the limited protection provided by fault divorce, she has an increased incentive to remain active in the labor market after marriage. Alternatively, consider a woman who has the more limited potential to be a supermarket clerk. She does not have the ability to generate a high return on investments in herself, she does not anticipate investments through onthe-job training, and she does not possess skills that are likely to depreciate at a high

 6 Of course, if investment was made in the wife and this investment would not have occurred except for the marriage, then H'_d could be greater than H^*_d . Given the poor financial condition of most women after a divorce, this would appear to be an uncommon situation. Since the rate of return is usually higher on investment in the husband, there is an incentive to invest more in him than in the wife.

⁷Jacob Mincer and Haim Ofek (1982) conclude that depreciation affects both general and firm-specific human capital. While the depreciation of general human is gradual, the depreciation of firm-specific human capital can be a one-time event when the job separation occurs

rate. Absences from the labor market are not likely to have a profound effect on her human capital. Unilateral divorce would create only a small increase in the incentive for this woman to remain active in the labor force after marriage.

Data are not available for the theoretical variables (i.e., the rate of return, the investments, and the depreciation rate). However, the literature on human capital provides variables that can be used as proxies and for which there are data. These variables are age, race, and education. The rate of return from an investment in human capital decreases with age. Becker (1975) notes that the returns will be larger the longer is the period over which they occur. Becker (1975) also presents evidence that nonwhites have lower rates of return on investment in human capital than do whites. Furthermore, he finds that education and on-the-job training are positively correlated. People who can generate a higher rate of return should tend to invest more than others in education. Therefore, education should be positively correlated with the amount of investment and the rate of return on that investment. Mincer and Polachek (1974) find that the depreciation rate for human capital is small and statistically insignificant for women with less than a high-school education. However, they find that the rate increases with education level.

Educational level, however, can have conflicting effects on the labor-supply decision of a married woman in a unilateral-divorce state. More education leads to a higher opportunity cost of reducing one's labor-force participation, which should increase labor-force participation. However, if education is acquired during the marriage, it can be a substitute for experience and onthe-job training for increasing or maintaining the value of a married woman's human capital.⁸ It could reduce the LFPR of married women.

The literature suggests that the married women who would be most likely to increase their labor-force participation because of the potential uncompensated reduction in their human capital due to unilateral divorce are those who are young and white. The effect of education is ambiguous.

II. Empirical Analysis

The data used by Peters and this study were collected in the March/April 1979 Current Population Survey. The sample consists of married women who were living in the same state in 1979 as in 1975, to standardize for the influence of the law of that state on their behavior. Remarried women with young children were eliminated from the sample to avoid problems with other than own children in the household.

Three logit regression equations were estimated. Table 1 contains the definitions of the variables used in the regressions and their means. The dependent variable in the equations is a dummy variable indicating whether or not a woman was in the labor force in 1978. The empirical test of equation (i) uses the same variables as the equation estimated in Peters (1986) to determine whether an appropriate sample is being used. As in Peters's study, the independent variables consist of the variables associated with women's labor-force participation: age, education, husband's earnings, race, number and ages of children, whether the family lived in a SMSA, and regional variables for South, West, and North Central states. The influence of unilateral divorce was introduced by a dummy variable for states that had unilateral-divorce statutes in 1978.

Equation (ii) adds three new variables to those used in equation (i). Additional variables were introduced to capture the effects of the interaction between residence in a state that had a unilateral-divorce statute in 1978 and the demographic variables identi-

⁸James A. Sweet and Ruy Teixeira (1984) report that the percentage of time that young married women were enrolled in school rose dramatically between 1970 and 1980. The increase was greater for childless women than for those with children. It also was greater for those with more than a high-school education.

⁹In both Peters (1986) and this study, states were classified as unilateral if only irretrievable breakdown and incompatibility were grounds for divorce or if these grounds had been added to traditional fault grounds.

Table 1—Variable Definitions and Mean Values of the Variables from the 1979 Current Population Survey Data

Variable	Definition	
In labor force, 1978 (percentage)	1 if the woman had positive earnings in 1978	54.5
Age	age of woman in 1979	44.1
Kids under 6	number of children younger than age 6 in the household in 1979;	0.0
	the number is not calculated for remarried women	0.3
Kids 6-18	number of children in the household between ages 6 and 18;	
	the number is not calculated for remarried women	0.7
Kids squared	children in the household under age 18, squared	2.6
Education	number of years of education completed as of 1979	12.1
White (percentage)	1 if woman is white	91.0
Husband's earnings	husband's earnings in 1978 in thousands of dollars	13.5
SMSA (percentage)	1 if the woman lived in a standard metropolitan statistical area in 1979	35.1
South (percentage)	1 if the woman lived in the South Atlantic, East South Central,	
Bouth (percentage)	or West South Central geographic divisions	29.6
West (percentage)	1 if the woman lived in either the Mountain or Pacific geographic divisions	21.4
North Central (percentage)	1 if the woman lived in the East North Central or West North Central	
Ttorin Contini (percentage)	geographic divisions	27.4
Unilateral (percentage)	1 if the woman lived in a unilateral-divorce state (as defined by Peters in	
Cimateral (percentage)	her table 4) in 1979	54.8
Strict property (percentage)	1 if the woman lived in a state in 1979 that had property-division laws in 1977	
Street brokers? (bereemange)	that allocated property either based on title or in fixed equal shares	35.4
Sample size:		19,056

Note: The sample consists of married women who lived in the same state in 1979 as in 1975. Women were eliminated from the sample if there were children in the household under age 18 and the women were remarried. Source: Current Population Survey, March/April 1979.

fied above: age, race, and education of the married woman. The age interaction term is anticipated to be negative, and the white interaction term is anticipated to be positive. The education interaction term can be either positive or negative.

A third equation was estimated as an alternate test of the hypotheses. This test is based on the flexibility given the courts in a state to allocate property at divorce. Separate and marital properties were allocated at divorce based on common law and community-property statutes. The statutes provided either a strict or an equitable standard. Some common-law states required property to be allocated strictly based on title, 10 while others gave judges broad discretion based on equitable distribution. While women in common-law states with a strict standard received property at divorce

if they held the title or the title was held

iointly, they could not receive any more

property than that provided by title. Under equitable distribution, housewives often could anticipate a larger allocation. Among the community-property states, some required a strict equal division of the marital property, 11 while others permitted the judges to make an equitable distribution. In strict jurisdictions, the courts could not adjust the property settlements to reflect the commitment that women had made to working at home. Meanwhile, the "contribution of each spouse to the marriage" was a common criterion for an equitable distribution in both common-law and community-property states. No state made a reduction in a spouse's future earnings a criterion for an equitable adjustment. In other words, marriage-specific investment was recognized as a basis for a more generous allocation for

¹⁰In 1977, these states included Florida, Maryland, Mississippi, New York, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, and West Virginia (see Freed and Henry H. Foster, 1977).

¹¹In 1977, these states included California, Louisiana, and Washington (see Freed and Foster, 1977).

housewives and mothers. Losses of human capital were not given the same recognition. In unilateral-divorce states in which the judges had discretion, married women could feel that their marriage-specific investment was better protected than in states with strict distribution laws.

The hypothesis of marriage-specific investment would anticipate a higher LFPR for married women in strict unilateraldivorce states. Since reduced human capital was not a basis for an equitable distribution, the human-capital hypothesis would not predict the property distribution laws to have any effect on the LFPR of married women in unilateral-divorce states. In the fault-divorce states, the different legal rules should have had no effect, because the property settlements in those states tend to be negotiated rather than based on statutes. In equation (iii), a new variable (strict-property×unilateral) is added to the variables contained in equation (i). The hypothesis of marriage-specific investment would predict that the effect of this variable is positive, while the human-capital hypothesis would not predict it to be significant.

III. Empirical Results

The results of the logit regression analyses from Peters (1986) and the three additional equations are presented in Table 2. Equation (i) contains the same variables as used by Peters. The specification of the sample in this study resulted in a slightly smaller sample than the one used in Peters's study. However, the regression coefficients in Peters's paper and equation (i) are similar with the same variables having significant effects, suggesting that the samples are similar.

The more interesting results are contained in equations (ii) and (iii). In equation (ii), the coefficients of the new variables for which there are prior expectations have the

predicted signs, and they are all statistically significant. The age interaction term is negative, and the white interaction term is positive. The education interaction term is negative and significant. This suggests that education during marriage may be used by married women in unilateral-divorce states as a substitute for employment in maintaining their human capital.¹³ The unilateraldivorce-state term by itself is still positive and significant. These empirical results imply that married women in unilateral-divorce states increase their labor supply in response to their potential losses of human capital if their marriages are dissolved. Alternatively, since the ability to make marriage-specific investment would not be expected to vary based on age, race, and education; these results tend to refute the hypothesis of marriage-specific investment.

In equation (iii), the coefficient of the strict-property interaction term is negative but not statistically significant. The LFPR of married women does not appear to have been sensitive to the laws controlling property allocation. This result would lend additional support to the conclusion that the increase in the LFPR of married women in unilateral-divorce states was due to the human-capital hypothesis.

IV. Conclusion

This paper provides an alternative explanation for the effects of unilateral divorce on the LFPR of married women identified in Peters (1986). The combination of a narrow legal definition of property and limited alimony at divorce with the introduction of unilateral-divorce statutes resulted in an increase in the LFPR of certain types of married women in unilateral-divorce states. The increase was greater for the married women who could experience larger reductions in their human capital if they reduced their participation in the labor force. These women tend to be those who are younger and white. Pursuing more education during

¹²Although an attempt was made to use a similar selection procedure for this paper, Peters (1986) has a sample size of 19,501, while the sample size used here is 19,056.

¹³The data used here did not indicate when a married woman obtained her education.

Table 2—Labor-Force Participation Logit Equations

Variable	Peters's equation	Equation (i)	Equation (ii)	Equation (iii)
Intercept	71.98*	69.22*	64.02*	69.05*
•	(426.38)	(8,632.27)	(4,780.34)	(8,606.27)
Age	-1.92*	-1.81*	-1.75*	-1.82*
	(2,119.43)	(1,980.25)	(1,145.82)	(1,980.25)
Kids under 6	-30.84*	-29.62*	-29.63*	- 29.63*
	(752.80)	(711.29)	(710.76)	(711.29)
Kids 6-18	-8.80*	-8.31*	-8.31*	-8.31*
	(99.30)	(89.30)	(89.11)	(89.11)
Kids squared	1.42*	1.36*	1.33*	1.36*
	(54.94)	(50.27)	(50.13)	(50.13)
Education	3.46*	3.39*	3.90*	3.39*
	(452.74)	(418.61)	(246.80)	(418.61)
White	-12.52*	-11.65*	-16.06*	-11.60*
	(71.21)	(60.68)	(58.37)	(60.06)
Husband's earnings (in thousands)	-0.39*	-0.34*	-0.34*	-0.34*
	(98.21)	(76.56)	(76.39)	(77.26)
SMSA	-0.31	-1.03	-1.14	-0.75
	(0.14)	(1.42)	(1.74)	(0.71)
South	-0.08	-0.15	0.21	-0.01
	(0.00)	(0.02)	(0.03)	(0.00)
West	-0.71	0.05	0.19	0.65
	(0.28)	(0.00)	(0.02)	(0.21)
North Central	2.54*	2.85*	2.85*	2.78*
	(4.98)	(6.30)	(6.25)	(6.00)
Unilateral	2.22*	1.98*	9.84ª	2.24*
	(6.34)	(4.88)	(3.17)	(5.95)
Age×unilateral			-0.13*	
			(4.73)	
White×unilateral			8.70*	
			(8.70)	
Education × unilateral			-0.85*	
			(7.08)	
Strict-property × unilateral				- 1.74
				(1.44)
Sample size:	19,501	19,056	19,056	19,056

Notes: The estimates reported are ∂ (percentage) $/\partial X = \beta [\bar{P}(1-\bar{P})]100$ from the logit $P=1/(1+e^{-X\beta})$. Chi-square statistics are in parentheses.

a Significantly different from zero at the 10-percent level.

* Significantly different from zero at the 5-percent level.

marriage is identified as an alternative method for maintaining a married woman's human capital.

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