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WELL-BEING OF WOMEN  
AFTER MARITAL DISRUPTION**

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**Center for Social Development**



George Warren Brown School of Social Work

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**Center for Social Development  
Washington University  
Campus Box 1196  
One Brookings Drive  
St. Louis, Missouri 63130 USA  
tel 314-935-7433  
fax 314-935-8661  
email [csd@gwbssw.wustl.edu](mailto:csd@gwbssw.wustl.edu)**

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## **ABSTRACT**

This study uses panel data from the National Longitudinal Surveys of Youth to examine the effects of assets on the economic well-being of women one year after marital disruption. Instrumental variable estimation and seemingly unrelated regression are used. Results suggest that financial assets have positive effects on the post-disruption economic well being of women. Financial assets significantly increase income (including earnings) and reduce welfare receipt. In addition, the coefficients of human capital variables are substantially inflated in models without asset variables, suggesting that the effects of assets are captured by human capital variables when asset variables are omitted. In addition to human capital investment, asset accumulation could be a protective strategy for women and children at risk of marital disruption. Future research should include asset variables when there is reason to believe assets may be relevant.

## INTRODUCTION

Marital disruption through divorce and separation is one of the leading factors contributing to the growth of female-headed families, the major impoverished group in the United States (Arendell, 1987; Spain & Bianchi, 1996). Throughout the 1990s, female-headed families with children were five times more likely to be poor than two-parent families with children (U.S. Bureau of the Census, 1998). In 1996, for instance, 42% of female-headed families with children under 18 lived in poverty, compared with 7.5% of married couples with children under 18. In addition, children who live in female-headed families seem to have less favorable long-term economic prospects. Evidence indicates that children growing up in female-headed families tend to have lower socioeconomic attainment in adulthood than children in two-parent families (McLanahan, 1985; Muller & Cooper, 1986; Amato & Keith, 1991; McLanahan & Sandefur, 1994).

The soaring divorce rate in the 1970s and its negative economic consequences for women and children have inspired a body of literature on the economic well-being of women after marital disruption (e.g., Corcoran, 1979; Weiss, 1984; Weitzman, 1985; Smock, 1994). Many studies have tried to identify factors that buffer the economic hardship of divorced and separated women (Mauldin, 1990; Mauldin & Koonce, 1990; Smock, 1993 & 1994). Investments in human capital, such as education and work experience, have been the focus of this literature. These studies show that women with greater human capital fare better economically than other women after disruption (Mauldin & Koonce, 1990; Smock, 1993 & 1994). Given the high probability of marital disruption,<sup>1</sup> many advocate increased investment in the human capital of

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<sup>1</sup> Although divorce rates in the U.S. have leveled off since the mid-1980s, the probability of marital disruption remains high. At its peak in 1979, the divorce rate was 5.3 divorces per 1000 individuals. In 1997, there were 4.3 divorces per 1000 individuals (National Center for Health Statistics, 1998).

women as an economic safeguard for women and children. Specific strategies include support for education beyond high school, equal employment opportunities, pay equity, and affordable child care (McLanahan & Booth, 1989; Mauldin, 1990; Mauldin & Koonce, 1990).

While it appears that asset ownership should also affect the post-disruption economic well-being of women, existing literature has largely ignored the role of assets. If assets are a significant determinant of post-disruption economic well-being, the omission of these variables in empirical studies may lead to specification error and biased estimates.<sup>2</sup> In particular, researchers may have overlooked the role of assets and may have overstated the importance of other factors. This study examines the effects of human capital variables and asset variables on the economic well-being of women one year after marital disruption.

## **LITERATURE REVIEW**

### **The Economic Outcomes of Marital Disruption**

Over the last two decades, numerous studies have documented the magnitude and persistence of the economic outcomes of marital disruption (e.g., Weiss, 1984; Weitzman, 1985; Smock, 1993). These studies have confirmed that women experience a drastic decline in their economic well-being, that women fare much worse than their male counterparts, and that the chance for an economic recovery in the short run is limited for women.

Declines in economic well-being are typically demonstrated by reductions in income and standard of living (Duncan & Hoffman, 1985; Weiss, 1984; Weitzman, 1985; Smock, 1993; Smock, 1994; Mauldin, 1990; Mauldin & Koonce, 1990; Peterson, 1996; Nestel, Mercier, & Shaw, 1983).<sup>3</sup> Studies suggest that divorced and separated women experience a 22% to 55%

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<sup>2</sup> If an important variable is omitted from a model, all the estimated coefficients will be biased unless the omitted variable is uncorrelated with every included variable (Ramanathan, 1995).

<sup>3</sup> Standard of living is usually measured by the “income-to-needs” ratio, with the appropriate official poverty threshold as the standard of need.

decline in average total family income, a 16% to 36% decline in average per capita income, and a 7% to 73% decline in the average standard of living. Although income reductions occur at every income level, the steepest declines appear to occur for women with relatively high pre-disruption income (Weiss, 1984; Weitzman, 1985). For example, Weiss (1984) reports that women who were in the upper third of the income distribution before disruption experienced about a one-half reduction in income, while those who were in the lowest third before disruption experienced a one-fourth reduction.

Evidence also suggests a pronounced gender disparity in the economic consequences of marital disruption. For example, Smock (1994) found an increase of 53% in the average per capita income for men but a decline of 16% for women. The most stunning result is reported by Weitzman (1985), who found that women experienced a 73% decline and men a 42% increase in their average standard of living one year after divorce.<sup>4</sup> Some other moderate estimates for the change in standard of living show an increase of 10% to 13% for men and a decline of 13% to 27% for women (Duncan and Hoffman, 1985; Peterson, 1996).

Obviously, women appear to experience an economic deterioration after marital disruption while men do not. However, as Holden and Smock (1991) note, the severity of economic decline might be overstated if women can recover shortly. Existing longitudinal studies have examined up to five years following marital disruption. It is evident that a substantial improvement in economic well-being is unlikely in the short run, unless women remarry (Weiss, 1984; Duncan & Hoffman, 1985; Hill, 1992). Duncan and Hoffman (1985) found that average family income in the fifth year after disruption was 27% higher than the pre-

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<sup>4</sup> In academic, legal, and popular publications, the findings of Weitzman (1985) are the most often cited to illustrate the economic effects of marital disruption. Yet some scholars have seriously questioned the accuracy of the findings. See Peterson (1996) for a review.

disruption level for women who remarried. However, for women who did not remarry, average family income in the fifth year remained around 70% of the pre-disruption level. Weiss (1984) also found relatively little economic recovery during the five-year interval following disruption for women who did not remarry. For women in the upper third of the income distribution when married, the post-disruption/pre-disruption income ratios were .45, .47, .50, .53, and .50 for the five years following disruption. For those in the lower third category, the ratios were .77, .80, .74, .74, and .78.

## **Explaining the Outcomes**

### The Role of Human Capital

Researchers have generally explained the economic outcomes of marital disruption by noting the gender disparity in human capital investment. The essence of human capital theory is that investments in marketable human capital (including education, work experience, and on-the-job training) are conducive to market productivity and earning capability. Much evidence indicates that some portion of earnings differentials can be accounted for by human capital.<sup>5</sup> Therefore, women who have little marketable human capital could fare particularly poorly after a disruption.

Despite the increase in labor force participation by women (particularly married women) over the past two decades (Spain & Bianchi, 1996), the specialization of women in household responsibilities is still a predominant family arrangement (Ferree, 1991; Hochschild, 1989; Biernat & Wortman, 1991; Vannoy-Hiller & Philiber, 1989). Many women limit their work time or job choices to accommodate family responsibilities (Becker, 1985; Polachek, 1981; Zellner,

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<sup>5</sup> For example, Corcoran and Duncan (1979) found that education and work experience explained 35% of the earnings gap between white women and white men and 26% of the gap between black women and white men aged 18 to 64 years. Mincer and Polachek (1974) estimated that work experience accounted for about 45% of the earnings gap between married women and married men aged 30-44 years.

1975). Women work fewer hours than men, have more discontinuous employment histories, and stay out of the work force longer (Jacobsen, 1994; Spain & Bianchi, 1996). Some may also enter less demanding occupations, usually low-paying jobs, which do not reward work experience but do not penalize employment discontinuities.

Empirical findings support the hypothesis that pre-disruption investments in human capital affect economic standing following marital disruption. Many studies indicate that educational attainment is a strong predictor of post-disruption income (e.g., Smock, 1993; 1994; Mauldin, 1990; Mauldin & Koonce, 1990). In addition, women who perform more market work during marriage appear to experience less economic hardship after a disruption (Mauldin and Koonce, 1990; Smock, 1994). However, empirical findings regarding job training are mixed. Mauldin (1990) found that job training before disruption was significantly associated with post-disruption income, but many other studies have not found significant effects.

### The Role of Assets

In addition to human capital, assets could also play an important role in the post-disruption economic well-being of women. Assets cushion income shocks that occur with crises such as major illness, job loss, or marital breakup (Sherraden, 1991). Therefore, assets may help women cope with income shortfalls and maintain economic security after a marital disruption. Assets also allow people to borrow against future income and therefore to smooth their lifetime consumption (Hubbard, Skinner, and Zeldes, 1995; Skinner, 1988; Zeldes, 1989). Deaton (1991) has demonstrated that even a small level of assets can smooth consumption considerably.

The effects of assets on post-disruption economic well-being have not been explored. However, some studies have found positive effects of assets on economic security in other circumstances. For example, in Singapore, asset accumulation in the Central Provident Fund has



improved people's economic well-being, particularly in terms of housing and health care (Sherraden, Nair, Vasoo, Liang, & Sherraden, 1995). Assets have also reduced perceived economic strain among auto workers experiencing a plant closing (Page-Adams & Vosler, 1995). Cheng and Page-Adams (1996) suggest that assets reduce the intergenerational transmission of poverty among female-headed families. Finally, assets appear to be associated with reduced welfare receipt among low-income people with small businesses (Raheim, 1996; Else & Raheim, 1992).

One might expect assets to be associated with higher levels of post-disruption income for three reasons. First, assets may generate income through interests, dividends, rental payments, and so forth. Second, assets may enhance the personal functioning of individuals and subsequently their active engagement in productive activities, including jobs. Sherraden (1991) suggests that asset holding increases personal efficacy<sup>6</sup> and creates an orientation toward future. Greater personal efficacy may foster confidence, a sense of control, and higher effort expenditure. An orientation toward the future may encourage hope, expectation, and long-term planning. Both personal efficacy and future orientation may be important determinants of performance in a wide range of life events. In the economic sphere, a person with these qualities may possess more positive work attitudes and put forth more effort in jobs. At least one empirical study suggests that assets indeed have positive effects on individuals' perceived efficacy and plans about labor market participation, such as finding a new job (Yadama & Sherraden, 1996).

Finally, existing assets may encourage further development of assets (Sherraden, 1991), which again may motivate work behavior. People with assets incur lower costs for additional

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<sup>6</sup> Self-efficacy is a self-judgement of capability to accomplish (Bandura, 1986).

investment. For example, an individual who wants to buy a house or invest in stocks has to devote much time and effort to collect information, understand the processes involved, make choices, and come up with sufficient starting capital, such as a down payment or the minimum amount required to purchase many stocks or funds. The initial cost is especially high. However, as the individual invests more, the average cost usually decreases. Also, rewards generally increase because of better diversification and the ability to choose better investments as knowledge increases. Owning assets itself is an educational process, through which people acquire more knowledge, skills, and experience that may improve efficiency. The increased efficiency and return to investment help individuals to use their incomes more effectively, thereby providing incentives for increasing work effort and accumulating more assets. Taken together, the last two reasons suggest that assets may increase income by motivating people to work, to work harder, and to work more effectively.

## **METHODS AND DATA**

### **Data Source and Sample**

This study uses panel data from the National Longitudinal Surveys of Youth (NLSY), 1979-1994. The NLSY is a nationally representative sample of 12,686 men and women who were 14 to 22 years of age when first interviewed in 1979, including oversamples of blacks and Hispanics. The sample used in this study is limited to women who experienced their first separation or divorce during the period from 1985 to 1989. Respondents who were remarried or cohabiting in the year following the disruption are excluded from the analyses. The final sample has 363 women.

### **Variables**

To examine how women fare after marital disruption, their economic well-being one year after the disruption (denoted as  $t+1$ ) is studied. All but one of the pre-disruption characteristics

of the respondents are examined one year before the disruption (denoted as  $t-1$ ). The exception is family income. In the NLSY, income data are collected using the prior year as the reference year. In other words, at time  $t$  (the year of the disruption), respondents reported their income for  $t-1$ . If women reported being separated or divorced at the time of the survey, however, their husbands' income for the reference year ( $t-1$ ) would not be counted. Therefore, the most complete data on pre-disruption family income are available for  $t-2$ , two years before disruption.

### Dependent Variables

The post-disruption economic well-being of the respondents is measured by total family income and per capita family income at  $t+1$ . Family income is measured as the sum of income from all sources for all family members. Income sources include military income, wages, salaries, tips, farm income, business income, unemployment compensation, Aid to Families with Dependent Children, food stamps, SSI, other welfare, child support, alimony, and other sources such as scholarships, veteran benefits, interest, dividends, and rent. Per capita income is measured as family income divided by family size.

To examine the separate effects of independent variables on various income sources, the family income variable is also decomposed into earned income and unearned income. Earned income equals total earnings from jobs, the military, farms, and businesses. The two categories of unearned income are welfare payments (including AFDC, food stamps, SSI, and other assistance) and private transfers (including child support and alimony). All income amounts are in 1992 dollars. Due to skewness, the income variables are transformed by taking logarithms.

### Independent Variables

Pre-disruption human capital variables include educational attainment, work experience, and job training. They are expected to have positive effects on post-disruption economic well-

being. Educational attainment is the highest educational level completed at t-1. Job training is whether or not any form of job training occurred at t-1. Work experience is the average annual number of hours worked in the years the woman was surveyed since 1979 and prior to t.

A second category of independent variables consists of asset variables, which include the value of financial assets, home equity, and the value of any business or real property at t+1.<sup>7</sup> It is hypothesized that assets have positive effects on post-disruption economic well-being. Financial assets include money in savings or checking accounts, money market funds, credit unions, U. S. savings bonds, individual retirement accounts, 401(k) plans, pre-tax annuities, certificates of deposit, and so forth. Home equity is the market value of the house or apartment where a respondent lives less the amount of mortgage or debt. The value of business or real property is the total market value of investments in farm operations, business or professional practices, or other real estate (excluding the residential property of respondents) less the amount of debts or liabilities. All values are in 1992 dollars and, for multivariate analyses, are transformed by taking logarithms.

A third group of independent variables relates to social support. A small portion of women in the sample lived with relatives after divorce or separation. Family members may provide financial or social resources in times of economic difficulty. They may provide lodging, share living expenses, or provide child care which enables respondents to work. Living with relatives may not be as helpful as expected, however, if relatives do not contribute income (or enough income) to offset the increase in family size. To capture the different effects, social support is represented by two dichotomous variables. The first measures whether women live with relatives (coded 1 if yes); the second measures whether the relatives respondents live with

provide income (coded 1 if yes). It is expected that living with relatives who provide income has a positive effect on post-disruption family income and per capita family income.

Other independent variables include the number of children at t+1 and race/ethnicity (coded 0 if non-Hispanic white). Having more children is expected to have negative effects on post-disruption economic well-being. Non-Hispanic blacks and Hispanics are expected to fare worse than non-Hispanic whites. Year dummies are also included since women who divorce in a particular year may fare better or worse than those who divorce in other years due to changing economic circumstances. The reference year is 1985.

### **Estimation**

Each dependent variable is modeled as a linear function of the independent variables described above. However, since the asset variables can be affected by the dependent variables, they are correlated with the error terms. This endogeneity problem can cause ordinary least squares (OLS) results to be biased and inconsistent (Ramanathan, 1995). Therefore, instrumental variable estimation is used.<sup>8</sup> The instruments for the asset variables at t+1 are their own lags, the log of the value of financial assets at t, the log of home equity at t, and the log of the value of business or real property at t. In addition, since earned income and unearned income are usually correlated, error terms are likely to be correlated across equations involving earnings, welfare income, and private transfers. When such contemporaneous correlation exists, it is more efficient to estimate all equations jointly by using the seemingly unrelated regressions (SUR)

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<sup>7</sup> These assets may have been brought from the marriage or acquired after the disruption. It is impossible to sort out the origins of these assets from the data.

<sup>8</sup> Instrumental variable estimation is a two-stage least squares estimation technique (Ramanathan, 1995). In the first stage, the endogenous independent variable is regressed on its instrument. In the second stage, the dependent variable is regressed on the independent variables, but the endogenous independent variable is replaced by the predicted values calculated from the first stage regression. An instrumental variable should be uncorrelated with the error term and highly correlated with the endogenous independent variable.

estimation technique (Wallace & Silver, 1988).<sup>9</sup> Hence, SUR is also used to estimate equations involving earnings, welfare income, and private transfers.

## FINDINGS

### Descriptive Statistics

Table 1 shows sample characteristics. The sample included 176 white, 116 black, and 71 Hispanic women who first separated or divorced during the period 1985 to 1991. The average respondent married when she was 21 years old, divorced or separated at 26 years, had just over 12 years of education, and had worked an average of 926 hours a year. The average number of children at t+1 was 1.4.

Tables 2-4 present changes in assets and income between t-1 and t+1. As Table 2 indicates, women were less likely to hold all three types of assets after marital disruption. From period t-1 to t+1, the percentage of women holding financial assets, home, and business or real property declined from 56% to 50%, 29% to 14%, and 4% to 3%, respectively.

Table 3 shows the percentage change in average asset values between t-1 and t+1.<sup>10</sup> In general, women who were white, who were more educated, or who had more work experience tended to have more assets at both t-1 and t+1. Job training, however, did not appear to be related to higher average asset values. With only three exceptions, the average values of all three types of assets declined after marital disruption.<sup>11</sup>

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<sup>9</sup> In SUR, the first step is to calculate residuals for all regression equations. Then, the second-round regressions include the first-round residuals as independent variables. Second-round residuals are used as independent variables in the third-round regressions, and so forth. The process of calculating new residuals and re-estimating the equations continues until the estimated coefficients are equal from one run to the next (Wallace & Silver, 1988).

<sup>10</sup> Because many women in the sample had no assets, the median values of assets by characteristics would contain many zeros. To provide more information, average values are used.

<sup>11</sup> The value of financial assets increased for women with at least a college education, and the value of business or real property increased for women with substantial work experience and for black women. Explanations for these increases might include the possibility that highly educated women had better jobs than their husbands (especially when these women worked more after the disruption) or simply the existence of one or more outliers. Since the

Table 4 shows the percentage change in total family income and per capita family income between t-2 and t+1. As expected, non-Hispanic whites had higher incomes than Hispanics and non-Hispanic blacks at both t-2 and t+1. Income increased with education and work experience in both periods. Those who held assets were likely to have higher income levels. Both income measures, however, deteriorated after disruption, regardless of race, education, work experience, job training, or asset holding.

### **Multivariate Regression**

Table 5 shows regression results for log family income and log per capita family income.<sup>12</sup> Both education and work experience significantly increased family and per capita family income. An increase of one year in education increased both family income and per capita family income by 9%. An increase of 250 hours of work experience (corresponding to an increase of five hours a week for year-round workers) increased both incomes by about 4.5%. As for assets, only the log value of financial assets significantly increased both incomes. A one-percent increase in the value of financial assets was associated with an increase of 0.15% in both incomes.

Each child increased the total family income by 14% but decreased per capita family income by 21%. Living with relatives also had a negative effect on per capita family income, but living with relatives who provided income increased both family and per capita family income by more than 80%. Black women received 31% less in income than did white women. Finally, women who divorced or separated in 1986 and 1987 had significantly higher incomes than women who divorced or separated in 1985.

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average value of business or real property for black women at t-1 was low (\$222), the increase at t+1 was not that substantial.

<sup>12</sup> Similar regression results were found when the log values of home and business or real property were replaced by ownership dummies.

A second set of models was used to estimate separately the effects of independent variables on log earnings, log welfare income, and log private transfers (Table 6).<sup>13</sup> Log earnings increased with education and work experience. An extra year of education increased earnings by 31%. An extra 250 hours of work experience increased earnings by 57.5%. Job training and number of children, however, reduced earnings. Among the assets variables, only financial assets increased earnings. A one-percent increase in financial assets increased earnings by 0.31%. In addition, women who divorced or separated in 1987 earned more than women who divorced or separated in 1985.

In the model predicting log welfare income, work experience and log value of financial assets significantly decreased welfare income, while the number of children increased welfare income. A 250-hour increase in work experience decreased welfare income by 45%, while a one-percent increase in the value of financial assets decreased welfare income by 0.55%. An additional child increased welfare income by 63%.

In the model predicting log private transfers, human capital characteristics were not significant. The log value of financial assets had a positive coefficient which was significant at the 10% level. Log private transfers increased with the number of children. Black women received substantially less in private transfers than did white women.

As mentioned earlier, omitting important variables might bias estimation results. Does omitting assets affect the estimates for the other variables? Table 7 shows the coefficients of the human capital variables in models with and without asset variables. The magnitudes of the education and work experience coefficients were consistently larger in the models without asset

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<sup>13</sup> Again, similar regression results were obtained when the log values of home and business or real property were replaced by ownership dummies. Also, similar results were found when SUR was used to estimate only the equations of log earnings and log welfare income instead of all three equations together.



variables than in the models with asset variables. The increase in magnitudes ranged from 17.4% for work experience in log earnings to 850% for education in log welfare income. When asset variables were excluded, the effects of assets appear to have been captured by the human capital variables.

## **DISCUSSION AND CONCLUSION**

This study confirms prior research showing that women experience declines in economic well-being following marital disruption. The NLSY data suggest decreases of 40% and 24%, respectively, in average family income and per capita income. These values are within the ranges suggested by previous research. Also, both the percentage of women holding assets and average asset values declined after disruption. There were declines of 31%, 57%, and 14%, respectively, in the average value of financial assets, home equity, and business or real property.

With regard to factors that explain post-disruption economic well-being, some of the regression results reported here confirm previous research while others bring forth new evidence. As expected, both education and work experience increase post-disruption earnings, and work experience decreases post-disruption welfare receipt. However, this study finds that job training does not significantly affect post-disruption economic well-being, except that it has a negative effect on earnings. The measurement of job training, however, may have biased the results. As in most past research, job training was measured dichotomously, and different kinds and different sources of training were grouped together. If the effects of job training on income vary with different training programs, these effects might then be poorly captured. As Veum (1995) suggests, some forms of training, such as company training and seminars outside of work, are more effective than the others.

Past results regarding the effects of race and children on post-disruption income are confirmed.<sup>14</sup> Black women receive less total family income, per capita family income, and private transfers than white women. And, women with more children tend to rely more on welfare payments, child support, and alimony, and less on earned income. These patterns may indicate that the need for or cost of child care constrains women's job opportunities or forces them to remain at home. Also, this study shows that financial support from social networks increases post-disruption economic well-being of women and their children, at least in the short run.<sup>15</sup>

While assets are excluded from existing studies, this study finds that assets have a positive effect on the post-disruption economic well-being of women. Because financial assets significantly increase income (including earnings) and reduce welfare receipt, financial assets seem to serve as a buffer against the economic effects of marital disruption. As discussed earlier, assets may generate income and may also be an impetus for increased work effort. At the same time, the decrease in welfare income could also be due to loss of eligibility resulting from asset holding. Though the mechanisms by which financial assets reduce welfare receipt cannot be clearly identified, it is reasonable to expect that an increase in financial assets will reduce welfare dependency even in the absence of the eligibility issue.

Most of the existing research on divorce uses samples collected from a time frame of more than one year. Year-to-year variation in the broader economic circumstances, however, may affect economic well-being. Existing studies have rarely considered this possibility, and

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<sup>14</sup> Women who are black fare worse than white women and having more children negatively affects post-disruption income (Mauldin & Koonce, 1990; Smock, 1993; 1994).

<sup>15</sup> Smock found that living with relatives had a positive effect on post-disruption income in one study (1993) but a negative effect in another (1994).

estimation results may therefore be biased.<sup>16</sup> This study finds that women had greater post-disruption earnings when they divorced or separated in 1987 than in 1985. That means that earnings (in constant dollars) were higher in 1988 than in 1986. Also, women had more post-disruption family income and per capita family income when they divorced or separated in 1986 and 1987 than in 1985. That is, incomes were higher in 1987 and 1988 than in 1986. Data from the U.S. Bureau of the Census (1997) indicate that the annual unemployment rate was lower and per capita gross domestic product (GDP) was higher in 1987 and 1988 than in 1986.<sup>17</sup>

Although divorce rates have declined over the past two decades, the likelihood of marital instability remains quite high. Therefore, it is important to identify programs and policies that help women and children avoid large declines in economic well-being following marital disruption. Like other studies, this study suggests that policies that promote human capital would help prepare women and children for the possibility of marital disruption. In addition to human capital investment, this research also suggests that asset accumulation could be a potential strategy to protect women from economic insecurity. In fact, the number of state and local programs designed to promote asset accumulation has grown rapidly during the 1990s. In particular, Individual Development Accounts (IDAs), which encourage asset building through matched savings, are now under a national policy demonstration, and an in-depth evaluation is

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<sup>16</sup> See note 2. When year dummies were excluded from the models, the estimated coefficients changed moderately. The magnitudes of the changes varied from model to model. In the models of log per capita income, for example, the magnitudes of the coefficients were somewhat larger for the human capital variables and the race variable, but somewhat smaller for the financial assets and social support variables.

<sup>17</sup> The annual unemployment rate was also lower and per capita GDP was also higher in 1989 and 1990 than in 1986. However, the coefficients for the 1988 and 1989 dummies were insignificant in all models, except the 1988 dummy in the model of log earnings, which was significant at the 10% level. It is unclear why the 1988 and 1989 dummies did not have income effects. Still, most of the year dummies had positive (negative) coefficients in the earnings and incomes (welfare income) equations. This pattern is consistent with the expectation that when macroeconomic conditions are better, average income is higher and dependence on welfare is lower, even for divorced women.

under way. If IDAs are found to be effective, they could be a promising approach to protect women from economic adversity, particularly due to marital disruption.

This study also has implications for research. First, since both human capital and financial assets appear to be important predictors of post-disruption economic well-being, future research should examine under what situations, or for whom, one of these resources may be more important than the other. Second, future studies should strive to identify the mechanisms through which financial assets improve post-disruption economic well-being. Finally, since the coefficients for education and work experience appear to be biased when asset variables are omitted, it is important to include asset variables in future studies of post-disruption economic well-being. Researchers should also consider including asset variables in other studies of personal well-being.

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**Table 1. Sample Characteristics (N=363)**

	Mean	Standard Deviation
Non-Hispanic black	0.32	—
Hispanic	0.20	—
Age at marriage	20.68	2.76
Age at divorce/separation	25.75	2.64
Years of education (t-1)	12.30	1.86
Work experience prior to t (average annual working hours)	926	617
Number of children (t+1)	1.38	1.23

**Table 2. Asset Holding Before and After Marital Disruption, by Asset Type**

	Financial Assets		Home		Business/Real Property	
	t-1	t+1	t-1	t+1	t-1	t+1
Number of women with assets	166	148	85	41	12	9
Percentage of women with assets	56	50	29	14	4	3

**Table 3. Percentage Change from t-1 to t+1 in Average Asset Values**

Characteristic	Financial Assets		Home Equity		Business/ Real Property	
	Value at t+1	Percent Change	Value at t+1	Percent Change	Value at t+1	Percent Change
All	\$1,215	-31%	\$8,772	-57%	\$1,119	-61%
Race						
Non-Hispanic black	469	-65	5,753	-25	246	11
Hispanic	972	-38	6,589	-49	0	0
Non-Hispanic white	1,826	-13	11,735	-63	2,184	-63
Human Capital						
1. Education (t-1)						
No high school	146	-57	506	-94	0	0
High school	687	-55	3,889	-77	38	-94
Some college	1,345	-55	27,498	-5	3,897	-7
College and more	6,310	42	8,492	-81	2,874	-84
2. Work Experience before t (average annual working hours)						
0-874	530	-48	3,172	-72	134	-84
875-1749	2,283	-5	5,810	-77	1,848	-66
1750 and more <sup>a</sup>	2,075	-11	31,758	-19	1,691	30
3. Job Training (t-1)						
Yes	650	-60	10,210	-54	0	0
No	1,276	-28	8,621	-57	1,236	-61

Note: All values are in 1992 dollars.

<sup>a</sup> 1750 corresponds to working 35 hours a week year-round.

**Table 4. Percentage Change from t-2 to t+1 in Average Income Variables**

Characteristic	Total Family Income		Per Capita Family Income	
	Income at t+1	Percent Change	Income at t+1	Percent Change
All	\$19,157	-40%	\$9,155	-24%
Race				
Non-Hispanic black	15,243	-44	6,460	-24
Hispanic	20,227	-29	8,194	-15
Non-Hispanic white	21,270	-41	11,302	-24
Human Capital				
1. Education (t-1)				
No high school	11,940	-43	4,131	-20
High school	17,442	-41	6,515	-34
Some college	22,471	-38	13,161	-13
College and more	36,295	-39	25,259	- 22
2. Work Experience before t (average annual working hours)				
0-874	14,015	-44	5,509	-29
875-1749	23,039	-37	11,886	-23
1750 and more <sup>a</sup>	27,111	-39	14,883	-17
3. Job Training (t-1)				
Yes	16,743	-42	9,490	- 2
No	19,432	-40	9,117	-23
Assets at t+1				
1. Home Ownership				
Yes	23,510	-30	10,846	-4
No	18,482	-42	8,893	-27
2. Business/Real Property Ownership				
Yes	32,883	-29	20,951	-5
No	18,704	-41	8,766	-25
3. Financial Assets				
Yes	24,447	-39	13,207	-17
No	13,695	-44	4,972	-40

Note: All values are in 1992 dollars.

<sup>a</sup> 1750 corresponds to working 35 hours a week year-round.

**Table 5. Regression Analysis of Log Total Family Income and Log Per Capita Family Income**

Independent Variable	Coefficient (p-value)	
	Log Total Family Income	Log Per Capita Family Income
Human Capital		
Education	0.09 (0.00078)	0.09 (0.0082)
Work experience before t	0.00018 (0.0461)	0.0002 (0.0346)
Job training (no training)	-0.22 (0.1116)	-0.13 (0.3697)
Assets		
Log value of financial assets	0.15 (0.0001)	0.15 (0.0001)
Log value of home equity	-0.0049 (0.8211)	-0.0111 (0.6255)
Log value of business/real property	-0.05 (0.5037)	-0.03 (0.7249)
Number of children	0.14 (0.0035)	-0.21 (0.0001)
Race		
Non-Hispanic black (non-Hispanic white)	-0.32 (0.0029)	-0.31 (0.0061)
Hispanic (non-Hispanic white)	-0.08 (0.5367)	-0.11 (0.4102)
Social Support		
Living with relative(s) (no relative)	-0.02 (0.8640)	-0.74 (0.0001)
Living with relative(s) who contribute income (no contribution)	0.90 (0.0001)	0.84 (0.0001)
Year of Marital Disruption		
1986 (1985)	0.42 (0.0021)	0.47 (0.0015)
1987 (1985)	0.33 (0.0161)	0.30 (0.0392)
1988 (1985)	0.19 (0.1323)	0.21 (0.1158)
1989 (1985)	0.11 (0.4147)	0.15 (0.3237)
Constant	7.51 (0.0001)	7.14 (0.0001)
Adjusted R <sup>2</sup>	0.28	0.49

Note: Categories in parentheses are reference groups.

**Table 6. Regression Analysis of Log Earnings, Log Welfare Income, and Log Private Transfers**

Independent Variable	Coefficient (p-value)		
	Log Earnings	Log Welfare Income	Log Private Transfers
<b>Human Capital</b>			
Education	0.31 (0.0393)	-0.04 (0.7909)	0.04 (0.8120)
Work experience	0.0023 (0.0001)	-0.002 (0.0001)	0.00014 (0.7292)
Job training (no training)	-1.38 (0.0303)	0.16 (0.8070)	-0.19 (0.7836)
<b>Assets</b>			
Log value of financial assets	0.31 (0.0306)	-0.55 (0.0001)	0.26 (0.0892)
Log value of home equity	0.04 (0.7248)	-0.08 (0.4649)	0.11 (0.3400)
Log value of business/real property	-0.24 (0.5672)	-0.24 (0.5764)	-0.07 (0.8844)
Number of children	-0.38 (0.0535)	0.63 (0.0013)	0.98 (0.0001)
<b>Race</b>			
Non-Hispanic black (non-Hispanic white)	0.64 (0.1689)	-0.47 (0.3091)	-1.49 (0.0031)
Hispanic (non-Hispanic white)	-0.27 (0.6238)	-0.07 (0.8962)	-0.12 (0.8338)
<b>Social Support</b>			
Living with relative(s) (no relative)	0.60 (0.2147)	-0.86 (0.0770)	-0.69 (0.1849)
Living with relative(s) who contribute income (no contribution)	0.09 (0.8897)	-0.17 (0.7982)	-0.07 (0.9292)
<b>Year of Marital Disruption</b>			
1986 (1985)	0.29 (0.6419)	0.21 (0.7342)	0.82 (0.2275)
1987 (1985)	1.17 (0.0528)	-0.28 (0.6480)	1.11 (0.0882)
1988 (1985)	1.00 (0.0817)	-0.61 (0.2881)	0.57 (0.3633)
1989 (1985)	0.89 (0.1546)	-0.43 (0.4917)	-0.18 (0.7907)
Constant	-0.10 (0.9526)	6.77 (0.0001)	0.02 (0.9931)
Adjusted R <sup>2</sup>	0.36	0.38	0.09

Note: Categories in parentheses are reference groups.

**Table 7. Estimated Coefficients of Education and Work Experience in Models With and Without Assets**

Dependent Variable	Education		Work Experience	
	With Assets	Without Assets	With Assets	Without Assets
Log Total Family Income	0.09	0.15	0.00018	0.00038
Log Per Capita Family Income	0.09	0.15	0.00020	0.00040
Log Earnings	0.31	0.45	0.00230	0.00270
Log Welfare Income	-0.04	-0.38	-0.00180	-0.00260
Log Private Transfers	0.04	0.21	0.00014	0.00055