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Joseph Lupton
James P. Smith

DRU-2215-NICHD

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Prepared for
National Institute of Child Health and Human Development

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MARRIAGE, ASSETS, AND SAVINGS*

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November 1999

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Introduction

In the last two decades, there has been considerable research documenting the economic consequences of differences among and transitions between alternative household arrangements (Smith (1988)). Invariably, these studies have used some definition of income as the index of economic well-being. While income is certainly critical, wealth is an important complimentary measure of a household's command over economic resources. Especially in longitudinal surveys, studies that use wealth also have the advantage of informing us about the impact alternative family arrangements have on individual and aggregate savings, a subject about which we currently know relatively little.

One reason most existing research has used income rather than wealth is that until recently either wealth was not measured at all or was measured quite poorly in the social science household surveys (Browning and Lusardi (1996)). These data limitations were so severe that it discouraged theoretical speculation about the impact of alternative household configurations on savings behavior. Fortunately, this situation has been changing rapidly as a number of social science household surveys now include well-designed wealth modules.

This paper explores the relationship between household type and asset accumulation. Households are distinguished principally along standard demographic lines--whether they marry, divorce, separate or become widowed. To accomplish this goal, we rely on two household surveys with high quality wealth modules. The first --the Health and Retirement Survey (HRS)--is ideal for depicting the nature and magnitude of wealth disparities across households in a relatively narrow age range. Wealth is one of the core HRS modules, and as a result, considerable survey resources were spent in improving the quality and inclusiveness of the asset information collected. The second survey is the Panel Study of Income

Dynamics (PSID) which included wealth modules in its 1984, 1989, and 1994 waves. PSID data are useful not only since they cover the complete age span of households, but because they allow use to model changes in wealth holdings of individuals living in the same or in different types of households across time. Furthermore, the PSID provides information regarding households' saving in various assets excluding any capital gains that they had in such important assets as a home, business, or the stock market.

This paper is divided into four sections. The first section summarizes some theoretical reasons why different types of households may save at different rates. The second section uses the HRS to highlight the principal cross-sectional wealth differences among alternative household arrangements. Section 3 describes household wealth changes that are associated with marital status transitions. The final section of the paper uses the 1984, 1989, and 1994 wealth modules of the PSID to model household savings behavior associated with alternative marital states.

Section 1- Theoretical Considerations

Does the institution of marriage increase or decrease aggregate national savings? Will two people save more collectively as two unrelated individuals or will they have more assets as a married couple? Despite the simplicity of the question and the sharp secular changes taking place in the prevalence of marriage, very little theoretical or empirical research has addressed this issue. Family composition may affect savings in a number of ways. There is at least one good theoretical reason why marriage could depress savings. One motivation for savings is to insure against future uncertainties, such as income or job loss or episodes of poor health (Mincer (1978)). In part, marriage is a risk reducing institution, as individual members insure each other against life's vagaries. To provide a simple but empirically relevant

example, one spouse may increase their labor supply to offset job problems faced by the other. Similarly, spouses may care for each other in times of poor health, lessening the necessity of accumulating a nest egg for future medical costs. For these reasons, precautionary savings may be higher for single household than for married ones.

Marriage may also be a wealth enhancing institution, disproportionately altering total output and total consumption. Complementarities in production among the partners implies that the total product of the married couple is larger than the sum of the outputs of each produced separately (Becker (1981)). In contrast, economies of scale in consumption suggests that the couple could achieve the same utility with less combined expenditure than the sum of their individual consumption if living apart. Indeed, it is these shared costs (housing, food preparation, etc.) that justify the widespread use of household equivalence scales. There are wealth and price effects associated with this effect of marriage (see Hurd (1998)). Of course, this additional wealth could all be used for additional consumption leaving savings unaffected. However, if bequests are related to household wealth, the net implication of this more than proportionate expansion in output and less than proportionate increase in consumption is that marriage should expand savings.

The price effects are due to scale economies of household consumption. Consider the extreme where there is a single consumption good which is a pure public good. The best example may be housing where two may well be able to live as cheaply as one. Two single people could live alone their entire lives, or they could marry for part of their lives and be single (divorced) thereafter. For the purposes of this argument, let incomes be unaffected by marriage and let divorce be exogenous. If demand for this consumption good (housing) is completely price inelastic, then the couple will smooth

over the married and divorced states the combined utility they receive from housing. But this smoothing implies lower consumption expenditures while married compared to the combined expenditures while single. The implication then is that the household will save during the years while they are married to finance the additional combined housing expenditures when single.

This conclusion must be tempered by the assumption of zero price elasticity. Economies of scale have made housing consumption cheaper during the married years and the couple may respond by purchasing more housing (e.g., a bigger house). Any additional housing consumption would reduce the savings enhancing effects of marriage, and if the price elasticity exceeded one, total consumption expenditures could actually increase (and savings fall) while married. Barring this case which seems to us at least unlikely, there is a presumption then that both the wealth and price effects due to the economies of scale will produce higher savings rates during the married years.

One of the central distinctions in economic models of savings is between permanent and transitory income shocks. With no uncertainty and perfect access to capital markets, the combination of current non-human wealth and human wealth (or permanent income) rather than current income is the determinant of household consumption (Deaton (1992), Friedman (1957)). Increases in permanent income will be consumed while temporary income increments will be saved. This rigid distinction between the influence of permanent and current income is weakened somewhat if we relax the two caveats on capital markets and uncertainty. Imperfect capital markets and incomplete foresight would both assign to current income an independent role in determining current consumption, a role that will

likely depend on the life-cycle stage.[1]

These distinctions should carry over to marital status transitions. If a transition into separation or divorce is seen as relatively transitory with reconciliation or remarriage on the near term horizon, the disrupted family should try to maintain prior consumption levels and absorb more of their income loss through dissavings. The distinction made above between permanent and transitory income may also vary across alternative household configurations. It seems reasonable, for example, that divorced or separated families as well as those more recently married who have less collateral or assets would more likely absorb a current income decline by partly reducing consumption.

There are several other effects of marriage that may impact on savings decisions. A number of authors have argued that marriage is 'protective' of health thereby reducing mortality rates of spouses at older ages (see Lillard and Weiss (1996)). This protective effect of marriage is larger for men than women as women provide more care that enhances the health of their partner. Increases in life-expectancy should encourage more wealth accumulation in order to store up funds for this longer life time of consumption. If the ages of retirement do not change, the married household should reduce somewhat its per period consumption flow, thereby accumulating more assets which it then depletes over a longer post-retirement period.

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[1] If families are not free to borrow and lend at constant market interest rates, it follows that if current income falls, the family is more likely to be pressed against credit constraints and to be forced to reduce its current consumption. Consumption should move more closely with current income in such a world, when compared to a situation in which perfect capital markets prevail. Similarly, in the perfect certainty case, there would be no surprises, so that fluctuations in income would not force families to revise their expectations of lifetime wealth. If future income is uncertain, however, year-to-year changes are not completely innocuous from a lifetime perspective, for they provide signals about more distant income prospects and hence influence wealth (and therefore consumption). Ultimately, the effects of unexpected current income on consumption depend upon the income process itself.

Children are one of the primary products of the family and therefore may well be a central reason why savings varies across family types. Almost by its very nature, the rearing of children is a forward-looking activity. Marriage may positively sort people with an eye for the future who subsequently end up with larger families. Indeed, Fisher (1930) in his classic work argued that children should enhance savings since they encourage time preference for the future. Similarly, a positive bequest motive should flatten consumption and wealth profiles especially at older ages (Hurd (1990)) as families preserve some of their wealth to transfer to their heirs. Inter-generational bequests take the form of both human capital and financial transfers. With declining rates of return to human capital investments, families will initially specialize in these investments so that financial bequests will only kick in at higher income levels (Becker (1981)). This argument suggests that significant asset accumulation for bequests may only be operative at high incomes.

The expected relation of children and assets is complicated, because, in a life-cycle framework, the effect of childbearing on family savings flows through a number of additional channels. On the consumption side, children have two effects. Obviously, the needs of children must be met and the demands of commodities complimentary with children will also increase. In addition, parents' consumption may change as the allocation of their time between the market and home is altered. Whether the family as a whole will consume more of less depends, however, on whether market purchased goods are, on net, substitutes for or complements with children and household time.[2]

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[2] Whether family consumption rises or falls may also depend on the current consumption of the family's consumption bundle. For example, if the family already owns a house and other goods which are complimentary with children, then the birth of a child would affect total consumption mainly through its impact on goods which are

Given the impact of children on total family consumption, their effect on savings and asset accumulation will depend on whether the reallocation of household members' time lowers family income more than family consumption. The dominant linkage on the income side is the reduction in family income that results from the well-established lower work effort of women induced by the presence of a young child. The impact of a child may depend critically on the ages of children as well as their numbers. At older ages, parents may save to accumulate funds for such child related expenses as the costs of college. These arguments suggest that it may be necessary to disentangle these life-cycle factors before isolating any effect of children through bequests. For example, the effect of children on savings may well be negative early in the life-cycle when the labor supply depressing effect of children is large, but positive at older ages when college is on the horizon.

One well-known difficulty that precludes any direct causal interpretation of wealth differences across households is that the distribution of households across family types is decidedly non-random. Low income families are the most likely to dissolve, either through widowhood, separation, or divorce. Given dissolution, low income households are also less likely to remarry within any fixed time frame. Therefore, any association between wealth and family type could reflect selectivity as well as the consequences of specific marital transitions. Cross-sectional surveys, such as the HRS base line used in the next section, are inherently incapable of distinguishing between selectivity and behavioral effects. Instead, these HRS cross-sectional patterns are simply meant to isolate and illustrate the magnitude and

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substitutes, raising the likelihood that total consumption will fall. Conversely, new families who have not yet purchased these child-complimentary goods will be induced to do so when their first children are born. Therefore, the effect of children on total may be a function of the age of the family and the child.

direction of the key associations between wealth and family type. To begin making theoretical distinctions, the Panel Study of Income Dynamics is used in Section 3 for further analysis.

Section 2- Wealth Differences Across Household Types

This section summarizes wealth disparities obtained from the baseline wave of the HRS, a nationally representative sample of 7608 households that contain a member born between 1934 and 1941 (51-60 years old).[3] Given its focus on the pre-retirement years, the principle objective of HRS is to monitor transitions in retirement, income, wealth and health. Each spouse was interviewed in married families. Because of their increasing importance in the policy debate, geographic areas with high-density Black and Hispanic households were over-sampled at a rate of two to one.

Table 1 highlights some salient characteristics of wealth disparities, with an emphasis on stratification by marital status.[4] First, much more so than income, the distribution of wealth is severely skewed. Mean wealth is 2.4 times the median, suggesting that the bulk of wealth is concentrated among relatively few households. Second, race and ethnic disparities in wealth are enormous, far outdistancing income differences. For example, for every dollar of wealth a middle-aged white household has, Black (Hispanic) households have 27 (30) cents.

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[3] For a more detailed description of the HRS design, see "An Overview of he Health and Retirement Study " by F. Thomas Juster and Richard Suzman.

[4] Household wealth in HRS consists of a number of categories. First, the "knowledgeable" respondent was asked about the existence and value of housing in the form of a house or apartment; second homes farm or ranch; and mobile homes. On the liability side of the housing balance sheet, values of first mortgages, second mortgages, home equity loans, and all mortgages on second homes were obtained. In addition to housing, assets are separated into the following eleven categories in HRS; other real estate; vehicles, business equity; IRA or Keogh; stocks, trusts, or mutual funds; checking, saving, or money market funds; CD's, government savings bonds, or treasury bills; other bonds; other savings and assets; and other debt (see Smith (1995)).

This table also demonstrates that net worth varies significantly across marital categories. Not surprisingly, wealth is highest among married spouse present respondents. Somewhat distinct perceptions of the magnitude of the disparities are obtained, depending of whether means or medians are used as the yardstick. With married couples as the reference group, median wealth disparities are considerably larger, a difference that flows from the much higher heterogeneity of asset holdings within any of the not currently married groups. For example, mean wealth is almost five times the median among never married households, twice the multiplier that exists among married families. Many never-marrieds apparently possess considerable wealth while others have quite limited resources. This more extreme separation into haves and have-nots also characterizes the other not currently married samples. Because they better mimic the typical household in each group, medians will be used to describe wealth differences across marital groups.

Median assets of married households run at least three to four times larger than any of the other groups. Widows have approximately one-third the wealth of married families, while the divorced and never-married possess about one-forth. By far the largest discrepancy takes place among those who had separated. Median net worth of separated households is only six cents on the dollar of the wealth of married households. In all cases, married couples' net worth is far more than twice that in other household configurations, indicating that something more than the simple aggregation of individual savings behavior is taking place.

The second point to note is that these marital disparities are much larger among Blacks and Hispanics. In particular, net worth is shockingly low among both separated or never-married minority

households. Median wealth among blacks (Hispanic) separated households is only $594 ($150), trivial relative even to separated white households. Similarly, among never-marrieds, Hispanic median net worth is only $500 and the average such black household has virtually no assets. Since a very inclusive wealth concept is being used (including housing equity), the fact that total net worth in these families is always less than one thousand dollars is impressive. While they fare somewhat better, minority widowed and divorced households also score low in these asset comparisons. While median wealth in widowed white households is slightly less than half that of married white couples, the corresponding ratio among Black (Hispanic) households is 19 (17) percent.

These large disparities among alternative household structures may account for some of the racial wealth gap. Blacks are far more likely than whites to reside in household arrangements that typically have low wealth. Forty-three percent of blacks live in married households compared to more than 70 percent of whites. However, these large racial differences in prevalence rates only 'explain' 10 percent of the racial wealth gap.[5]

In addition to these disparities in asset levels, there are also differences across families in the composition of assets. While this paper does not offer a theory of asset portfolio composition, Table 2 displays a three-part division of mean assets into tangible (business, real estate, etc.), financial, and equity held in the primary residence. With the exception of widowed and never-married, home equity comprises a roughly similar proportion of net worth across family type. Widowed households hold a much higher fraction of their wealth in housing than single households do. Since both type of

[5] This number was obtained by applying the white percents in alternative household types to the black means.

households have similar relative financial holdings, the offset occurs in the tangible investment category. Across all household types, real investments are highest among the never-married and lowest among widowed families.

Financial assets also vary significantly among these households. In particular, in absolute dollars financial assets are lowest among separated or divorced families. This may suggest that, as assets are lost with the end of a marriage, the first dollars to go are those held in financial forms. In contrast, these households may attempt to maintain their homes and other real investments.

Not only are there impressive cross-sectional wealth differences by marital categories, persistent and quantitatively large disparities emerge by duration in a state. Table 3 lists net worth arrayed by duration of marriage for HRS households. For example, median net worth among HRS couples married thirty five years or more are 64 percent larger than the median wealth of couples married during the last five years. Since HRS respondents fall within a relatively narrow age ban, age differences among the households cannot explain these duration patterns. There exist equally pronounced duration effects in the divorced or separated state, but now wealth is lower the longer the separation or divorce. This association is particularly pronounced among those whose marriages ended more than fifteen years ago, almost 40 percent of all HRS households. One possible explanation for this pattern could follow from habit formation. If there are returns to scale that allow for higher levels of consumption in marriage, then divorce or separation combined with persistent habits in consumption would lead to a large reduction in saving and hence a wealth gap relative to married households that grows over time.

Wealth disparities across family configurations also vary with the gender of the household head. Sex differences in market earning power remain large translating into very different capacities to save. Assets are indeed dramatically lower in divorced, separated or widowed households that are headed by women. Table 4 indicates that median assets in these female headed households are two-thirds of those in similarly situated male headed families. This sex distinction, however, only applies to white households with no systematic pattern of a gender difference in minority households.

There are several possible reasons for these gender differences. Because children typically remain with their mother, the consumption requirements in female headed families may be higher. These higher consumption needs may not be fully offset by alimony and child support transfers from the father. Even if the assets built up during the earlier marriage were split evenly between the spouses, assets derived before or subsequent to that marriage are typically not joint property. The ability to accumulate these assets are in part tied to the differential earning power of each spouse. Moreover, savings are likely to be a highly non-linear function of wages, implying that these gender differences in wealth may only emerge at sufficiently high wages. Since sex differences in wages are much smaller and wage levels lower in black families, smaller gender wealth disparities may result.

As defined to this point, personal net worth is a conventional but narrow wealth concept. Most important, it ignores some fundamental claims on future income flows. Fortunately, the measurement of wealth can be expanded in the HRS to include the two most prevalent such claims-social security and pensions. These often-neglected components are not only quantitatively large, but they may be distributed quite differently across family types. Private and public sector social security

are important sources of household wealth, particularly among the middle-aged Americans in the HRS sample.[6]

Table 5 illustrates the effects of a more comprehensive definition of household wealth. In this age range, personal net worth represents slightly more than half of total wealth while social security constitutes 26 percent and pensions 22 percent. The impact of this broadening is even greater on the median household. Of the three categories, personal net worth is the most unevenly and social security by far the most equally distributed. The equalizing character of social security drives the differences that emerge between the conventional and comprehensive wealth concepts. Social security is especially important for the average household, because, for them, it dwarfs conventionally defined personal net wealth.

Broadening the definition has a significant impact on wealth disparities across family types, especially for the average household. Most of these differences reflect the equalizing impact of social security. Evaluated at the medians, the typical married couple has more social security wealth than personal net worth. Social security is far more dominant in all other household types. The most extreme example occurs among separated households who have more than seven dollars of social

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[6] All HRS respondents were asked their current accumulation for defined contribution plans and their expected income flow and age of receipt for defined benefit plans. These questions were asked for all plans on the current and past jobs. Computation of pension wealth requires estimating current and expected incomes across all plans, past and present for each respondent. A similar procedure was used to compute social security wealth in the HRS. Respondents were asked to estimate their future expected age of initial social security receipt as well as expected payments. Once benefit levels were estimated, translating them into pension and social security wealth required assumptions concerning real interest rates, expected inflations (for those plans without COLA's) and expected mortality. For simplicity, a real interest rate of 2.75 percent was assumed for social security and pensions with a COLA and 6.75 percent for pensions without COLA's. See Smith (1995) for the details of these wealth computations.

security wealth for every dollar of personal net worth. While less extreme, social security wealth also looms large in other types of dissolved households, averaging about twice personal net worth

Section 3- Household Structure and Savings Behavior

To this point, cross-sectional differences in wealth by marital categories have been described. However, models of asset accumulation require longitudinal data to test even their most basic implications. To model the dynamic process of household accumulation across the full life-cycle, the 1984, 1989 and 1994 wealth modules of the Panel Study of Income Dynamics (PSID) will be used. PSID has gathered thirty years of extensive economic and demographic data on a nationally representative sample of approximately 5000 families and 35,000 individuals who live in those families. All individuals who were part of the original 1968 sample frame remain panel members no matter what their subsequent family arrangement. Therefore, both spouses of a couple married in 1968 will be interviewed following their divorce or separation. However, if the couple married after 1968, only that partner who was in the original 1968 sample is retained in the panel.

The 1984, 1989 and 1994 waves of the PSID included supplements detailing household wealth. The definition of personal net worth in the PSID closely parallels that used in the HRS; housing equity, other real estate, autos, farm or business ownership; stocks, checking or savings accounts, C.D.'s, savings bonds and IRA's; bonds, trusts, life insurance; and other debts. No attempts were made in the PSID to measure social security or pension wealth.

Our principal interest with the PSID rests in the change in assets between the three wealth supplements. Before examining that issue, a basic distinction must be made between families who

maintained the same marital status between two successive wealth modules, and those families who altered it during that time period. Only the former families have asset growth that can be interpreted as partly mirroring their savings behavior. The changing asset position of families undergoing marital transitions largely result from the addition and subtraction of assets of incoming and outgoing family members. For example, a divorced 1984 family head who remarried by 1989 will typically exhibit a very large expansion in assets that has little to due with savings behavior. Instead, this growth merely reflects the combining of assets of the previously divorced household with those of the new household to whom it married. Similar problems confound the interpretation of asset changes for 1984 married families who dissolved by 1989.

We use various subsets of the PSID in Tables 6 though 12 to control for the issues mentioned above. First, Tables 6 and 7 restrict the original cross section samples in 1984 and 1989 (6,915 and 7,111 households respectively) to the same head of household in both of these years reducing the sample to 5,273 households. The analysis presented in Tables 8 through 11 further restrict the samples to control for changes in saving resulting from transitions into and out of marital states. To do this, the cross section samples in 1984, 1989 and 1994 (the 1994 sample consists of 8,623 households) are combined into two samples. The two samples examine the same head of household over the five year period (1984 to 1989; 1989 to 1994) whose marital state was unaltered over this period. These consist of 4,408 and 4,416 households, respectively. Finally, Table 12 examines within household variation and is restricted only to the same head of household in each year from 1984 to 1994 (4,065 households). All dollar values are presented in 1996 dollars.

Table 6 lists net worth for families stratified by their household status in 1984 and their subsequent transition by 1989. Table 7 is a companion table that lists the changing family income between 1984 and 1989. While not-shown in these tables, the basic patterns are almost identical if PSID wealth waves 1989 and 1994 were used instead. Even after sub-stratification by these marital transitions, observed initial 1984 asset levels had the same ranking as the cross-section--married, widowed, divorced, never married and separated. The first set of families to consider are the fixed state households--those who were in the same marital situation in 1984 and 1989. As mentioned above, such families provide the only legitimate test of differential savings behavior across households. Among these fixed marital state families, there is some suggestive evidence of a relationship between marriage and savings. Households who were continuously married enjoyed a large increase in mean assets of 4.7 percent per year. In contrast, asset growth for continuously divorced households was 3.2 percent per year, was essentially zero for separated families and was actually negative among widowed families. Never-married households actually had the largest asset expansion, but this could largely result from their relatively young age. Indeed, the absence of any control for confounding factors such as age argues against any strong savings interpretation of the data listed in table 6. For example, widowed households are among the oldest households and there asset decline may result more from their life cycle position than from their marital status.

A comparison of Tables 6 and 7 indicates that wealth differences among those in the fixed state sample are larger than the household income disparities of these households. For example, in 1984 median income of continuously married couples exceeds that of divorce households by about two to

one while median wealth of these married families are four times higher than divorced households. Even larger income-asset discrepancies exist for separated families. In this case, median incomes of continuously married families are almost four times larger than median incomes of separated families while the wealth of married families are 80 times larger than asset levels of continuously separated households. These asset- income ratios across family types suggest that income disparities among alternative household configurations alone cannot account for the vastly different wealth positions of these households.

Tables 6 and 7 also demonstrate why selectivity is such a central part of the association between marriage and savings. Table 6 indicates that married couples have more income than those in other marital situations. But Table 6 also shows that even among those initially married households, families that subsequently dissolved have lower incomes to begin with. Similarly, divorced or separated families who remarried by 1989 have higher pre 1984 incomes than those families who remained unmarried. In general, a marriage transition that can be characterized as economically downward (upward) ex-post is associated with lower (higher) ex-ante family income.

Table 6 shows that this selectivity also characterizes and is indeed much stronger on initial asset levels. Among currently married couples in 1984, those who subsequently divorced or separated have less than half the assets of those who remained married by 1989. A parallel ranking exists for divorced families in 1984 with those who subsequently remarried possessing much larger assets even in 1984.

Finally, Table 6 summarizes the changing net worth position of households who did undergo a marital transition between 1984 and 1989. These asset changes largely reflect the addition or

subtraction of household members associated with the union or split. For example, a married head of household who divorced by 1984 suffered a 36 percent lost in net worth over this period while a divorced head who married doubled their wealth. In general, transitions into marriage are associated with large increases in household wealth while transitions out of marriage are correlated with large wealth declines. While important for the well-being of the members of these families, wealth changes between marriage states do not inform us about the impact of marriage on household savings behavior.

Section 4- A Multi-variate Model of Household Savings

In this section, we present results obtained from multi-variate models of household savings between successive waves of the PSID. Our principal interest in these models is to examine the extent to which savings behavior differs among households in alternative marriage states. There are several issues that must be dealt with before estimating these models. The first issue concerns the computation of household savings. Savings can be measured in panel surveys as the between wave differences in household wealth, adjusted for any capital gains or losses and net transfers into the household. Such adjustments are necessary as there are wealth increments when individuals originally outside the household join, and wealth decrements when some family members leave. Similarly, a family may receive inheritances in the form of new assets, and money may be withdrawn from pensions and added to household wealth. Finally, wealth increments due to capital appreciation must be distinguished from active saving.

These distinctions can all be empirically implemented in the PSID. Based on a sample of PSID

households with the same household head in 1984, 1989, and 1994, total changes in household wealth between 1984, 1989, and 1994 were computed. Net wealth transfers into the household were defined as the sum of money taken out of pensions, the value of new inheritances received, and assets brought in by new family members minus any assets previous family members took with them when they left. The PSID includes a short transaction module which asks the amount of money put into real estate or business, net transfers into stocks, bonds, and annuities, allowing one to separate so called active saving from wealth accumulation that is a consequence of capital gains. Total capital gains are defined as the change in the total value of stocks, businesses, and real estate minus the net amount a household puts into these assets between waves. This data provide two observations of active saving and capital gains for each household, i.e. from 1984 to 1989 and from 1989 to 1994.[7]

The second issue involves the considerable heterogeneity across households that exists in asset holdings. Some households are clearly savers while others are not. In light of this heterogeneity, in addition to the standard OLS estimates of mean effects, we provide estimates of models at the 25th, 50th (median), and 75th percentiles. For all models except the mean, boot strapped estimates of standard errors are computed. Finally, asset data are well known to be extremely noisy. To mitigate the extent of this bias, the original data was trimmed, eliminating the extreme one percent of the net worth. To examine the stability of coefficient estimates over time, separate models are estimated between the 1984 and 1989 PSID waves and between the 1989 and 1994 waves of the PSID.

[7]See Juster, Lupton, Smith, and Stafford (1999) for a more detailed discussion of these issues.

Finally, a third issue (as discussed in Section 3) is that we have restricted the sample to households whose marital states are unaltered over the two periods.

Table 8 summarizes base line models that include only simple demographic controls (age, race, and whether the household was headed by a woman and an indicator variable that the household was not married). In these base line specifications, asset growth declines with age and savings of black households were always less than less than other groups. Most importantly, Table 8 indicates that savings between the PSID waves were significantly lower among not married households. Controlling for race and age, we estimate that on average married couples saved about $11,000 to 14,000 more over these five years than non-married households save (equivalently more than $2,000 per year). The magnitude of these savings effects varies systematically across these percentiles. These marriage effects are quite small at the 25th percentile, average about $8,500 at the median, and reach $22,000 at the 75th percentile. Finally, there do not appear to be large differences in marriage effects estimated between the first and second or second and third PSID wealth modules.

Table 9 lists coefficients obtained when we allow the impact of marriage to depend on the duration of time spend in the current marital state. Two additional variables are added to the model summarized in Table 8- duration of years in the current marital state at baseline and this duration interacted with years currently not married. In this form, the coefficient on duration measures the impact of a year increase in the length of the current marriage while the interaction term captures the difference between an extra year not married and an extra year married. Combined these estimates imply that the savings differences between married and not currently married households are largest in

the earliest duration in marital states and steadily converge thereafter. This result is consistent with our prior speculation that dissavings is most common the shorter the duration in the non-marriage state as households attempt to maintain their prior consumption levels

These large savings differentials associated with marriage do not speak to the reasons why they may have emerged. Many relevant co-variates correlated with marriage have not yet been incorporated into the model. In particular, no economic variables are included although economic status varies considerably across alternative household structures. The augmented model listed in Table 10 includes base year quartiles of household labor income, education of the head, the change in family income between successive waves of the PSID, the amount of total net transfers and inheritances received between PSID waves and a set of variables measuring the number of children in the household in a set of age groups.

Replicating a common finding in the literature (Browning and Lusardi (1996)), the impact of household income on savings is highly non-linear. Using the model estimating mean effects to illustrate the point, the coefficient of labor income in the third Quartile is more than twice that of the second Quartile while the effect of the highest Quartile is more than three times that of the third Quartiles. Non-linear effects of household income are one reason why marriage will affect savings since dividing income between the partners must reduce total household income. Education of the head also exhibit similar non-linearities with savings concentrated among college graduates. Families that received some inheritance between the waves of the data apparently saved a significant fraction of it while consuming the rest.

The number of children in specific age groups were included in the model since we anticipated that the effect of children on family savings would depend critically on their ages. Young children may depress family savings since they simultaneously may increase family consumption (the consumption needs of children must be met) and reduce family income (as women exit the labor force). In contrast, children near the college attending ages may encourage family saving to pay these bills that are on the horizon. In addition to these life-cycle effects of children on family savings, children may encourage families to save for future bequests. In spite of the a priori plausibility of these arguments, we consistently find essentially no effect of children on family savings decision.[8] Children do not appear to be the main reason why married families save more than other type of families.

If we compare the results obtained in Tables 9 and 10 for our most robust specification (the median model), we see that these multi-variate controls for household economic status explain a little more than half of the asset accumulation differences among households by family type (as judged by the coefficient on the variable not married). Therefore while income selectivity is certainly important, these results suggests that savings do vary across households distinguished along demographic lines independent of the income differences across households.

The results reported in Table 11 parallel those in Table 10 but in addition separate not- married households into their sub-groups- never married, widowed, divorced or separated. Of these subgroups, all accumulated fewer assets than married couples. After adjusting for age, widowed

[8]This finding is consistent with those reported by Hurd (1990) who reports that wealth accumulation by households was not related to the presence or number of children.

households saved the least ($34,000 less than married couples), divorced, separated or single families had similar savings deficits of approximately $20,000. An important source of the duration differentials identified above are among single households. The longer a head of household remains single the smaller the marriage savings premium. Although not as large quantitatively, the size of the divorced savings deficit also declines with the length of the divorce.

Even after controlling for demographic and economic characteristics of the household, much of savings behavior is left unexplained. If this unobserved heterogeneity is correlated with marital status, the coefficients estimated in Tables 8 through 11 will be biased. The most likely source of unobserved heterogeneity is that 'prudent' individuals may be more likely to marry. If so, what we measure as the impact of marriage could simply reflect the sorting of 'prudent' people into the marriage state. It has already been noted from Tables 6 and 7 that selectivity could play an important role in marriage and savings behavior. Unfortunately, with only two observations of saving per household it is not yet possible to test for this selectivity. For this to be possible, one would need to observe the same household's saving patterns in both states (married and not married) over a period in which a marriage transition did *not* take place. Otherwise, the savings pattern would be dominated by the effect of the marital transition.

Nevertheless, other possible sources of heterogeneity can be controlled for by examining within household variation over the 10 year period (saving from 1984 to 1989 and saving form 1989 to 1994). Table 12 estimates the effects of all possible marital state combinations of the head in 1984, 1989 and 1994 on the change in household saving from the 1984-1989 period to the 1989-1994 period. The excluded reference group are households in which that head is not married in 1984, 1989

and 1994. However, to distinguish between head of households that have never been married (single) and households that are simply not currently married, the group for single head in 1984, 1989 and 1994 is included.

The model estimated in Table 12 also controls for certain economic characteristics of the household. In particular, along with income and transfers into the household, the capital gains on various assets are included. As seen in Tables 2a, wealth in different assets varied by household type. This can lead to capital gains that also vary by household type which can therefore bias the effects of marital status on savings. Table 12 indicates a household savings rate from household of 8.5% (all else equal) while over half of all inheritances are consumed. Capital gains in stocks decrease saving by $0.17 to the dollar while gains in housing have smaller effect ($0.03 to the dollar). Since the household is on both sides of the housing market (seller as well as buyer) and could also have inside information regarding gains in their own home, the small value for housing gains is not surprising.

Turning to the marital state variable in Table 12, the dominance of marital transitions is obvious. For example, households whose head was married in 1984 and 1989 but then unmarried by 1994, decreased saving by almost $21,000. On the other hand, households whose head was not married in 1984 and 1989 but then married by 1994 increased saving by $16,537. The only category which bypasses these transition issues are households whose marital state did not change: households whose head was married in all three years or never married in all three years.[9] These large effects estimated

[9] The reference group 'not married' in all three years is also a valid 'non-marital transition' group. Note that this is not completely accurate since it is possible for a transition out of and back into a marital state during the between period.

for marital transitions indicates that the PSID module was not completely successful in capturing the amount of assets that left or entered the household when a martial transition occurred.

Looking only at these fixed marital state groups, there is little difference between the never married state and the not currently married state. However, the married state decreased their savings by $5,135 over the 10 year period relative to the never married state. This is somewhat larger than the values estimated in Table 11. Consider the median regression in Table 11. Using the coefficient from the 1984 to 1989 period, a one year increase in the duration of a household's marital state decreased the savings gap between married and not married by $386. This implies a decrease in the savings gap of $3,855 over the ten year period.

Conclusion

This paper explored the relationship between household type and asset accumulation. This analyses suggests that there may be a quantitatively large relation between assets, savings and marriage. Married couples apparently save significantly more than other households, an effect that is not solely related to their higher incomes nor the simple aggregation of two individuals' wealth. If marriage is related to household savings, the sharp decline in the fraction of American households who are married may be part of the reason for the secular fall in U.S. private savings rates. For households that remain married, the duration of the marriage positively affects wealth beyond the simple age-wealth relationship. On the other hand, for households that remain divorced or separated, the duration of this situation negatively affects wealth. Comparing the duration effects on *saving* of married households to

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However, these cases are less likely and do not impact the results in Table 12.

all unmarried households, a fairly robust result shown in this paper is that the gap in saving between these two marital states decreases with time. However, since this gap is large to begin with, completely closing it is unlikely. The initial savings of married households provides early exposure to capital gains thereby making it even more difficult for non-married households to catch-up. This is evident from the large wealth gap between these households.

Research on the relationship between demographic variables such as marriage and household savings is too new to consider these results established facts. More importantly, there is much we do not yet understand about the underlying theoretical reasons for the impact marriage has on household savings. However, the strength of the relationship suggests that this may be a n especially worthy subject for additional research.

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Table 1
HRS Net Worth (by Marital Status)

Means

	Married	Partner	Separated	Divorced	Widowed	Never Married	All
All	288,372	218,244	85,251	117,553	119,505	166,099	238,544
White	303,616	271,783	136,495	132,458	146,671	213,615	263,739
Black	120,404	44,041	18,757	45,671	36,272	23,178	71,587
Hispanic	106,567	64,603	8,619	36,912	50,203	31,144	79,658

Medians

	Married	Partner	Separated	Divorced	Widowed	Never Married	All
All	132,200	56,500	7,600	33,670	47,275	35,000	99,500
White	141,100	91,000	30,250	38,704	65,200	52,250	115,000
Black	58,650	3,000	594	13,047	11,000	200	24,750
Hispanic	50,000	5,000	150	4,750	8,500	500	29,650

Percent of Cases

	Married	Partner	Separated	Divorced	Widowed	Never Married	All
All	65.7	2.6	4.1	14.1	8.2	4.8	n.a.
White	70.9	2.2	2.4	13.3	6.7	3.9	n.a.
Black	43.0	4.3	11.4	17.7	14.5	8.5	n.a.
Hispanic	60.7	4.0	6.5	14.5	8.0	5.0	n.a.

Table 2a
Compostion of Wealth: HRS baseline sample

	Married	Separated	Divorced	Widowed	Never Married
Tangible	124,212	42,874	49,876	33,947	76,359
Financial	77,575	15,944	32,270	38,323	48,322
Primary Residence	75,848	23,917	35,702	45,246	36,223
Total	288,372	85,251	117,553	119,505	166,099

Table 2b
Compostion of Wealth: Shares of total wealth

	Married	Separated	Divorced	Widowed	Never Married
Tangible	0.43	0.50	0.42	0.28	0.46
Financial	0.27	0.19	0.27	0.32	0.29
Primary Residence	0.26	0.28	0.30	0.38	0.22
Total	1.00	1.00	1.00	1.00	1.00

Table 3

HRS Household Net Worth by Duration of Current Marital State

Duration of Marriage	Mean	Median	Percent of Cases
< 5 years	242,018	96,000	5.7
5-9 years	248,176	100,500	5.6
10-14 years	270,807	105,000	5.8
15-19 years	248,590	119,000	6.7
20-29 years	289,899	125,000	22.7
30-34 years	307,520	143,500	24.4
35+ years	302,456	157,850	29.0

Years Since End of Marriage	Mean	Median	Percent of Cases
< 2 years	154,759	41,900	10.7
2-4 years	115,766	32,500	13.0
5-9 years	108,448	36,000	16.7
10-14 years	169,160	34,813	18.2
15-19 years	72,645	21,400	16.8
20+ years	60,864	7,200	21.4

Table 4
HRS Net Worth by Sex of Head

	Means			
Marital Status	All	White	Black	Hispanic
Divorced or Separated				
Male	161,977	192,109	34,956	31,990
Female	82,128	96,979	35,560	26,474
Widowed				
Male	170,451	220,650	50,619	49,417
Female	112,691	137,501	33,906	50,292
Never Married				
Male	248,147	298,345	29,505	22,287
Female	92,377	124,329	19,706	37,305

	Medians			
Marital Status	All	White	Black	Hispanic
Divorced or Separated				
Male	35,000	51,950	3,000	3,000
Female	22,870	31,500	6,000	800
Widowed				
Male	43,600	95,750	15,000	1,750
Female	46,000	63,700	10,750	10,000
Never Married				
Male	39,500	58,900	600	750
Female	30,800	50,550	150	500

Table 5
HRS Total Wealth Distributions

	Means			
	Net Worth	Pensions	Social Security	TOTAL
		All		
Total	238,544	103,597	120,756	465,897
Married	288,372	127,878	141,166	557,416
Separated	85,251	34,014	56,615	175,880
Divorced	117,553	58,192	73,730	249,475
Widowed	119,505	27,783	78,569	225,857
Never Married	166,099	71,759	70,685	308,543
		Medians		
Total	99,500	40,981	115,436	320,928
Married	132,200	71,376	139,665	409,330
Separated	7,600	0	55,117	95,669
Divorced	33,670	2,000	73,655	153,829
Widowed	47,275	0	74,952	151,141
Never Married	35,000	1,500	66,761	167,014

Table 6
PSID Net Worth by Type of Marital Transition
(Thousands of Dollars)

	Means		Medians	
	1984	1989	1984	1989
Married				
Married-Married	220.9	280.2	95.2	118.9
Married-Divorced	95.7	66.5	40.8	36.2
Married-Separated	121.9	111.2	35.2	11.3
Married-Widowed	177.9	209.7	102.0	100.3
Divorced				
Divorced-Divorced	57.9	67.8	18.0	24.8
Divorced-Married	55.3	114.2	14.7	52.1
Separated				
Separated-Separated	15.4	15.5	1.2	0.6
Separated-Divorced	22.7	54.8	6.0	10.2
Separated-Married	89.4	137.8	24.9	120.4
Widowed				
Widowed-Widowed	108.0	102.6	62.3	50.3
Widowed-Married	249.5	303.6	102.1	172.0
Never Married				
Never Married-Never Married	37.5	64.6	6.9	13.0
Never Married-Married	15.7	84.4	6.8	37.2

Table 7
PSID Family Income by Type of Marital Transition
(Thousands of Dollars)

	Means		Medians	
	1984	1989	1984	1989
Married				
Married-Married	63.0	66.8	52.6	53.4
Married-Divorced	50.8	44.4	47.7	40.6
Married-Separated	51.9	46.7	43.7	38.2
Married-Widowed	37.4	42.7	32.2	23.3
Divorced				
Divorced-Divorced	28.6	31.2	24.0	27.2
Divorced-Married	51.4	69.7	40.5	55.9
Separated				
Separated-Separated	19.3	22.3	14.0	15.5
Separated-Divorced	26.4	30.7	21.8	26.2
Separated-Married	47.1	68.0	38.7	61.9
Widowed				
Widowed-Widowed	20.4	19.9	14.4	13.1
Widowed-Married	45.2	45.4	46.5	36.9
Never Married				
Never Married-Never Married	27.7	32.6	24.1	25.4
Never Married-Married	39.0	66.7	32.1	60.2

Table 8
Baseline Models of Active Savings Between PSID Waves

	Median		25%		75%		Mean	
	84-89	89-94	84-89	89-94	84-89	89-94	84-89	89-94
Not married	-8757	-8251	-1384	324	-22802	-22238	-10711	-13599
	(-6.44)	(-6.84)	(-2.09)	(0.31)	(-6.84)	(-5.49)	(-2.02)	(-1.29)
Black	-4015	-6213	1604	1929	-18924	-17455	-16643	-19339
	(-5.68)	(-7.78)	(2.41)	(2.61)	(-8.35)	(-6.73)	(-5.27)	(-2.77)
Female head	-705	773	-433	185	-4534	-2745	-11323	-1562
	(-0.78)	(1.10)	(-1.01)	(0.33)	(-1.96)	(-0.86)	(-2.00)	(-0.14)
Age	-75	-178	-154	-353	-44	-182	-277	-631
	(-3.06)	(-5.69)	(-5.18)	(-7.48)	(-1.24)	(-3.96)	(-3.04)	(-3.12)
Constant	16048	20819	3303	7106	49908	55327	45662	63017
	(10.28)	(15.51)	(2.76)	((3.68)	(24.20)	(22.45)	(10.51)	(6.48)

Table 9
Active Savings Between PSID Waves: Duration of Marriage Effects

	Median		25%		75%		Mean	
	84-89	89-94	84-89	89-94	84-89	89-94	84-89	89-94
Not married	-13516	-13248	-3709	-3136	-26425	-27082	-16279	-18327
	(-9.57)	(-10.61)	(-3.04)	(-2.53)	(-6.99)	(-4.00)	(-2.47)	(-1.41)
Duration	-438	-367	-189	-256	-332	-312	24	-227
	(-3.25)	(-4.05)	(-1.36)	(-1.78)	(-1.16)	(-0.97)	(0.07)	(-0.38
Duration not married	537	513	452	522	464	453	973	595
	(3.98)	(5.17)	(3.84)	(3.39)	(1.42)	(1.60)	(1.83)	(0.63)
Black	-4285	-4875	1812	1624	-18782	-17306	-16357	-19171
	(-4.69)	(-8.65)	(2.46)	(1.97)	(-12.13)	(-9.90)	(-5.18)	(-2.75)
Female head	-625	-163	-847	-39	-4355	-3955	-12599	-2963
	(-0.86)	(-0.27)	(-1.63)	(-0.08)	(-3.41)	(-1.21)	(-2.03)	(-0.25)
Age	-57	-150	-155	-342	-35	-158	-343	-611
	(-2.38)	(-5.92)	(-4.86)	(-4.73)	(-1.19)	(-2.65)	(-3.09)	(-2.51)
Constant	19713	23126	4658	9066	52056	58490	48102	64792
	(14.42)	(20.64)	(3.27)	(4.37)	(15.86)	(11.89)	(10.41)	(6.40)

Table 10
Augmented Models of Active Savings Between PSID Waves

	Median		25%		75%		Mean	
	84-89	89-94	84-89	89-94	84-89	89-94	84-89	89-94
Age	-17.0	-82.2	-157.9	-362.7	10.8	-17.9	-222.0	-332.3
	(-1.29)	(-3.08)	(-3.16)	(-6.92)	(0.61)	(-0.44)	(-1.70)	(-1.16)
Not married	-5996.3	-6356.5	-4883.9	-4474.7	-9118.2	-7131.8	-15019.9	-2078.1
	(-4.58)	(-3.78)	(-2.61)	(-2.04)	(-3.76)	(-2.30)	(-2.16)	(-0.14)
Duration of marital	-369.5	-282.7	-336.8	-246.8	-330.2	-231.0	-192.5	-20.48
status	(-3.36)	(-2.97)	(-2.44)	(-1.87)	(-1.51)	(-1.54)	(-0.51)	(-0.03)
Duration not married	393.1	367.2	594.4	603.3	446.7	166.6	1229.8	392.4
	(4.07)	(3.54)	(5.53)	(3.39)	(2.34)	(0.76)	(2.24)	(0.39)
Black	-680.4	-732.9	1655.3	1727.9	-8036.1	-3982.7	-8131.2	-5710.6
	(-2.16)	(-1.01)	(2.42)	(1.26)	(-5.38)	(-2.38)	(-2.34)	(-0.74)
Female head	-3.41	1616.0	-952.3	786.6	586.7	1168.0	-9109.3	5185.1
	(-0.01)	(2.08)	(-1.14)	(0.65)	(0.81)	(0.57)	(-1.50)	(0.41)
Household labor income	1922.4	2688.9	-1415.1	-423.8	6870.7	7650.0	1552.8	7724.4
in 2nd quartile	(2.54)	(3.00)	(-1.50	(-0.36)	(4.36)	(4.00)	(0.33)	(0.75)
Household labor income	9687.2	9232.0	-1198.2	-1572.1	19547.7	22150.4	-1575.9	17678.9
in 3rd quartile	((7.76)	(4.65)	(-0.81)	(-1.00)	(7.40)	(10.11)	(-0.28)	(1.48)
Household labor income	25178.3	23787.4	3309.7	1366.7	50470	65880.0	17655.5	57932.6
in 4th quartile	(12.58)	(7.70)	(1.15)	(0.41)	(10.14)	(11.0)	(2.87)	(4.39)
Change in household	.1372	.0913	.0443	.0394	.1727	.2106	.0530	.6319
labor income	(3.04)	(1.74)	(1.01)	(0.95)	(2.13)	(2.50)	(0.88)	(6.90)
Head education:	-.5876	-421.4	-1069.1	-2281.4	1373.6	2885.4	698.5	-8394.6
High School degree	(-0.00)	(-0.93)	(-1.56)	(-1.83)	(2.87)	(3.11)	(0.18)	(-0.97)

Head education:	1938.6	2177.7	-1924.9	12.8	7583.7	10529.6	13725.5	6050.7
Some college	(1.57)	(1.89)	(-2.06)	(0.01)	(2.49)	(4.97	(2.80)	(0.59)
Head education:	8027.8	7609.3	1876.1	747.6	23077.1	17119.4	31315.4	10220.0
College or more	(3.18)	(4.91)	(0.95)	(0.30)	(6.38)	(4.18)	(6.02)	(0.93)
Inheritance	.2770	.3711	.0413	-.0416	.5719	.6439	.2607	.4697
	(1.69)	(2.03)	(0.28)	(-0.27)	(2.01)	(2.86)	(3.71)	(2.40)
Net transfer	.0350	.0225	.0154	.3080	.2212	-.0860	.1185	-.0778
	(0.24)	(0.13)	(0.14)	(2.15)	(1.40)	(-0.42)	(6.10)	(-0.44)
Number of kids age 1-13	-96.2	-626.4	-99.7	-443.5	-396.63	-938.4	1.6932	208.9
in household	(-0.58)	(-2.99)	(-0.313)	(-1.15)	(-1.24)	(-1.59)	((0.00)	(0.06)
Number of kids age 14-17	-34.6	-943.9	39.6	-720.5	344.4	-732.4	46.8	-5430.9
in household	(-0.09)	(-1.42)	(0.05)	(-0.76)	(0.32)	(-0.50)	(0.02)	(-0.75)
Number of kids age 18-20	416.2	55.75	482.1	-243.3	1587.7	1043.3	8897.6	-5965.2
in household	(1.39)	(0.06)	(0.65)	(-0.14)	(1.66)	(0.80)	(2.29)	(-0.58)
Number of kids age 21-29	13.54	62.8	508.6	-941.2	-6.2	-490.0	-4254.9	-2047.1
in household	(0.05)	(0.08)	(1.02)	(-0.74)	(-0.01)	(-0.38)	(-1.16)	(-0.24)
Constant	6998.6	9198.1	6540.9	11365.2	16471.6	14057.1	26932.9	17741.5
	(4.55)	(4.03)	(2.85)	(3.72)	(5.04)	(3.92)	(3.21)	(0.95)

Table 11
PSID Augmented Models of Active Savings: Types of Marital Status

	Median		25%		75%		Mean	
	84-89	89-94	84-89	89-94	84-89	89-94	84-89	89-94
Age	-6.95	-131.1	-147.3	-410.1	42.2	-75.7	-131.0	-512.9
	(-0.53)	(-3.13)	(-4.10)	(-3.93)	(1.09)	(-2.23)	(-0.85)	(-1.46)
Duration of marital	-385.5	-226.5	-354.6	-169.7	-420.2	-178.6	-341.5	206.3
status	(-3.43)	(-1.74)	(-2.26)	(-1.22)	(-1.32)	(-0.89)	(-0.85)	(0.30)
Duration not married	397.5	337.4	647.7	584.3	501.6	150.9	1356.4	302.3
	(3.76)	(2.80)	(3.81)	(5.18)	(1.58)	(0.72)	(2.43)	(0.30)
Head never married	-5749.9	-6833.6	-5195.1	-6247.4	-9728.4	-7721.1	-13665.7	-6075.0
	(-3.92)	(-3.69)	(-3.49)	(-3.32)	(-2.10)	(-2.42)	(-1.84)	(-0.39)
Head widowed	-6384.3	-4450.9	-6013.0	-4415.6	-11403.3	-3602.3	-22122.1	9129.1
	(-3.76)	(-1.80)	(-2.59)	(-1.41)	(-1.92)	(-0.92)	(-2.30)	(0.45)
Hear divorced	-5907.4	-5183.1	-4332.8	-2020.2	-9993.0	-3018.3	-18391.0	2062.1
	(-3.89)	(-2.49)	(-2.34)	(-1.56)	(-1.94)	(-0.74)	(-2.24)	(0.12)
Head separated as of	-6134.7	-5909.6	-4991.1	-3833.7	-10470.5	-7141.4	-12074.2	3639.2
	(-4.56)	(-2.67)	(-2.62)	(-2.43)	(-2.09)	(-2.21)	(-1.15)	(0.15)
Black	-721.2	-872.5	1694.1	2230.5	-7523.4	-2748.7	-8696.1	-5185.0
	(-1.67)	(-1.33)	(2.62)	(3.06)	(-4.09)	(-1.63)	(-2.48	(-0.67)
Female head	88.9	1371.8	-1294.1	909.1	717.7	81.8	-8019.7	3259.0
	(0.47)	(1.88)	(-1.68)	(0.83)	(0.58)	(0.05)	(-1.30)	(0.25)
Household labor income	2046.5	2443.3	-1589.2	-776.0	6688.9	7974.1	1624.4	7587.8
in 2nd quartile	(4.84)	(4.45)	(-1.64)	(-0.67)	(4.60)	(5.69)	(0.34)	(0.72)
Household labor income	9652.0	8597.6	-1358.9	-1500.6	19354.3	22449.0	-1179.6	17066.3
in 3rd quartile	(7.00)	(5.77)	(-0.99)	(-0.88)	(6.66)	(7.83)	(-0.21)	(1.41)

Household labor income	25391.5	23219.8	3284.6	948.5	50470.0	66116.4	18024.6	57332.5
in 4th quartile	(14.00)	(6.52)	(1.77)	(0.39)	(13.50)	(10.28)	(2.90)	(4.30)
Change in household	.1368	.0884	.0463	.0387	.1717	.2220	.0570	.6296
labor income	3.74)	(1.31)	(1.36)	(1.14)	(2.51)	(3.04)	(0.95)	(6.87)
Head education:	30.99	-442.1	-1072.0	-2015.7	1596.9	2633.0	703.7	-8282
High School degree	(0.14)	(-0.82)	(-1.64)	(-1.98)	(2.26)	(2.23)	(0.19)	(-0.95)
Head education:	2043.4	2205.3	-1937.3	48.7	7650.4	9612.4	13678.3	6319.9
Some college	(1.32)	(2.96)	(-1.64)	(0.04)	(3.43)	(4.52)	(2.79)	(0.62)
Head education:	8139.2	7862.2	2111.5	669.1	23370.0	16857.3	30869.9	10842.6
College or more	(3.37)	(2.93)	(1.85)	(0.21)	(5.18)	(4.18)	(5.91)	(0.99)
Inheritance	.2746	.3757	.0412	-.0413	.5762	.5990	.2619	.4682
	(1.47)	(1.48)	(0.36)	(-0.18)	(2.23)	(3.01)	(3.73)	(2.39)
Net transfer	.0345	.0184	.0154	.3079	.2213	-.0459	.1188	-.0753
	(0.24)	(0.10)	(0.19)	(1.77)	(1.40)	(-0.26)	(6.12)	(-0.43)
Number of kids age 1-13	-123.4	-646.4	-86.0	-583.0	-488.7	-986.0	215.0	-203.3
in household	(-1.20)	(-2.38)	((-0.53)	(-1.3)	(-1.70)	(-2.35)	(0.14)	(-0.06)
Number of kids age 14-17	88.9	-982.7	-333.0	-1449.3	445.8	-1132.1	155.9	-5946.5
in household	(0.19)	(-1.41)	(-0.52)	(-1.18)	(0.56)	(-0.67)	(0.05)	(-0.82)
Number of kids age 18-20	423.5	376.6	650.9	-594.7	1364.6	1070.7	8843.5	-6595.3
in household	(1.89)	(0.32)	(0.87)	(-0.28)	(1.02)	(0.67)	(2.27)	(-0.64)
Number of kids age 21-29	96.3	-185.1	396.7	-987.2	-66.3	-831.3	-4163.3	-2201.8
in household	(0.52)	(-0.20)	(0.38)	(-0.72)	(-0.08)	(-0.74)	(-1.13)	(-0.25)
Constant	6575.9	10954.9	6455.6	12894.7	16097.1	15603.7	24314.8	23489.8
	(4.00)	(5.15)	(4.79)	(3.37)	(4.02)	(5.08)	(2.78)	(1.19)

Table 12

Within Household Models of Change in Savings: PSID

Age	2486
	(3.08)
Agesq	-24
	(-3.52)
mmn	-20785
	(-4.19)
mnm	6814
	(0.85)
nmm	-6348
	(-1.13)
mm	16537
	(2.12)
nmn	-19533
	(-2.30)
mnn	19275
	(3.39)
mmm	-5135
	(-2.17)
sss	-811
	(-0.23)
net transfers	.025
	(2.22)
inheritances	.464
	(6.69)
income	.085
	(1.82)
capital gains, home	-.027
	(-1.05)
capital gains, stock	-.170
	(-4.19)
capital gains, business	.019
	(0.82)
cons	-48733
	(-2.20)

Note: 'm' is for 'married', 'n' is for 'not married' and 's' is for 'never married'. For example, 'mmn' means married in 1984 and 1989 but not married in 1994.