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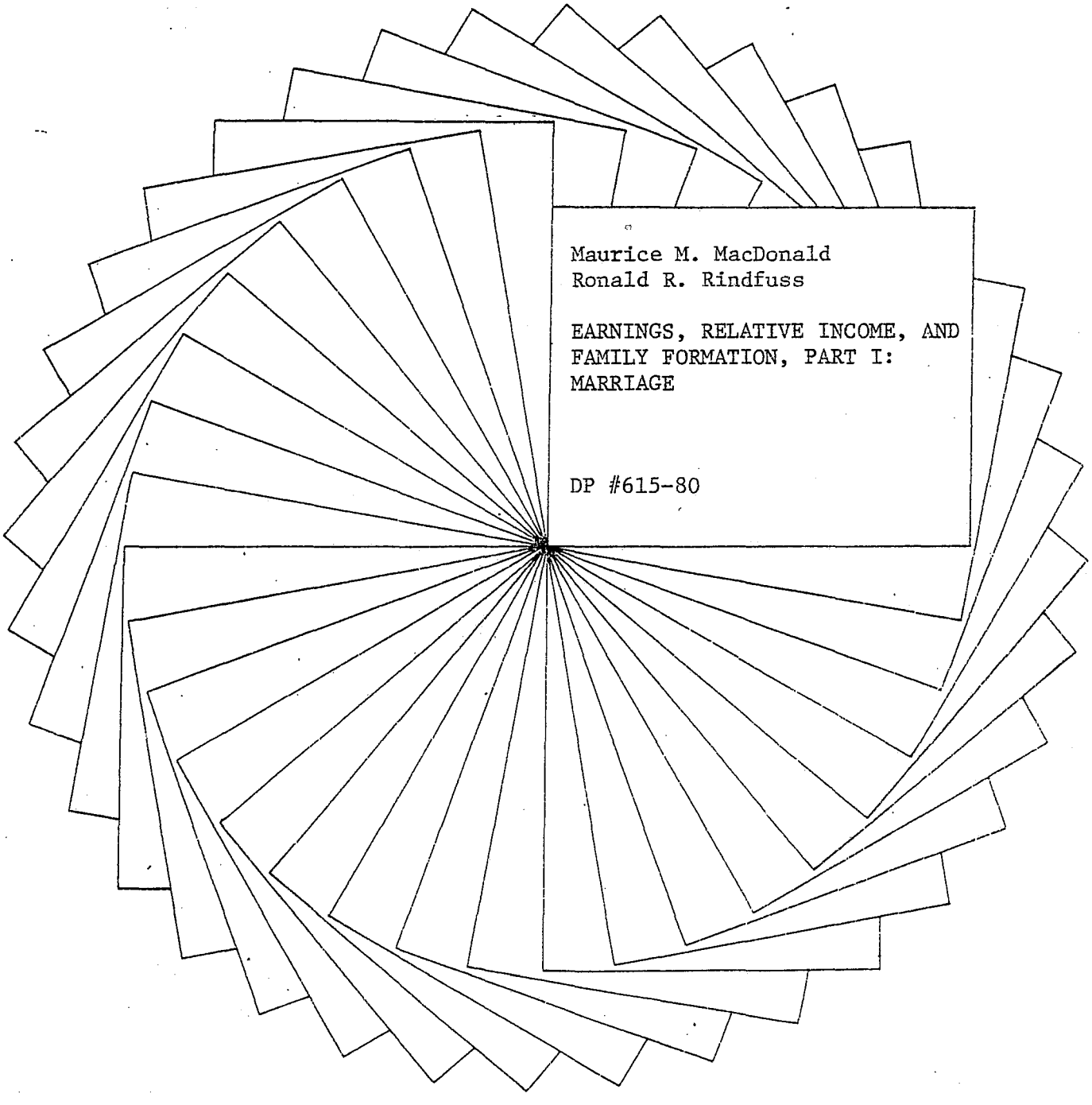

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EARNINGS, RELATIVE INCOME, AND FAMILY FORMATION, PART I: MARRIAGE

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Earnings, Relative Income, and Family Formation, Part I: Marriage

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ABSTRACT

The probability of first marriage for men who graduated from Wisconsin high schools in 1975 is analyzed with respect to their Social Security earnings records, Wisconsin income tax reports for parents, and other variables. The findings provide no support for Easterlin's hypothesis that marriage will occur earlier when young men judge their economic prospects favorably with respect to their parents' income. However, young men's earnings and time spent in schooling to increase them are found to be important influences on marriage timing. Additional schooling has little effect net of the time it absorbs. Other results stem from models that investigate the role of earnings relative to one's peers earnings, and of permanent income indicators. Young men who earn more than predicted for them marry earlier, as do those whose postmarriage observations indicate high permanent income. As the sample ages, the pattern of effects indicates that educational aspirations condition the marriage process.

EARNINGS, RELATIVE INCOME, AND FAMILY FORMATION, PART I: MARRIAGE

Among those interested in family formation trends, the relative-income hypothesis of Easterlin (1962, 1966, 1973, 1978) has attracted attention over the past decade or two. According to Easterlin, the marriage and fertility plans of young men are influenced by their economic prospects, as indicated by their current income relative to their parents' income. The parents' income references the consumption standard of the family of origin, and is said to represent young men's material aspirations. When young men judge their economic prospects to be favorable, marriages will occur earlier and fertility will rise. This hypothesis has been advanced to explain marriage and fertility fluctuations in a number of countries over the past 40 to 60 years.

The present paper focuses on the timing of marriage to test the relative-income hypothesis and competing ideas about family formation. Related work on the timing of fertility is reported in another paper (Rindfuss and MacDonald, 1980).

From a microeconomic perspective, predicting the effects on timing of marriage of a change in young men's economic prospects can be analyzed as the impact of a change in wage rate on the allocation of time among family, schooling, and market work (Becker, 1973). In this view, a rise in the wage increases the costs of time for family or schooling; this in turn tends to increase market work. However, rising wages also mean greater returns from all market work, making marriage and family more affordable and possibly increasing the rate of return to schooling. Hence, the marriage effect of improved economic conditions is an empirical question.

By contrast, Easterlin's relative-income hypothesis states that when wages rise (as judged in reference to a consumption standard indicated by parents' income), young men will exercise their preferences for family activities. Thus, Easterlin asserts that the income effect of increasing wages is more important than the offsetting tendency for young men to substitute toward market work from activities that cost more after the wage increase.

Most of the empirical work on the relative-income hypothesis has analyzed fertility at the macro level (Easterlin and Condran, 1976; Lindert, 1978; Lee, 1976; Butz and Ward, 1977). However, Easterlin (1962, 1966, 1973) has also studied marriage with aggregate data. With few exceptions (e.g., Butz and Ward, 1977), these studies find support for the relative-income hypothesis. Yet the results from microdata have been uniformly negative (MacDonald and Rindfuss, 1978; Thornton, 1978; Olneck and Wolfe, 1978; Crimmins-Gardner and Ewer, 1978). However, none of these investigations had all the information necessary to test the relative-income hypothesis conclusively. For this, we need data on the income of the individual's parents in his adolescence, on his age, education, and other background characteristics, on his earnings after adolescence, and on the timing of marriage and fertility.

The Wisconsin Study of Social and Psychological Factors in Socio-economic Achievement data we analyze here contain all the necessary information for testing the relative-income hypothesis, and they also provide an opportunity to improve our general understanding of the economics and sociology of marriage.

The bulk of the recent empirical literature on the economics of marriage is motivated by an interest in marital instability; it assesses how earnings

influence the likelihood of marriage for previously married men. The primary hypothesis is that the higher a man's earnings, the more likely he is to remarry. Sweet (1973) and Becker, Landes and Michael (1977) confirmed this hypothesis using data from the 1967 Survey of Economic Opportunity. Wolf and MacDonald (1979) analyzed the Wisconsin data used in this study. They found that long-run permanent income was positively associated with remarriage, but that prior earnings and earnings relative to peers had minimal effects. Duncan (1976), using the Panel Study of Income Dynamics, concluded that 1967 income had no effect on whether men who, in 1968, were never-married and previously married had married by 1974.

A disadvantage of these studies for inferences about the timing of first marriage is that they do not address contingencies that arise from the timing of schooling and military service. Human capital investment and time allocation theory imply that marriage will be delayed to obtain training that depresses current earnings and raises permanent income. But continued schooling conceivably alters preferences for family versus other activities. Our results illuminate the effects of schooling, per se, and the constraining influence of both military duty and schooling.

DATA AND CONCEPTUAL APPROACH

Our analyses are based on a sample of men in the Wisconsin Longitudinal Study of Social and Psychological Factors in Achievement (Sewell and Hauser, 1975). These men were Wisconsin high school seniors in 1957, when they were surveyed to obtain college plans and other social and psychological variables. In connection with a 1964 follow-up survey of parents, Wisconsin state income tax returns were used to construct an average of parental

income from 1957 to 1960. In 1975, 88.5 percent of the original 1957 sample was reinterviewed. Among other responses, these interviews obtained detailed marital and fertility histories. Also, over the years, Social Security earnings records have been matched with the interview data to cover the period from 1957 to 1971.[2]

To obtain earnings variables for analysis, case record values for each calendar year were coded in one hundred dollar units and then inflated by the ratio of the Consumer Price Index for 1972 to the Consumer Price Index for the relevant calendar year. In years for which the young men's total wages were below the taxable Social Security maximum, the earnings variable is based on the raw Social Security record. In other cases, further steps were necessary to obtain more complete earnings measures (see Appendix A).

For persons in uncovered employment, our earnings variables do not provide valid earnings histories. Many zero and low earnings reports for post-schooling years probably reflect poor Social Security coverage of civilian government employees and self-employed persons. Hauser (1979) reports that zero earnings reports are associated with increased educational attainment, such that they "more probably reflect a truncation at the top than at the bottom of the earnings distribution" (p. 13). To deal with these records, we use a missing data indicator (EFLG). For any year after the respondent had completed his schooling and for which his Social Security earnings were less than $1000, this indicator was assigned a value of 1; otherwise zero. A sensitivity analysis (reported later in this paper) was also conducted, excluding respondents who had a farm background, or who were farmers, farm managers, or self-employed proprietors in 1964.

More than one-fifth of the Wisconsin Study Sample had not married by the end of 1965. Excluding never-married respondents could bias the results of an analysis of age at marriage. Also because an individual's relative income changes over time, it is inappropriate to use a single relative-income variable. Furthermore, military and schooling options change as the sample ages. For these reasons, the marriage process is investigated sequentially.

We analyze the probability of first marriage for successive samples of men exposed to the risk of first marriage, i.e., the young men who were still never-married. Thus, the analysis samples become progressively smaller (see the N's in Table 2) and selected on characteristics related to the probability of having married in prior periods. This is exactly how the marriage market changes for a cohort as it ages. Because the probability of first marriage is low for each period and the analysis requires a number of independent variables, sample size eventually becomes restrictive. Therefore, we decided to examine the probability of first marriage during eight annual periods after high school graduation.

One final conceptual issue needs to be discussed here: whether we will be able to disentangle age, period and cohort effects. Our analysis is based on a cohort of males who were high school seniors in 1957. Since there is very little variability in the ages of high school seniors, it is convenient, for the present, to think of these young men as also being members of the same birth cohort (approximately 1939-1940). Thus, from the perspective of the relative-income hypothesis, one prominently mentioned variable, cohort size, is fixed; and we will be examining individual variability within the framework of a fixed cohort size. The fact that we have data for

only one cohort also means that both the period and age dimensions are changing simultaneously and isomorphically. Thus, we will not be able to distinguish period effects from age effects.

EFFECTS OF RELATIVE INCOME, AND CURRENT EARNINGS

In this section, the hypothesis guiding the specification of two main estimation models are discussed with respect to period-specific marriage-decision functions. After defining the variables that enter these models, the results are presented.

The formations that motivate Models 1 and 2 are

(1) $M_2 = f_1[W_1; S_1; F_0; B_0]$ and

(2) $M_2 = f_2[W_1/F_0); S_1; B_0]$

where M_2 represents the outcome of a decision to marry or not during a period, dated 2;

W_1 is the young man's market wage for the immediately prior period.

S_1 is his stock of human capital at the end of this period;

F_0 is the income (or wealth) of his family of origin while the respondent was an adolescent; and

B_0 are the social characteristics of the family of origin (e.g., religion).

Because function (2) specifies an interaction between a young man's wage and his parents' income, it corresponds closely to Easterlin's hypothesis. Function (1) is consistent with Easterlin's view in that it specifies an effect of parents' income, but it also is appropriate for determining the net impact of a wage change as in Becker's approach. In

both models S_1 indicates taste differences that arise from education. Likewise, the background characteristics (B_0) control for different preferences.

Models 1 and 2 are reduced forms of a more complicated structure that we have not identified. We recognize that the marriage decision process is likely to involve a number of decisions: whether or not to enter the marriage market and search for a mate; whether to get engaged, etc. However, whether or not a young man marries in a given year is the only decision variable available to us.

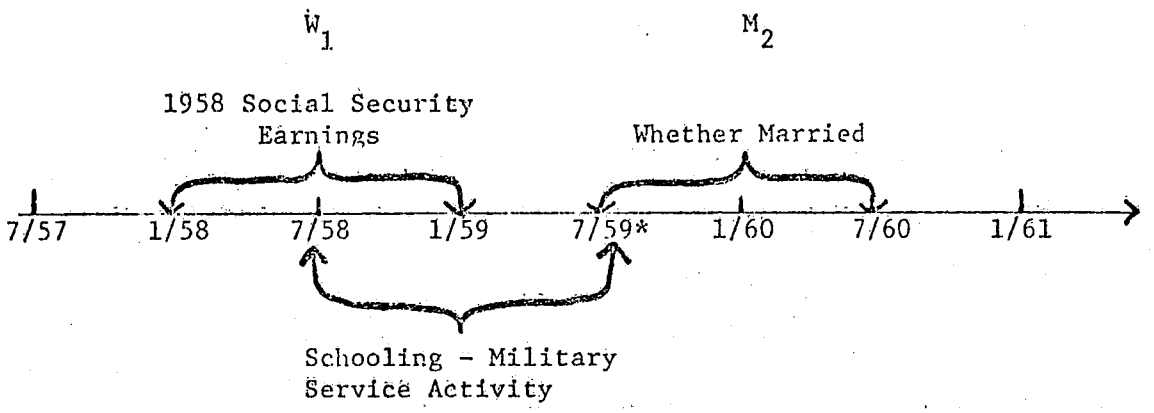
Figure 1 illustrates accounting periods for variables defined in Table 1. Two years are illustrated. MAR(59) refers to the decision to marry or not after June 30, 1959 and before July 1, 1960 among first-marriage eligible men. MAR(64) refers to the same decision among first-marriage eligibles, for the period after June 30, 1964 to July 1, 1964. The 12 months immediately prior to the successive decision periods reference recent schooling and military service activities. However, there is a six-month lag between the end of the Social Security calendar year earnings period and the beginning of each marriage decision period. All earnings and income variables refer to calendar years. Again it should be pointed out that the sample included in the analysis for each decision period only includes those who are eligible to marry for the first time during that period; those who married in prior years are excluded.

The variables used in the estimation of Models 1 and 2 are defined in Table 1 with reference to MAR(59), the department variable for 1959. Lower-case letters are used to name variables that do not change across all decision periods (e.g., background characteristics). Upper-case names define variables that do change across decision periods. Appendix B displays

Figure 1

ACCOUNTING PERIODS

Case 1: MAR(59)



*CED (S_1) established here for M_2

Case 2: MAR(64)

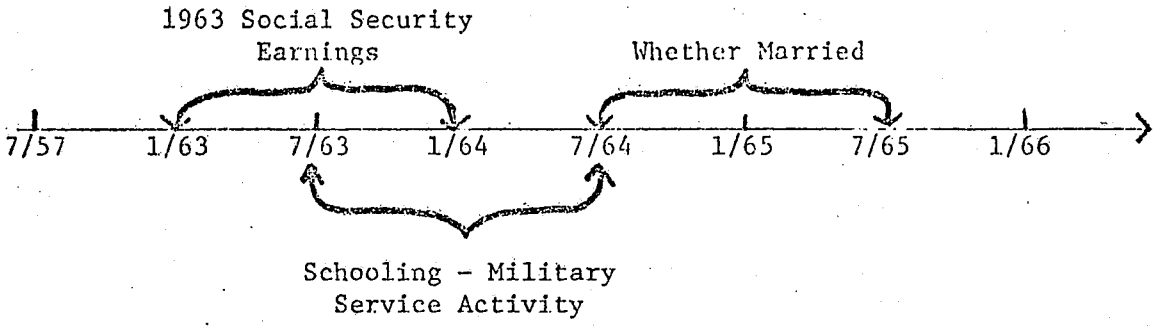


Table 1: Definitions of variables used in Models 1 and 2. (For those variables that change across decision periods, MAR(59) is used as an example. Such variables are denoted by upper-case letters.)

M_2 (Dependent Variable)

MAR(59)	equals one if married after June 1959 and before July 1960 (7/59-7/60); otherwise zero.

B_0 (Social Characteristics)

cath	equals one if family of origin was Catholic; otherwise zero.
oldr	equals one if 18.5 or more years old in June 1957; otherwise zero.
nfrm	equals one if family of origin did not reside on a farm; otherwise zero.
nkids	number of siblings in family of origin

F_0 (Family Income, or Wealth)

pay2	equals one if parents were in the second quartile of the parents' average(1957-1960) income distribution; otherwise zero.
pay3	equals one if parents were in the third quartile of the parents' average income distribution; otherwise zero.
pay4	equals one if parents were in the fourth quartile of the parents' average income distribution; otherwise zero.
mpay	equals one if missing data on parents' income; otherwise zero.
fin2	equals one if parents in the second quartile of the needs-adjusted parents' average income distribution; otherwise zero.
fin3	equals one if parents in third quartile of the needs-adjusted average income distribution; otherwise zero.
fin4	equals one if parents in fourth quartile of the needs-adjusted average income distribution; otherwise zero.
mfin	equals one if missing data on parents' needs-adjusted average income; otherwise zero.
foc2	equals one if Duncan score for father's occupation is in the second quartile of distribution of Duncan occupation scores; otherwise zero.
foc3	equals one if father's Duncan score in the third quartile of the occupation score distribution; otherwise zero.

Table 1 (cont'd)

foc4	equals one if father's Duncan score in the fourth quartile of the occupation score distribution; otherwise zero.
focu	equals one if missing data on father's occupation; otherwise zero.
medl	equals one if mother's education was 8-11 years; otherwise zero.
medm	equals one if mother's education was 12 years; otherwise zero.
medh	equals one if mother's education was more than 12 years; otherwise zero.

W_0 (Wage indicators)

SRN2	equals one if in the second quartile of the calendar 1958 Social Security earnings distribution; otherwise zero.
SRN3	equals one if in third quartile of 1958 Social Security earnings distribution; otherwise zero.
SRN4	equals one if in fourth quartile of 1958 Social Security earnings distribution; otherwise zero.
EFLG	equals one if completed schooling before July, 1959 and 1958 Social Security earnings less than $1000; otherwise zero.
RELY	1958 Social Security earnings divided by parents' 1957-59 average income.
ARLY	1958 Social Security earnings dividend by needs-adjusted parents' 1957-59 average income.
FUL	equals one if enrolled in school or on active military duty for one month or less, from July, 1958 through June, 1959; otherwise zero.
PRT	equals one if enrolled in school or on active military duty for more than one month but less than 9 months, from July, 1958 through June, 1959; otherwise zero.
OUT	equals one if enrolled in school or on active military duty 9 months or more, from July, 1958 through June, 1959; otherwise zero.

S_1 (Human Capital)

CED	total schooling accumulated through June 1959.

the means and standard deviations of all variables used in our study, for MAR(59), MAR(62), and MAR(65).

Ideally, a wage rate variable would measure the value of the young man's time directly, but there are no data on annual employment hours with which to obtain wage rates from Social Security earnings. However, time spent in schooling or the military can be accounted for. For a sample of white high school graduates in the late 1950s and early 1960s it seems reasonable to assume full employment for time not spent in the military or as a student. If labor supply hours are roughly equivalent for men employed in the civilian labor force, earnings coefficients that net out military and schooling effects may approximate wage rate effects.

Whether or not earnings net of time out of the civilian labor force represent wages, accounting for military and schooling remains necessary. How young men evaluate their earnings performance will depend on the extent of part-year employment. The variables FUL and PRT indicate full and part-year availability for civilian employment. Although the Wisconsin Study data are precise about the timing of military duty, it was necessary to impute some schooling activity codes (see Appendix A).

The following variables were included as background characteristics: religion of the family of origin, farm-nonfarm origins and age at high school graduation. Religion is dichotomized as Catholic--non-Catholic. Among a number of Catholic groups, late marriage has been a long tradition (Kennedy, 1973). Since the analysis covers a time period from the late 1950s through the mid 1960s, the recent convergence in Catholic--non-Catholic behavior (Bumpass and Westoff, 1973; Westoff and Jones, 1977; Jones and Westoff, 1979) is not applicable.

Nonfarm background is included to control for the more limited educational opportunities available in rural areas (Duncan and Reiss, 1956). Age at high school graduation indexes maturational differentials within our sample; this was found to be important by Voss (1977). Race is conspicuously absent, for only about 2% of the sample is nonwhite. Other potential background variables used in preliminary models but found unimportant were the type of high school program (i.e., whether college prepatory or not), percentile rank on the Henmon-Nelson test, and normalized class rank.

Estimation Methods

A logit program provided maximum likelihood estimates of the partial effects of independent variables on the log of the odds that a young man would marry. The dichotomous form of the dependent variable dictated the selection of this technique (Goldberger, 1964; Goodman, 1976). To make the results easier to understand, the log odds coefficient estimates were transformed. Each coefficient was multiplied by $(\overline{P})(1-\overline{P})$, where $\overline{P}$ is the mean of the dependent variable (Hanushek and Jackson, 1977). The resulting transformed coefficients are analogs to regression coefficients, to be interpreted as the estimated effect of a unit change in an independent variable on the probability of marriage, evaluated at the sample mean. For a number of the decision periods, we also ran OLS estimates and obtained identical results.

Usually the coefficient estimates refer to the impact of membership in a particular category relative to an omitted category. Because dummy variables restrict the range over which iterations must be computed, their use was encouraged by the decision to use logit. With respect to variables such as

parents' income another advantage is that the dummy variables pull in extreme values subject to greater sampling variability that might otherwise mislead by dominating coefficient estimation.

Results

Table 2 presents results for two versions of Models 1 and 2 for eight annual periods--1958 through 1965. The goodness of fit measure indicates much less satisfactory fits for the later years than for the earlier years. Hence for other versions of these models only the first five periods were analyzed. The substantive reasons for the decline in the fit of the models are discussed later.

Parents' 1957-60 income average enters directly in Model 1, or in the denominator of the relative-income variable for Model 2. Contrary to our expectations from Easterlin's relative-income hypothesis, neither model provides any indication of a parents' income effect. Furthermore, a commentary on Model 2 is that the relative-income variable obfuscates important effects of young men's current earnings.

Because some aggregate studies support the relative-income hypothesis, the lack of effects for parents' income might be considered surprising. It might be argued that parents' income during the period 1957-60 does not adequately capture the earlier economic socialization experience. To further explore the Easterlin hypothesis, we created other measures of parental status that might indicate the standard of living experienced by the respondent in his family of origin and that could determine his consumption tastes. We selected the Duncan SES score for the father's occupation and the mother's educational attainment since they seemed sufficient to tap sociological aspects

Table 2: Results[a] of logit regressions for Models 1 and 2, for men from the Wisconsin Longitudinal Study of Social and Psychological Factors in Achievement, 1958-1965.

	1958[b]		1959		1960		1961		1962		1963		1964		1965	
	N=4056; $\bar{P}$=0.071		N=3766; $\bar{P}$=0.120		N=3314; $\bar{P}$=0.173		N=2738; $\bar{P}$=0.213		N=2155; $\bar{P}$=0.197		N=1729; $\bar{P}$=0.207		N=1374; $\bar{P}$=0.207		N=1089; $\bar{P}$=0.208	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
α for χ^2	0.000	0.000	0.000	0.000	0.000	0.000	0.076	0.141	0.007	0.022	0.104	0.481	0.072	0.141	0.023	0.430
SRN2	-0.002	---	0.054*	---	0.049*	---	0.059*	---	0.047**	---	0.011	---	0.052**	---	0.058	---
SRN3	0.043*	---	0.111*	---	0.037	---	0.070*	---	0.082*	---	0.072*	---	0.031	---	-0.022	---
SRN4	0.051*	---	0.134*	---	0.111*	---	0.088*	---	0.024	---	0.026	---	0.104*	---	0.111*	---
pay2	-0.001	---	0.029**	---	0.006	---	0.005	---	0.008	---	0.050**	---	0.013	---	0.049	---
pay3	0.011	---	0.015	---	-0.024	---	0.006	---	0.034	---	0.015	---	0.021	---	0.009	---
pay4	0.004	---	0.028	---	-0.032	---	0.001	---	0.017	---	0.069*	---	0.009	---	0.070**	---
KELY	---	0.009	---	0.001	---	0.009	---	0.10	000	-0.018	---	-0.015	---	0.003	---	0.000
CED	-0.041**	-0.063*	-0.006	-0.031*	0.000	-0.012	0.007	-0.002	0.013*	0.007	0.003	0.004	-0.014*	-0.013*	0.002	0.006
FUL	0.028**	0.034*	0.048*	0.075*	0.038**	0.066*	0.036	0.048*	0.028	0.046**	0.036	0.067*	0.015	0.050	-0.013	0.016
PRT	0.006	0.005	-0.018	-0.020	0.039**	-0.041	0.035	0.035	-0.022	-0.014	-0.019	0.032	0.061**	0.068*	-0.056	-0.057
cath	-0.011	-0.010	-0.023*	-0.020	-0.036*	-0.032*	-0.029**	-0.026	-0.034	-0.008	-0.027	-0.027	0.000	0.000	0.035	0.031
oldr	0.046*	0.047*	0.031	0.033	0.052*	0.055*	0.016	0.016	-0.103*	-0.103*	0.014	0.012	-0.010	-0.004	0.000	-0.012
nfrm	0.005	0.013	0.007	0.022	0.005	0.004	0.010	0.018	0.002	0.010	0.019	-0.005	-0.043	-0.035	0.033	0.053

[a] The figures are transformed log-odds coefficients. The missing data codes described in Table 1 are included in the analysis but are not shown here because of the lack of substantive interest.

[b] In 1958, the dependent variable is MAR(58), i.e., the probability of first marrying between July 1958 and June 1959. The dependent variable is defined comparably for the other analysis years.

* Significant for at least .05.

** Significant at .05, but < .10.

of the environment of the family of origin as well as to proxy for parental wealth that might be measured poorly by reported income.

The number of household members who shared the parents' income is also important to the standard of living experienced in the family of orientation. We adjusted parental income for the ages and numbers of siblings in the respondent's household while he was in high school. We had to assume there were no other relatives or dependents living in the household, and that siblings left the household on their twentieth birthday. The age-size composition of the parents' household on their twentieth birthday. The age-size composition of the parents' household was used to rescale parents' income using the North Central Region family equivalence scales for the Bureau of Labor Statistics moderate income level. Rural incomes were inflated to urban standards, based on work by Reed and MacIntosh (1972) and Espenshade (1973) on the cost of raising children.

Model 1 was rerun twice--once substituting father's occupation and mother's education for parents' income, and once substituting adjusted parents' income. We also substituted needs-adjusted parents' income in the denominator of the relative income ratio for model 2. Those results appear in Table 3. The coefficients for variables other than earnings, parents' income, relative income, father's occupation and mother's education are not shown, because their effects did not change from Table 2. The original version of Models 1 and 2 are included in Table 3 for the reader's convenience, and are labeled "version A." None of the alternative specifications of the respondent's economic socialization experience provide support for the relative-income hypothesis. This can be seen in Versions B and C of Model 1 and Version B of Model 2.

Table 3. Results[a] from logit regressions for alternative specifications of Models 1 and 2 for men from the Wisconsin Longitudinal Study of Social and Psychological Factors in Achievement: 1958-1962.

	1958[b]			1959			1960			1961			1962		
	N=4056; $\bar{P}$=0.071			N=3766; $\bar{P}$=0.120			N=3314; $\bar{P}$=0.173			N=2738; $\bar{P}$=0.213			N=2155; $\bar{P}$=0.197		
	Model 1, Version: C			Model 1, Version: C			Model 1, Version: C			Model 1, Version: C			Model 1, Version: C		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
α for χ^2 =	.000	.000	.000	.000	.000	.000	.000	.000	.000	.076	.066	.064	.007	.008	.005
SRN2	-.002 (.897)	-.002 (.886)	-.002 (.895)	.054* (.025)	.053* (.024)	.055* (.017)	.049* (.046)	.046* (.059)	.047* (.050)	.059* (.019)	.059* (.020)	.060* (.019)	.047** (.095)	.038 (.130)	.043** (.084)
SRN3	.043* (.009)	.042* (.008)	.044* (.008)	.111* (.000)	.108* (.000)	.113* (.000)	.037 (.151)	.031 (.221)	.036 (.156)	.070* (.012)	.070* (.011)	.071* (.010)	.082* (.003)	.081* (.003)	.086* (.002)
SRN4	.051* (.002)	.049* (.003)	.051* (.003)	.134* (.000)	.130* (.000)	.136* (.000)	.111* (.000)	.107* (.000)	.109* (.000)	.088* (.005)	.090* (.004)	.089* (.004)	.024 (.449)	.025 (.443)	.029 (.385)
pay2	-.001 (.919)	--	--	.029 (.067)	--	--	.006 (.751)	--	--	.005 (.841)	--	--	.008 (.777)	--	--
pay3	.011 (.373)	--	--	.015 (.365)	--	--	-.024 (.239)	--	--	.006 (.800)	--	--	.034 (.206)	--	--
pay4	.004 (.743)	--	--	.028 (.109)	--	--	-.032 (.138)	--	--	.001 (.964)	--	--	.017 (.525)	--	--
foc2	--	.007 (.523)	--	--	-.003 (.829)	--	--	.007 (.724)	--	--	.007 (.785)	--	--	.015 (.564)	--
foc3	--	-.005 (.701)	--	--	.009 (.582)	--	--	.018 (.388)	--	--	.022 (.379)	--	--	-.003 (.915)	--
foc4	--	-.002 (.908)	--	--	-.033** (.068)	--	--	.015 (.477)	--	--	.006 (.801)	--	--	.008 (.765)	--
med1	--	.015 (.323)	--	--	.003 (.882)	--	--	.039 (.108)	--	--	-.021 (.478)	--	--	-.009 (.773)	--
medm	--	.010 (.503)	--	--	-.013 (.481)	--	--	.006 (.803)	--	--	.002 (.953)	--	--	-.020 (.537)	--
medh	--	-.015 (.448)	--	--	-.034 (.172)	--	--	-.070 (.360)	--	--	-.001 (.965)	--	--	-.062 (.101)	--
fin2	--	--	.015 (.236)	--	--	.001 (.967)	--	--	.014 (.443)	--	--	-.006 (.790)	--	--	-.011 (.661)
fin3	--	--	.012 (.353)	--	--	-.002 (.889)	--	--	-.023 (.257)	--	--	.002 (.938)	--	--	-.020 (.439)
fin4	--	--	.008 (.580)	--	--	.015 (.385)	--	--	-.034 (.119)	--	--	.012 (.617)	--	--	.008 (.774)

	Model 2, Version:		Model 2, Version:		Model 2, Version:		Model 2, Version:		Model 2, Version:	
	A	B	A	B	A	B	A	B	A	B
α for χ^2	0.000	0.000	0.000	0.000	0.000	0.000	0.141	0.136	0.022	0.019
RELY	.009	--	.001	--	.009	--	.010	--	-.018	--
ARLY	--	.002	--	.001	--	.003	--	-.008	--	.002

[a] The figures are transformed log-odds coefficients. The findings for CED, FUL, PRT, cath, oldr, nfrm, and all missing data categories are not presented. The missing data codes described in Table 1 are included in the analysis but are not shown here because of the lack of substantive interest.

[b] In 1958, the dependent variable is MAR(58), i.e., the probability of first marrying between July 1958 and June 1959. The dependent variable is defined comparably for the other analysis years.

* Significant for at least .05.

** Significant for >.05, but <.10.

For all versions of Model 1, young men whose earnings in the calendar year preceding the year they married placed them above the first quartile were substantially more likely to marry. Net of commitment to school or military, ability to earn more apparently allows young men to exercise preferences for family activity. If we interpret these earnings coefficients as measures of the impact of wage differences, the theoretical implication is that income effects outweigh substitution effects of rising wages. Whether or not the earnings coefficients tap wage differences, it is clear that as earnings rise in the first five years the probability of marriage increases.

In each of the first five decision periods the coefficients for FUL indicate that young men employed 11 months or more in the previous year are more likely to marry than men who were in school or the military for 11 months or more. Presumably young men who initially specialize in market work are more able to combine this with family activity than those who enter college or the military. Conversely, those who are in school or in the military may be more likely to postpone marriage until a given schooling or training program is finished. For such individuals, the components of the marriage search and decision process may take longer. For example, the "engagement" period may be longer.

For most decision periods, young men who had part-year schooling or military duty the previous year were no more or less likely to marry than were those who were students or in the military for 11 months or more. Evidently transit in to and out of the civilian labor force or combining market work with other activities impede marriages as much as full-time schooling or military duty.

Additional schooling, per se, has a relatively small negative effect on the likelihood of marriage. It is important to remember that the time spent acquiring additional education is controlled by including FUL and PRT. Thus, additional schooling (CED) represents such aspects of education as the acquisition of additional knowledge and changes in values and tastes. Evidently these aspects do not affect marriage timing. For fertility this inference is corroborated by evidence that education affects fertility through its effect on the timing of the entry into motherhood, and does not directly affect subsequent components of fertility (Rindfuss, Bumpass and St. John, forthcoming). Looking at the various background factors in the models, we find that older high school graduates were more likely to marry in the first few years after high school, as expected. In later years they were similar to their classmates. Catholics were less likely to marry than non-Catholics, but the effect is not always significant. Finally, in no case does farm background have a significant effect.

To study whether the results for Models 1 and 2 are sensitive to use of Social Security earnings and Wisconsin tax reports in lieu of more comprehensive income measures, we also analyzed three restricted samples for 1959, 1962, and 1965. These subsamples exclude men with farm background as well as those whose parents reported in 1964 that the young men were farmers, farm managers, or self-employed proprietors. Table 4 generally verifies the results discussed thus far (compare with Table 2). One of the parents' income quartiles does become significant for 1965, but this is balanced by the lack of change for the more crucial early periods.

Table 4: Results[a] from logit regression analyses for Model 1, Version A for men from the Wisconsin Longitudinal Study of Social and Psychological Factors in Achievement: 1959, 1962 and 1965.

	1959[b]	1962	1965
	N=2982; $\bar{P}$=0.118	N=1718; $\bar{P}$=0.201	N= 875; $\bar{P}$=0.219
α for χ^2	0.000	0.009	0.019
SRN2	0.021	0.060*	0.059
SRN3	0.062*	0.075*	-0.024
SRN4	0.099*	0.021	0.135*
pay2	0.015	0.016	0.071
pay3	0.016	0.029	0.026
pay4	0.022	0.032	0.088*
CED	-0.011	0.010	0.000
FUL	0.057*	0.033	-0.030
PRT	-0.014	-0.027	-0.056
cath	-0.023*	-0.020	0.037
oldr	0.011	-0.089*	-0.009

[a]These analysis samples omit respondents with farm background, or who were employed as farmers, farm managers, or self-employed proprietors in 1964. The figures are transformed log-odds coefficients. The missing data codes described in Table 1 are included in the analysis but are not shown here because of the lack of substantive interest.

[b]In 1959, the dependent variable is MAR(59), i.e., the probability of first marrying between July 1959 and June 1960. The dependent variable is defined comparably for the other analysis years.

*Significant for at least .05.

**Significant for >.05, but <.10.

OTHER SPECIFICATIONS OF RESPONDENT'S INCOME

Models 1 and 2 withheld available post marriage decision observations on earnings and income, mimicking what the sample actually knew with certainty at each decision period. This strategy has the important advantage of avoiding a potential simultaneity bias that could arise in a model that includes postdecision earnings. If marriage and related activities discourage or encourage increased earnings, then marriage affects earnings as well as vice versa. Models 1 and 2 are free of this possible simultaneity bias. However, marriage theories also recognize that the expected time path of wages is important for marriage decisions. Also there are arguments that the appropriate reference group is one's peers rather than one's parents (Freedman, 1963). These two possibilities are examined in this section.

Model 3 tests the hypothesis that young men gauge their economic prospects by comparing their wages to those of their peers--young men with similar productive attributes; as such, the model like Models 1 and 2, avoids any simultaneity problem. Ignoring the perils of simultaneity, Model 4 uses pre- as well as postdecision observations on earnings and income to explore the influences of permanent income. These models are

$$(3) \qquad M_2 = f_3[(W_1/\hat{W}_1);\ S_1;F_0;B_0]$$

$$(4) \qquad M_2 = f_4[Y;S_1;F_0;B_0]$$

where $(W_1/\hat{W}_1)$ is the ratio of the actual prior-period wage to that predicted from an earnings regression;

Y measures earnings or income for periods subsequent and prior to the decision period.

For (3) the hypothesis is that young men whose wages have been higher than would have been expected judging by what might have been predicted from their own and their peers' characteristics will expect to continue earning more than their peers.

Results derived from (4) can reveal how the short-run impacts of a wage change might differ from any permanent income effects. The findings have to be considered very tentative, as we have not attempted to purge any simultaneity from impacts of marriage on earnings.

In order to estimate Models 3 and 4, four additional sets of categorical dummy variables were developed. Table 5 contains brief definitions.

Our analysis of Models 3 and 4 was restricted to 1959, 1962, and 1965. This reduces the number of earnings regressions needed to define earnings relative to peers for Model 3, but reveals the pattern of effects as the sample ages. Table 6 displays the findings; version A of Model 1 is presented for comparison. The fits are better for earlier years, but also these models are more satisfactory for 1965 than the fits of Models 1 and 2 were for that year.

Again, the pattern of effects across decision period varies with respect to differences in early commitments to school or the military versus market work. Note that in Models 3 and 4 for 1959, additional schooling is associated with remaining unwed, but in Model 1 for the same period, schooling has no effect. This difference results from deleting FUL and PRT for Models 3 and 4, based on our reasoning that the schooling-military adjustment is redundant when permanent income indicators are included. When FUL and PRT are not included, CED picks up the time component of education, and is significant in 1959.

Table 5: Definitions of alternative specifications of the respondent's income. (For those variables that change across decision periods, MAR(59) is used as an example. Such variables are denoted by upper-case letters.)

(w_1/w_1) (Earnings Relative to Peers)

EXLS	equals one if 1958 Social Security earnings divided by predicted 1958 earnings exceeds 1.25; otherwise zero.
EXMR	equals one if 1958 Social Security earnings divided by predicted 1958 earnings is less than 0.75; otherwise zero.
MDEX	equals one if missing data on predicted 1958 earnings; otherwise zero.

P3 (Components of Permanent Income)

av59	three-year average Social Security earnings for 1958-1960, in hundred dollar units.
av63	three-year average Social Security earnings for 1962-1964.
av69	three-year average Social Security earnings for 1968-1970.
y742	equals one if in the second quartile of the 1974 own income report distribution; otherwise zero.
y743	equals one if in the third quartile of 1974 own income report distribution; otherwise zero.
y744	equals one if in the fourth quartile of 1974 own income report distribution; otherwise zero.
my74	equals one if did not report 1974 own income; otherwise zero.
per2	equals one if in the second quartile of the projected 1984 income distribution; otherwise zero.
per3	equals one if in the third quartile of the projected 1984 income distribution; otherwise zero.
per4	equals one if in the fourth quartile of the projected 1984 income distribution; otherwise zero.
mper	equals one if missing data on projected 1984 income; otherwise zero.

Earnings Relative to Peers

As mentioned above, relative income has been considered with reference to the earnings of young men's peers. Although our data do not identify such peers or their earnings, we are able to estimate earnings variables for young men with the same characteristics as individual respondents. A separate regression to predict earnings for the year prior to each of the three decision periods was obtained to provide the denominator for the ratio that represents the young man's earnings relative to his peers (see Appendix A). The results in Table 6 are for categories of this ratio of actual earnings to predicted earnings. EXLS refers to men who would be expected to earn less than they actually did. The men in this category had actual earnings that exceed their predicted earnings by 25% or more. Conversely, EXMR indicates men who earned three-quarters or less of the amount predicted for them. For 1959 and 1962 the coefficients support the hypothesis that young men learn about their own permanent income by how well they perform in comparison to their peers. However, for 1965, EXLS and EXMR are not significant. Perhaps by 1965 young men refer to their previous earnings history instead of comparing their current income to their peers'.

Permanent Income Indicators

Three different measures of permanent income were estimated. For the first, the quartile categories of the respondent's 1975 report of 1974 own income represent long-run permanent income (see Model 4, Version A). These 1974 income categories have no effect in 1959, but years of schooling do have a significant effect. However, in 1962 and 1965, 1974 income is highly associated with increased marriage probability. For these periods additional

Table 6: Results[a] of logit regressions for Models 3 and 4 for men from the Wisconsin Longitudinal Study of Social and Psychological Factors in Achievement: 1959, 1962 and 1965.

	1959[b] N=3766; $\bar{P}$=0.120					1962 N=2155; $\bar{P}$=0.198					1965 N=1089; $\bar{P}$=0.208				
	Model 1, Version		Model 4, Version:			Model 1, Version		Model 4, Version:			Model 1, Version		Model 4, Version:		
α for χ^2 =	A 0.000	Model 3 0.000	A 0.000	B 0.000	C 0.000	A 0.007	Model 3 0.005	A 0.000	B 0.001	C 0.002	A 0.023	Model 3 0.640	A 0.001	B 0.001	C 0.006
SRN2	0.054*	--	--	--	--	0.047*	--	--	--	--	0.058*	--	--	--	--
SRN3	0.111*	--	--	--	--	0.082*	--	--	--	--	-0.022	--	--	--	--
SRN4	0.134*	--	--	--	--	0.024	--	--	--	--	0.111*	--	--	--	--
EXLS	--	0.047*	--	--	--	--	0.050*	--	--	--	--	0.037	--	--	--
EXMR	--	-0.032*	--	--	--	--	-0.036*	--	--	--	--	-0.003	--	--	--
y742	--	--	0.007	--	--	--	--	0.072*	--	--	--	--	0.097*	--	--
y743	--	--	0.019	--	--	--	--	0.084*	--	--	--	--	0.167*	--	--
y744	--	--	0.010	--	--	--	--	0.077*	--	--	--	--	0.169*	--	--
per2	--	--	--	-0.005	--	--	--	--	0.052*	--	--	--	--	0.106*	--
per3	--	--	--	0.009	--	--	--	--	0.066*	--	--	--	--	0.142*	--
per4	--	--	--	0.006	--	--	--	--	0.089*	--	--	--	--	0.132*	--
av59	--	--	--	--	0.002*	--	--	--	--	0.001	--	--	--	--	0.000
av63	--	--	--	--	0.001*	--	--	--	--	0.003*	--	--	--	--	0.000
av69	--	--	--	--	0.000	--	--	--	--	0.000	--	--	--	--	0.001*
CED	-0.006	-0.059*	-0.063*	-0.052*	-0.027*	0.013*	0.003	0.001	-0.063	0.006	0.002	0.000	-0.007	-0.005	0.005
FUL	0.048*	--	--	--	--	0.028	--	--	--	--	-0.013	--	--	--	--
PRT	-0.018	--	--	--	--	-0.022	--	--	--	--	-0.056	--	--	--	--
cath	-0.023*	-0.023*	-0.020**	-0.192**	-0.029*	-0.034	-0.012	-0.010	-0.010	-0.015	0.035	0.032	0.026	0.030	0.029
oldr	0.031*	0.044*	0.039	-0.049*	0.032	-0.103*	-0.098*	-0.091*	-0.075*	-0.100*	0.000	-0.013	0.003	0.005	-0.001
nfrm	0.007	0.013	0.015	0.015	0.001	0.002	0.017	0.007	0.007	0.012	0.033	0.055	0.050	0.048	0.048
pay2	0.029**	--	--	--	--	0.008	--	--	--	--	0.049	--	--	--	--
pay3	0.015	--	--	--	--	0.034	--	--	--	--	0.009	--	--	--	--
pay4	0.028	--	--	--	--	0.017	--	--	--	--	0.070	--	--	--	--

[a]The figures are transformed log-odds coefficients. The missing data codes described in Table 5 are included in the analysis but are not shown here because of the lack of substantive interest.

[b]In 1959, the dependent variable is MAR(59), i.e., the probability of marrying between July 1959 and June 1960. The dependent variable is defined comparably for the other analysis years.

*Significant for at least .05.

**Significant for >.05, but <.10.

schooling does not matter. Evidently the schooling variable taps permanent income better in the early period--about this, more later.

Version B of Model 4 uses income projected for 1984, when the sample will be about 45 years old. (See Appendix A on the projection technique.) Again, more long-run income implies a greater probability of marriage for 1962 and 1965, but no effect for 1959. Essentially, these results are the same as for Version A.

Because family activity may be financed from savings as well as from borrowing, it seemed reasonable to study whether our results are sensitive to including both prior and subsequent earnings in the same model. The final version of Model 4 uses three three-year Social Security earnings averages, centered respectively upon 1959, 1963, and 1969.[3] Note that the metric for these variables differs from those for quartile income categories. There is a tendency here for the most contemporaneous earnings average to have the strongest effect. This is true in 1959 and 1962. For 1965, there is a slight exception. Only the earnings average centered on 1969 has a significant effect; the average centered on 1963 does not. Nevertheless, the general findings from this version of Model 4 tend to verify the results from Model 1: the timing of marriage is responsive to contemporaneous earnings.

EDUCATIONAL CONSTRAINTS AND MARRIAGE

Because the primary objective of this paper is to examine the relative-income hypothesis, the fact that certain other variables operate differently as the sample ages has not been emphasized. However, those changes warrant further attention. They are particularly striking for variables involving

the time commitment of the respondent to formal schooling (CED, FUL, and PRT). In addition, the last section demonstrated that permanent-income indicators are strongly related to marriage timing. These facts suggest educational aspirations and financing education are very important to the marriage process. At the risk of stating the obvious, certain points about this seem worth mentioning. Then we present a final set of results.

Young men probably aspire to a degree or program completion, instead of a given number of additional school years. The aspiration to finish a program structures an individual's propensity to engage in activities that may hinder its completion. Parents typically play an important role in financing college. Undoubtedly the norm is that parents' support ends when children marry and form their own households. Hence, young men who attend college are inclined to postpone marriage until the end of their undergraduate education. Since graduate education and professional training are often financed in other ways, the effect of additional schooling will decrease in the years near or after college attendees complete a bachelor's degree.

To examine this further, we ran Model 4, Version A for all eight decision periods--1958 through 1965. Consistent with our discussion, Table 7 shows that education is significant during all of the first four years after high school, but remains significant in only one of the subsequent four years. The 1974 income categories also behave as anticipated. During the years immediately following high school graduation, permanent income does not have a significant effect on whether or not young men marry. However, the effect becomes significant as the "normal" college graduation time approaches, and becomes even stronger subsequently.

With respect to Easterlin, these findings suggest that the income of young men has to be considered in relation to the decisions they make about

Table 7: Results[1] of logit regressions of Model 4, version A, for men from the Wisconsin Longitudinal Study of Social and Psychological Factors in Achievement: 1958-1965

	MAR(58)	MAR(59)	MAR(60)	MAR(61)	MAR(62)	MAR(63)	MAR(64)	MAR(65)
α for χ^2 =	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
y742	0.000	0.007	0.023	0.050*	0.072*	0.048	0.039	0.097*
y743	-0.056	0.019	0.026	0.076	0.084*	0.111*	0.110*	0.167*
y744	0.004	0.010	0.073*	0.079*	0.077*	0.095*	0.096*	0.169*
CED	-0.070*	-0.063*	-0.037*	-0.015*	0.001	0.005	-0.018*	-0.007
cath	-0.009	-0.020**	-0.032*	-0.026	-0.010	-0.031	-0.004	0.026
oldr	0.071*	0.039	0.074*	0.019	-0.091*	0.030	0.012	0.003
nfrm	0.012	0.015	-0.011	0.011	0.007	0.011	-0.045	0.050

[1]The figures are transformed log-odds coefficients. The missing data codes described in Table 5 are included in the analyses but are not shown here because of the lack of substantive interest.

[2]In 1958, the dependent variable is MAR(58), i.e., the probability of marrying between July 1958 and June 1959. The dependent variable is defined comparably for the other analysis years.

*Significant for at least .05.

**Significant for >.05 but <.10.

the kind and amount of credentials and training they acquire or plan to acquire. Put in aggregate, in terms of shifting cohort size, one response of a small cohort following a large cohort might be to acquire fewer credentials and less training than they otherwise might have. Conversely, a large cohort following a small cohort might respond by acquiring more credentials and training. Ryder's (1978) work suggests that this is how the baby boom cohorts were initially occupied in the late 1960s and the early 1970s.

CONCLUSION

We have investigated the Easterlin relative-income hypothesis with respect to the probability of first marriage among successive samples of never-married men who graduated from Wisconsin high schools in 1957. Competing theories have also been examined.

There is no support for Easterlin's assertion that marriage timing depends on an interaction between young men's earnings and their parents' income. We also analyzed the Duncan score for the father's occupation with the mother's education, as well as a needs-adjusted parents' income variable, and found no effects.

Young men's earnings are positively related to earlier marriage. Net of schooling and military activity, these results suggest that increased wages make marriage more affordable despite related increases in the opportunity cost of time spent in family activities. The effects of earnings relative to peers and of postmarriage indicators of permanent income were also examined. It appears that young men learn what their permanent income will be by comparing their own earnings to their peers'. In addition more direct indicators of permanent income are positively related to earlier marriage.

The effects of 1974 income and income projected to 1984 appear after most sample members have completed college. For the first few years after high school, schooling and military duty are significant predictors, but long-run income is not.

The pattern of these effects over time implies that educational aspirations and financing college are important for marriage timing. With respect to the Easterlin hypothesis, this implies that the impact of wage changes on educational aspirations and financing deserves greater attention.

Our analysis also illuminates the role of education, per se. Completed years of schooling had no effect on marriage timing in models that account for time spent in schooling and military service. Thus, continued education does not seem to affect preferences for marriage. Other tastes did have effects. Catholics tended to marry later, there was no effect of farm background, and the older members of the Wisconsin class of 1957 were likely to marry earlier.

NOTES

[1]Note that the women from the Wisconsin Longitudinal Study of Social and Psychological Factors in Achievement could not be used in the present analysis because the required earnings data were not obtained for women. Furthermore, the relative income hypothesis, as originally formulated by Easterlin, only addresses the relative income of males.

[2]We should point out that elaborate procedures have been designed and utilized to safeguard the confidentiality of these Social Security Earnings data. At no time did we, or any member of our staff have access to the individual records. Instead, certified individuals had to request Madison Academic Computer Center officials for runs from the source tape. The output from these runs then was checked by the Computer Center officials to insure that no listings were obtained, and that no cross-tabulations were obtained which provided information on a cell with fewer than five cases.

[3]The correlations between three-year earnings averages centered closer together than these are too high.

APPENDIX A

This appendix discusses how some of the more complex variables were constructed.

Social Security Earnings

If earnings exceeded the taxable ceiling, an annual figure had been imputed by the Wisconsin Longitudinal Study of Social and Psychological Factors in Achievement staff. For this purpose the highest reported figure for any quarter prior to and including that in which the taxable maximum was reached was assigned to each subsequent quarter for which there was no reported earnings figure. In addition, an algorithm projected total earnings for cases involving more than one employer. If the earnings from each employer were below the ceiling, all employer records were summed. To obtain an estimated total for multiple employer cases that did exceed the ceiling the algorithm adds projected and reported earnings.

Because the self-employed provide annual reports, net earnings from self-employment was used regardless of the amount of self-employment taxable income. If an earner had a wage record and reported self-employment income, the two types of records were summed.

Measuring farmers' income is known to be fraught with difficulty. For young men whose farm income exceeded the taxable income, annual estimates were assigned uniformly. These farm maximum estimates rose as the ceilings increased: 1957-58, $7400; 1959-65, $8000; 1966-67, $10,700; and 1968-71, $12,600.

Military and Schooling Activity

For about 20% of the sample, schooling codes had to be imputed uniformly across years in which schooling may not have been distributed uniformly.

If, for example, a Bachelor's degree was completed five years after entering college and no military duty intervened, each month of the five years was imputed a schooling activity code to assign four-fifths of a school year to each of the five years. When military service interupted schooling, the active duty months would instead be assigned military activity codes, and the codes assigned to months not on military duty would reflect the reduction of time during the five years that could have been devoted to schooling. This procedure maintains equivalent schooling years across all Bachelor's recipients, and assumes that part year schooling delayed the degree when there was no military service. If, in our example, a young man actually dropped out of school to work for a year, he would incorrectly be assigned to the PRT category for that year. Furthermore, such an error will contaminate CED(completed school years at the onset of the decision period), because a drop-out year not spent in the military is then imputed four-fifths of a school year.

Earnings Regressions for Peers' Earnings

The sample for each earnings regression included all men in the relevant analysis sample for whom information was available to predict earnings. Characteristics used as explanatory variables included the missing data indicator for zero earnings reports (EFLG), age at graduation from high school, parents' income, completed years of schooling, the military-schooling categories (FUL and PRT), and other social background characteristics (cath, oldr). In addition to these, other explanatory variables were normalized high school rank, Henmon-Nelson test score, and whether the young men had been in a college preparatory program. Together these variables explained about 40% of the sample earnings variation for 1958, 1961 and 1964.

Projecting 1984 Income

A weighted average of earnings and income was multiplied by the 1970 Census ratio for North Central Region men's earnings at age 45 to those at age 35, specific to the 3-digit Census occupation code for each young man's reported 1974 occupation. The earnings-income average weighted 1970 and 1971 Social Security earnings each at 0.20, with 1974 income weighted by 0.60. (We had no information about 1972 and 1973 income.) These weights smooth out interannual fluctuations but assign more importance to the 1974 income report.

APPENDIX B

Table B-1: Means and Standard Deviations for Selected Analysis Years.

		1959		1962		1965	
		$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
origin family catholic	(cath)	0.40	0.49	0.43	0.49	0.44	0.50
18.5 or older on 7/1/57	(oldr)	0.06	0.24	0.05	0.22	0.06	0.23
nonfarm background	(nfrm)	0.81	0.38	0.81	0.39	0.82	0.40
parents' 1957-60 average income in second quartile	(pay2)	0.25	0.44	0.25	0.44	0.25	0.44
parents' average income in third quartile	(pay3)	0.24	0.42	0.26	0.45	0.24	0.42
parents' average income in fourth quartile	(pay4)	0.25	0.44	0.24	0.42	0.25	0.44
missing data for parents' parents' income	(mpay)	0.03	0.16	0.04	0.17	0.03	0.16
2nd quartile for needs-adjusted parents' income	(fin2)	0.24	0.42	0.24	0.43	0.24	0.42
3rd quartile for needs-adjusted parents' income	(fin3)	0.25	0.44	0.25	0.44	0.25	0.44
4th quartile for needs-adjusted parents' income	(fin4)	0.25	0.43	0.26	0.45	0.25	0.44
missing data for needs-adjusted income	(mfin)	0.01	0.05	0.01	0.05	0.01	0.05
2nd quartile Duncan father's occupation score	(foc2)	0.21	0.41	0.20	0.40	0.20	0.40
3rd quartile Duncan father's occupation score	(foc3)	0.24	0.41	0.24	0.42	0.26	0.45
4th quartile Duncan father's occupation score	(foc4)	0.24	0.43	0.26	0.45	0.25	0.44
missing data	(focu)	0.01	0.08	0.01	0.07	0.01	0.08
mother's education 8-11 school years	(med1)	0.36	0.47	0.33	0.47	0.33	0.47
mother's education 12 school years	(medm)	0.40	0.48	0.40	0.48	0.41	0.49

Table B-1 (cont.)

		1959		1962		1965	
		$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
2nd quartile 1984 projected income	(per2)	0.24	0.42	0.24	0.42	0.24	0.42
3rd quartile	(per3)	0.25	0.43	0.25	0.43	0.25	0.43
4th quartile	(per4)	0.25	0.43	0.25	0.43	0.25	0.43
missing data for '84 income	(mper)	0.02	0.13	0.03	0.16	0.02	0.13
S.S. earnings (in 00's)		20.94	17.02	37.56	25.02	61.02	34.92
whether married	($\bar{P}$)	0.12	0.33	0.20	0.40	0.21	0.41
sample size	(N)	3766		2155		1089	

Table B-1 (cont.)

		1959		1962		1965	
		$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.
mother's education more than 12 years	(medh)	0.15	0.35	0.16	0.37	0.18	0.38
2nd quartile of Social Security earnings	(SRN2)	0.23	0.42	0.24	0.43	0.27	0.45
3rd quartile	(SRN3)	0.26	0.45	0.25	0.44	0.26	0.44
4th quartile	(SRN4)	0.25	0.43	0.25	0.44	0.24	0.43
S.S. earnings ($<1,000) and schooling completed	(EFLG)	0.10	0.20	0.05	0.22	0.07	0.24
S.S. earnings ÷ Parents' Income	(RELY)	0.23	0.38	0.66	0.85	1.00	1.09
S.S. earnings ÷ Needs-Adjusted Parents' Income	(ARLY)	0.36	0.95	1.08	2.54	1.71	3.46
in school or on active military duty < 1 month	(FUL)	0.42	0.49	0.39	0.49	0.71	0.46
in school or military more than 1 but < 9 mo.	(PRT)	0.38	0.48	0.37	0.48	0.22	0.41
total years of schooling	(CED)	12.19	0.30	13.36	1.68	13.96	0.24
earnings relative to peers was > 1.25	(EXLS)	0.25	0.43	0.25	0.43	0.23	0.42
earnings relative to peers was < 0.75	(EXMR)	0.40	0.49	0.37	0.48	0.27	0.46
missing data on earnings relative to peers	(MDEX)	0.02	0.15	0.03	0.16	0.04	0.17
1958-60 S. S. earnings average (in 00's)	(av59)	32.26	20.27	23.44	16.39	22.84	16.57
1962-64 S.S. earnings average	(av63)	53.02	27.86	46.00	26.20	34.65	21.69
1968-70 S.S. earnings average	(av69)	97.57	46.67	94.20	47.72	88.64	50.67
2nd quartile of 1974 own income	(y742)	0.24	0.42	0.24	0.43	0.24	0.43
3rd quartile	(y743)	0.25	0.43	0.25	0.43	0.25	0.43
4th quartile	(y744)	0.25	0.43	0.25	0.43	0.25	0.43
missing data for '74 income	(my74)	0.01	0.05	0.01	0.05	0.01	0.05

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