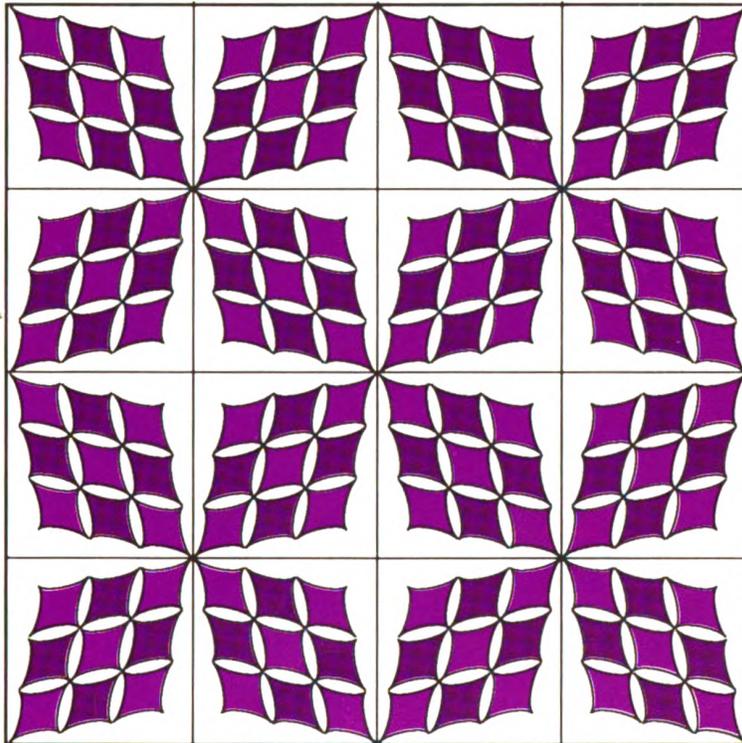


# Studies in Household and Family Formation

Remarriage Among Women  
in the United States: 1985

Living Arrangements of Young Adults Living Independently:  
Evidence From the Luxembourg Income Study



U.S. Department of Commerce  
BUREAU OF THE CENSUS

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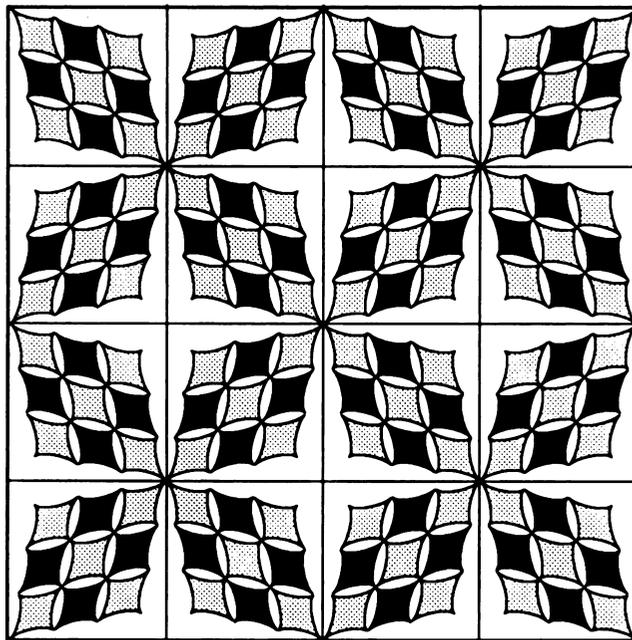
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# Studies in Household and Family Formation



Remarriage Among Women  
in the United States: 1985  
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Independently: Evidence From the Luxembourg  
Income Study

Issued December 1990



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# Preface

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Social scientists have been concerned with understanding the complexities of modern living arrangements for the purpose of guiding plans and policies designed to create housing, social, and economic assistance programs. As a consequence, a notable body of research on the dynamics of household and family formation has evolved over the last quarter century.

Among several factors that have been identified as contributing to changing lifestyles are social and economic events and circumstances. This report contains two papers that explore these relationships. In "Remarriage Among Women in the United States: 1985," Arthur Norton and Louisa Miller present information about women in the United States and their likelihood of remarriage after divorce or widowhood. Kathleen Short and Thesia Garner in their paper "Living Arrangements of Young Adults Living Independently: Evidence From the Luxembourg Income Study" offer an international comparison of the influence of income on independent household formation among young adults in the United States and several foreign countries.

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by Kathleen S. Short, Bureau of the Census, and  
Thesia I. Garner, Bureau of Labor Statistics

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# Remarriage Among Women in the United States: 1985

Arthur J. Norton and Louisa F. Miller, Bureau of the Census

## Introduction

Remarriage is in many respects as important to modern society as are its antecedents, first marriage, divorce and/or widowhood. This particular type of formal union (remarriage) brings with it complexities not found in other statuses. Partners in remarriage have the benefits and/or burdens of experiences both from a previous marriage and from the termination of a previous marriage. As the frequency of remarriages has grown (about 46 percent of the 2.4 million marriages in 1987 were remarriages for at least one of the partners) (U.S. National Center for Health Statistics, 1990), interest in the effects of widespread remarriage on society in general and on remarried couples and their families in particular has increased.

Remarriage influences all aspects of family life as well as the social and economic institutions with broad responsibilities for serving families and their members. It affects the lives of children, parents, grandparents, siblings, and other kin by introducing the complexities associated with the blending of blood, marital, and step relationships. Research into the implications of extensive remarriage for policies and services reflects a variety of concerns. Miller and Moorman (1989) focus on the growth in the prevalence of stepfamilies. They estimate that 15 percent of all children living with two parents in 1985 were living with one stepparent. Zill (1988) suggests that about one-fourth of today's young children will live as a stepchild before reaching age 16. The majority of those step situations come about because of remarriage. Other researchers have concentrated on remarriage and kinship extension and/or dilution (Whiteside, 1989), preparation for remarriage (Ganong and Coleman, 1989), marital satisfaction in remarriage (Vemer, Coleman, Ganong and Cooper, 1989), impact on children relative to contact with an absent parent (Seltzer and Bianchi, 1988), and the changing roles of family members involved in a remarriage (Guisinger, Cowan, Schulberg, 1989).

This paper presents a profile of women who remarry after divorce or widowhood

and discusses the relative likelihood of remarriage among women with different social and demographic characteristics. The paper focuses on remarriage after the first marriage has ended in divorce or widowhood. No analysis of third or higher order marriages is included. The incidence of the latter is increasing but still represents a relatively small part of the remarriage experience of women in the United States. (Only 3 percent of women ever married in 1985 had experienced more than two marriages.)

## Data

The data are from the June 1985 marriage and fertility history supplement to the Current Population Survey. This set of data is from the latest in a series of quinquennial surveys conducted by the Bureau of the Census and sponsored by the National Institute of Child Health and Human Development. These data give the most recent comprehensive national information on marriage, divorce, widowhood, and remarriage in the United States. Information from the June 1990 survey will become available during 1991. In the 1985 survey, detailed marriage history questions were asked only of women.

## Overall Trends in Remarriage

Nearly 4 of every 10 ever-married women in 1985 had had a first marriage end in divorce or widowhood (table A). Remarriage is more common after divorce than after widowhood. Among the 17 million women divorced after first marriage, about two-thirds (65  $\pm$  1 percent) had remarried by June 1985.<sup>1</sup> Slightly more than one-fifth (23  $\pm$  1 percent) of the 11 million women widowed after first marriage had remarried by June 1985.

Data viewed across age groups (youngest to oldest) indicate that the proportion remarrying (before 1985) among previously divorced women increases with age while among women widowed after first marriage, the opposite appears to be true.<sup>2</sup> The data in table A show that among women who had been divorced after first marriage, 43 ( $\pm$  6) percent of women under 25 at the survey date had remarried but that fully 80

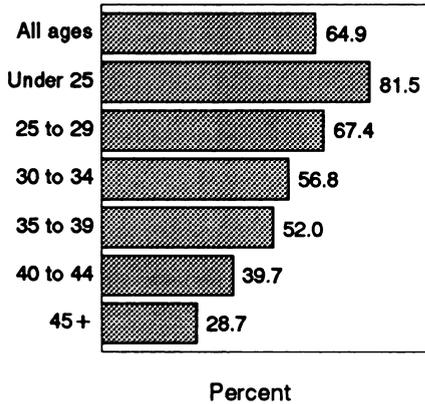
( $\pm$  5) percent of women 75 years and over in June 1985 had remarried. Among women whose first marriage ended in widowhood, 42 ( $\pm$  10) percent who were under 35 at the survey date had remarried, compared with only 15 ( $\pm$  2) percent of women 75 and over in 1985. Thus, age appears to be associated with likelihood of remarriage. However, in a generalized sense, "age" represents several components linked to remarriage including the chronological age of women, the age at dissolution of first marriage, the duration of the first marriage, the duration in the divorced or widowed status, and the age at remarriage. Looking at the different dimensions of age separately gives a clearer picture of the dynamics of the "age"/remarriage relationship.

The association between age at divorce and likelihood of remarriage is clearly inverse in nature. The younger a woman is at the time her first marriage ends in divorce, the more likely she is to eventually remarry. Among women who were under 25 at the time of divorce, 81 ( $\pm$  2) percent had remarried by 1985, compared to 67 ( $\pm$  2) percent of women 25 to 29 at divorce, 57 ( $\pm$  3) percent of women 30 to 34 at divorce, 52 ( $\pm$  4) percent of women 35 to 39 at divorce, 40 ( $\pm$  5) percent of women 40 to 44 at divorce, and 29 ( $\pm$  4) percent of women whose first divorce occurred at age 45 or older (figure 1 and table B). This same pattern holds when time since divorce is controlled for. Among women who had been divorced from their first husbands at least 5 years, 89 ( $\pm$  1) percent of those divorced when they were under 25 years old had remarried by 1985, while only 37 ( $\pm$  5) percent of those divorced at ages 45 and older had remarried by 1985.

<sup>1</sup> Figures following the  $\pm$  notation in this section represent the 90-percent confidence interval of the estimate.

<sup>2</sup> The apparent increase between the proportion of widows under age 35 who have remarried (41.9 percent) and the comparable proportion for widows ages 35 to 44 (42.2 percent) is not statistically significant.

Figure 1.  
**Percentage of Women Divorced From Their First Husbands, Who Had Remarried by the Survey Date, by Age at Divorce From First Marriage: June 1985**



A similar relationship exists between age at widowhood and likelihood of remarriage. Among women whose first marriage ended in widowhood, 54 ( $\pm 3$ ) percent of those who were widowed at ages under 45 years had remarried, 21 ( $\pm 3$ ) percent of those who were widowed at ages 45 to 54 had remarried, 8 ( $\pm 2$ ) percent of those who were widowed at ages 55 to 64 had remarried, and only 2 ( $\pm 1$ ) percent of women who were widowed at ages 65 or older had remarried by June 1985 (figure 2). As was the case for women divorced from their first husbands, the relationship between age at widowhood and likelihood of remarriage holds even when time since first marriage ended in widowhood is controlled for. Among women widowed from their first husbands at least 5 years before the survey date, 58 ( $\pm 3$ ) percent of those under age 45 at widowhood had remarried by 1985, but only 3 ( $\pm 1$ ) percent of their counterparts widowed at ages 65 and older had remarried by 1985.

The inverse relationship between age at termination of first marriage (either through divorce or widowhood) and likelihood of remarriage is due, in part, to the direct relationship between age and the availability of potential spouses. In March of 1985, there were 119 unmar-

Table A.  
**Marital History of Women 15 Years and Over, by Age: June 1985**

(Numbers in thousands)

Marital history	All women 15 and over	Age at survey date						75 years and over
		15 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 to 74 years	
Total	95,413	19,300	20,824	16,085	11,561	11,753	9,370	6,520
Ever married	73,971	5,059	16,604	14,955	10,956	11,311	8,931	6,155
Known to have ever been divorced	17,418	654	4,211	4,844	3,043	2,424	1,475	767
Known to have ever been widowed	12,735	31	215	535	996	2,465	3,900	4,594
Divorced after first marriage	17,142	651	4,201	4,790	2,999	2,366	1,404	729
Never remarried	6,025	372	1,724	1,736	960	716	371	146
Remarried	11,117	279	2,477	3,054	2,039	1,650	1,033	583
Widowed after first marriage	11,367	25	197	469	873	2,127	3,481	4,197
Never remarried	8,794	14	115	271	566	1,511	2,763	3,554
Remarried	2,573	11	82	198	307	616	718	643
PERCENT DISTRIBUTION								
Ever married	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Known to have ever been divorced	23.5	12.9	25.4	32.4	27.8	21.4	16.5	12.5
Known to have ever been widowed	17.2	0.6	1.3	3.6	9.1	21.8	43.7	74.6
Divorced after first marriage	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Never remarried	35.1	57.1	41.0	36.2	32.0	30.3	26.4	20.0
Remarried	64.9	42.9	59.0	63.8	68.0	69.7	73.6	80.0
Widowed after first marriage	100.0	(B)	100.0	100.0	100.0	100.0	100.0	100.0
Never remarried	77.4	(B)	58.4	57.8	64.8	71.0	79.4	84.7
Remarried	22.6	(B)	41.6	42.2	35.2	29.0	20.6	15.3
Ever married	100.0	6.8	22.4	20.2	14.8	15.3	12.1	8.3
Known to have ever been divorced	100.0	3.8	24.2	27.8	17.5	13.9	8.5	4.4
Known to have ever been widowed	100.0	0.2	1.7	4.2	7.8	19.4	30.6	36.1
Divorced after first marriage	100.0	3.8	24.5	27.9	17.5	13.8	8.2	4.3
Never remarried	100.0	6.2	28.6	28.8	15.9	11.9	6.2	2.4
Remarried	100.0	2.5	22.3	27.5	18.3	14.8	9.3	5.2
Widowed after first marriage	100.0	0.2	1.7	4.1	7.7	18.7	30.6	36.9
Never remarried	100.0	0.2	1.3	3.1	6.4	17.2	31.4	40.4
Remarried	100.0	0.4	3.2	7.7	11.9	23.9	27.9	25.0

B Base less than 75,000.

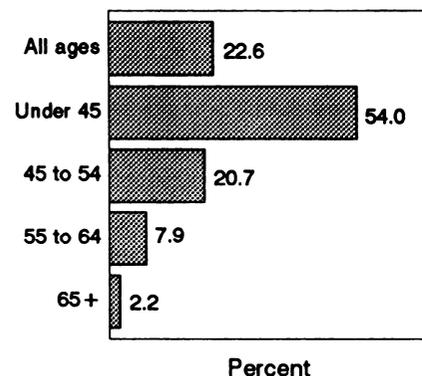
**Table B.**  
**Percentage of Women 15 Years and Over Divorced From Their First**  
**Husbands, Who Had Remarried by the Survey Date, by Age at Divorce,**  
**Time Since Divorce, and Selected Characteristics: June 1985**

(Universe is all women whose first marriage ended in divorce)

Characteristic and time since divorce	All ages	Age at divorce after first marriage						Median
		Under 25 years	25 to 29 years	30 to 34 years	35 to 39 years	40 to 44 years	45 years and over	
<b>TOTAL</b>								
Total .....	64.9	81.5	67.4	56.8	52.0	39.7	28.7	27.7
<b>Race and Hispanic origin:</b>								
White .....	66.4	82.7	69.4	59.5	52.5	43.8	28.8	27.6
Black .....	53.5	71.5	52.7	42.1	46.4	25.7	28.7	28.4
Hispanic <sup>1</sup> .....	54.5	71.8	54.4	50.8	36.8	(B)	(B)	27.6
<b>With children ever-born under 18 at divorce:</b>								
None .....	50.6	65.6	55.3	59.7	52.2	45.6	27.8	29.9
One or more .....	68.5	84.6	70.1	58.4	52.0	37.8	30.4	27.2
<b>Years of school completed:</b>								
Less than 12 years .....	72.7	85.1	76.7	69.4	62.0	52.9	34.8	27.2
12 years .....	65.1	80.4	66.0	59.0	53.6	38.7	26.4	27.3
13 to 15 years .....	59.7	77.4	64.1	47.3	42.3	34.9	27.8	27.6
16 or more years .....	54.6	83.3	61.5	43.5	39.9	23.8	22.1	29.6
<b>AT LEAST 3 YEARS SINCE FIRST MARRIAGE ENDED IN DIVORCE</b>								
Total .....	71.5	87.1	74.2	63.4	59.1	44.2	33.6	27.4
<b>Race and Hispanic origin:</b>								
White .....	73.1	88.5	76.1	66.1	60.2	46.1	33.8	27.3
Black .....	59.6	75.9	59.0	48.3	51.0	30.8	33.7	28.0
Hispanic <sup>1</sup> .....	61.2	80.8	61.1	55.4	(B)	(B)	(B)	27.7
<b>With children ever-born under 18 at divorce:</b>								
None .....	59.2	77.5	63.8	58.7	61.6	48.4	33.4	30.1
One or more .....	74.3	88.7	76.2	125.4	58.8	42.9	33.7	26.9
<b>Years of school completed:</b>								
Less than 12 years .....	78.0	90.2	81.3	74.1	67.8	57.3	40.4	27.1
12 years .....	72.0	86.8	73.5	65.6	59.4	43.7	31.5	27.1
13 to 15 years .....	66.9	83.1	72.1	55.9	48.9	37.9	31.4	27.3
16 or more years .....	61.0	86.2	66.7	48.8	50.9	25.7	26.2	28.9
<b>AT LEAST 5 YEARS SINCE FIRST MARRIAGE ENDED IN DIVORCE</b>								
Total .....	74.8	89.3	77.2	67.8	62.7	46.9	36.9	27.1
<b>Race and Hispanic origin:</b>								
White .....	76.3	91.0	78.9	70.5	63.6	48.0	37.0	27.1
Black .....	64.1	77.3	63.5	52.6	55.9	(B)	(B)	27.5
Hispanic <sup>1</sup> .....	65.3	82.3	66.0	65.9	(B)	(B)	(B)	27.5
<b>With children ever-born under 18 at divorce:</b>								
None .....	63.2	80.9	67.8	64.9	65.2	53.3	36.8	30.0
One or more .....	77.3	90.6	78.9	68.4	62.2	45.0	37.0	26.7
<b>Years of school completed:</b>								
Less than 12 years .....	80.2	91.7	83.9	77.3	70.1	58.4	43.0	27.1
12 years .....	75.5	89.3	76.5	70.3	64.0	45.5	33.7	26.8
13 to 15 years .....	70.3	85.3	75.2	61.3	48.4	40.7	36.9	27.0
16 or more years .....	65.3	88.7	69.4	51.5	55.9	29.9	31.6	28.4

<sup>1</sup>Persons of Hispanic origin may be of any race.  
 B Base less than 75,000.

**Figure 2.**  
**Percentage of Women Widowed From Their First Marriage, Who Had**  
**Remarried by the Survey Date, by Age at Widowhood From First**  
**Marriage: June 1985**



ried 25- to 34-year-old males for every 100 unmarried females in that age group (U.S. Bureau of the Census, 1986).<sup>3</sup> For 45- to 64-year-olds, the ratio was only 54 males per 100 unmarried females and for the population 65 and over, there were only 26 unmarried males per 100 unmarried females.

### Divorce and Remarriage

In addition to the strong association between age at divorce and likelihood of remarriage, there are other variables that appear to influence the prospects of remarriage after a first marriage has ended in divorce. Table B shows that for all women who divorced after first marriage, remarriage was more frequent among women who were White, women who had at least one child who was less than 18 years old when the mother divorced, and women who had lower educational attainment.

Even taking into account differences according to race or Hispanic origin, presence of children under 18 at the time of divorce, or education, women were still much more likely to remarry if

<sup>3</sup> Unmarried includes never married, widowed, and divorced.

they divorced at a young age.<sup>4</sup> For example, among women who divorced when they were under 25, about 83 percent of White women had remarried, compared with 71 percent of Black women and 72 percent of Hispanic women.<sup>5</sup> Among women who were in their mid- to late thirties when they divorced, only 52 percent of Whites, 46 percent of Blacks, and 37 percent of Hispanics had remarried.<sup>6</sup>

Data for women by presence of children under age 18 at divorce show that among women who divorced at ages under 25, 66 percent of women with no children and 85 percent of women with children had remarried, while among women who divorced at ages 45 or older only 28 percent of women without children and 30 percent of women with children had remarried. The proportions remarried for women who divorced at ages 45 and older are virtually identical. This undoubtedly is related to the ages of and actual presence of children at the time of divorce and remarriage. It may well be that women with very young children have a greater need to remarry than other women.

Education, as measured by years of school completed, appears to have little effect on likelihood of remarriage for those women who divorced at ages below 25. As age at divorce increases, the percentage remarried decreases across education categories. Thus, while there is virtually no difference in the percent remarried between the lowest and highest level of education (both close to 85 percent) among women who divorced at ages below 25 years, among women who divorced at ages 45 or older, 35 percent of women with less than 12 years of school completed had remarried, compared with only 22 percent of women with 16 or more years of school completed.<sup>7</sup>

The age of the woman at the June 1985 survey date also appears to be related to her likelihood of remarriage after divorce. Table C shows data for two age groups of women by the same characteristics shown for all women 15 years old and older in table B. As one would expect, the older women have higher proportions remarried overall largely be-

cause of increased exposure to the "risk" of remarriage.

The median age at divorce after first marriage for all women was 27.7 years (table B). The median age at divorce varied by less than 1 year by race and Hispanic origin and was quite similar (slightly above 27 years) for education categories reflecting less than 16 years of school completed. For women who completed 16 or more years of school, the median was 29.6 years. Better educated women tend generally to marry, divorce, and remarry later than women with fewer years of school completed but do not necessarily spend a longer time between marital events than other women (Norton and Miller, 1990).

Women with one or more children present at the time of divorce divorced at an earlier age than women with no children at the time of divorce (27.2 years versus 29.9 years) also reflecting a generally later pattern of marrying, divorcing, and remarrying among childless women (Norton and Miller, 1990). Table C indicates an older median age at divorce (32.0 years) for women who were 45 to 54 years old in 1985 than for women 35 to 44 (28.6 years). These data reflect more complete divorce experience for the older women. As the younger women attain more experience, their median age at divorce will more closely approximate that of their older counterparts.

The data on duration between divorce after first marriage and remarriage shown in figure 3 imply little or no variation according to age at divorce. Women who remarry do so relatively soon after divorce. For women who remarried at ages under 40, the median number of months spent in a divorced status was similar: 26.0 to 27.7. Thus, more than half of all remarriages to these women occurred within 2 to 2 1/2 years after divorce. The frequency of remarriage after divorce declines as age at divorce increases and the number of women who remarried after divorcing at ages 40 to 44 and 45 years and over is relatively small. Thus, the median number of months between divorce and remarriage for these women (30.9 months for women aged 40 to 44 at divorce and 23.6 months for women aged 45 and

over at divorce) should be interpreted cautiously.<sup>8</sup>

Among women who remarried after their first marriage ended in divorce, Black women had a longer interval between the two events than White women (table D). The median interval between divorce and remarriage for Black women was 38.3 months, compared with 26.5 months for White women.<sup>9</sup>

4 The apparent increases in the proportion of Blacks remarried between those divorced at ages 30 to 34 and 35 to 39 (42.1 percent versus 46.4 percent) and also those divorced at ages 40 to 44 and 45 to 49 (25.7 percent versus 28.7 percent) are not statistically significant. The apparent increase in the proportion with no children who had remarried between those divorced at ages 25 to 29 and 30 to 34 (55.3 percent versus 59.7 percent) is also not statistically significant.

5 Persons of Hispanic origin may be of any race. There is no statistically significant difference between the proportions of Black (71 percent) and Hispanic (72 percent) women. The difference between the proportions of White (83 percent) and Hispanic (72 percent) women is significant at the 83-percent level of confidence. The usual minimum level of confidence accepted by the Bureau of the Census is 90 percent.

6 The proportions of White (52 percent), Black (46 percent), and Hispanic origin (37 percent) women are not statistically different from each other.

7 The difference in the proportion remarried for those with less than 12 years of school completed (35 percent) versus those with 16 or more years of school completed (22 percent) is significant at the 87-percent level of confidence. The usual minimum level of confidence accepted by the Bureau of the Census is 90 percent.

8 The difference between the median intervals to remarriage for 40 to 44 year olds (30.9 months) and those 45 years and over (23.6 months) is significant at the 83-percent level of confidence. The usual minimum level of confidence accepted by the Bureau of the Census is 90 percent. Neither of these intervals is significantly different from any of the intervals for the under 40 population.

9 The interval for Hispanic women (29.9 months) is not statistically different from the intervals for White and Black women.

**Table C.**  
**Percentage of Women 35 to 54 Years Old Divorced From Their First**  
**Husbands, Who Had Remarried by the Survey Date, by Age at Divorce,**  
**Time Since Divorce, and Selected Characteristics: June 1985**

(Universe is all women whose first marriage ended in divorce)

Characteristic	All ages	Age at divorce after first marriage						Median
		Under 25 years	25 to 29 years	30 to 34 years	35 to 39 years	40 to 44 years	45 years and over	
35 to 44 years . . . . .	63.8	91.3	72.2	48.9	30.7	13.5	(NA)	28.6
At least 3 years since first marriage ended in divorce . . . . .	69.4	91.3	72.2	51.1	42.1	(B)	(NA)	27.8
At least 5 years since first marriage ended in divorce . . . . .	73.9	91.3	72.2	56.7	48.3	(B)	(NA)	27.1
Race and Hispanic origin:								
White . . . . .	66.2	92.7	75.4	52.0	30.9	16.0	(NA)	28.5
Black . . . . .	44.9	77.9	47.4	30.6	25.3	(B)	(NA)	29.2
Hispanic <sup>1</sup> . . . . .	55.0	(B)	(B)	45.5	(B)	(B)	(NA)	29.1
With children ever-born under 18 at divorce:								
None . . . . .	52.1	87.2	59.4	39.9	30.4	(B)	(NA)	30.2
One or more . . . . .	65.4	91.7	73.8	50.5	30.8	11.2	(NA)	28.4
Years of school completed:								
Less than 12 years . . . . .	66.7	89.0	71.4	53.6	24.3	(B)	(NA)	27.4
12 years . . . . .	65.8	92.3	72.3	52.3	34.0	(B)	(NA)	28.5
13 to 15 years . . . . .	63.3	91.2	74.9	45.7	32.4	(B)	(NA)	28.9
16 or more years . . . . .	55.7	91.6	68.8	41.3	26.0	(B)	(NA)	30.0
45 to 54 years . . . . .	68.0	95.5	85.5	71.1	59.5	34.9	20.2	32.0
At least 3 years since first marriage ended in divorce . . . . .	71.2	95.5	85.5	71.1	59.5	35.9	33.8	31.3
At least 5 years since first marriage ended in divorce . . . . .	74.0	95.5	85.5	71.1	59.5	38.4	(B)	30.7
Race and Hispanic origin:								
White . . . . .	69.1	96.6	86.3	71.6	60.3	37.6	22.7	32.0
Black . . . . .	59.4	88.1	(B)	64.1	(B)	(B)	(B)	31.6
Hispanic <sup>1</sup> . . . . .	73.2	(B)	(B)	(B)	(B)	(B)	(B)	29.6
With children ever-born under 18 at divorce:								
None . . . . .	45.3	(B)	(B)	(B)	(B)	30.8	21.8	41.9
One or more . . . . .	72.4	95.8	86.8	71.7	60.3	36.3	17.3	30.9
Years of school completed:								
Less than 12 years . . . . .	77.1	96.5	87.9	74.3	70.8	43.5	(B)	29.2
12 years . . . . .	69.1	96.1	84.8	76.9	57.4	36.1	20.6	32.0
13 to 15 years . . . . .	61.2	90.4	(B)	62.5	50.0	36.5	(B)	34.1
16 or more years . . . . .	52.6	(B)	(B)	60.5	(B)	(B)	(B)	34.8

<sup>1</sup>Persons of Hispanic origin may be of any race.  
 NA Not applicable.  
 B Base less than 75,000.

Women with no children present at the time of divorce spent more time in the divorced state before remarrying than women with children present (31.0 months and 26.7 months, respectively). Education appears to have had little significant influence on the interval between divorce and remarriage, at least

for all women 15 years and older who had remarried after a first marriage ended in divorce.

Comparative analysis of data on remarriage by age of women at the survey date is confounded by the incomplete marriage, divorce, and remarriage expe-

rience of younger women. However, the data shown in table D for women 45 to 54 years old and 55 years and older (two age groups wherein most divorces and subsequent remarriages have taken place) indicate a movement toward more rapid remarriage for those women who do remarry. The median interval between divorce and remarriage for women 45 to 54 years old was about 26.6 months, compared with a median interval of 35.6 months for women 55 years old and over in 1985.

### Widowhood and Remarriage

Remarriage after widowhood is much less frequent than remarriage after divorce. Reasons for the differences in propensity to remarry are associated with emotional attachment to the previous spouse, the number of eligible potential partners available for remarriage, and the ages at which widowhood and divorce occur—most divorces occur to young women and most incidences of widowhood occur to comparatively much older women. The median age at divorce for women was 27.7 years according to the June 1985 survey while the median age at widowhood was 55.1 years.

As with the relationship between age at divorce and likelihood of remarriage, age at widowhood is inversely related to the likelihood of remarriage. Table E shows that among women who were widowed at ages under 45 years, 54 percent had remarried. The proportions remarried among women who were widowed at ages 45 to 54, 55 to 64, and 65 years and older were 21 percent, 8 percent, and 2 percent, respectively. This association between age at widowhood and likelihood of remarriage exists for each set of characteristics presented in table E. (For simplicity's sake, the discussion here has been limited to the TOTAL section of table E.)

White women, regardless of age at widowhood, are more likely to remarry than Black women. The apparent differences between the likelihood of Hispanic women remarrying and both White and Black women remarrying are not statistically significant. Twenty-three percent

of White widows (from their first marriage) had remarried by June 1985 while 18 percent of Black widows and 20 percent of Hispanic-origin widows had done so. Among all women whose first marriage ended in widowhood, about 45 percent of those with a child under age 18 at the time of widowhood had remarried, compared with only 12 percent of those who had no children under age 18. This difference is largely a function of the age of the woman at the time of her husband's death and not primarily to the presence or absence of children. The proportion remarried among women who were widowed at ages under 45 or 45 to 54 years, ages during which widows would be likely to have children under 18, are quite similar for both women who had children and those who did not.

Differences according to years of school completed in the proportion of widows who remarried are minimal. There is some indication that level of education is associated with likelihood of remarriage for women who were widowed at ages under 45 years old. Within this group, women with 16 or more years of school completed may be somewhat less likely to have remarried than women of other educational attainment levels (47 percent remarried versus 55 percent remarried). The apparent difference is not statistically significant, however.

Figure 4 shows that White women usually become widowed at an older age than Black or Hispanic women. The median age at widowhood for White women was about 56 years, compared with a median of around 49 years for Black women and 48 years for women of Hispanic origin (the latter ages are not statistically different from each other).

Women who remarried after their first marriage ended in widowhood had a much younger median age at widowhood than all women widowed after first marriage, 36 years as compared with 55 years. Among widows who remarried, Whites still had an older median age at widowhood (36 years) than Blacks (33 years).<sup>10</sup> The median age at widowhood

Figure 3.  
**Median Number of Months Between Divorce From First Marriage and Remarriage, by Age at Divorce: June 1985**

(Universe is women married two or more times whose first marriage ended in divorce)

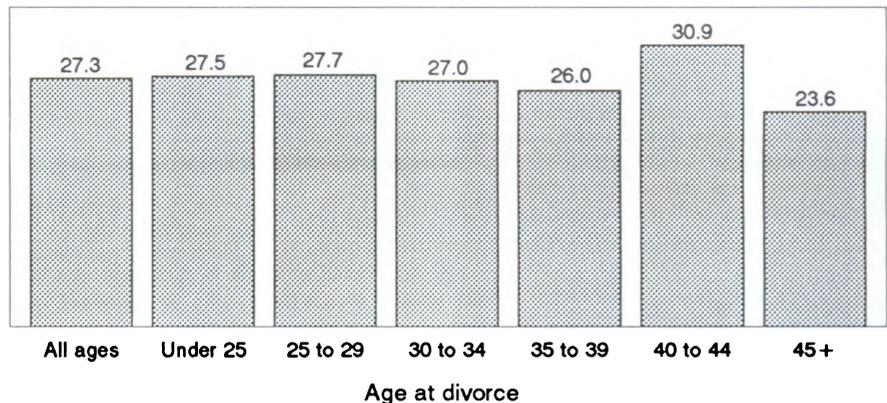


Table D.  
**Median Interval (in Months) Between Divorce and Remarriage for Women Whose First Marriage Ended in Divorce, by Selected Characteristics: June 1985**

(Universe is women married two or more times whose first marriage ended in divorce)

Characteristic	All ages	Age at survey date			
		Under 35 years	35 to 44 years	45 to 54 years	55 years and over
Total .....	27.3	20.8	27.4	26.6	35.6
Race and Hispanic origin:					
White .....	26.5	20.2	27.0	26.0	34.4
Black .....	38.3	26.1	33.5	29.7	51.7
Hispanic <sup>1</sup> .....	29.9	23.5	36.7	35.4	47.5
With children ever-born under 18 at divorce:					
None .....	31.0	23.5	34.8	24.7	38.4
One or more .....	26.7	20.2	26.7	27.4	34.6
Years of school completed:					
Less than 12 years .....	28.3	15.9	24.0	28.6	35.0
12 years .....	25.7	19.6	25.4	27.3	35.9
13 to 15 years .....	28.3	23.9	29.1	23.3	38.3
16 or more years .....	28.8	24.4	30.4	28.0	32.2

<sup>1</sup>Persons of Hispanic origin may be of any race.

<sup>10</sup> The difference in the median ages at widowhood for White (35.9 years) and Black (32.7 years) remarried widows is significant at the 83-percent level of confidence. The usual minimum level of confidence accepted by the Bureau of the Census is 90 percent.

**Table E.**  
**Percentage of Women 15 Years and Over Widowed From Their First Husbands, Who Had Remarried by the Survey Date, by Age at Widowed, Time Since First Widowed, and Selected Characteristics: June 1985**

(Universe is all women whose first marriage ended in widowhood)

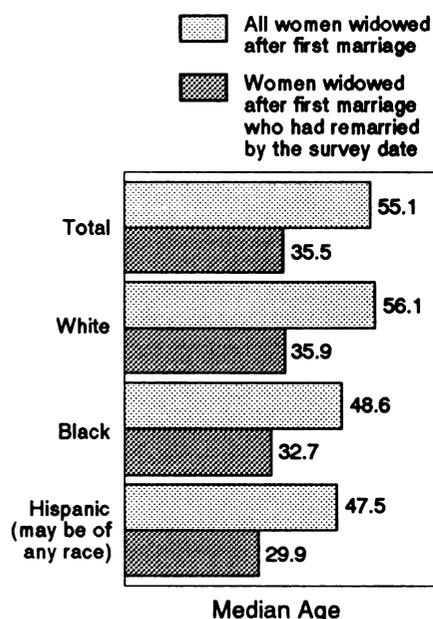
Characteristic and time since first widowhood	All ages	Age at widowhood after first marriage				Median
		Under 45 years	45 to 54 years	55 to 64 years	65 years and over	
<b>TOTAL</b>						
Total .....	22.6	54.0	20.7	7.9	2.2	55.1
<b>Race and Hispanic origin:</b>						
White .....	23.3	58.2	22.5	8.6	2.4	56.1
Black .....	17.7	35.1	10.8	2.7	-	48.6
Hispanic <sup>1</sup> .....	20.3	37.9	9.6	4.8	(B)	47.5
<b>With children ever-born under 18 at widowhood:</b>						
None .....	11.5	50.4	20.3	8.0	2.2	61.7
One or more .....	44.6	54.8	21.3	5.9	(B)	37.5
<b>Years of school completed:</b>						
Less than 12 years .....	21.2	54.6	20.2	7.6	2.3	56.8
12 years .....	24.4	53.6	20.8	8.6	1.9	52.9
13 to 15 years .....	25.0	57.9	22.0	5.9	3.9	53.8
16 or more years .....	21.2	47.0	21.3	9.9	0.8	54.4
<b>AT LEAST 3 YEARS SINCE FIRST MARRIAGE ENDED IN WIDOWHOOD</b>						
Total .....	25.7	56.8	22.4	9.0	2.8	53.5
<b>Race and Hispanic origin:</b>						
White .....	26.5	60.8	24.2	9.7	2.9	54.7
Black .....	20.2	37.7	11.8	3.2	-	47.2
Hispanic <sup>1</sup> .....	23.2	42.7	(B)	5.4	(B)	47.2
<b>With children ever-born under 18 at widowhood:</b>						
None .....	13.4	52.9	21.9	9.1	2.8	60.7
One or more .....	47.4	57.6	23.2	6.6	(B)	37.0
<b>Years of school completed:</b>						
Less than 12 years .....	23.8	56.5	21.1	8.5	2.8	55.1
12 years .....	28.2	56.9	23.3	9.9	2.4	51.9
13 to 15 years .....	28.6	62.2	24.2	7.0	4.9	51.9
16 or more years .....	25.1	51.0	24.5	11.2	1.2	53.3
<b>AT LEAST 5 YEARS SINCE FIRST MARRIAGE ENDED IN WIDOWHOOD</b>						
Total .....	28.2	58.5	23.5	10.0	3.2	52.5
<b>Race and Hispanic origin:</b>						
White .....	29.1	62.5	25.4	10.9	3.3	53.3
Black .....	22.0	39.3	12.9	3.5	-	46.5
Hispanic <sup>1</sup> .....	26.5	43.5	(B)	(B)	(B)	44.8
<b>With children ever-born under 18 at widowhood:</b>						
None .....	15.1	53.7	23.2	10.2	3.2	59.9
One or more .....	49.3	59.5	24.0	7.7	(B)	36.8
<b>Years of school completed:</b>						
Less than 12 years .....	25.6	57.5	21.6	9.2	3.1	54.0
12 years .....	31.3	58.9	25.0	11.6	2.9	50.5
13 to 15 years .....	32.3	66.2	25.6	8.3	5.9	50.7
16 or more years .....	28.7	53.0	26.9	13.4	1.6	50.6

<sup>1</sup>Persons of Hispanic origin may be of any race.

- Rounds to zero.

B Base less than 75,000.

**Figure 4.**  
**Median Age at Widowhood for Women Whose First Marriage Ended In Widowhood, by Whether Remarried by Survey Date, Race, and Hispanic Origin: June 1985**



of Hispanic widows who remarried (30 years) was not statistically different from the comparable medians for White and Black women. This is most probably due to the small number of Hispanic widows who remarried (98,000) rather than to a true lack of difference.

Approximately one-half of the widows who remarried did so within about 47 months of becoming widowed (table F). The variation in the length of widowhood before remarriage, according to age at widowhood was not particularly striking, and, in fact, was not statistically significant.

### Redivorce

About 1 of every 4 women who divorced and remarried had experienced a second divorce by June 1985. Redivorce is relatively rare among ever-married women. However, as the growing frequency of divorce and subsequent remarriage expands the "at risk" population, redivorce is likely to increase in

future years. Data in table G show that according to the results of the June 1985 survey, 26 percent of women eligible to redi-vorce had done so by age 75. Among eligible women aged 35 to 44 in 1985, 30 percent had redi-vorced by age 45. These women have not yet completed their redi-vorce experience but have completed most of their first divorce and remarriage experience. These women also are expected to have the highest first divorce rates ever recorded (Norton and Moorman, 1987) and will to some as yet unknown degree establish a benchmark for stability of remarriage after divorce that may influence the redi-vorce behavior of younger cohorts of women. We will know more about the trend in redi-vorce and will be able to make more refined judgments of future redi-vorce behavior when the results of the 1990 marital history survey become available.

## Summary

This paper has presented a description of recent trends in remarriage for women in the United States. The results reported here are intended to illuminate some of the dynamics associated with an increasingly common marital event that profoundly affects the form and nature of a dramatically rising number of families. The focus has been on who is most likely to remarry among women whose first marriage ends in divorce or widowhood. A brief section on the stability of remarriage after divorce described redi-vorce as being generally infrequent among all women ever-married but of growing importance among women who remarry after divorce.

The major findings in the paper indicate that remarriage is much more likely after divorce than after widowhood and that while characteristics like age, race, Hispanic origin, education, and presence of children have some role in determining remarriage prospects, age at divorce or widowhood exerts an overriding influence on the likelihood of remarriage.

**Table F.**  
**Women 15 Years and Over Whose First Marriage Ended in Widowhood by Interval Between Widowhood (After First Marriage) and Remarriage, and Age at Widowhood: June 1985**

(Numbers in thousands. Universe is women married two or more times whose first marriage ended in widowhood)

Interval	All ages	Age at widowhood after first marriage				Median age
		Under 45 years	45 to 54 years	55 to 64 years	65 years and over	
Total, all intervals . . . . .	2,574	1,815	471	223	65	35.5
Less than 12 months . . . . .	210	159	35	8	8	30.6
12-23 months . . . . .	392	291	54	38	10	33.9
24-35 months . . . . .	413	292	76	34	12	35.7
36-59 months . . . . .	507	342	92	60	13	35.9
60-119 months . . . . .	624	409	134	58	23	37.8
120-179 months . . . . .	247	179	53	15	-	37.8
180 or more months . . . . .	181	141	28	11	-	33.4
Median interval (in months) . . . . .	46.5	44.3	53.1	48.8	(B)	(NA)

NA Not applicable.

- represents zero.

B Base less than 75,000.

Note: All numbers are rounded independently so parts may not sum to total.

**Table G.**  
**Distribution of Women Married Two or More Times Whose First Two Marriages Ended in Divorce by Selected Ages at Redi-vorce and Age at Survey Date: June 1985**

(Numbers in thousands)

Age at redi-vorce	All ages	Age at survey date						
		15 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 to 74 years	75 years and over
Women married two or more times whose first marriage ended in divorce . . . . .	11,117	279	2,477	3,054	2,039	1,650	1,033	583
Percentage of women whose second marriage ended in redi-vorce by age—								
25 years . . . . .	2.6	8.6	5.0	2.4	1.3	1.6	0.5	1.0
35 years . . . . .	13.5	(NA)	19.3	17.3	11.0	10.0	6.1	3.1
45 years . . . . .	22.0	(NA)	(NA)	29.7	26.0	20.4	13.0	6.3
55 years . . . . .	24.9	(NA)	(NA)	(NA)	30.8	28.4	17.1	14.8
65 years . . . . .	25.8	(NA)	(NA)	(NA)	(NA)	31.8	20.6	16.6
75 years . . . . .	26.0	(NA)	(NA)	(NA)	(NA)	(NA)	20.9	19.0
Over 75 years . . . . .	26.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	19.0

NA Not applicable.

## References

- Ganong, Lawrence H. and Marilyn Coleman, 1989. "Preparing for Remarriage: Anticipating the Issues, Seeking Solutions." *Family Relations*, Vol. 38 (January 1989), pp. 28-33.
- Glick, Paul C., 1989. "Remarried Families, Stepfamilies, and Stepchildren: A Brief Demographic Profile." *Family Relations*, Vol. 38, (January 1989), pp. 24-27.
- Guisinger, Shan; Philip A. Cowan; and David Schuldberg, 1989. "Changing Parent and Spouse Relations in the First Years of Remarriage of Divorced Fathers." *Journal of Marriage and the Family*, Vol. 51 (May 1989), pp. 445-456.
- Miller, Louisa F. and Jeanne E. Moorman, 1989. "Married-Couple Families with Children." U.S. Bureau of the Census, Current Population Reports, Series P-23, No. 162, *Studies in Marriage and the Family*, U.S. Government Printing Office, Washington, D.C.
- Norton, Arthur J. and Jeanne E. Moorman, 1987. "Current Trends in Marriage and Divorce Among American Women." *Journal of Marriage and the Family*, Vol. 49 (February 1987), pp. 3-14.
- Norton, Arthur J. and Louisa F. Miller, 1990. "The Family Life Cycle: 1985." U.S. Bureau of the Census, Current Population Reports, Series P-23, No. 165, *Work and Family Patterns of American Women*, U.S. Government Printing Office, Washington, D.C.
- Seltzer, Judith A. and Suzanne M. Bianchi, 1988. "Children's Contact with Absent Parents." *Journal of Marriage and the Family*, Vol. 50 (August 1988), pp. 663-678.
- U.S. Bureau of the Census, 1986. Current Population Reports, Series P-20, No. 410, *Marital Status and Living Arrangements: March 1985*, U.S. Government Printing Office, Washington, D.C.
- U.S. National Center for Health Statistics, 1990. "Advance Report of Final Marriage Statistics, 1987." *Monthly Vital Statistics Report*, Vol. 38, No. 12, Supplement, Department of Health and Human Services Publication No. (PHS) 90-1120. Public Health Service, Hyattsville, MD.
- Vemer, Elizabeth; Marilyn Coleman; Lawrence H. Ganong; and Harris Cooper, 1989. "Marital Satisfaction in Remarriage: A Meta-analysis." *Journal of Marriage and the Family*, Vol. 51 (August 1989), pp. 713-726.
- Whiteside, Mary F., 1989. "Family Rituals: A Key to Kinship Connections in Remarried Families." *Family Relations*, Vol. 38 (January 1989), pp. 34-39.
- Zill, Nicholas, 1988. "Behavior, Achievement, and Health Problems Among Children in Stepfamilies: Findings From a National Survey of Child Health." In *The Impact of Divorce, Single Parenting and Stepparenting on Children* (1988), pp. 325-368, E. Mavis Hetherington and Josephine D. Arasteh (eds.), Lawrence Erlbaum Associates, Hillsdale, NJ.

# Living Arrangements of Young Adults Living Independently: Evidence From the Luxembourg Income Study

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The findings presented here do not necessarily reflect the views of the Bureau of Labor Statistics.

## Introduction

One of the important applications of the Luxembourg Income Study (LIS) data base has been the comparison of poverty rates and distributions of income across nations. This is an important as well as highly intriguing issue. Unfortunately, these are not easy to measure, since it is difficult to standardize national measures across countries for comparisons. One difficulty is the difference in the age composition of the populations in the countries under comparison. Different age structures result in different household structures and people of different ages have different propensities to reside in "poor" households. A country with a large proportion of elderly living on small pensions would look poorer than a country with a large cohort of middle-age earners, even though elderly individuals in the second country had typically smaller pensions than those in the first.

This problem of comparability is exacerbated by the possibility that household structure is itself a function of household or family income. For example, we may describe an elderly woman as poor if she prefers to live on her own with a small pension, with barely enough resources to meet her minimum needs, rather than live with her more affluent daughter. Her poverty can be alleviated by her moving in with her daughter, but as long as the daughter does not contribute to her support, her poverty is real. If one is interested in measuring changes over time, the prevalence of poverty, or predicting the success of a program to eliminate it, one cannot ignore the impact of changes in household living arrangements and one's preference for living alone. As noted by Beresford and Rivlin [1966], failure to consider this. . .

Phenomenon may lead to the conclusion that programs to increase the incomes of needy groups are unsuccessful because the number of poor units has not declined or has even increased. . . . Moderate increases in the incomes of the poor will enable them to live apart from relatives and hence, will actually lead to increases in the number of

people counted as poor. Their situation may be improving, in the sense that they have more income and are better able to afford the privacy and other commodities they desire, but the statistician engaged in the counting of poor households may not detect this improvement at all.

In an attempt to deal with the size of household issue cross-nationally, a range of equivalence scales has been developed using the LIS data. However, the scales need to be applied with care since they can produce different results. (For a thorough discussion of these see Smeeding, Torrey, and Rein [1988], Smeeding, Schmaus, and Allegreze [1985], or Buhmann, et al. [1987]).

It is our suggestion that further development of appropriate equivalence scales cannot proceed without a fully specified understanding of the relationship between income and the household formation behavior of all groups. Furthermore, this behavioral process is of interest in and of itself to social scientists for all age groups. In this paper, we chose a small group and began an investigation of this relationship.

We began our investigation with the belief that the age distribution of households affects income packaging, and that income packaging may affect the age distribution of households. This latter relationship implies, for example, that larger public transfers make it possible for individuals with lower labor force activity rates, such as the very young or the very old, to set up their own households. If household formation is sensitive to increases in income, then the measurements of poverty and income distribution may suffer from a bias due to this simultaneous relationship if we do not control for the concomitant effect on household structures. We limited our analysis to one side of the relationship, identifying variables related to whether an individual lives alone or with others. The sample included families or households in which the head or reference person was in the 15-24 age group. Individuals in this age group were selected since the young are expected to be sensitive to eco-

nomics variables when deciding which living arrangements they will pursue. We focused on the following question: Of those young people living independently (not in their parental homes), how do incomes from various sources affect their decision whether to live alone or with others? The sample did not include all persons in the 15-24 age group, only those living independently. A logit analysis of the living alone question was conducted using data from five countries (Canada, the Federal Republic of Germany, the United Kingdom, Australia, and the United States) included in the LIS data base to determine whether differences across countries exist. In the next section of this paper, background on the relationship between income and household formation is presented. The following sections include a description of the methods, results, and conclusions.

## Background

When we compare household incomes across countries we are comparing a whole set of different kinds of income packages; consequently, we are comparing income packages which are reflective of different household compositions. Different income transfer policies are very likely to affect the way that individuals gather together into households or families, and household distributions are likely to affect income packaging. In addition, individuals in different countries may differ in their preferences for privacy or living alone.

Hedstrom and Ringen (1985) examined the standard of living of young and old families cross-nationally as determined by varying income transfer policies. Using LIS they examined the relative economic position of families of various ages in seven industrial nations around 1980. The countries they examined were Canada, the Federal Republic of Germany, Israel, Norway, Sweden, the United Kingdom, and the United States. Hedstrom and Ringen noted that the seven countries for which they conducted their analysis differed both in the availability of various forms of income and in family composition. They reported further that the age composition of a population is likely to affect the

packaging of income in several different ways. "An increase in the proportion of elderly people, for example, will reduce the role of earnings, and by affecting the relative numbers of 'supporters' and 'supported', increase the size of the public redistributive system and the relative role of public transfer."

Household composition is also expected to be related to one's preference for privacy or for living independently. If space and privacy or living independently are normal goods, then we would assume that people demand more of them as incomes rise and as their relative prices fall. Michael, Fuchs, and Scott (1980) examined the propensity to live alone in the U.S. over the period from 1950 to 1976 for men and women aged 25 to 34 and for elderly widows. Their study showed that income levels were a major determinant of the propensity to live alone. They reported that among young single men and women, rising income was the principal explanation for this trend. The authors, however, sounded a cautionary statement in the summary of their findings noting that "...while we conclude that growth in income raises the propensity to live alone, there is another body of literature which indicates that income is positively related to the propensity to marry..." They cited work by Becker (1974), Cutright (1970), and others, and stated that reconciliation of these opposing influences of income on living arrangements deserves a high priority in subsequent research.

Trends in household formation provide important information concerning the issue of income packaging. Trends in household formation in Europe, beginning with the 1960's, are described in *Economic and Social Features of Households in the Member States of the European Community*, a 1982 EUROSTAT publication. One of the most significant trends noted in European countries has been that households, as observed through the general population censuses in the 1960's and 1970's, have increased in number and decreased in size. This change included a trend toward more households with no earners, made up of widows and students primarily. Data from the 1977 La-

bour Force Sample Survey, as described in this study, showed evidence of a tendency for individuals to maintain households at earlier ages. This trend of an increasing proportion of younger households was most notable in the Federal Republic of Germany and France.

Kiernan (1986) conducted a study of the living arrangements of young adults in six west European countries. She noted that, "The proportion of young people living in non-family households (i.e., living alone or with friends) might be regarded as a guide to the preference or opportunities for independent living." Kiernan finds, in her examination of the 1982 European Economic Community Labour Force Survey, that this proportion is lowest in the United Kingdom and Ireland, and highest in the Federal Republic of Germany and Denmark. The study also included the Netherlands and France. Kiernan noted that Danish youth leave home at younger ages and at a faster pace than do young people in other countries, and suggested that this may result from the fact that Denmark has a housing policy which recognizes the need to provide affordable housing to young people. In the United Kingdom, public sector housing is generally reserved for families with children.

Smith, Rosen, Markandya, and Ullmo (1984) examined the demand for housing, headship rates, and household formation in Canada, France, Great Britain, and the United States. They discussed the rapid increase in non-family household formation that occurred in the 1960's and 1970's. In Canada, France, and the United States, the rate of growth of non-family headship rates increased most for the youngest age group, those aged 15-24 years. They theorized that headship rates for household types and age groups are a function of disposable income, housing cost, the availability of public housing, and such socio-economic variables as rates of divorce and female labor force participation. They reported that income was important in the determination of headship rates for all ages except the 65 and over category in France and the United States. The income elasticity

was highest in the youngest age group. On the other hand, the price of housing variable was significant for all groups except for the 15-25 age groups in France. The availability of public housing was only important in the determination of headship rates of the elderly.

Other researchers (Wolf, 1984; Danziger et al., 1982) have examined the influence of specific types of transfer payments on household formation. Generally these studies showed some influence on household structure. However, findings from these studies are not consistent. (For a discussion of these studies see Goodman [1986].)

The issue of household and family formation is an important one, and as these studies indicate, much of the change that has occurred has been concentrated in the behavior of young adults. Studies using microdata to examine the behavioral process of household or family formation report, in general, that younger age groups are more sensitive to economic variables as are unmarried individuals (Hill and Hill, 1976; Heer, Hodge, and Felson, 1985).

## Methods

In this study we examined the determinants of living alone among young adults, i.e., individuals aged 15 to 24 years, in several European countries and the United States. We chose this particular group because earlier research has shown that this group is most responsive to economic factors in their decision to form households. Ideally, we would have examined the household formation activity of all young people. For this we would have needed observations on a representative sample of all young adults, whether they resided with their parents or lived independently. Unfortunately the Luxembourg data did not include information on these individuals. We only had observations on those young people who were themselves maintaining households; therefore, our results refer to this truncated sample.

Given that our sample was composed of young people who had made the decision to live independently, we were concerned with the question about how

they subsequently chose to live in the different countries for which we had data. For young people living independently, we were interested in determining how income from various sources affected their decision to live alone.

The omission of young persons still living with parents results in biases in any estimates of propensities of all young persons to choose living arrangements. This, however, was not the immediate purpose of this study. Essentially our efforts here were to show that incomes affect choices about living arrangements. Young people residing with their parents may not be choosing that particular arrangement. The timing of leaving the parental home is a more complicated issue, in general, than simply affordability of other quarters.

We assumed that the results of this research, showing that incomes of various types affect decisions about living arrangements, was not affected by this truncated sample problem as all results are interpreted as conditional on the fact that this group of young persons have already made the decision to live independently. Our purpose here is not so much to estimate the magnitude of the effects of income on all living arrangement choices of young persons, but to provide evidence that incomes affect living arrangements and that different income types in different countries affect living arrangements differently.

### Model

The model employed in the analysis incorporated the hypothesis that incomes by source affect the decision to live alone. If privacy is a normal good, we would expect incomes from all sources to increase the propensity of young persons to live alone.

Other characteristics were also expected to affect the decision of young persons to live by themselves. For example, we expected to see differences in the behavior of young men and women in living arrangement choices for several reasons. Different mean ages of first marriage by sex suggests that we would observe different patterns of choice by sex.

Table A.  
Definition of Variables

Variable	Definition
EARN79\$	wages, salaries, and self employed income of the householder.
TRAN79\$	per capita transfer income:includes social retirement income, child allowances, unemployment payments, sick pay, accident pay, disability pay, maternity allowance, military or war related benefits, other social insurance, cash and near cash means-tested benefits, private transfers such as child support.
OTHIN79\$	per capita property and pension income plus other miscellaneous income
CAN	equals 1 for Canada
GER	equals 1 for the Federal Republic of Germany
UK	equals 1 for the United Kingdom
AUS	equals 1 for Australia omitted category is the United States
CANEAR	interaction term CAN * EARN79\$
CANTRA	interaction term CAN * TRAN79\$
CANOTH	interaction term CAN * OTHIN79\$
GEREAR	interaction term GER * EARN79\$
GERTRA	interaction term GER * TRAN79\$
GEROTH	interaction term GER * OTHIN79\$
UKEAR	interaction term UK * EARN79\$
UKTRA	interaction term UK * TRAN79\$
UKOTH	interaction term UK * OTHIN79\$
AUSEAR	interaction term AUS * EARN79\$
AUSTRA	interaction term AUS * TRAN79\$
AUSOTH	interaction term AUS * OTHIN79\$
ED	equals 1 if more than a high school education or equivalent is attained (Canada:some post-secondary or above; Germany:at least 13 years; United Kingdom: university or other higher education; United States: more than 12 years; Australia:still at school, Bachelor's degree or similar); equals 0 otherwise
LFP	equals 1 if at least one earner in household; equals 0 otherwise
SEX	equals 1 if male; equals 0 otherwise
AGE	age of householder
MS	equals 1 if married or co-habiting; equals 0 otherwise
EDAGE	interaction term ED * AGE

Labor force attachment of the household, already represented in part by the earnings variable, was important as it represented the participation by others in the household. This was included in order to differentiate between persons for whom earnings were zero but who lived with others who are employed and persons who lived in households with no earners. Level of education was expected to affect choices about living arrangements directly, as well as indirectly as it represents differences in tastes.

We also expected propensities to live alone to vary by age for young persons. Young people may first live alone and then, as they develop relationships, form households with other persons. This pattern would suggest a negative coefficient on an age variable. Marital status has an obvious effect on propensities to live alone. Finally, separate variables that represent the included country should capture differences between countries unaccounted for by other country-specific variables,

institutional and market as well as cultural differences, not explicitly included elsewhere.

Therefore, we have assumed that the propensity to live alone among young people who had left the parental home was a function of incomes from various sources, labor force participation, level of education, age, sex, marital status, and country:

$$\text{Prob (living alone)} = F [Y(i), \text{Ed, LFP, Sex, Age, MS, Country}(j)]$$

where: Y = income

i = source of income

ED = education of household head

LFP = labor force attachment of household

Sex = sex of household head

Age = age of household head

MS = marital status of household head

Country = country dummy variable

j = country.

A logit model was specified using SPSS-X (1986). All computer programs were electronically mailed to Luxembourg. This was necessary since the LIS data are not directly accessible to researchers.

## Data

The data used in this analysis are from the 1988 Luxembourg Income Study (LIS). The countries studied include the United Kingdom, the Federal Republic of Germany, Australia, Canada, and the United States. At the time of this research, there were ten country data sets in LIS; our choice of these five was based on similarity of available variables and reference units.

The independent variables and their definitions are listed in table A. The income measures were made comparable by conversion to 1979 United States dollars using the Organization for Economic Cooperation and Development Purchasing Power Parities (OECD, 1987; U.S. Department of Labor, 1988b) and the U.S. Consumer Price Index (U.S. Department of Labor, 1988a).

Three income variables were included for each country: EARN79\$, which included wages, salaries, and self-employment income; TRAN79\$, which included means-tested, social security, and private transfer income; and OTHIN79\$, which included cash property income, pension incomes, and other cash income. Measures of labor market opportunities in the respective countries as well as housing costs were expected to be captured by country dummy variables included in the equation both separately and as interaction terms with the various income variables. Education was recoded roughly for each country to represent at least a high school education. The omitted category was not a high school or equivalent education. An interaction term of age and education was included to incorporate differing effects of age as education varied. Labor force participation represented the presence of any earners in the household. The earner could have been the householder or any other member in the household. The omitted category was no earners in the household. The sex dummy variable represented whether the householder was male. Age was included as a continuous variable. Marital status was represented by including a dummy variable for married or cohabitating. For some of the countries included in the sample, co-habitation was a marital status category option. The omitted category included single, divorced, separated and widowed, where distinguishable, for each country.

## Results

The sample included 5,664 households; of these 2,894 were one-person house-

Table B.  
Sample Frequencies by Country

Country	Total sample	Number living alone
Canada	1,449	795
Federal Republic of Germany	117	72
United Kingdom	406	142
United States	1,721	798
Australia	1,971	1,087
Total	5,664	2,894

Table C.  
Means and Standard Deviations of Variables

Variables	Mean	Standard deviation
LA	.512	.500
EARN79\$ <sup>1</sup>	7,130.681	5,762.956
TRAN79\$ <sup>2</sup>	378.700	858.502
OTHIN79\$ <sup>2</sup>	197.202	934.365
CA	.256	.436
GER	.021	.142
UK	.072	.258
US	.304	.460
AUS	.348	.476
ED	.234	.423
LFP	.946	.225
SEX	.638	.481
AGE	21.576	1.948
MS	.317	.466
EDAGE	1.166	9.386
CANEAR	1,995.581	4,735.045
CANTRA	103.167	447.904
CANOTH	47.283	4,371.219
GEREAR	134.550	1,292.688
GERTRA	7.718	126.036
GEROTH	.000	.000
UKEAR	458.822	2,157.456
UKTRA	79.022	454.756
UKOTH	2.118	21.983
USEAR	2,365.187	4,939.241
USTRA	92.482	531.068
USOTH	78.382	581.436
AUSEAR	2,176.542	4,047.205
AUSTRA	96.310	374.623
AUSOTH	69.419	544.138

<sup>1</sup>Earnings of householder.

<sup>2</sup>Income variable divided by number of persons in household.

holds. The distribution of the sample by country is presented in table B. Within countries, the greatest percentage of individuals aged 15-24 who lived independently and alone resided in Germany (65 percent), while the smallest percentage of individuals with these characteristics resided in the United Kingdom (35 percent).

Means and standard deviations of the variables included in the logit estimation are listed in table C for the 5,664 cases of young households in the combined countries sample. These are unweighted statistics. Earnings represented earnings of the householder only, while transfer and other income were divided by household size to be per capita measures. The means of the

country dummy variables represent their proportion of the sample. German youth represented the smallest proportion of the sample, while Australian youth represented the largest proportion.

About 23 percent of the combined sample of young people living independently had more than a high school or equivalent education, and nearly 95 percent were in the labor force. Almost 64 percent were male. The mean age of those in the sample was 21.6 years. Only 32 percent were married or living with someone.

Table D includes the results of the logit regression for which the dependent variable equaled 1 if an individual lived alone; these results represent the log of the odds of the probabilities that a

**Table D.**  
**Estimated Model Parameters and Standard Errors**

Independent variables	Estimated parameter	Asymptotic standard error
EARN79\$ <sup>1</sup> . . . . .	0.003**	0.001
TRAN79\$ <sup>1</sup> . . . . .	-0.006*	0.003
OTHIN79\$ <sup>1</sup> . . . . .	0.007*	0.004
CAN . . . . .	0.722**	0.104
GER . . . . .	3.383**	0.388
UK . . . . .	-0.022	0.156
AUS . . . . .	0.406**	0.083
CANEAR <sup>1</sup> . . . . .	0.003**	0.001
CANTRA <sup>1</sup> . . . . .	-0.005	0.006
CANOTH <sup>1</sup> . . . . .	-0.004	0.008
GEREAR <sup>1</sup> . . . . .	-0.006	0.004
GERTRA <sup>1</sup> . . . . .	-0.064**	0.030
GEROTH <sup>1</sup> . . . . .	0.000	0.000
UKEAR <sup>1</sup> . . . . .	0.005**	0.002
UKTRA <sup>1</sup> . . . . .	0.012*	0.006
UKOTH <sup>1</sup> . . . . .	-0.050	0.084
AUSEAR <sup>1</sup> . . . . .	-0.003**	0.001
AUSTRA <sup>1</sup> . . . . .	-0.026**	0.006
AUSOTH <sup>1</sup> . . . . .	0.000	0.006
ED . . . . .	-0.259	0.587
LFP . . . . .	0.201**	0.083
SEX . . . . .	0.194**	0.040
AGE . . . . .	-0.063**	0.011
MS . . . . .	-3.575**	0.167
EDAGE . . . . .	0.028	0.027
Constant . . . . .	6.140**	0.238

<sup>1</sup>Regression parameters and standard errors are divided by 100.

\* Statistically significant at the 0.10 level.

\*\* Statistically significant at the 0.01 level.

Note: Parameter estimates based on the following logit model:  $\log(p/(1-p))/2 + 5 = \text{constant} + BX$ .

young adult, living outside the parental home, lived alone. Our major finding is that different types of income affected the propensity to live alone differently and that the effects themselves differed among the countries under study. (The Chi-Square goodness-of-fit measure is not presented since it is considered to be invalid when individual observations are used for logit analysis; however, the results for the individual variables are valid [SPSS-X, 1986]).

For the omitted country, the United States, earnings were positively related to the probability to live alone. In addition, transfer and other types of income were significantly related to living alone among the young people in the United States, at the 90 percent level of significance. Transfer incomes were negatively associated with the propensity of young people to be in a single person household. This result was not surprising for the United States since the receipt of transfer income from one of the main transfer programs for younger families, Aid to Families with Dependent Children, is contingent upon having a child.

This result suggests that a simultaneous equations model would have been more appropriate. Whereas receipt of income surely affects choice of living arrangement, for some countries, such as the United States, living arrangements directly determine receipt of income. Insofar as the model is misspecified, the estimated coefficients suffer from simultaneous equations bias. We suspect, however, that a more precise specification that captured the effect of living arrangements on receipt of transfer income, would yield the positive effect we expect to see between amounts of transfer income and the probability of living alone.

Canada had an additional positive effect from earnings on living alone over and above that of the United States as revealed by the parameter for CANEAR; the effect from other income sources was essentially the same as for the United States. Also, the propensity to live alone, for reasons not accounted for in the equation, was higher for Canada than it was for the United States, as

suggested by the positive and significant parameter on the CAN variable.

German youth had a much higher propensity to live separately than did young people in the United States, indeed than in all countries, for reasons not attributable to our measures of income. The country dummy variable parameter for Germany is large and significant, indicating a strong preference for living alone by young Germans who were not living in their parental home. Transfer income had a significantly negative correlation with living alone for the German youth. We expect that this represents the pro-family social transfer income policies in this country, and again, as for the U.S., would be more appropriately captured by a simultaneous equations model.

The parameter for the dummy variable representing the United Kingdom is not statistically significant in the equation; however, earnings had a greater positive effect on living alone in the United Kingdom than they did for youth living in the United States. Transfer incomes in the United Kingdom, unlike in Germany, were positively correlated with living alone. For the United Kingdom, this could be related to special transfer programs designed to assist the youth that are not related to the presence of children. Other types of income had no additional effect in the United Kingdom.

Australian youth, like those in Canada and Germany, had a higher propensity to live alone than did young people in the United States and in the United Kingdom. The effect of earnings was less in Australia than in the United States. Transfer incomes in Australia, as in the German sample, were significantly negatively related to the probability of living alone for young people.

For the sample as a whole, earners were more likely to live alone. Males who were not married were more likely to live alone than were unmarried females. For this sample, increases in age were negatively related to living alone, which means individuals were more likely to marry or to live with someone as age increases. However, if our sample had included all individuals in the 15-24 age group, including those

living in their parents' home, we might have found that age and living alone were positively related.

## Conclusions

Economic theory, previous empirical studies, and results from this study suggest that income and household formation are very closely related to one another. Of particular interest are the different effects estimated for the incomes from different sources, as well as the country differences in income effects. These results, and those of earlier work, suggest that inter-country comparisons of household based measures should be preceded by a more definitive study of the differences in the household formation behavior of individuals of all ages and socioeconomic categories.

Comparisons of household income distributions among countries depend upon the packaging of incomes in the various countries, which itself affects the household formation process that, in its turn, can affect income distribution measures. This study shows the differential response to incomes from different sources by individuals age 15–24. A more thorough study of this important process needs to be conducted to un-

derstand the impact of this process on comparisons of income distributions and inequality. Since data were not available in the 1988 LIS data files for individuals living in their parental homes for this study, future analyses should be designed to include these households. Specific information concerning institutional differences among countries also could be included in future investigations.

Although the empirical evidence described here is preliminary, we interpret it as suggestive that incomes do affect living arrangements and that incomes from different sources affect living arrangements differently. If this is so, then cross-national comparisons of income distributions must be made with a great deal of care and attention to the composition of households or families, the unit of analysis generally employed in these types of comparisons. Any evidence that incomes affect the choice of living arrangements, either from the work described here or that from earlier work, suggests that comparisons of income distributions between various countries are highly sensitive to the type of incomes available to persons in each country.

We suggest that a more thorough investigation be conducted into this important area of research. Our suggestions include specifying a fully simultaneous model that would capture the effects that living arrangements have on receipt of certain transfer incomes, evidenced in several of the countries here. Specifying a fuller choice model and employing a multinomial logit estimation of possible living arrangements such as living alone, married, and other arrangements, may yield more precise information.

We further suggest employing updated information now available in the Luxembourg Income Study that includes information on young people residing with parents. These data would allow a more complete investigation of the household formation behavior of young persons. Future work should also examine living arrangements of all age groups and the sensitivity of such to the various income packages that differ by country.

The importance of international data sets for this type of study cannot be overstated. Having available such a wide variety of income packages in a household based microdata set, such as the Luxembourg Income Study, is invaluable.

## References

- Becker, Gary S. (1974). "A Theory of Marriage." in T.W. Schultz (ed.), *Economics of the Family*. Chicago: University of Chicago Press.
- Beresford, John C. and Alice M. Rivlin (1966). "Privacy, Poverty, and Old Age," *Demography*. 3(1):247–258.
- Buhmann, Brigitte, Aldi Hagenaars, Richard Hauser, Peter Hedstrom, F. De Kam, Michael O'Higgins, Peter Saunders, Gunther Schmaus, Timothy Smeeding, and Michael Wolfson (1987). "Improving the LIS Income Measure: Toward Microdata Estimates of the Size of Cash and Noncash Income in Eight Countries," LIS-CEPS Working Paper #13, Luxembourg Income Study.
- Cutright, P. (1970). "Income and Family Events: Getting Married," *Journal of Marriage and the Family*. 32:628–637.
- Danziger, Sheldon, George Jakubson, Saul Schwartz, and Eugene Smolensky (1982). "Work and Welfare as Determinants of Female Poverty and Household Headship," *Quarterly Journal of Economics*. 97: 519–534.
- EUROSTAT, Statistical Office of the European Community (1982). *Economic and Social Features of Households in the Member States of the European Community*. Luxembourg: EUROSTAT.
- Goodman, Jr., John L. (1986). "Economic Determinants of Household Formations and Living Arrangements," No. 66, Working Paper Series, Economic Activity Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, December.
- Hedstrom, Peter and Stein Ringen (1985). "Age and Income in Contemporary Society," LIS-CEPS Working Paper #4, Luxembourg Income Study.
- Heer, David, Robert W. Hodge, and Marcus Felson (1985). "The Clustered Nest: Evidence That Young Adults Are More Likely to Live at Home Now Than in the Recent Past," *Sociology and Social Research*. 69 (3): 436–444.
- Hill, Daniel and Martha Hill (1976). "Older Children and Splitting Off," Greg Duncan and James Morgan (eds.). *Five Thousand American Families - Patterns of Economic Progress*. (Vol. IV). Ann Arbor: University of Michigan Press.
- Kiernan, Kathleen (1986). "Leaving Home: Living Arrangements of Young People in Six West-European Coun-

tries," *European Journal of Population*. 2(2): 177-184.

Michael, Robert T., Victor R. Fuchs, and Sharon R. Scott (1980). "Changes in the Propensity to Live Alone: 1950-1976," *Demography*. 17 (1): 39-56.

OECD, Department of Economics and Statistics (1982). *National Accounts Main Aggregates Volume 1, Purchasing Power Parities Supplement*. Paris: Organization for Economic Co-operation and Development.

Smeeding, Timothy, Gunther Schmaus, and Serge Allegreza (1985). "An Introduction to LIS." LIS-CEPS Working Paper # 1, Luxembourg Income Study.

Smeeding, Timothy, Barbara Torrey, and Martin Rein (1988). "Patterns of Income and Poverty: The Economic Status of the Young and Old in Eight Countries." In J. Palmer, Timothy Smeeding, and Barbara Torrey (eds.). *The Well-Being of Children and Elderly in the U.S.: Intertemporal and International Perspectives*. Washington, D.C.: Urban Institute Press.

Smith, Lawrence B., Kenneth T. Rosen, Anil Markandya, and Pierre-Antoine Ullmo (1984). "The Demand for Housing, Household Headship Rates, and Household Formation: An International Analysis," *Urban Studies*. 21 (4): 407-414.

*SPSS-X User's Guide, Edition 2* (1986). Chicago: SPSS Inc.

U.S. Department of Labor, Bureau of Labor Statistics, Office of Prices and Living Conditions (1988a). "Experimental Measures, CPI-U-X1: All Items, Rental Equivalence Approach Using CPI Rent, U.S. City Average." Unpublished tables, February 26. Washington, D.C.

U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology (1988b). "Purchasing Power Parity (PPP) Exchange Rates for Private Consumption Expenditures, 23 Countries, 1970-1987." Unpublished manuscript, October. Washington, D.C.

Wolf, Douglas (1984). "Change in Household Size and Composition Due to Financial Incentives," *Journal of Human Resources*. 19(1): 87-103.