

## ***Women's Employment and the Social Security System***

*by Marianne A. Ferber\**

---

The rapid rise in women's labor-force participation and the great increase in diversity of family and household structures raise serious questions about the equity and adequacy of a Social Security system developed primarily to meet the needs of traditional families with male wage earners and female homemakers. This article examines the changes in women's roles in the home and in the labor market, then goes on to consider possible reforms in the Social Security system that might help it to better meet the requirements of this profoundly altered society.

---

Professor of Economics and Women's Studies, Emerita, University of Illinois, Urbana-Champaign; Matina S. Horner Distinguished Professor at Radcliffe College, 1993-94.

It has become increasingly clear that the costs and benefits of the Social Security system accruing to individuals depend to a great extent on when these individuals were born, their labor-force participation and earnings over the life cycle, their marital status, and the division of earnings among family members.<sup>1</sup>

A variety of reasons account for these differences. For instance, Social Security taxes have been raised a good deal over time because benefits collected by retirees have consistently been greater than could be financed by their prior contributions alone (Burkhauser and Warlick 1981). Hence, younger workers are increasingly faced with a lower rate of return than their elders. The ratio of benefits to payments is more favorable for people with lower earnings.

Most of the objections voiced about these differences, however, from concerns about the inequity of benefits between one- and two-earner couples, and the treatment of divorced spouses, to complaints about the Social Security taxes paid by employed wives who may not receive additional benefits in return, in one way or another involve the role of women (Bergmann 1981, p. 229). This is so in part because when Social Security was instituted the traditional family, consisting of a wage-earner husband who was responsible for a dependent wife and children, was still the norm.

The system retains important elements of this origin, even though only a minority of households conform to this pattern today. Nonemployed spouses of covered workers receive benefits at no expense to the family; employed spouses pay Social Security taxes but receive no additional benefits as long as they are eligible for a smaller amount as workers than as spouses. Hence, the cost benefit ratio tends to be far more favorable for traditional families than for households without full-time homemakers. Thus, it is not surprising that there is considerable concern both about the effect of Social Security on women's roles in the home and in the labor force, and about the effect that women's labor-force participation and retirement behavior in turn have on the costs of the Social Security system.<sup>2</sup>

We shall examine the radical changes during the past 60 years in women's roles in the economy and in the family, but also focus on the substantial remaining differences in the economic status of women and men.<sup>3</sup> To the extent that these differences persist, gender neutral treatment under the Social Security system is not likely to be viewed as entirely appropriate.

The first part of this article reviews information concerning the rapid influx of women into the labor market; differences in labor-force participation by race and ethnicity, and marital and parental status; women's labor-force attachment; occupational distribution; and variations in earnings. These issues are relevant, because they influence Social Security taxes women pay and benefits they receive.

In order to better understand both the impetus for the changes that have taken place, and the constraints that have prevented them from going further, we also examine how the relevant decisions about working and retirement are made by women and families. This enables us to better predict probable future developments with respect to women's labor-force participation and life cycle labor-force attachment, both crucial in determining the appropriateness of possible reforms of the Social Security system. Specifically, learning more about determinants of women's labor supply helps to provide better insight with respect to the impact of possible policy changes on women's labor-force behavior.

The second part of the article focuses on the fit of the existing Social Security system with the needs of today's increasingly diverse households, many of them female-headed, and how to improve the adequacy and equity of the system in the evolving economy and the altered society.

## *The Changing Status of Women*

### *Trends in Labor-Force Participation*

Table 1 shows labor-force participation rates for men and women aged 16 or older since 1930. At the beginning of

this period the proportion of women in the labor force was only 5 percentage points greater than it had been in 1890,<sup>4</sup> and was still less than one-fourth. By way of contrast, the increase was almost 8 percentage points during the 5 years that encompass World War II; by 1945, more than one-third of women worked for pay. Although there was a brief decline after that, the climb resumed after 1947. By 1990, women's labor-force participation rate was fully 57.5 percent, almost two and one-half times greater than it had been in 1930. This figure declined to 57.4 percent in 1991, but during the same year the participation rate for men decreased from 76.5 percent to 75.9 percent. The decline is generally thought to be the result of the recession, when more discouraged workers tend to stay out of the labor force.<sup>5</sup> Assuming that the economy returns to a healthier growth rate, women's labor-force participation may be expected to resume its long-term upward trend, albeit perhaps at a slower rate.

Meantime, the proportion of men in the labor market, which also increased during World War II, has slowly declined since then, to reach a level about 5 percentage points lower in 1990 than it had been in 1930. One factor contributing to the reduction in men's labor-force participation was the decline in retirement age in recent decades.<sup>6</sup> There are, however, reasons to believe that this

downward trend in retirement age has run its course, and may even be reversed in the near future (Levine and Mitchell 1991).

Table 2 displays information separately for whites and blacks since 1955, and for Hispanics since 1975.<sup>7</sup> The data provide evidence of some broad similarities. Participation rates rose for all three groups of women throughout the period, declined for black and white men between 1955 and 1975, and have changed relatively little since then. There are nonetheless some interesting differences by race and ethnicity. The participation rate was a good deal higher for black women than for white women in 1955, but virtually the same in 1990.<sup>8</sup> Hispanic women, on the other hand, have had lower participation rates than the other women since 1975, and the size of the gap has changed little. Among men, participation rates were almost identical for whites and nonwhites in 1955, but have declined more among the latter since then, while Hispanic men had higher participation rates than the other men in 1975, and they have risen slightly since.

As shown in table 3, the labor-force participation rate rose most rapidly among married women with children, husband present. Further, among them the largest increase was for wives with children aged 3-5, from 29.1 percent to 61.2 percent, and with children under

Table 1.--Labor-force participation rates of men and women aged 16 or older, 1930-91

Year	Percent of men in the labor force	Percent of women in the labor force
1930.....	82.1	23.6
1940.....	82.5	27.9
1945.....	87.6	35.8
1947.....	86.8	31.5
1950.....	86.8	33.9
1960.....	84.0	37.8
1970.....	80.6	43.4
1980.....	77.9	51.6
1990.....	76.8	57.5
1991.....	75.9	57.4

Source: U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1970*, Bicentennial Edition, Pt. 1, 1975, pp. 131-32; U.S. Department of Labor, *Employment and Training Report of the President*, 1982, pp. 131-32; U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, Vol. 39, No.1, January 1992, p. 15.

age 3, from 21.2 percent to 54.5 percent.<sup>9</sup> Thus, the presence of young children has had increasingly less impact on women's labor-force participation.

At the same time, additional years of schooling have had progressively greater positive impact, as can be seen in table 4. As late as 1970, the proportion of women with 4 or more years of college in the labor force was less than 20 percentage points higher than for women who had not completed high school (60.9 compared with 43.0 percent). In 1988, the difference was about 35 percentage points (80.8 compared with 45.4 percent). Since more highly educated women tend to be married to more highly educated men who generally have higher earnings, these data suggest that the positive response to their own potential wages increasingly outweighs the disincentive effects of higher family income.<sup>10</sup>

These changes in women's labor-force participation contributed substantially to the sharp decline in the proportion of "traditional" families with full-time homemakers in recent decades. As shown in table 5, by 1991 no less than 67.3 percent of employed persons who maintained families (63.1 percent of men and 72.0 percent of women) had a spouse who was in the labor force. In addition, 5.2 percent of the men, and 18.3 percent of the women were single parents. Therefore, as would be expected, concern has shifted to some extent from reforms

in Social Security intended to provide adequate protection for employed men and "housewives," to revisions that would provide more equitable treatment for the diverse types of households of today. Because of the persistent, albeit declining gender differences in labor-force attachment, occupational distribution, and earnings, there also continues to be particular concern about adequate protection for women. For it is widely recognized that without special safeguards the Social Security system which, in principle, is gender blind, has very different effects on women and men in practice.

### Life Cycle Labor-Force Participation

As late as 1940, about 80 percent of married women were not in the labor force at the time they were married (Goldin 1990, p. 24). Gradually, more of them remained employed till the first child was to arrive. It was only after World War II that for the first time women in large numbers re-entered the labor force as their children were growing up, and gradually did so after progressively shorter intervals. In time, a growing minority of women remained in the labor force even during their childbearing years.

Table 3.--Labor-force participation rates of women by marital status and presence and age of youngest child, 1966 and 1988<sup>1</sup>

Year and marital status	Total	No children under age 18	Children present			
			Age 16-17, none younger	Age 3-5, none under 3	Under age 3	Children under age 18
<b>1966</b>						
Never married.....	40.8	(2)	(2)	(2)	(2)	(2)
Married, husband present.....	35.4	38.4	43.7	29.1	21.2	33.2
Other ever married.....	39.5	34.7	65.9	57.5	38.6	57.0
<b>1988</b>						
Never married.....	65.2	67.3	67.1	53.9	40.1	51.6
Married, husband present.....	56.5	48.9	72.5	61.2	54.5	65.0
Other ever married.....	46.1	38.1	77.5	67.0	52.4	71.7

<sup>1</sup> Data for March of each year, include women aged 16 or older in 1988 and aged 14 or older in 1966.  
<sup>2</sup> Data not available.

Source: Hayghe (1983), Table B-5, p. 16 and U.S. Department of Labor Statistics, Bulletin 2340, August 1989, Tables 55-57, pp. 235-44.

Table 2.-- Labor-force participation rates of men and women aged 16 or older, by race and Hispanic origin, 1955-90<sup>1</sup>

Year	Men			Women		
	White	Black	Hispanic <sup>2</sup>	White	Black	Hispanic <sup>2</sup>
1955.....	85.4	<sup>3</sup> 85.0	(4)	34.5	<sup>3</sup> 46.1	(4)
1965.....	80.8	<sup>3</sup> 79.6	(4)	38.1	<sup>3</sup> 48.6	(4)
1975.....	78.7	70.9	80.7	45.9	48.8	43.1
1985.....	77.0	70.8	80.3	54.1	53.1	49.3
1990.....	76.9	70.1	81.2	57.5	57.8	53.0

<sup>1</sup> Civilian labor force.  
<sup>2</sup> Hispanics are also included in the relevant racial category.  
<sup>3</sup> Includes other nonwhites.  
<sup>4</sup> Data not available.

Sources: U.S. Department of Labor, Bureau of Labor Statistics, *Working Women: A Databook*, 1977, pp. 44-45; U.S. Department of Labor, *Handbook of Labor Statistics*, Bulletin 2340, August 1989, pp. 25-30; U.S. Department of Labor, *Employment and Earnings*, Vol. 38, January 1991, p. 208.

These changes are reflected in chart 1, which shows labor-force participation of various cohorts in 1990, from those born between 1926 and 1930, to those born between 1961 and 1965. First, each later cohort begins with a higher labor-force participation rate between ages 20-24. Second, for women born between 1926 and 1945 the rate declined after entry and rose again after the child-bearing years, while for women born since 1945, the decline has disappeared.

As a result of these developments, the average number of years women workers spend in the labor force over their lifetime, although not yet on a par with men, appears to have increased considerably since about 1970.<sup>11</sup> Smith and Ward (1989) estimated that in 1920 women employed at age 50 had, on average, accumulated 19.3 years of work experience, and that it will be 22.5 years in 1990.<sup>12</sup> Blau and Ferber (1992a, p.162), using U.S. Dept. of Commerce (1987) data, calculated that in 1984 female workers between ages 21-64, on average, had 5.2 less years of experience than male workers. Ever-married women, however, are thought to spend considerably more time out of the labor

force, about 37 percent of the years after age 16, according to one estimate.<sup>13</sup>

At the same time, labor force turnover of women has been declining, as can be seen in table 6. Turnover is calculated as the difference between the experience rate (the proportion of individuals in the labor force some time during the year) and the participation rate (the proportion of individuals in the labor force at the time of the survey), divided by the labor force-participation rate.<sup>14</sup> While the turnover rate for women had been more than four times as high as for men in 1957, it was only slightly more than twice as high in 1989. Thus the differential between the two became far smaller, even though the turnover rate for men also declined somewhat.

Because a lower turnover rate is caused by a smaller proportion of workers moving in and out of the labor force, behavior that is obviously related to fewer interruptions, it tends to be associated with a greater accumulation of lifetime work experience. To the extent this is the case, women who are in the labor force are accumulating more Social Security credits.

At the same time, differences in job

tenure have also decreased. O'Neill (1985) estimated that in 1966 female workers aged 16 or older had, on average, 2.8 years of tenure in their current job, while men had 5.2 years. According to estimates by the U.S. Department of Labor (1987b), the corresponding figures for 1987 were 3.6 and 5.0. Thus the differential declined from 2.4 to 1.4 years.<sup>15</sup>

Because male-female differences in labor-force experience and tenure have contributed substantially to occupational segregation and the wage gap, both segregation and the differential in earnings would be expected to have diminished, although not to have disappeared, as a result of these changes. As we shall see below, this has been the case, at least to some extent.

### Occupational Distribution

Table 7 shows the percentage distribution of men and women in 1972 and 1991 in the nine major occupational categories used by the Bureau of the Census. It is evident that during 1972 the proportion of men was far higher among executives, administrators, and managers; precision production and craft and repair workers; operators, fabricators, and laborers; and those who worked in farming, forestry, and fishing. Women were far more highly represented among administrative support workers and service workers. By 1991, fully 11.4 percent of employed women were in the executive, administrative, and managerial category, as compared with 14.0 percent of men; this was an impressive change from 4.6 percent of women and 11.5 percent of men in 1972.

Table 4.--Labor-force participation rates of women, by years of schooling completed, 1970 and 1988<sup>1</sup>

Years of school completed	1970	1988
Less than 4 years of high school.....	43.0	45.4
4 years of high school.....	51.3	66.9
1-3 years of college.....	50.9	74.7
4 or more years of college.....	60.9	80.8

<sup>1</sup> Data are for March of each year and include women aged 25 to 64.

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Handbook of Labor Statistics*, Bulletin 2340, August 1989, Table 66, pp. 282-83.

Table 5.--Employed persons who maintain families, by work status of spouses, 1991

Spouses work status	Men		Women	
	Number in thousands	Percent	Number in thousands	Percent
Total.....	40,377	100.0	35,370	100.0
Employed spouse.....	25,477	63.1	25,477	72.0
Unemployed spouse.....	1,039	2.6	993	2.8
Spouse not in labor force.....	11,748	29.1	2,443	6.9
Spouse not present.....	2,113	5.2	6,457	18.3

Note: Excludes persons living alone or with nonrelatives, persons in married-couple families where the husband or wife is in the Armed Forces, other relatives aged 16 or older, and persons in unrelated families.

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, Vol. 39, No. 1, January 1992, p. 172.

Changes in other categories were, however, considerably less dramatic.

As would be expected, it is mainly younger women who have been moving into nontraditional occupations (Herz 1988). In table 8 we see comparable data by race and ethnicity. They show that differences in the occupational distribu-

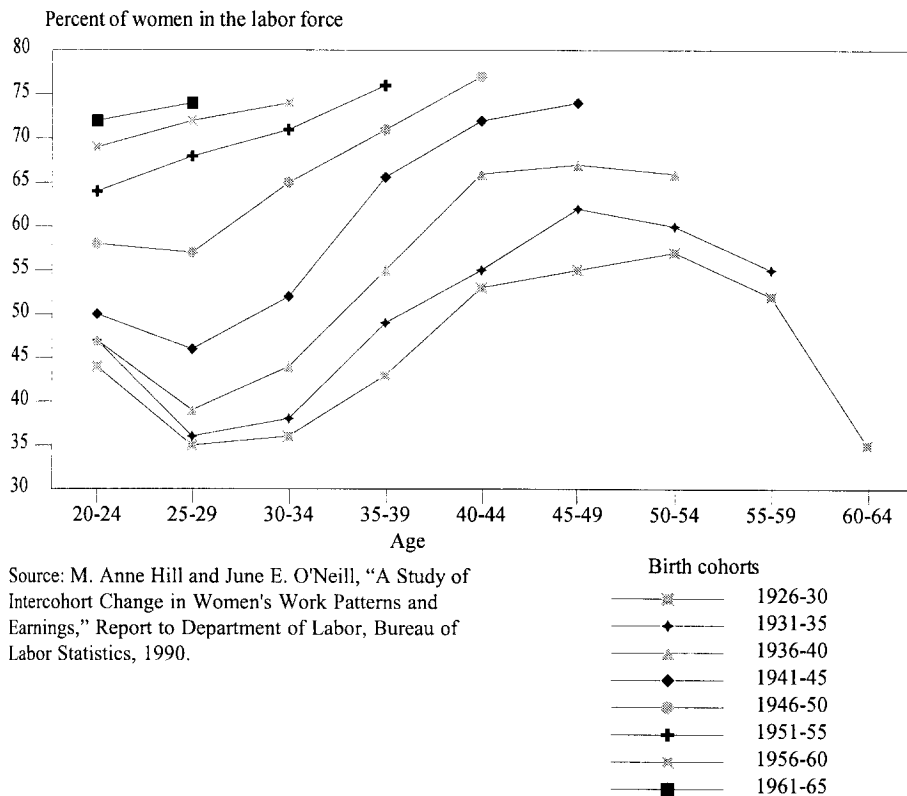
tion by race and ethnicity, particularly among women, are considerably smaller than differences by gender.

The data in tables 7 and 8, however, understate the full extent of gender segregation among workers. Women and men not only tend to work in different occupations, but also in different industries and

firms. Men are represented to a much greater extent than women in agriculture, construction, durable manufacturing, transportation, and public utilities; women are far more highly represented in retail trade, finance, insurance, real estate, and other service industries (U.S. Department of Labor, Employment, and Earnings 1992). Furthermore, there is also considerable segregation by firm, as Blau (1977) showed, and employers often use far more detailed job categories than those provided in census data. As a result, a study of 373 California firms, employing a total of 47,000 men and 14,000 women, found that among 51 percent of these firms all job categories were completely segregated by gender, and the work force of an additional 8 percent of firms was entirely single-sex (Baron and Bielby 1984).

Finally, in addition to segregation by occupation, industry, and job category within firms, there is a great deal of "vertical segregation" among employees working in the same occupation for the same employer. Men are far more heavily represented in the upper levels of hierarchies compared with women, as are whites compared with blacks, and "Anglos" compared with Hispanics. This is equally true in corporate management, labor unions, college faculties, and civil service workers.<sup>16</sup>

Chart 1.-- Cohort participation rates



Source: M. Anne Hill and June E. O'Neill, "A Study of Intercohort Change in Women's Work Patterns and Earnings," Report to Department of Labor, Bureau of Labor Statistics, 1990.

Table 6.--Labor-force turnover of men and women, selected years, 1957-89<sup>1</sup>

Year	Males			Females		
	Participation rate <sup>2</sup>	Experience rate <sup>3</sup>	Turnover rate <sup>4</sup>	Participation rate <sup>2</sup>	Experience rate <sup>3</sup>	Turnover rate <sup>4</sup>
1957.....	81.9	88.2	7.8	35.8	47.3	32.1
1962.....	78.4	85.1	8.5	36.6	48.7	32.9
1967.....	80.4	86.7	7.8	41.1	53.1	29.2
1972.....	79.0	86.7	8.5	43.9	54.3	23.9
1977.....	77.7	83.4	7.4	48.4	58.2	20.1
1982.....	76.6	80.4	5.0	52.6	59.2	12.5
1989.....	76.4	80.0	4.7	57.4	63.1	9.9

<sup>1</sup> Civilian labor force.

<sup>2</sup> The proportion of individuals in the labor force during the reference week (annual averages).

<sup>3</sup> The proportion of individuals in the labor force at some time during the year.

<sup>4</sup> The difference between the labor-force experience rate and the labor-force participation rate divided by the labor participation rate.

Source: 1957-77 data are from Cynthia B. Lloyd and Beth T. Nieme, *The Economics of Sex Differentials* (N.Y.: Columbia University Press, 1979), Table 2.6, p. 71, reprinted by permission of the publisher; later data are from U.S. Department of Labor, *Employment and Training Report of the President*, 1982, Table A-5, p. 155, *Monthly Labor Review*, Vol. 107, No. 12, December 1984, Table 1, p. 19; and U.S. Department of Labor, Bureau of Labor Statistics, "Seven out of Ten Persons in the Working-Age Population Has Some Employment During 1989," *News*, August 28, 1990.

There is much disagreement about the primary causes of segregation. Neoclassical economists tend to minimize the importance of employer discrimination, except perhaps in response to worker or customer preferences.<sup>17</sup> Instead, their explanations of gender segregation emphasize such factors as gender differences in tastes and qualifications and, most of all, women's discontinuous labor-force participation. In simple terms, the argument is that the more time a woman expects to spend out of the labor force, the less worthwhile she will find it to invest in education and training, and the greater the premium she places on a job she can re-enter with minimum penalties. In return she accepts lower rewards for experience (Polachek 1979, 1981).

Others have challenged this hypothesis, arguing that there is considerable mobility between male and female jobs (Corcoran, Duncan, and Ponza 1984), that women do not appear to be penalized less than men for interruptions in predominantly female occupations, and that, holding education and training constant, women earn more in predominantly male occupations (England 1982, 1984). While recognizing gender differences in characteristics of employees, these scholars emphasize possible differences in demand for men and women

workers, often ascribing the crucial role to discrimination by employers. Their motivation may be taste for discrimination (Becker 1965), pressure from male workers (Strober 1984), eagerness to maximize profits (Bergmann 1974; Madden 1973),<sup>18</sup> or their allegiance to a patriarchal system (Hartmann 1976).

The two approaches need not be mutually exclusive; both differences in characteristics and discrimination may well play a part. Further, there appear to be "feedback effects," between women's roles in the home and in the labor market, resulting in a dynamic of each reinforcing the other. Discrimination against women in the labor market reinforces their traditional role in the family, and their traditional role as homemaker provides a rationale for labor market discrimination. Far more work is needed, however, before we can fully understand the reasons for occupational segregation, although careful studies by Strober and Arnold (1987), and others reported in Reskin and Hartmann (1986) and Reskin and Roos (1990) have provided useful insights.

Whatever the explanation for occupational segregation, it contributes to the existing earnings gaps among various groups.<sup>19</sup> A U.S. Department of Commerce (1987) report, for instance, estimates that 30 percent of the wage gap

between women and men without a college degree, and 17 percent of the gap among college graduates is accounted for by differences in occupations. Because firm size and unionization, both closely related to occupation and industry, are among the main determinants of the availability of employer provided pension programs, continued gender segregation also adds to the pension gap. In 1984, only 38 percent of retired pension recipients aged 65 or older were women, although 60 percent of this population were women (Newton 1988). A gender gap, albeit a smaller one, exists even among full-time employees.

### Earnings Differentials

Table 9 shows that the female-male earnings ratio among full-time, year-round workers fluctuated narrowly around 60 percent for almost three decades. Only since 1980 has it been increasing, to reach 71.1 percent in 1990. The ratio of usual weekly earnings of full-time workers, which is available for an additional year, rose from 71.8 percent in 1990 to 74.0 percent in 1991.<sup>20</sup> In spite of these changes in recent years, the earnings gap remains quite large.<sup>21</sup> Data in table 10, however, suggest that it may be expected to continue to decline, possibly more rapidly. Not only has the ratio of women's to men's incomes<sup>22</sup>

Table 7.--Percentage distribution of men and women, by major occupational categories, 1972 and 1991<sup>1</sup>

Occupational category	1972		1991	
	Men	Women	Men	Women
Total employed.....	100.0	100.0	100.0	100.0
Executive, administrative, and managerial.....	11.5	4.6	14.0	11.4
Professional specialty.....	9.7	12.4	12.2	15.6
Technicians and related support.....	2.3	2.4	3.0	3.5
Sales occupations.....	10.0	11.1	11.2	12.8
Administrative support, including clerical.....	6.4	31.5	5.8	27.5
Service occupations.....	8.3	21.2	10.1	17.9
Precision production, craft, and repair.....	19.4	1.6	18.9	2.1
Operators, fabricators, and laborers.....	25.9	13.4	20.2	8.1
Farming, forestry, and fishing.....	6.4	1.9	4.6	1.0

<sup>1</sup> Data refer to civilian workers aged 16 or older.

Source: Department of Labor, Bureau of Labor Statistics, *Employment and Earning*, Vol. 31, No. 1, January 1984, pp. 15-16 and Vol. 39, No.1, January 1992, p. 184.

risen most for the younger cohorts, but, contrary to earlier experience, in recent years the ratio for the cohorts aged 35-44 and 45-54 in 1980 rose over the next 10 years.

A comparison among racial and ethnic groups seen in table 11 shows that in 1989 the income gap between black and white males was almost as large as that between all men and women, and the gap between Hispanic and white men was larger than that between women and men. It will also be noted that, ominously, the gap between black and Hispanic men on the one hand, and white men on the other has been widening in both cases since 1975. Differences in earnings between women and men are far smaller among blacks and Hispanics than among whites, and far smaller among women than men between racial and ethnic groups, although these differentials have been rising as well.

As in the case of gender segregation, the reasons for these earnings differentials continue to be debated. The dispute is, once again, mainly between those who focus almost exclusively on differences in work-related characteristics of workers, and those who ascribe a significant role to gender discrimination.<sup>23</sup>

There are substantial differences in human capital, and they account for a large portion of earnings differentials. As early as Mincer and Polachek (1974) and Corcoran (1978), it was established that labor market experience, and particularly tenure, as well as education and training have a substantial effect on earnings.<sup>24</sup> In 1984, among workers aged 21 to 64, only 13.2 percent of men, but as many as 47.0 percent of women had experienced one or more work interruptions.<sup>25</sup> Male workers had, on average, spent 1.6 percent of potential work years away from work. Female workers had spent 14.7 work years away from work, but the figures decline from 22.7 for the oldest group, to 16.6 and 5.3 for the younger cohorts. Finally, 22.0 percent of men and 25.6 percent of women had less than 2 years of tenure on their current job, while 35.8 percent of men and only 22.8 of women had more than 10 years of tenure<sup>26</sup> (U.S. Department of Commerce 1987).

We also know that white men, on average, have more education than black and Hispanic men and that there are differences, albeit diminishing ones, between women and men in the courses they took in secondary schools and the

majors they chose in college. Finally, although no data are available, there can be little doubt that men tend to receive more on-the-job training. Nonetheless, two important issues remain unresolved.

First, none of the studies, even those that include information on a large number of variables, have succeeded in accounting for all of the earnings gap, whether by gender, race, or ethnicity; many studies explain little more than half of the differential.<sup>27</sup> The unexplained portion may be ascribed to real differences, say in motivation, energy expended, or talent, that may influence productivity, even though they cannot be measured. Or, this portion may be ascribed to discrimination, whether it reduces access to training, better paying jobs and promotions, or results in lower pay for doing essentially the same, or at least comparable work.

Second, to the extent that some studies explain much of the earnings gap by taking detailed occupations into account, we have seen that it is not clear to what extent occupational segregation is itself caused by discrimination. Nor is there agreement why workers in women's occupations tend to be paid less for comparable personal characteristics.<sup>28</sup>

Table 8.--Percentage distribution of workers, by occupation, race, ethnicity, and gender, 1991<sup>1</sup>

Occupational category	White		Black		Hispanic	
	Men	Women	Men	Women	Men	Women
Total civilian labor force 2 .....	100.0	100.0	100.0	100.0	100.0	100.0
Executive, administrative, and managerial.....	14.7	12.0	7.2	7.2	...	...
Professional speciality.....	12.6	16.1	6.7	11.5	11.4	15.8
Technicians and related support....	3.0	3.5	2.3	3.4	...	...
Sales occupations.....	11.8	13.3	6.2	9.4	15.1	39.8
Administrative support, including clerical.....	5.4	27.9	8.9	26.3	...	...
Service occupations.....	9.0	16.6	18.8	27.6	17.1	26.2
Precision production, craft, and repair.....	19.5	2.1	15.2	2.2	18.7	3.0
Operators, fabricators, and laborers.....	19.2	7.5	31.2	12.2	29.1	14.0
Farming, forestry, and fishing.....	4.7	1.2	3.5	.3	8.0	1.2

<sup>1</sup> Data refer to civilian workers aged 16 or older. Data for Hispanics for all categories are not available for year 1989; the data here are for 1990.

<sup>2</sup> Figures do not always equal 100 due to rounding.

Source: For white and black, U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, Vol. 39, No. 1, January 1992, p. 184; for Hispanics, U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Population Characteristics, Series P-20, No. 455, October 1991, p. 12.

Because statistical evidence alone cannot resolve these issues, other confirmation of the existence of discrimination is worth considering. Employers have been found guilty of such practices in a significant number of court cases, even though they had the opportunity to provide the sort of detailed evidence about characteristics of workers that is not generally accessible to researchers. Also, direct evidence of discriminatory attitudes has been accumulated (to a great extent by social scientists other than economists), which raises considerable doubts about whether individuals are generally evaluated objectively and without bias.<sup>29</sup>

### *The Labor-Force Participation Decision*

There is an extensive economic literature concerned with women's decisions on whether or not to seek employment and particularly with explaining the rapid influx of women into the work force.<sup>30</sup> The theoretical foundation for much of this work was provided by Becker and Mincer in the 1960's.<sup>31</sup> Their neoclassical models, in conformity with the mainstream tradition of the discipline, assume rational maximizing behavior.<sup>32</sup> Some accept the family as the relevant unit. Becker (1965), for instance, begins by assuming that the allocation of time to market work and housework is made jointly by husband and wife on the basis of comparative advantage.<sup>33</sup> Others focus on the individual as the decisionmaker. Essentially, they take the husband's labor force status and earnings as given, and expect the wife to make her decision accordingly.

Both models, on the one hand, provide a rationale for the traditional division of labor between husband and wife. Real income, which consists of purchased goods and services, plus the value of goods and services produced at home, is maximized. On the other hand, they also explain why women are devoting increasingly more time to market work as its value has increased relative to the value of their time at home.

Women's wages rose because of longer years of education (Goldin

1990),<sup>34</sup> growing demand for female labor (Oppenheimer 1970; O'Neill 1985), and general increases in the productivity of women workers. Real earnings of men also rose through the middle 1970's. All else equal, the husband's higher income would serve to reduce the need for a second wage earner in the family, and increase the demand for leisure and for the services of the homemaker, but this countervailing force was not enough to offset the effect of the rise in women's own potential wages.<sup>35</sup> In recent years, real earnings of many men tended to level off or even decline, providing additional impetus for wives to enter the labor force.

Meanwhile, the growing availability in the market of goods and services that used to be produced in the home, the declining proportion of people living on farms (where women's productive activities generally went far beyond those of the urban housewife), and the smaller number of children, along with longer life expectancy (that provided many more years without young children), all helped to reduce the economic value of the woman's contribution in the home.<sup>36</sup>

Only the rising number of elderly who need care tends to work in the opposite

direction. Even using a narrow definition, which includes only persons who are the two main caregivers, the estimated number of women providing such care to the elderly in 1984 was 409,000 and 425,000, respectively. The corresponding numbers for men were 168,000 and 523,000. Estimates that use a broader definition of caregiving, including anyone who regularly provides help for elderly persons, range as high as 30 percent of employees (Ferber and O'Farrell 1991, p. 74).

Beyond the developments noted above, the rising divorce rate made it necessary for increasing numbers of women to seek employment in order to support themselves and their children. Others may have chosen to enter, or remain in, the labor force in order to be prepared in case the need should arise.<sup>37</sup>

Changes in women's potential earnings and in the value of time spent at home, along with greater need for their own income have undoubtedly been the main precipitating causes of the rise in women's labor-force participation for some time. In recent years, the declining real wages of a substantial proportion of men gave further impetus to this movement.<sup>38</sup> But it would be a mistake to

Table 9.--Median annual earnings of full-time, year-round workers, and unusual weekly earnings of full-time women workers, as a percent of men's earnings, selected years 1955-90

Year	Annual earnings of full-time, year-round workers 1	Usual weekly earnings of full-time workers 2
1955.....	63.9	...
1960.....	60.8	...
1965.....	60.0	...
1970.....	59.4	62.3
1975.....	58.8	62.0
1980.....	60.2	64.4
1985.....	64.6	68.2
1989.....	68.7	70.1
1990.....	...	71.8

1 Workers aged 15 or older. Prior to 1979, workers aged 14 or older.

2 Workers aged 16 or older.

Source: United States Department of Labor, Women's Bureau, Bulletin 29, *Time of Change: 1984 Handbook on Women Workers*, 1987; Bureau of the Census, Population Reports, Consumer Income Series P-60, *Money Income of Households, Families, and Persons in the United States*, 1990; and the Bureau of the Census, Population Reports Income Series P-60, *Money, Income, and Poverty Status in the United States*, various issues; Earl F. Mellor, "Investigating the Differences in Weekly Earnings of Women and Men," *Monthly Labor Review*, No. 107, June 1984, pp. 17-28; Bureau of Labor Statistics, *Handbook of Labor Statistics*, Bulletin 2340, August 1989; and Bureau of Labor Statistics, *Employment and Earnings*, various issues.



think that is the whole story. Women from more recent cohorts are spending a higher proportion of their time in the labor market, even when characteristics are held constant (Hill and O'Neill 1990).

Women's growing labor-force participation itself appears to exert feedback effects. One example is that women who have more schooling are more likely to enter employment, but they also go to school longer, and obtain a more job-oriented education because they intend to seek employment. There are other examples as well. The availability of women willing to work for relatively low wages made possible the great expansion of what came to be female-dominated occupations. The growing demand from two-earner families for goods and services gave impetus to the growth of new businesses that satisfied this demand. Women who intended to have a career were less likely to have a large number of children;<sup>39</sup> and women who were able to support themselves were likely to be less reluctant to seek a divorce when their marriage was unsatisfactory. Finally, the entry of more, and especially of better educated middle class women into the labor force has made working for pay more acceptable, and thus in turn has encouraged further entry.<sup>40</sup>

Economic models that ignored tradition and mores, as well as the extent to which they have changed, failed to fully account for the rise in women's labor-force participation.<sup>41</sup> Similarly, by ignoring differences in conventions and accepted standards they have failed to explain such variations among racial and ethnic groups as the historically high labor-force participation of black women,<sup>42</sup> and the low rates for Hispanic women.<sup>43</sup>

### Outlook for the Future

In view of existing concerns about the future of the Social Security system, and because the future of the system is closely related to labor force developments, accurate predictions are crucial. Unfortunately, forecasting is a hazardous undertaking at best, and the record of practitioners of this art is hardly inspiring. Nonetheless, there is little choice in

this matter, for failure to do so explicitly merely results in the use of implicit forecasts, which all too often amount to no more than a projection of recent trends. The educated guesses offered below, based on the preceding analysis of women's labor-force status, should be somewhat better than that.

The "baby boomlet" in the 1980's was widely discounted, and many experts predicted continued low birthrates, perhaps even some further decline.<sup>44</sup> Recently, however, the Bureau of the Census revised its fertility predictions through 2016 upward from 1.8 percent to 2.1 percent, and now projects a population growth of 10.4 percent for the 1990's, as compared with 9.5 percent in the 1980's. The proportion of the population that is elderly is projected to grow considerably more slowly till about 2010, but to increase again thereafter, as baby boomers join their ranks (Posner and De Vol 1993). These people, especially the very old, need a great deal of care, much of it provided by women.

Age of marriage has risen, but to date cohabitation appears to be a prelude or a sequel rather than a substitute for marriage. The high divorce rate declined slightly in the late 1980's, and is not expected to resume its previous upward course. The rate of remarriage also remains high, but has been declining somewhat as well (Cherlin 1990). In view of these factors, together with the persistently higher life expectancy of women as compared with men, and the growing number of births to unmarried women, the proportion of female headed households cannot be expected to decline to any great extent.

The decline in labor-force participa-

tion of men aged 50 or older, and in median age of retirement, has leveled off. The retirement age for men may even have risen in recent years.<sup>45</sup> One may safely conclude that any further decline in labor-force participation of men, if it occurs at all, is likely to be quite modest. Labor-force participation for women up to age 64 rose steadily, and the decline for women 65 or older was very modest compared with that for men in the same age group, albeit from a much lower level. Changes in women's retirement age have paralleled those of men, and this is expected to be true in the foreseeable future as well.<sup>46</sup>

It is generally expected that participation rates for women, including those aged 50 or older, will continue to increase, but at a slower rate.<sup>47</sup> Should there be changes in government policies so that traditional families lose some of their tax advantages,<sup>48</sup> or if employer policies are instituted that make it easier to combine employment and household responsibilities, the rate of increase might even rise once again. For those who find that hard to believe, it is interesting to note that in Sweden labor-force participation rates of women between ages 16 and 64 now approach 90 percent.

It is considerably more difficult to predict changes in hours of work and in life cycle labor-force participation for employed women (although there is no question that both will rise for the total population of women). This is in part because we lack adequate data even for the past and present, and in part because there are conflicting forces at work.

With respect to hours worked, the growing tendency for mothers of young children to remain in the labor force, or

Table 10.--Median annual income of year-round full-time women workers as a percent of men's income, by age, 1980 and 1990

Ages	1980	1990
All ages.....	60.2	71.1
25-34.....	68.6	79.1
35-44.....	56.2	68.9
45-54.....	54.3	61.4
55-64.....	56.7	62.6

Source: U.S. Department of Commerce, Bureau of the Census, Consumer Income Series P-60, No. 134, *Money Income and Poverty Status in the United States: 1981*, pp. 13-14; and No. 168, *Money Income and Poverty Status in the United States: 1990*, pp. 106-107.

to reenter after a short absence, would tend to increase the proportion of part-time workers. The large proportion of women in Sweden who work part time (over half of employed women, compared with slightly over one-fourth in the U.S.) points in the same direction. On the other hand, the higher level of education and wages of young women, as well as the increasing availability of day care would, on balance, be expected to give them more incentive to work full time.

Similarly, as women not previously employed enter the labor force, they reduce the average amount of experience of women workers; but when employed women remain in the labor force, or drop out for shorter periods of time, average years of experience increase. The fact that the most rapid increases in labor-force participation since the late 1970's have been among young women, including mothers of children under age 3,<sup>49</sup> and a greater percentage of these women are working year-round, full-time than in earlier days, however, suggests that some increase in life cycle labor-force participation may be expected. In addition, it appears that young women, who used to considerably underestimate the amount of time they would spend in the labor market, are becoming more realistic about their lifetime labor-force participation (Shaw and Shapiro 1987). This may partly explain why there has been a convergence in the percentage of men and women who graduate from college, and

in their college majors, as well as the substantial rise in the proportion of women in traditionally male graduate and professional programs.

These changes have certainly contributed to the observed influx of women, and particularly young women, into male occupations, mainly the ranks of executives and professionals,<sup>50</sup> and the decline in the gender earnings gap since the late 1970's, especially among the young. But the outlook is not all rosy. There is some disagreement whether the recent downward trend in occupational segregation is likely to continue, and how meaningful this trend is in view of the continued gender segregation within occupations, generally along hierarchical lines (Reskin and Roos 1990).

More of a consensus appears to exist that the decline in the earnings gap will persist, but it is not clear at what rate it will proceed. In many of the other industrialized countries the rapid decline in the earnings gap during the 1970's abruptly leveled off in the 1980's; this raises the possibility that the same could happen here. Finally, to the extent that the gender earnings differential narrowed since the late 1970's because of the poor performance of men's real wages, this does not represent a real improvement.

A major caveat about the above projections must be noted. General economic developments influence the labor force status of both women and men.

The decline in real wages when inflation outstrips increases in earnings, the effect of persistently high unemployment rates on labor-force participation, and the impact of sectoral shifts in the economy on occupational segregation are only a few examples. Given our notorious inability to forecast the course of the economy, as well as the possibility of new legislation, liberal or conservative, there are serious questions about the accuracy of any predictions, particularly of women's labor-force participation and life cycle labor-force attachment, and consequently about any predictions of need for and costs of Social Security reforms.

### *Changing Roles of Woman and the Social Security System*

#### *Implications of Labor Market Changes*

The main goals of the Social Security program from its inception were to replace earnings at retirement and to provide minimum support for the aged (Pechman, Aaron, and Taussig 1968), and these are still the goals today. Old-Age and Survivors Insurance (OASI) is by far the largest income maintenance program in this country. Fully 92 percent of the elderly (aged 65 or older) receive income from this source, compared with only 26 percent who receive private pensions. OASI provides all of the income of 14 percent of the beneficiary units, 90 percent or more for 25

Table 11.--Median annual income of full-time, year-round workers, by race, hispanic origin, and gender, as percent of income of other group, selected years 1955-89<sup>1</sup>

Year	White females to white males	Black females to black males	Hispanic females to Hispanic males <sup>2</sup>	Black males to white males	Black females to white females	Hispanic males to white males <sup>2</sup>	Hispanic females to white females <sup>2</sup>	All females to all males
1955.....	65.3	55.1	...	60.9	51.4	...	...	63.9
1960.....	60.6	62.2	...	66.1	67.8	...	...	60.8
1965.....	57.9	62.5	...	62.8	67.9	...	...	60.0
1970.....	58.6	70.5	...	68.1	81.9	...	...	59.4
1975.....	57.5	75.1	68.6	73.2	95.5	71.2	85.0	58.8
1980.....	59.3	78.7	71.7	70.4	93.3	70.0	84.5	60.2
1985.....	64.1	81.2	78.0	70.0	88.5	67.5	82.0	64.6
1989.....	66.6	86.5	86.2	69.4	90.1	62.2	80.5	68.7

<sup>1</sup> Prior to 1970, blacks include blacks and other non-whites. Data for 1980-89 refer to workers aged 15 or older; and for 1955-75 to workers aged 14 or older.

<sup>2</sup> Persons of Hispanic origin can be of any race.

Source: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Consumer Income Series P-60, various issues.

percent, and 50 percent or more for 60 percent (U.S. Department of Health and Human Services 1990a).<sup>51</sup>

The program has been remarkably successful in reducing the poverty rate among the elderly, which today is about the same as for the rest of the population. Nonetheless, a lively debate has gone on for some time about its adequacy and fairness. Charges from all parts of the political spectrum range from claims that the system is not fair,<sup>52</sup> and that many covered workers are not sufficiently protected, to complaints that the life-cycle relationship between payroll taxes and Social Security benefits has become increasingly less favorable, and that there will be long term funding difficulties (Boskin 1986).

Numerous reforms have been proposed in response to such concerns, but so far most have come to naught. This is not surprising in view of substantial disagreements both about what the effects of Social Security are, and what the outcomes should be. Substantial questions remain about the impact of Social Security taxes and benefits on the labor supply and on savings. Among the unresolved issues are whether the appropriate focus is on current year or life-cycle transfers; the extent to which differences in benefits represent evidence of redistribution, or are simply the unintended results of insurance arrangements; whether the decomposition of the benefit structure into an individual equity and a social adequacy component would be useful in resolving the internal contradictions of the present system; and whether the latter should involve universal demogrants or means tested benefits.

A voluminous literature has grown as a result of the attendant debates.<sup>53</sup> In recent years, attention has also focused on the extent to which the radical changes in the roles of women in the economy and in the family require changes in the Social Security system, in order to adjust to new needs and take advantage of new opportunities.

The world is very different than it was a half century ago when the Social Security system was introduced. At that time, the traditional family with one wage earner and a full-time homemaker was

still the norm; today, such households are in a minority. There has been a considerable increase in the proportion of adults who live alone, with unrelated persons, or in single-parent families. Further, among two parent families only 30 percent of employed husbands and 6 percent of employed wives have spouses who are not in the labor force (U.S. Department of Labor 1990).

Nonetheless, there are still millions of women who have been full-time homemakers most of their lives, although their number has been declining rapidly. There are many more women who have been full-time or part-time homemakers intermittently. As recently as 1990 only 70 percent of employed women worked full-time, and 64 percent worked 50 weeks or more per year, (up from 67 percent and 54 percent, respectively, in 1981), while 87 percent of men worked full-time, and 73 percent worked 50 weeks or more per year (also up from 86 percent and 65 percent in 1981) (U.S. Department of Commerce, Money Income of Households, Families and Persons in the U.S. 1983, 1990).

As of 1989, among the population age 20 or older, 91 percent of men, but only 77 percent of women were insured for retirement benefits (U.S. Department of Health and Human Services 1990a). Furthermore, women who worked full-time continuously nonetheless have, on average, substantially lower lifetime earnings than men.<sup>54</sup> Thus, women are likely to be entitled to far smaller Social Security benefits in their own right than are men and, in spite of recent improvements, they are also considerably less likely to have their own private pensions (Andrews 1988).<sup>55</sup>

The remainder of this section examines possible reforms of the Social Security system intended to better address present-day economic and social realities. Ideally, such revisions should adjust to new developments rather than inhibit them, but it also needs to be recognized that because of the remaining gender differences in labor-force status and earnings abrupt changes could create hardships for many women, and often their children as well.

Even under the existing Social Secu-

urity system, which favors lower income workers and makes provisions for spouses who are not employed, or who are entitled to greater benefits as spouses than as workers, women are at somewhat of a disadvantage. In 1988, their average monthly benefits were only \$426, compared with \$655 for men (Lingg 1990). Eligible widows aged 60 or older received \$537 (King 1990), but those who are younger do not get any benefits unless they have children, and lose benefits if they remarry. Moreover, neither former spouses who were married less than 10 years, nor disabled homemakers receive any benefits.

One more problem confronting women is that they are far more likely to outlive their spouses than vice versa, and Social Security payments for survivors are at most 67 percent of the amount received by couples,<sup>56</sup> while the equivalence scale generally used in the U.S. assumes that a single person needs about 80 percent of a couple's income to maintain the same standard of living.<sup>57</sup> This issue is discussed in some detail in Burkhauser, Duncan, and Hauser (1993).

As a result, women are disproportionately represented among the elderly poor, in spite of being helped by Supplemental Security Income (SSI), explicitly designed to aid the low-income disabled and aged.<sup>58</sup> One reason SSI has not been more effective in this respect is that in most States payments are not sufficient to lift recipients out of poverty.<sup>59</sup> Another reason was that participation rates had been only 50 to 65 percent (Sheils, Barnow, Chaurette and Constantine 1990). Factors thought to contribute to the low utilization rate were ignorance of the existence of the program, bureaucratic procedures, fear of loss of privacy, and the stigma associated with welfare receipt (U.S. Congress 1989). Since then, however, thanks in large part to successful outreach programs, SSI rolls have increased by 25 percent.

How much better women will fare in the future if the Social Security system remains unchanged, depends in part on the proportion of women who will work enough quarters to become eligible for retired worker benefits in their own right before reaching retirement age, and how

large these benefits will be.<sup>60</sup> For married, divorced, and widowed women it also depends on their marital history, their own and their husbands' longevity, and their husbands' lifetime earnings profiles. The system may, however, change. We have already seen that there are reasons for concern about adequacy of benefits; there are also serious concerns about fairness. As Bergmann (1982) notes, both these issues mostly involve the housewife, and hence the traditional family; they are also the issues that motivate much of the current agitation for reform.

At present, workers with the same earnings pay the same Social Security taxes and receive the same benefits on their own account, whether they are married or single. But workers' spouses (and children) who are not covered as workers themselves, receive benefits without additional taxes being paid. Consequently, married couple families with full-time homemakers gain at the expense of other types of households, while workers without spouses, including those who are heads of families, are clearly at a disadvantage.

The situation of beneficiaries who are entitled to payments both in their own right and as spouses is not as clear. Compared to those who are not employed, who receive an entirely "free lunch," those who paid Social Security taxes and get no additional benefits in return are being shortchanged. On the other hand, those who receive higher benefits as spouses than they would in their own right, do better than workers, married or single, who receive only their own benefits.

Whether any Social Security benefits should be provided for spouses, and if so what kind, is a complex and emotionally charged issue. On the one hand, most homemakers and secondary wage earners need such payments in order to attain a modicum of security. On the other hand, these benefits provide incentives for married women to remain out of the labor force.<sup>61</sup> This is a matter for concern because dependency puts women at considerable risk, not only in case of divorce, but also in case the husband dies

at an early age, or does not earn enough to be able to provide for the family.<sup>62</sup>

This issue is all the more important because, as previously noted, the present income tax structure also favors traditional one-earner, one-homemaker families. Not only do one-earner couples pay lower taxes than two single individuals with the same money income<sup>63</sup> but, more importantly, the real income produced by the homemaker is not taxed.<sup>64</sup>

Together with the preferential treatment under the Social Security system, this adds up to a substantial subsidy for traditional families at the expense of other households, one that dwarfs the tax deductions employed parents receive for child care. In addition, although benefits for non-employed spouses were intended to help poor families with dependents, such transfers often go to the relatively affluent. These dilemmas are difficult to resolve at best; there is even less hope for a reasonable resolution as long as large segments of the population tend to be unaware of the relevant facts.

To the extent that existing programs favoring traditional families were adopted deliberately, and the decisions were based on evidence that society as a whole benefits,<sup>65</sup> such policies could be justified. If, however, the decisions were made without adequate evidence, and without awareness of the full costs of these policies,<sup>66</sup> they need to be reconsidered. In any case, as the proportion of families with full-time homemakers declines, political support for programs that favor them is likely to decline.

We shall examine several proposed reforms of the Social Security system that are particularly concerned with adequacy of coverage for women, and with fairness among various types of households. Advantages and disadvantages will be noted in each instance, but the decision on how to weigh them will be left to the reader.<sup>67</sup> Needless to say, the list of possible changes discussed is not exhaustive.

Earnings sharing proposals suggest that "the combined earnings of husband and wife during the period of their marriage be divided equally and shared between them for Social Security pur-

poses" ( U.S. House of Representatives, Committee on Ways and Means 1985, p. IX). As Burkhauser (1982) pointed out, this approach would fundamentally change property rights within the family. While our present legal system follows the English common law procedure of assigning rights to a separate earnings stream to each individual earner, earnings sharing follows Roman law (as does community property), and assigns an equal part of total family earnings to each spouse, so that for the years of marriage each receives the same retirement benefits.<sup>68</sup> To the extent that both spouses participate in the decision on whether one of them should withdraw from the labor market, such equal sharing seems reasonable.

In principle, equal payment could also be made to each spouse for disability, but there is much opposition to paying wage earners less than the benefits they are presently entitled to. This makes the issue of paying disability benefits to homemakers highly problematic.

Because earnings sharing is neutral with respect to the roles of husband and wife, it would help to end the bias toward traditional family roles and tend to remove the possible negative effect on the work effort of married women. At the same time, it continues to provide some protection for the homemaker, although widowed homemakers would receive only half instead of 100 percent of their husbands' benefits earned during the years they were married. Advocates of earnings sharing who were troubled about this devised a plan whereby the survivor would inherit all of the deceased spouse's earnings credits during their years of marriage. Such modifications, however, conflict with the goal of treating families with the same earnings equally, whether or not there is more than one wage earner.

Other problems with earnings sharing proposals cause concern. One is that Social Security benefits for one-earner couples, for surviving members of such couples, and for most divorced men would be substantially reduced. This means that such a policy could not be introduced abruptly, but would have to

be phased in gradually so that no one would be hurt retroactively.<sup>69</sup> Second is the fact that divorced individuals who invested little in job-oriented human capital would no longer share in the benefits of their ex-spouses with higher earnings. Further, the same is true of the widowed, unless they receive survivor benefits.

A second type of proposal provides for homemaker credits to non-employed spouses of covered workers, or possibly to all non-employed homemakers. Because they would receive these benefits in their own right, this would give them greater security, including coverage for disability, and the dignity of knowing that they had earned the benefits themselves. The credits would take the place of present payments to non-employed spouses, and would not necessarily be greater, depending on the value placed on homemaking.<sup>70</sup> Even so, the question arises whether the costs of such a program should be covered out of general Social Security funds, as is true of spousal benefits at present, or should be paid for by homemakers, much as self-employed persons pay Social Security taxes.<sup>71</sup>

Providing benefits for all homemakers without collecting taxes from them would make it possible to cover non-employed heads of single-adult families without causing any hardship for them. On the other hand, costs to the system would rise, and traditional families would continue to be subsidized at the expense of single workers and of dual earner couples.

Imposing taxes on all homemakers would increase the tax base, so that rates could be reduced without loss in revenues. Even so, such taxes would be expected to cause difficulties for low income families with full-time homemakers, quite likely forcing some of these women to seek employment. This might be seen as appropriate if there were agreement that women, like men, should work for pay when the family cannot support itself without the additional income.<sup>72</sup> It would, however, be opposed by advocates of the traditional family, and would create serious hard-

ships for heads of single adult families who are not in the labor force, or work only part time.

An alternative that has received more attention is the possibility of providing caregiving credits, up to a specified number of quarters, for homemakers who care for young children or, as is increasingly often the case, for elderly relatives.<sup>73</sup> Combined with other program changes, this might well result in lower payments to those wives, divorcees, and widows who receive relatively generous benefits under the present system, but in higher payments for others, especially those who receive no benefits as spouses. How adequate the payments would be, and the effect on costs to the Social Security system depends, in large part, on the level of the credits, and the period of time covered.

Double-decker or two-tier programs have also received some consideration.<sup>74</sup> They are not mainly intended to address women's issues, but nonetheless impinge upon them. Advocates of these approaches argue that under present arrangements two distinct goals are to be achieved by one set of benefits, and that it would be preferable to have two separate components. One part would consist of payments proportional to wages (with or without earnings sharing<sup>75</sup>), to be paid for out of Social Security taxes. This would satisfy the requirement of individual fairness.<sup>76</sup> A second part would address the issue of social adequacy, taking into account family size, and could be paid for or subsidized out of general funds.

In a double-decker program, the second part would usually consist of demogrants (flat pensions) paid to the disabled and to everyone upon reaching a specified age. A two tier program, on the other hand, would involve means-tested grants to the poor, or a negative income tax, providing payments related to the extent income falls short of specified amounts for various families.

One feature of any two-part approach that pays for part or all of the redistributive second tier out of general revenues is that it would reduce worries about possible eventual insolvency of the Social

Security trust fund, but would, of course, increase the drain on general revenues correspondingly. Beyond that, the two-tier program is viewed as a more efficient way of channeling money to the needy, while the double-decker program, like the present system, avoids the potentially demeaning means test. It is also likely to result in larger benefits, because universal schemes appear to enjoy broader political support (Smeeding, Torrey, and Rein 1987; Wilensky 1983). As a result, however, marginal tax rates would be expected to be higher for everyone above the poverty level (Garfinkel 1982).

In view of the less progressive income tax structure in recent years, and the trend toward a more unequal distribution of income, this redistribution toward the poor might be considered acceptable by those who put a high priority on providing greater fairness.<sup>77</sup> Deadweight loss<sup>78</sup> because of possible negative effects on the labor supply may not be too serious an issue; at least for men, labor supply might increase rather than decrease in response to a decline in take-home pay.<sup>79</sup> A negative effect on savings is more likely, and therefore may be a cause for concern.

Resistance to higher tax rates must also be expected. This is all the more probable because taxes would increase more for other households as compared to families with a full-time homemaker, because a larger share of the income of the latter consists of untaxed home production.

Finally, it has been suggested that the problem of inadequate benefits for the widowed, most often women, could be solved by increasing Social Security payments to survivors. Under current law, a wife with a retired-worker benefit greater than 50 percent of her husband's retired-worker benefit receives a higher benefit amount than she would receive if she were eligible only for a spouse benefit. Widows, however, would receive retired-worker benefits greater than the amount they are eligible for as survivors only in the rare instances when they earned benefits larger than their husbands. It has been suggested that a

change in OASI rules is needed to ensure a more reasonable split of benefits across the life cycle of a couple. This could be done without raising costs by, for instance, using a slightly lower PIA formula and changing payout rules to provide at least two-thirds of the total OASI benefits of the couple to the surviving spouse (Burkhauser 1992).

### ***Recommendations for Further Research***

As is clear from the earlier discussion, we know a good deal about past and present demographic and economic trends, and the attendant change in needs of various segments of the population. More and better data and additional research are, nevertheless, needed to increase our understanding of existing conditions, and even more so to improve our ability to predict future trends, and to determine the probable impact of sundry reforms. However, both data collection and research are costly. Therefore, rather than to present a laundry list, only a few relatively modest recommendations are offered below.

The first suggestion is to collect more longitudinal data that provide information over an extended period, possibly for the whole life cycle of individuals, rather than relying so heavily on cross-section data that merely provide a snapshot of a population at one moment, but do not enable us to infer what happens over time. Say that surveys conducted annually consistently find that at any moment in time half of the women are employed. This may mean, at one extreme, that half the women are employed all their adult lives and the other half are never employed. At the other extreme, all women may be in the labor force half their adult lives. This is true not only of labor-force participation, but also of marital status, poverty, and so forth. Such longitudinal data as have been collected in recent years have proven a gold mine of useful information in these respects.<sup>80</sup>

One valuable use of longitudinal data is in conjunction with cohorts, for example, groups born within a specified

time interval. As Goldin (1990, pp. 215-17) points out, and demonstrates in her own work: "Just as the past unfolded through the aging of cohorts, the future can be revealed through the experiences of younger women today." The reason is that cohorts born during different periods tend to differ in endowments such as education and wealth, as well as in socialization, although, at any given time, they share the same period effects, such as the state of the economy and existing legislation, with other cohorts.<sup>81</sup>

Life-cycle information is also crucial for determining the adequacy and equity of the present Social Security system, and of various possible reforms, because it is the distribution of labor supply, earnings, etc., over a person's (and in the case of married women the husband's) life time, that determines the benefits they will be entitled to.<sup>82</sup> Adequate funding and institutionalization of more extensive collection of longitudinal data is therefore highly desirable.

More information about employer provided benefits such as pensions and disability insurance would be very useful for determining the needs of various groups (such as men and women, low income and high income workers) for Social Security benefits. At present, reasonably good data are available only from medium sized and large firms. This is all the more serious because small firms employ an increasingly larger share of the labor force, and particularly of women.

Beyond data collection, more research on several issues would be particularly useful in order to gauge the effect of various reforms of the Social Security system on receipts and disbursements, and on the well-being of women and their families. One of these is the probable impact of present and of proposed policies on women's labor supply. Much remains to be learned about their effect on labor-force participation, hours worked, work interruptions, and retirement age. These questions are crucial because a person's fully insured status under Social Security is determined by the number of years before age 62 during

which at least one-quarter of coverage was attained.

A number of econometric studies have shown that the labor force behavior of married women, unlike that of men, is quite responsive to tax rates (Feenberg and Rosen 1983). Similar studies involving Social Security benefits should provide useful evidence, especially if they are not limited to static rather than life cycle analysis and take into account indirect as well as direct effects, such as changes in accumulation of human capital. Simulation studies and research based on social experimentation would provide welcome additions.<sup>83</sup>

Another subject on which more research would be useful is how best to estimate the value of homemakers' services. To date, this is entirely ignored in determining the eligibility for means tested programs, although it is obvious that two otherwise similar families are not equally well off when one has a full-time homemaker and the other does not. Several ways to calculate the value of household production have been suggested,<sup>84</sup> but so far there is little agreement on the relative merits of different approaches, or just how each could be implemented.

Last but not least, whenever other advanced industrialized countries already have instituted policies that are now being discussed in the United States, it would be worthwhile to examine what we could learn from their experiences.<sup>85</sup> This is not to suggest that successes can be readily duplicated in another setting, or that programs unsuccessful elsewhere could not possibly succeed here. Nonetheless, ignoring available evidence of accomplishments and failures in other countries deprives us of a valuable source of knowledge.

These means for shedding additional light on unresolved issues need to be explored and utilized, so that policy decisions will be made on as sound a basis as possible. At the same time, it may be better to proceed with reforms that are likely to bring about net improvements than to wait for results of a lengthy research agenda.

## Notes

**Acknowledgments:** The author wishes to express sincere thanks to Hector Chade and Gauri Pavate for their assistance in data collection. Also note, that a good deal of the information in this article is derived from Blau and Ferber (1992a).

<sup>1</sup>See, for instance, Boskin (1986); Boskin, Avrin and Cone (1983); Boskin, Kotlikoff and Knetter (1985); Boskin, Kotlikoff, Puffert and Shoven (1987); Burkhauser (1979); Burkhauser and Holden (1982); Feldstein (1977); Holden (1979); Leimer and Lesnoy (1982); Leimer and Petri (1981); OECD (1977); Pechman, Aaron and Taussig (1968); Ross (1979 a, b).

<sup>2</sup>For example, Blinder, Gordon, and Wise (1980); Boskin (1974); Boskin and Hurd (1978, 1984); Burtless and Moffitt (1985); Fields and Mitchell ((1984); and Gustman and Steinmeier (1986).

<sup>3</sup>Differences by race and ethnicity are considered as well.

<sup>4</sup>Before then the published Census volumes contain few tabulations of the labor force participation of women, and the data that are available are considerably less reliable than later ones.

<sup>5</sup>This conclusion is supported by the findings of an unpublished study, by Janice H. Outtz, Women's Policy Research Institute, "Are Mommies Dropping Out of the Labor Force?" 1992.

<sup>6</sup>Women's retirement age has declined as well, but was offset to some extent by the growing proportion of later cohorts who were in the labor force to begin with.

<sup>7</sup>It should be noted that the data before 1975 are for "nonwhites" rather than for "blacks." The latter group was, however, such a large majority of the total population designated as not being white, that the figures are not likely to be affected much by this change in definition.

<sup>8</sup>Differences remain in the extent of labor force commitment. In 1990, only 77.8 percent of white women, but 88.0 percent of black women worked full-time (U.S. Dept. of Labor, Employment, and Earnings 1991).

<sup>9</sup>It will be noted that the figures are lower for ever married women with no children under age 18. The reason is that these women tend to be older. Hence, many are from cohorts that were less likely to be in the labor force than later ones, and many are already retired.

<sup>10</sup>Mincer (1962) was the first to point out that the positive (substitution) effect of women's own real wages, causing them to spend more time in the labor market as wages rose, was greater than the negative (income) effect of the husband's real income, which would cause them to spend more time out of the labor market as their husbands' earnings increased. See also Ashenfelter and Heckman (1974).

<sup>11</sup>Goldin (1990, p. 35) suggests that experience for working women may well have declined during the 1950's and 1960's, although it undoubtedly rose for the total population of women.

<sup>12</sup>The increase for all women (by age 50, as opposed to only those in the labor force, was considerably larger, from 10.9 years to 22.7 years, because the proportion of women who are in the labor market has increased as well.

<sup>13</sup>It was not clear a priori that the number of years of work experience of employed women would necessarily rise as women's labor force participation increased, for the entry of new workers tends to offset the greater attachment of those who are employed. In fact, the average number of years of experience appears to have been stable, or may even have declined through the 1970's. Hence the differential in experience between male and female workers apparently initially rose, and has been declining only in recent years (Goldin 1990).

<sup>14</sup>Measured during the reference week.

<sup>15</sup>Additional light is shed on this subject by a recent survey of seniors in the College of Commerce of the University of Illinois, Urbana-Champaign, which showed that these women (94 percent of whom expected to get married) on average planned to be in the labor force 35.3 years, 29.1 of them full-time, compared with 38.9 years for men, 37.7 of them full-time (Blau and Ferber 1991). Although this group is not representative of the whole population of young people, they may well be reasonably representative of the growing proportion receiving a college education.

<sup>16</sup>England (1989) suggests that the failure to rise to high rank is in substantial part the result of initial placement in entry level positions that involve little training and few opportunities for promotion. A study by Catalyst "Women in Corporate Management, 1990," cited in the *Wall Street Journal* (March 31, 1992, p. B1) points out the tendency to place women in staff positions, such as public relations and human resources, rather than in core areas such as production, marketing, and sales.

<sup>17</sup>They tend to assume that discrimination by employers could not persist in competitive labor markets, and to believe that labor markets, for the most part, are competitive.

<sup>18</sup>When employers have some degree of market power and there are distinct groups of workers, they will find it profitable to pay lower wages to those workers who are less responsive to a change in wage rates - who are less likely to be attracted by a higher wage, and are less likely to quit when the wage is lower.

<sup>19</sup>Bergmann (1989) argues that, on the one hand, segmented labor markets make lower wages for women possible, and that, on the other hand, women's lower wages provide impetus for employers to keep occupations segregated.

<sup>20</sup>The reasons why this ratio is somewhat higher are discussed in considerable detail in Rytina (1983).

<sup>21</sup>It may be noted that among 17 advanced industrialized countries the ratio was lower in only 5 countries, and was as high as 90.0 percent in Sweden (Blau and Ferber 1992b).

<sup>22</sup>Unfortunately, data on earnings are not available. Since earnings, however, constitute by far the largest proportion of income, it may be assumed that the results would be very similar.

<sup>23</sup>Blau and Kahn (1992) suggest a third alternative. A comparison of the situation in the U.S. and other advanced industrialized countries leads them to the conclusion that it is not larger human capital differences, nor greater discrimination in the U.S. than in other countries that explain the relatively large earnings gap in this country, but rather the very large gap between wages for skilled and unskilled labor.

<sup>24</sup>Unlike Mincer and Polachek, Corcoran found that interruptions had little or no long run effect on earnings, except for women who

were out of the labor market directly after leaving school.

<sup>25</sup>By far, most of the women's interruptions were for family reasons.

<sup>26</sup>The differences between men and women were broadly similar within racial and ethnic groups, but there were also interesting differences between the groups: among whites 21.8 percent of men and 26.0 percent of women had less than 2 years of tenure; 35.9 percent and 22.2 percent, respectively, had more than 10 years; among blacks, 22.6 percent of men and, interestingly, only 21.5 percent of women had less than 2 years of tenure; fully 39.9 percent and 28.0 percent, respectively, had more than 10 years; among Hispanics, 27.6 percent of men and 31.2 percent of women had less than 2 years of tenure, only 24.8 of men and 18.7 percent of women had more than 10 years.

<sup>27</sup>There is, however, evidence that the unexplained portion of the earnings differential has been declining in recent years (Blau and Beller 1988). For a more thorough discussion and further references, see, for instance, Blau and Ferber (1987) and Treiman and Hartmann (1981).

<sup>28</sup>In regressions which included, in addition to the usual human capital and employer variables, the degree of control individuals had achieved over human and financial resources, it was found that the proportion of women in the occupation nonetheless had a significant negative impact on earnings (Ferber and Green 1991).

<sup>29</sup> Among relevant studies are Fidell (1970) and Riach and Rich (1987), who sent out comparable information to potential employers with randomly chosen male and female names; Ferber (1986; 1988), who investigated citations by scholars of authors of the same sex and the opposite sex; Ferber, Huber, and Spitze (1979), who inquired into attitudes toward women and men in traditionally male professions; Kanter (1977) who investigated the treatment of "identifiable outsiders" in a corporate setting, and Ayres (1991), who examined how customers fared when they purchased automobiles.

<sup>30</sup>The question of how many hours to spend in the labor market is largely ignored here. This issue is more complex, and findings differ, depending whether the focus is on labor supply at one point in time or over the whole life cycle (see Heckman 1978). It is

worth noting, however, that women appear to be quite responsive to changes in tax rates, benefits, and so forth, with respect to hours, as well as labor-force participation (Leuthold 1978a,b; Levy 1979; McCarty 1990).

<sup>31</sup> Following the seminal works of Mincer (1962) and Becker (1965), among the most notable early empirical contributions were Cain (1966), and Bowen and Finegan (1969). Later, the more sophisticated statistical techniques developed by Ashenfelter and Heckman (1974), Gronau (1974), and Heckman (1974, 1979) made possible further refinements, found in such work as Gronau, (1977) and Smith (1980). Even so, once again, unresolved issues remain. For example, Dooley (1982) found that use of group data gives quite different results than use of individual data, and Heckman (1978) shows that the effect of variables is different at a point in time than over the life cycle.

<sup>32</sup> This proposition has not, however, gone unchallenged. Bell (1974), Ferber and Birnbaum (1977), and Sawhill (1977), point to lingering traditional attitudes about appropriate roles for men and women. They also argue that justifying the traditional division of responsibilities in the household on the basis of men's greater earnings, while at the same time justifying men's greater earnings on the basis that women spend less time in the labor market, constitutes circular reasoning. Thus, the question arises whether these models "have done anything more than describe the status quo in a society where sex roles are 'givens'" (Sawhill 1977).

<sup>33</sup>If individual A is relatively more efficient in market production as compared to home production than is individual B, then A is said to have a comparative advantage in market production, even though individual B may be more productive absolutely than A in the market and in the home. For a more detailed explanation see Blau and Ferber (1992), pp.37-40.

<sup>34</sup> It may be that, in some respects, education also raised the value of time at home, but it is clear that this effect tends to be much smaller than for market work.

<sup>35</sup>As noted earlier, the positive substitution effect of the woman's own higher wage is stronger than the negative income effect of the husband's earnings (Mincer 1962). At the same time, Blau and Grossberg (1991) found evidence that during years when women's real wages were not rising, labor-

force participation continued to increase because of the uncertainty about husbands' jobs and wages.

<sup>36</sup> Brown (1987) points out that many of the Mincer type models tended to ignore these changes in the need for housework.

<sup>37</sup> The divorce rate is, of course, both cause and effect of higher labor-force participation of women. The rate, which had been slowly rising for some time, almost doubled from 2.6 percent per year in 1950 to 4.8 percent per year in 1988 (U.S. Dept. of Commerce 1988). Although it appears to be leveling off, some predictions of the proportion of marriages expected to end in divorce have been as high as one-half (Chafe 1991, p. 220).

<sup>38</sup>Real wages are money wages adjusted for price changes. From Mincer (1962) to Levy (1979) the evidence consistently shows a negative relationship between husband's earnings and wife's labor-force participation, albeit not as large as the positive relationship to her own earnings.

<sup>39</sup> Cramer (1980) concluded that fertility influences labor-force participation in the short run, but that in the long run labor-force participation influences fertility.

<sup>40</sup> For one, having an employed wife is no longer viewed as a mark of the husband's inability to adequately provide for his family. So far, however, there has been considerably less change in attitudes toward housework. It continues to be seen as the responsibility of women, while men merely "help" in the home. Hence women still do the lion's share, whether or not they are employed full-time. Only in recent years has there been some increase in the time men devote to homemaking, especially among younger cohorts (Juster and Stafford 1991). Should this continue, women's labor-force participation and attachment may be expected to increase more than would otherwise be the case.

<sup>41</sup> For instance, Bowen and Finegan (1969) explained only 25 percent of the actual change between 1948 and 1965. More recently, O'Neill (1981) introduced a time trend and did far better. This device does not, however, add to our understanding when the positive coefficient for time is not explained. This may also help to explain why so many of the earlier projections of women's labor-force participation tended to be too low.



<sup>42</sup> Even in 1988, labor-force participation was slightly higher for black than for white women at all levels of education, except for those with less than 4 years of high school: 77.9 compared with 76.9 percent for high school graduates, 85.8 compared with 82.2 percent for those with 1-3 years of college, and 90.6 compared with 88.6 for college graduates (U.S. Department of Labor 1989a). Also, Leuthold (1978a) shows that taxes do not affect the labor-force participation of black and white women the same way.

<sup>43</sup> Carliner (1981), Chenoweth and Maret-Havens (1978), Clogg (1982), and Cooney (1975), were among those who found that such factors as age, education, fertility, and place of residence were not successful in accounting for the low labor-force participation of Hispanic women. We have little information about other minorities, but there may well be considerable diversity among some of the new immigrant groups coming from countries with very different views of women's roles.

<sup>44</sup> The argument found in Huber and Spitzer (1983) that as young women continue to find the costs of childrearing increasingly greater, and alternative uses of time and energy increasingly more attractive, fertility would be likely to resume its downward trend appeared persuasive.

<sup>45</sup> Men's median retirement age declined from 66.9 years during 1950-55 to 63.4 during 1970-75, and 62.6 during 1985-90. After a very small rise to 62.7 during 1990-95, Gendell and Siegel (1992) project a modest decline to 61.7 during 2000-2005. They also point out, however, that further work is needed to improve the measurement of the average age at retirement, and to validate available measures.

<sup>46</sup> Women's retirement age declined from 67.7 years during 1950-55 to 62.7 during 1980-85, rose to 62.8 during 1985-90, and is expected to decline to 61.2 during 2000-2005 (Gendell and Siegel 1992).

<sup>47</sup> Johnston and Packer (1987) predict that women's labor-force participation will be 61.1 in the year 2000; Fullerton (1989) expects the participation rate will be 62.6.

<sup>48</sup> These at present include not only lower tax rates for couples who can divide the unequal earnings, but also the fact that the value of home production is not taxed.

<sup>49</sup> Lest there be undue concern that these women may tend to work only intermittently, although they are entering the labor force early, it should be noted that Goldin (1990,

pp.17-30) makes a strong case that this was never common, even in the days when far fewer women entered the labor force, and most dropped out at the time of marriage.

<sup>50</sup> By the year 2000, increases of 22 percent in the number of women executives, administrators, 24 percent in the number of women professionals, and 32 percent in the number of technicians are expected (U.S. Dept. of Labor 1989).

<sup>51</sup> There were also 29.9 million aged persons enrolled in Medicare's Hospital insurance and/or Supplementary Medical insurance, and 4.6 recipients of Supplemental Security Income. The focus in this article is, however, on the basic OASI cash benefit program itself.

<sup>52</sup> Clearly, existing arrangements violate the rule of horizontal equity, which requires equal treatment for equals. At present, the same contributions into the system do not secure the same returns for families with full-time homemakers as opposed to those where all able bodied adults are employed, although both have the same income (Blau and Ferber 1992a, p. 62). More generally, Boskin, Kotlikoff, Puffert, and Shoven (1987) calculated that there are enormous differences in net gains and losses among participants.

<sup>53</sup> See, for instance, Boskin (1986); Burkhauser and Holden (1982); Pechman, Aaron and Taussig (1968); and Thompson (1983).

<sup>54</sup> Among the ever married there are probably few who never permitted their "family responsibilities" to interfere with their paid work. For instance, Ferber and Kordick (1978) found that even among Ph.D.s, surely an unusually career oriented group, women were far more likely than men to permit their spouse's job to determine their location. The cumulative impact of such behavior should not be underestimated, although Corcoran (1978) found that work interruptions and constraints placed on job conditions because of "family responsibilities" have only small direct effects on wages.

<sup>55</sup> For a given set of observed characteristics, a woman is 11 percent to 19 percent less likely than a man to have a pension" (Even and McPherson 1990).

<sup>56</sup> If one partner receives only spousal benefits, these amount to 50 percent of those paid to the worker. When one dies, the survivor receives the full amount of the worker's benefits, for such a couple, 67 percent as much as the previous benefit. At

the other extreme, if both spouses are entitled to equal benefits, the survivor gets only 50 percent as much as before.

<sup>57</sup> It should be noted, however, that some other countries use a considerably lower figure, for instance about 55 percent in Germany.

<sup>58</sup> The Federal SSI program employs uniform benefit levels and eligibility criteria. However, many States also provide supplementary benefits to households with no other income. Thus average monthly amounts of SSI payments per person vary considerably by State. Among the 28 States with federally administered supplementation in 1990, payments ranged from \$424 in California to \$207 in Maine (U.S. Dept. of Health and Human Services 1990b).

<sup>59</sup> They do serve to bring them closer to the poverty threshold, but the data do not show that.

<sup>60</sup> Sandell (1980) points out that the relationship between labor force participation and benefit entitlements is rather complex, and is determined not only by the total amount of participation, but also by the timing of the interruptions.

<sup>61</sup> The NBER Digest (August 1992) cites Martin Feldstein's and Andrew Samwick's argument that women whose earnings are so low that they would receive more Social Security benefits as their husband's dependent than they would based on their own earnings have less incentive to work because of the higher marginal tax rates.

<sup>62</sup> It is ironic that many of the strongest advocates of forcing single heads of families into the labor force see nothing wrong with policies that provide incentives for married women to stay out.

<sup>63</sup> Rosen (1987) shows that when a person who earns \$50,000 marries someone with no earnings, the tax liability of that person declines by \$2,700. Conversely, if two people who both earn \$25,000 get married, their taxes will rise by about \$1,000.

<sup>64</sup> This is a very substantial item. Estimates of the value of nonmarket work range upward from 25 percent of Gross Domestic Product (Ferber and Birnbaum 1980).

<sup>65</sup> "The family rears and socializes children; it reproduces the labor force and transmits social and spiritual values across generations" (Lampman and MacDonald, 1982, p.23). If traditional families do this better, the community may benefit.

<sup>66</sup> Direct costs are for the most part reduced tax receipts; indirect costs include encouraging women to become full-time homemakers. Such a choice not only involves the previously noted risks for the woman and her children (Bergmann, 1981), but also substantially increases the probability that they may become dependent on public support.

<sup>67</sup> Some readers may even disagree on whether particular features should be considered advantageous or not.

<sup>68</sup> Each partner would, in addition, receive any benefits earned during their years outside the marriage.

<sup>69</sup> Both the Committee on Ways and Means, U.S. Congress, House of Representatives, *Report on Earnings Implementation Study* (1985) and the Congressional Budget Office, *Earnings Sharing Options for the Social Security System* (1985) report, which evaluates this study, go a great deal further; they imply that the losses to some families and individuals are a serious drawback of earnings sharing and go on to suggest a variety of schemes to remedy or at least mitigate these losses. Not surprisingly, they then find that such schemes turn out to be quite costly. These studies entirely miss one of the main points of the advocates of earnings sharing: that those who are viewed to be gaining unfairly under the present system should be expected to lose. The Committee on Ways and Means study also suggests that the necessary reporting for earnings sharing could raise questions about privacy rights of individuals. It is not clear, however, that the reporting would involve information beyond that routinely required by the IRS.

<sup>70</sup> All this is premised on the assumption that the program would be mandatory, just as Social Security is for workers. If it were not, many women might end up being considerably worse off than under the present system.

<sup>71</sup> It could be argued that in order to be consistent, homemakers should also pay income taxes. Such a tax would, on the one hand, greatly reduce the advantage of full-time homemakers; on the other hand, all else equal, it would bring in a great deal of additional revenue. Estimates of the total value of homemakers' services in the economy are considered reasonably reliable (Ferber and Birnbaum 1980), but they are considered far less dependable for individual households. This is only one of the reasons why taxation of home production would be expected to meet with a firestorm of protest.

<sup>72</sup> This policy is mentioned not because it is likely to be adopted, but simply to make clear that it is logically tenable. Clearly, the present system does not conform to the rule that government taxes and benefits should be neutral with respect to the labor-force participation decision of individuals.

<sup>73</sup> By 1990, there were more than 30 million elderly in this country, somewhat more than 10 percent of them older than age 85. Only about 21 percent of the disabled elderly and 50 percent of the severely disabled were in nursing homes, while 35 percent lived with their children, most often daughters (Ferber and O'Farrell 1991, pp. 66-67). How much caregiving credits would cost depends heavily on whether they would be provided only for years when the caregiver has no earnings, or for years with reduced earnings as well.

<sup>74</sup> See, for instance, Munnell and Stiglin (1982) and Warlick, Berry, and Garfinkel (1982).

<sup>75</sup> If earnings sharing is incorporated, the virtues and drawbacks of that approach will to some extent also be present, except that the most serious problems for poor families with full-time homemakers will be considerably mitigated by the redistributive part of the two-tier program.

<sup>76</sup> This component of the program would not, however, necessarily be actuarially fair, if it is to be self-sustaining. Because payments are made by current workers to beneficiaries, the level of Social Security taxes would have to be appropriately adjusted as the ratio of the former to the latter changes.

<sup>77</sup> Levy (1987) estimates that the cumulative tax rate (as a percentage of cash income plus food stamps) for the lowest quintile of the population changed from 9.7 percent in 1979 to 11.9 percent in 1984, while the rate for the highest quintile changed from 31.6 percent to 31.1 percent. The share of income of the poorest 20 percent of families was 5.6 percent in 1969 and only 4.6 percent in 1987, while the share of the wealthiest 20 percent rose from 40.6 percent to 43.7 percent (U.S. Department of Commerce, *Money Income and Poverty Status in the U.S.* 1989). Although the distribution is somewhat more equal when adjusted for taxes and non-money income, these changes do not alter the trend. It is also worth noting that the distribution of wealth is far more unequal.

<sup>78</sup> Deadweight losses are losses incurred

by some that are not offset by gains to anyone else.

<sup>79</sup> "The supply curve of labor (the demand for leisure) can have a negative slope because a rise in the price of leisure (the wage rate), which by itself makes workers consume less leisure, also raises their incomes, which may lead them to consume more leisure" (Hamermesh and Rees 1988, p. 40). This is, however, less likely to be true for women who, to a far greater extent, tend to substitute market work for housework rather than for leisure.

<sup>80</sup> The new Health and Retirement Study, begun in 1992, which will follow men and women aged 50 to 60 years old for several years is one more useful step in this direction.

<sup>81</sup> Iams (1992), for instance, used 1984 Survey of Income and Program Participation (SIPP) data linked to Social Security Administration covered earnings to examine earnings at ages 22-31, 22-41, and 22-51, of birth cohorts of wives born in the 1930's, 1940's and 1950's. He found that more recent cohorts had more years and higher levels of earnings, but are nonetheless expected to receive benefits as spouses or widows, rather than as workers. Another example is Leimer and Petri's (1981) investigation of cohort-specific effects of Social Security policy.

<sup>82</sup> As Sandell (1980) points out, if an increase in labor-force participation is concentrated primarily among women who now work 8 instead of 5 years, they will still not qualify for retired worker's benefits. If, on the other hand, it is mainly women who now work 35 instead of 30 years, they will be eligible for greater benefits in their own right. How much greater depends, of course, on their lifetime earnings, and whether they really receive more depends also on their husbands' lifetime earnings.

<sup>83</sup> For a review of the limitations and promise of social experiments, see Ferber and Hirsch (1982). One serious limitation on their use is that they are very costly.

<sup>84</sup> For an extensive review, see Goldschmidt-Clermont (1982).

<sup>85</sup> A project at Syracuse University, using data from the Panel Study of Income Dynamics and the Socio-Economic Panel of Germany is one instance of cross-national research that may be expected to make very useful contributions along these lines. For more information, see Burkhauser, Duncan, and Hauser (1993).

## Bibliography

- Andrews, Emily S. 1988. "An Overview of the Employee Benefit System." Paper presented to the National Research Council Panel on Employer Policies and Working Families, Committee on Women's Employment and Related Social Issues, Washington, DC: Employee Benefit Research Institute.
- Ashenfelter, Orley and James J. Heckman. January 1974. "The Estimation of Income and Substitution Effects in a Model of Family Labor Supply." *Econometrica* 42: 73-85.
- Ayres, Ian. 1991. "Fair Driving: Gender and Race Discrimination in Retail Car Negotiations." *Harvard Law Review* 104 (February): 817-72.
- Baron, James N. and William T. Bielby. 1984. "A Woman's Place is With Other Women: Sex Segregation in the Workplace." In B. F. Reskin, ed., *Sex Segregation in the Workplace*. Washington, DC: National Academy Press.
- \_\_\_\_\_. 1965. "A Theory of the Allocation of Time," *The Economic Journal* 75 (September): 493-517.
- Bell, Carolyn S. 1974. "Economics, Sex, and Gender." *Social Science Quarterly* 55 (September): 615-31.
- Bergmann, Barbara R. 1974. "Occupational Segregation, Wages and Profits When Employers Discriminate by Race or Sex." *Eastern Economic Journal* 1 (April-July): 103-10.
- \_\_\_\_\_. 1981. "The Economic Risk of Being a Housewife," *American Economic Review* 71 (May): 81-86.
- \_\_\_\_\_. 1982. "The Housewife and Social Security Reform: A Feminist Perspective." In Richard V. Burkhauser and Karen C. Holden, eds., *A Challenge to Social Security*. New York: Academic Press, pp. 229-34.
- \_\_\_\_\_. 1989. "Does the Market for Women's Labor Need Fixing?" *Journal of Economic Perspectives* 3 (Winter): 43-60.
- Blau, Francine D. 1977. *Equal Pay at the Office*. Lexington, MA: D. C. Heath, Lexington Books.
- Blau, Francine D. and Andrea H. Beller. 1988. "Trends in Earnings Differentials by Gender, 1971-1981." *Industrial and Labor Relations Review* 41 (July): 513-29.
- Blau, Francine D. and Marianne A. Ferber. 1987. "Discrimination: Evidence from the United States." *American Economic Review* 77 (May): 316-20.
- \_\_\_\_\_. 1991. "Career Plans and Expectation of Young Women and Men: The Earnings Gap and Labor-force participation." *Journal of Human Resources* 26 (Fall): 581-607.
- \_\_\_\_\_. 1992(a). *The Economics of Women, Men, and Work*. Englewood Cliffs, NJ: Prentice-Hall.
- \_\_\_\_\_. 1992(b). "Women's Work, Women's Lives: A Comparative Economic Perspective." In H. Kahne and J. Z. Giele, eds., *Women's Lives and Women's Work in Modernizing and Industrial Countries*. West View Press: 28-44.
- Blau, Francine D. and Adam J. Grossberg. 1991. "Wage and Employment Uncertainty and the Labor-Force Participation Decisions of Married Women." *Economic Inquiry* 29 (October): 678-95.
- Blau, Francine D. and Lawrence M. Kahn. 1992. "The Gender Earnings Gap: Learning From International Comparisons." *American Economic Review* 82 (May): 533-38.
- Blinder, Alan S., Robert H. Gordon, and David E. Wise. 1980. "Reconsidering the Work Disincentive Effects of Social Security." *National Tax Journal* 33 (December): 431-42.
- Boskin, Michael J. 1974. "The Effect of Government Expenditures and Taxes on Female Labor." *American Economic Review* 64 (May): 251-56.
- \_\_\_\_\_. 1986. *Too Many Promises: The Uncertain Future of Social Security*. Homewood, IL: Dow Jones-Irwin.
- Boskin, Michael J., Marcy Avrin, and Kenneth Cone, 1983. "Modeling Alternative Solutions to the Long-Run Social Security Funding Problem." In Martin Feldstein ed., *Behavioral Simulation Methods in Tax Policy Analysis*. Chicago: University of Chicago Press.
- Boskin, Michael J. and Michael D. Hurd. 1978. "The Effect of Social Security on Early Retirement" *Journal of Public Economics* 10: 361-77.
- \_\_\_\_\_. 1984. "The Effect of Social Security on Retirement in the Early 1970's." *Quarterly Journal of Economics* 90 (November): 767-90.
- Boskin, Michael J., Lawrence J. Kotlikoff, and Michael M. Knetter. 1985. "Changes in the Age Distribution of Income in the U.S." National Bureau of Economic Research Working Paper 1766 (November).
- Boskin, Michael J., Lawrence J. Kotlikoff, Douglas J. Puffert, and John B. Shoven. 1987. "Social Security: A Financial Appraisal Across and Within Generations." *National Tax Journal* 40 (March): 19-34.
- Bowen, William and T. Aldrich Finegan. 1969. *The Economics of Labor-Force Participation*. Princeton, NJ: Princeton University Press.
- Brown, Clair V. 1987. "Consumption Norms, Work Roles and Economic Growth." In C. V. Brown and J. A. Pechman, eds., *Gender in the Workplace*. Washington, DC: The Brookings Institution.
- Burkhauser, Richard V. 1979. "Are Women Treated Fairly in Today's Social Security System?" *Gerontologist* 19 (June): 242-49.
- \_\_\_\_\_. 1982. "Earnings Sharing: Incremental and Fundamental Reform." In Richard V. Burkhauser and Karen C. Holden, eds., *A Challenge to Social Security: The Changing Roles of Women and Men in American Society*. New York: Academic Press, pp. 73-91.
- \_\_\_\_\_. 1990. "How Public Policy Increases the Vulnerability of Older Widows." *Journal of Aging & Social Policy*
- \_\_\_\_\_. 1992. "Reducing the Eco-

- conomic Risk to Older Women as they Move from Being Wives to Widows." *Congressional Symposium on Women and Retirement, Hearing before the Subcommittee on Retirement Income and Retirement of the Select Committee on Aging, House of Representatives*. Washington, DC: Government Printing Office, (September 24), pp. 151-53.
- Burkhauser, Richard V., Greg J. Duncan, and Richard Hauser. 1993. "Sharing Prosperity Across the Age Distribution: A Cross-National View of the United States and Germany in the Go-Go Eighties." Paper prepared for the meeting of the American Economic Association, Anaheim: CA, January.
- Burkhauser, Richard V. and Karen C. Holden, eds. 1982. *A Challenge to Social Security: The Changing Roles of Women and Men in American Society*. New York: Academic Press.
- Burkhauser, Richard V. and Jennifer Warlick. 1981. "Disentangling the Annuity from the Redistributive Aspects of Social Security." *Review of Income and Wealth* 27 (December): 401-21.
- Burtless, Gary and Robert Moffitt. 1985. "The Joint Choice of Retirement Age and Postretirement Hours of Work." *Journal of Labor Economics* 3, 2 (April): 209-36.
- Cain, Glen G. 1966. *Married Women in the Labor Force*. Chicago: University of Chicago Press.
- Carliner, Geoffrey. 1981. "Female Labor-Force Participation Rates for Nine Ethnic Groups." *Journal of Human Resources* 16 (September): 286-93.
- Catalyst. 1992. "Women in Corporate Management, 1990" cited in the *Wall Street Journal* (March 31).
- Chafe, William H. 1991. *The Paradox of Change. American Women in the 20th Century*. New York: Oxford University Press.
- Chenoweth, L. and Elizabeth G. Maret-Havens. 1978. "Wife's Labor-Force Participation—A Look at some Residential Patterns." *Monthly Labor Review* (March): 38-41.
- Cherlin, Andrew. 1990. "Recent Changes in American Fertility, Marriage and Divorce." *Annals, AAPSS* 510 (July): 145-54.
- Clogg, Clifford C. 1982. "Cohort Analysis of recent Trends in Labor-force participation." *Demography* 19 (November): 459-79.
- Cooney, Rosemary S. 1975. "Changing Labor-force participation of Mexican American Wives: A Comparison with Anglos and Blacks." *Social Science Quarterly* 56 (September): 252-61.
- Corcoran, Mary E. 1978. "Work Experience, Work Interruptions, and Wages." In Greg J. Duncan and James N. Morgan, eds., *Five Thousand American Families—Patterns of Progress*. Vol. 6, Institute for Social Research, University of Michigan, pp. 47-103.
- Corcoran, Mary E., Greg J. Duncan, and Michael Ponza. 1984. "Work Experience, Job Segregation, and Wages." In B. F. Reskin, ed., *Sex Segregation in the Workplace: Trends, Explanations and Remedies*. Washington, DC: National Academy Press.
- Cramer, James C. 1980. "Fertility and Female Employment: Problems of Causal Direction." *American Sociological Review* 45 (April): 167-90.
- Dooley, Martin D. 1982. "Labor Supply and Fertility of Married Women. An Analysis with Grouped and Individual Data from the 1970 Census." *Journal of Human Resources* 17 (Fall): 499-531.
- England, Paula. 1982. "The Failure of Human Capital Theory to Explain Occupational Sex Segregation." *Journal of Human Resources* 17 (Summer): 358-70.
- \_\_\_\_\_. 1984. "Wage Appreciation and Depreciation: A Test of Neoclassical Economic Explanations of Occupational Segregation." *Social Forces* 62 (March): 726-49.
- \_\_\_\_\_. 1989. "An Overview of Segregation and the Sex Gap in Pay." Paper presented at the annual meetings of the American Statistical Association.
- Even, William E. and David A. Mcpherson. 1990. "The Gender Gap in Pensions and Wages." *Review of Economic Statistics* 72 (May): 259-65.
- Feenberg, Daniel R. and Harvey S. Rosen. 1983. "Alternative Tax Treatment of the Family: Simulation Methodology and Results." In Martin S. Feldstein, ed., *Behavioral Simulation in Tax Policy Analysis*. NBER Project Report Series, Chicago: University of Chicago Press, pp. 7-41.
- Ferber, Marianne A. 1986. "Citations: Are They an Objective Measure of Scholarly Merit?" *Signs. Journal of Women in Culture and Society* 11 (Winter): 381-89.
- \_\_\_\_\_. 1988. "Citations and Networking." *Gender and Society* 2 (March): 82-89.
- Ferber, Marianne A. and Bonnie G. Birnbaum. 1977. "The New Home Economics: Retrospect and Prospects." *Journal of Consumer Research* 4 (June): 19-28.
- Ferber, Marianne A. and Carole A. Green. 1991. "Occupational Segregation and the Earnings Gap: Further Evidence." In Emily Hoffman, ed., *Essays on the Economics of Discrimination*. Kalamazoo, MI: Upjohn Institute.
- Ferber, Marianne A., Joan A. Huber and Glenna Spitze. 1979. "Preferences for Men as Bosses and Professionals." *Social Forces*, 58 (December): 466-76.
- Ferber, Marianne A. and Betty Kordick. 1978. "Sex Differentials in the Earnings of Ph.D.'s." *Industrial and Labor Relations Review* 31 (January): 227-38.
- Ferber, Marianne A. and Brigid O'Farrell, with LaRue Allen. 1991. *Work and Family: Policies for a Changing Workforce*. National Research Council, Washington, DC: National Academy Press.
- Ferber, Robert and Werner Z. Hirsch. 1982. *Social Experimentation and Economic*

- Policy. New York: Cambridge University Press.
- Fidell, Lillian S. 1970. "Empirical Verification of Sex Discrimination in Hiring Practices in Psychology." *The American Psychologist* 25 (December): 1094-98.
- Fields, Gary and Olivia Mitchell. 1984. *Retirement, Pensions, and Social Security*. Cambridge, MA: MIT University Press.
- Fullerton, Howard N. Jr. 1989. "New Labor Force Projections, Spanning 1988 to 2000." *Monthly Labor Review* 112 (November): 3-12.
- Garfinkel, Irwin (ed). 1982. *Income-Tested Transfer Programs*. New York: Academic Press.
- Gendell, Murray and Jacob S. Siegel. 1992. "Trends in Retirement Age by Sex, 1950-2005." *Monthly Labor Review* 115 (July): 22-29.
- Goldin, Claudia. 1990. *Understanding the Gender Gap: An Economic History of American Women*. New York: Oxford University Press.
- Goldschmidt-Clermont, Luisella. 1974. *Unpaid Work in the Household: A Review of Economic Evaluation Methods*. Geneva: International Labour Office.
- Gronau, Reuben. 1974. "Wage Comparison—A Selectivity Bias." *Journal of Political Economy* 82 (November/December): 1119-43.
- \_\_\_\_\_. 1977. "Leisure, Home Production, and Work: The Theory of the Allocation of Time Revisited." *Journal of Political Economy* 85 (December): 1099-2023.
- Gustman, Alan and Thomas Steinmeier. 1986. "A Structural Retirement Model." *Econometrica* 54 (May): 555-84.
- Hamermesh, Daniel S. and Albert Rees. 1988. *The Economics of Work and Pay*. New York Harper & Row, Publishers.
- Hartmann, Heidi I. 1976. "Capitalism, Patriarchy, and Job Segregation by Sex." In M. Blaxall and B. B. Reagan (eds.), *Women and the Workplace: The Implications of Occupational Segregation*. Chicago: University of Chicago Press.
- Hayghe, Howard. 1983. "Marital and Family Patterns of Workers: An Update, Special Labor Force Report." Bulletin 2163, Bureau of Labor Statistics, Washington, DC: Government Printing Office (May).
- Heckman, James J. 1974. "Shadow Prices, Market Wages and Labor Supply." *Econometrica* 42 (July): 679-94.
- \_\_\_\_\_. 1978. "A Partial Survey of Recent Research on the Labor Supply of Women." *American Economic Review* 68 (May): 200-207.
- \_\_\_\_\_. 1979. "Sample Selection Bias as a Specification Bias." *Econometrica* 47 (January): 153-61.
- Herz, Diane E. 1988. "Employment Characteristics of Older Women, 1987." *Monthly Labor Review* 111 (September): 3-12.
- Hill, M. Anne and June O'Neill. 1990. "A Study of Intercohort Change in Women's Work Patterns and Earnings." Final Report, U.S. Department of Labor, Bureau of Labor Statistics.
- Holden, Karen C. 1979. "The Inequitable Distribution of OASI Benefits Among Homemakers." *Gerontologist* 19 (June): 250-56.
- Huber, Joan A. and Glenna Spitze. 1983. *Sex Stratification, Children, Housework and Jobs*. New York: Academic Press.
- Iams, Howard M. 1992. "Social Security Earnings of Wives Relative to their Husbands: A Cohort Analysis." Paper presented at the 1992 meetings of the Gerontology Society of America.
- Johnston, William B. and Arnold E. Packer. 1987. *Workforce 2000. Work and Workers for the Twenty-First Century*. Indianapolis: Hudson Institute.
- Juster, F. Thomas and Frank P. Stafford. 1991. "The Allocation of Time: Empirical Findings, Behavioral Models, and Problems of Measurement." *Journal of Economic Literature* 29 (June): 471-522.
- Kanter, Rosabeth. 1977. *Men and Women of the Corporation*. New York: Basic Books, Inc.
- King, Gwendolyn S. 1990. Hearing on "Women, Caregiving, and Poverty: Options to Improve Social Security," before the Subcommittee on Retirement Income and Employment Select Committee on Aging, House of Representatives (October 3).
- Lampman, Robert J. and Maurice MacDonald. 1982. "Concepts Underlying the Current Controversy about Women's Social Security Benefits." In Burkhauser, Richard V. and Karen C. Holden, eds., *A Challenge to Social Security: The Changing Roles of Women and Men in American Society*. New York: Academic Press, pp. 22-39.
- Leimer, Dean R. and Peter A. Petri. 1981. "Cohort-Specific Effects of Social Security Policy." *National Tax Journal* 34 (March): 9-28.
- Leuthold, Jane H. 1978(a). "The Effect of Taxation on the Probability of Labor-force participation by Married Women." *Public Finance* 33: 280-94.
- \_\_\_\_\_. 1978(b). "The Effect of Taxation on the Hours Worked by Married Women." *Industrial and Labor Relations Review* 31 (July): 520-26.
- Levine, Philip B. and Olivia S. Mitchell. 1991. "Expected Changes in the Workforce and Implications for Labor Markets." National Bureau for Economic Research Working Paper No. 3743.
- Levy, Frank. 1979. "The Labor Supply of female Household Heads, or AFDC Incen-

- tives Don't Work Too Well." *Journal of Human Resources* 14 (Winter): 76-97.
- \_\_\_\_\_. 1987. *Dollars and Dreams: The Changing American Income Distribution*. New York: Russell Sage Foundation.
- Lingg, Barbara A. 1990. "Women Beneficiaries Aged 62 or Older, 1960-1988." *Social Security Bulletin* 53 (July): 2-13.
- Lloyd, Cynthia B. and Beth T. Niemi. 1979. *The Economics of Sex Differentials*. New York: Columbia University Press.
- Madden, Janice F. 1973. *The Economics of Sex Discrimination*. Lexington, MA: D.C. Heath and Co.
- McCarty, Therese A. 1990. "The Effect of Social Security on Married Women's Labor-Force Participation." *National Tax Journal* 43 (March): 95-110.
- Mellor, Earl F. 1984. "Investigating the Differences in Weekly Earnings of Women and Men." *Monthly Labor Review* 107 (June): 17-28.
- Mincer, Jacob. 1962. "Labor-Force Participation of Married Women." In H. G. Lewis, ed., *Aspects of Labor Economics*. Universities National Bureau of Economic Research Conference, Studies, No. 14, Princeton, NJ: Princeton University Press.
- \_\_\_\_\_. and Solomon W. Polachek. 1974. "Family Investments in Human Capital: Earnings of Women." *Journal of Political Economy* 82 (March/April): S76-S108.
- Munnell, Alicia H. and Laura E. Stiglin. 1982. "Women and a Two-Tier Social Security System." In Richard V. Burkhauser and Karen C. Holden, eds., *A Challenge to Social Security: The Changing Roles of Women and Men in American Society*. New York: Academic Press, pp. 101-123.
- National Bureau of Economic Research. 1992. *NBER Digest* (August).
- Newton, Margaret W. 1988. "Women and Pension Coverage." In Sara E. Rix, ed., *The American Woman 1988-89*. New York: W. W. Norton & Company.
- OECD. 1977. *The Treatment of Family Units in OECD Member Countries Under Tax and Transfer Systems*. A Report for the Committee on Fiscal Affairs.
- O'Neill, June. 1981. "A Time Series Analysis of Women's Labor-Force Participation." *American Economic Review* 71 (May): 76-80.
- \_\_\_\_\_. 1985. "The Trend in the Male-Female Wage Gap in the United States." *Journal of Labor Economics* 3 (January Suppl.): S91-S116.
- Oppenheimer, Valerie K. 1970. *The Female Labor Force in the United States: Demographic and Economic Factors Concerning its Growth and Changing Composition*. Population Monograph Series, No. 5. Berkeley, CA: University of California.
- Outtz, Janice H. 1992. "Are Mommies Dropping Out of the Labor Force?" Women's Policy Research Institute, unpublished paper.
- Pechman, Joseph, Henry H. Aaron, and Michael K. Taussig. 1968. *Social Security: Perspectives for Reform*. Washington, DC: The Brookings Institution.
- Polachek, Solomon W. 1979. "Occupational Segregation: Theory, Evidence, and Prognosis." In Cynthia B. Lloyd et al., eds., *Women in the Labor Market*. New York: Columbia University Press, pp. 137-57.
- \_\_\_\_\_. 1981. "Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure." *Review of Economic Statistics* 63 (February): 60-69.
- Posner, Christopher A. and Ross C. Devol. 1993. "Population and Demographic Changes and How They Will Impact the United States." *The WEFTA Group First Quarter 1993 U.S. Long-Term Outlook, Vol. 1*.
- Reskin, Barbara F. and Heidi I. Hartmann, eds. 1986. *Women's Work, Men's Work. Sex Segregation on the Job*. Washington, DC: National Academy Press.
- Reskin, Barbara F. and Patricia A. Roos. 1990. *Job Queues, Gender Queues: Explaining Women's Inroads Into Male Occupations*. Philadelphia: Temple University Press.
- Riach, Peter A. and Judith Rich. 1987. "Testing for Sexual Discrimination in the Labour Market." *Australian Economic Papers* 26 (December): 165-78.
- Rosen, Harvey S. 1987. "The Marriage Penalty is Down But Not Out." *National Tax Journal* 40 (December): 567-75.
- Ross, Stanford G. 1979(a). *Social Security: A Worldwide Issue*. Social Security Administration, Washington, DC: U.S. Government Printing Office.
- \_\_\_\_\_. 1979(b). *New Directions in Social Security: Considerations for the 1980's*. Social Security Administration, Washington, DC: U.S. Government Printing Office.
- Rytina, Nancy. 1983. "Comparing Annual and Weekly Earnings from the Current Population Survey." *Monthly Labor Review* 106 (April): 32-38.
- Sandell, Steven. 1980. Hearings before the Subcommittee on Social Security of the Committee on Ways and Means of the House of Representatives (December).
- Sawhill, Isabel V. 1977. "Economic Perspectives of the Family." *Daedalus* 106 (Spring): 115-25.
- Sehgal, Ellen. 1984. "Work Experience in 1983 Reflects the Effects of the Recovery." *Monthly Labor Review* 107 (December).
- Shaw, Lois B. and David Shapiro. 1987. "Women's Work Plans: Contrasting Expectations and Actual Work Experience." *Monthly Labor Review* 110 (November): 7-13.

- Sheils, John F., Burt S. Barnow, Katherine A. Chaurette, and Jill M. Constantine. 1990. *Elderly Persons Eligible for and Participating in the Supplemental Security Income (SSI) Program*. Washington, DC: Lewin-ICF.
- Smeeding, Timothy, Barbara B. Torrey and Martin Rein. 1987. "Comparative Well-being of Children and Elderly." *Contemporary Policy Issues* 5 (April): 57-72.
- Smith, James P., ed. 1980. *Female Labor Supply: Theory and Estimation*. Princeton, NJ: Princeton University Press.
- Smith, James P. and Michael Ward. 1989. "Women in the Labor Market and in the Family." *Journal of Economic Perspectives* 3 (Winter): 9-24.
- Strober, Myra H. 1984. "Toward a General Theory of Occupational Segregation: The Case of Public School Teaching." In Barbara F. Reskin ed., *Sex Segregation in the Workplace: Trends, Explanations, Remedies*. Washington, DC: National Academy Press, pp.144-66.
- \_\_\_\_\_ and Carolyn L. Arnold. 1987. "The Dynamics of Occupational Segregation Among Bank Tellers." In Clair Brown and Joseph A. Pechman, eds., *Gender in the Work Place*. Washington, DC: The Brookings Institution, pp. 107-48.
- Thompson, Lawrence H. 1983. "The Social Security Reform Debate." *Journal of Economic Literature* 21 (December): 1425-1467.
- Treiman, Donald J. and Heidi I. Hartmann, eds. 1981. *Women, Work, and Wages: Equal Pay for Jobs of Equal Value*. Washington, DC: National Academy Press.
- U.S. Congress, House of Representatives. 1985. *Report on Earnings Implementation Study and the Congressional Budget Office Earnings Sharing Options for the Social Security System*.
- U.S. Congress, House Committee on Ways and Means, Subcommittee on Social Security. 1989. *Report on Earnings Sharing Implementation Study*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Commerce, Bureau of the Census. Consumer Income Series P-60, Washington, DC: U.S. Government Printing Office, various issues.
- \_\_\_\_\_. Current Population Reports, Series P-60, No. 174, *Money Income and Poverty Status in the United States*, Washington, DC: U.S. Government Printing Office, various issues.
- \_\_\_\_\_. 1975. *Historical Statistics of the United States, Colonial Times to 1970*. Bicentennial Edition, Pt. 1.
- \_\_\_\_\_. 1984. *Lifetime Work Experience and Its Effect on Earnings: Retrospective Data From the 1979 Income Survey Development Program*, Series P-23, No. 136.
- \_\_\_\_\_. 1987. Current Population Reports, Series P-70, No. 10, *Male-Female Differences in Work Experience, Occupations and Earnings: 1984*. Washington, DC: U.S. Government Printing Office.
- \_\_\_\_\_. 1988. *Statistical Yearbook*. Washington, DC: U.S. Government Printing Office.
- \_\_\_\_\_. 1990. *Money Income of Households, Families, and Persons in the U.S.* Washington, DC: U.S. Government Printing Office.
- \_\_\_\_\_. 1991. Current Population Reports, Series P.20, No. 455. *Population Characteristics*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services, Social Security Administration, Office of Research & Statistics. 1990(a). *Fast Facts & Figures*. U.S. Government Printing Office.
- \_\_\_\_\_. 1990(b). "Monthly Tables." *Social Security Bulletin* 53 (July). Washington, DC: U.S. Government Printing Office.
- \_\_\_\_\_. 1991. "Annual Statistical Supplement." *Social Security Bulletin*, 54, Washington, U. S. Government Printing Office.
- U.S. Department of Labor, Bureau of Labor Statistics. Bulletin No. 2340. *Handbook of Labor Statistics*. Washington, DC: U.S. Government Printing Office, various issues.
- \_\_\_\_\_. *Employment and Earnings*. (January), Washington, DC: U.S. Government Printing Office, various issues.
- \_\_\_\_\_. 1977. *Working Women: A Databook*, Washington, DC: U.S. Government Printing Office.
- \_\_\_\_\_. 1982. *Employment and Training Report of the President*. Washington, DC: U.S. Government Printing Office.
- Women's Bureau. 1987. *Time of Change: 1983. Handbook on Women Workers*. Bulletin 298, Washington, DC: U.S. Government Printing Office.
- \_\_\_\_\_. 1989. "Projections of Occupational Employment, 1988-2000." *Monthly Labor Review* 112 (November): 00-00.
- \_\_\_\_\_. 1990. "Seven Out of Ten Persons in the Working-Age Population Had Some Employment During 1989." *News* (August 28).
- Warlick, Jennifer L., David E. Berry, and Irwin Garfinkel. 1982. "The Double-Decker Alternative for Eliminating Dependency under Social Security." In Richard V. Burkhauser and Karen C. Holden, eds., *A Challenge to Social Security: The Changing Roles of Women and Men in American Society*. New York: Academic Press, pp.131-60.
- Wilenski, Harold L. 1983. "Political Legitimacy and Concerns: Missing Variables in the Assessment of Social Policy." In Shimon E. Spuro and Ephraim Yuchtman-Yaar, eds., *Evaluating the Welfare State: Social and Political Perspectives*. New York: Academic Press.
- \_\_\_\_\_. 1992. "Women in Corporate Management." Cited in *Wall Street Journal* (March 31).