Expenditure patterns of the elderly: workers and nonworkers

Spending patterns of older households differ not only by income, but according to work status; older workers allocate more to retirement, pension, and Social Security funds, while the nonworking elderly spend more on food prepared at home and health care

Thomas Moehrle

The Nation's population continues to grow older. Recent information from the U.S. Bureau of the Census estimates that people aged 65 and over will make up more than 23 percent of the population in 2030, up from 12 percent in 1985.[1] Like other cohorts, the elderly have different spending patterns depending upon level of income and status as employed or retired. According to data from the 1986 – 87 Bureau of Labor Statistics Consumer Expenditure Survey, in terms of share of expenditure and separated into three income levels (low income = less than $15,000; medium income = $15,000 to $29,999; high income = $30,000 and over):

- Nonworking elderly households spend more on food prepared at home than do working elderly households, regardless of income level.
- High-income nonworking elderly households spend more on housing—particularly for utilities, fuels, and public services and for housefurnishings and equipment—than do their low-income counterparts.
- Low-income working elderly households spend more on transportation than do low-income nonworking elderly households.
- Regardless of income level, nonworking elderly households spend more on health care than do working elderly households.
- Working elderly households spend more on retirement, pension, and Social Security contributions than do nonworking elderly households, across all income levels.

Coupled with the well-known fall in the U.S. birth rate, the aging population will cause a decline in the growth, as well as the age distribution, of the labor force. An examination of the demographic characteristics of the labor force reveals, for example, that the century-long decline in the participation rate of older people has been moderating. In fact, new labor force projections to the year 2000 show that the participation rate of women in the 55-to-74 age group will increase. Also, although participation by men in the 55-and-over age group is likely to continue to decline, the labor force separation of these men will not be as significant as it has been in years past.[2]

Along with the aging of the population and the changes in labor force participation

Thomas Moehrle is an economist in the Division of Consumer Expenditure Surveys, Bureau of Labor Statistics.

rates of older people, changes are expected in the spending habits of the U.S. population. This article examines the differences in expenditures between the working and nonworking elderly households.

Background

Consumer Expenditure Survey data were used to calculate mean annual expenditures, income, and demographic characteristics for selected elderly U.S. consumer units.[3] The survey is a household survey in which family expenditures are collected. The analysis presented here is of participants from the 1986 – 87 survey years.

An earlier study by Beth Harrison[4] examined the spending patterns of consumer units with reference persons aged 65 and over.[5] Breaking these up into two age groups, 65 to 74 and 75 and over, Harrison found that, although persons aged 65 and over are commonly viewed as a single homogeneous group, there are identifiable differences in expenditures, incomes, and characteristics between the two age groups. Nonetheless, in the study presented in this article, consumer units with reference persons over age 74 are not included, because 93 percent of these reference persons are retired and because their spending patterns are greatly different from those of the 74-and-under group. Of course, the older group could be separated into working and nonworking subgroups, but then the working subgroup would have too few observations to be of sound statistical use.

Information from the Social Security Administration shows that the average age of retired persons awarded Social Security from 1967 to 1987 has been declining.[6] More important, the percentage distribution of retired persons who are between the ages of 62 and 64 has increased noticeably compared to all other retirees. For instance, in 1967, men aged 62 to 64 who were Social Security retirement recipients made up 35.7 percent of the number of men who had retired that year. In 1987, this same group made up 67.1 percent of the number of men who had retired in *that* year. (See table 1.) Similar changes have occurred for women as well. From these results, it seems evident that more workers have decided to take advantage of early retirement. Families with reference persons aged 62 to 74, rather than the customary 65 to 74, are therefore included in this analysis.

Separation of consumer units into working and nonworking subgroups was based on the

Table 1. **Number, average age, and percent distribution of retired men receiving Social Security awards**

Year	Number (in thousands)	Average age in year of award	Distribution by age[1]		
			62–64	65–69	70 and over
1967	719	64.8	35.7	61.1	3.1
1968	766	64.4	39.3	58.1	2.6
1969	779	64.5	37.1	60.5	2.4
1970	814	64.4	39.4	58.8	1.8
1971	840	64.3	41.7	56.5	1.8
1972	874	64.2	42.7	55.7	1.5
1973	875	64.2	44.6	54.0	1.4
1974	835	64.0	46.7	52.0	1.3
1975	902	64.0	48.9	50.2	.9
1976	875	64.0	49.8	49.3	.9
1977	940	64.0	49.1	50.0	.8
1978	852	63.9	49.5	49.6	.8
1979	926	64.0	48.3	51.0	.7
1980	942	63.9	51.7	47.6	.7
1981	926	63.8	54.5	44.9	.6
1982	942	63.7	56.5	42.9	.6
1983	976	63.7	57.4	41.8	.8
1984	934	63.7	58.8	40.5	.7
1985	986	63.7	65.7	33.6	.6
1986	1,011	63.7	67.0	32.3	.7
1987	970	63.6	67.1	32.6	.7

[1] Age in year of award for 1967–84; age in month of award for 1985, 1986, and 1987.

NOTE: For 1985 through 1987, estimates are based on 1 percent of the sample.

SOURCE: Table 53. *Social Security Bulletin. Annual Statistical Supplement,* Social SecurityAdministration, 1987.

Table 2. **Selected characteristics of consumer units with reference person aged 62–74, by after-tax income and work status, Consumer Expenditure Survey, 1986–87, complete income reporters only**

Item	All consumer units[1]	After-tax income					
		Less than $15,000		$15,000 to $29,999		$30,000 and over	
		Not working	Working	Not working	Working	Not working	Working
Number of consumer units (000)	13,390	5,893	1,766	2,097	1,375	981	1,277
Number of sample interviews	6,950	2,963	894	1,165	697	535	696
Consumer unit characteristics (averages):							
Income before taxes	$20,099	$8,370	$9,361	$21,633	$22,822	$49,063	$61,368
Income after taxes	$18,760	$7,946	$8,734	$20,881	$21,046	$45,732	$55,859
Size of consumer unit	1.9	1.6	1.8	2.2	2.1	2.6	2.5
Age of reference person	67.6	68.5	66.4	67.9	66.0	67.6	65.6
Number in consumer unit							
Earners	.7	.2	1.3	.4	1.6	.9	1.9
Vehicles	1.7	1.2	1.6	2.0	2.2	2.5	2.5
Children under 18	.1	.1	.1	.1	.1	.2	.1
Persons 65 and over	1.0	1.1	.8	1.3	.9	1.2	.8
Percent reporting:							
Housing tenure							
Homeowner with mortgage	21	12	20	23	28	30	48
Homeowner without mortgage	57	58	55	63	57	61	41
Renter	21	29	25	14	14	9	11
Race of reference person							
Black	10	14	14	5	6	4	2
White and other	90	86	86	95	94	96	98
Education of reference person							
Elementary (1–8)	24	32	29	21	12	7	5
High school (9–12)	50	53	48	53	55	44	36
College	25	13	22	26	32	49	59
Never attended and other	1	2	1	1	0	—	—
At least one vehicle owned	84	72	85	95	96	98	97

[1] In this study.

work status of the reference person. If the reference person received earnings from part- or full-time employment in the 12 months prior to his or her interview, the consumer unit was classified as a working household. Otherwise, the unit was classified as a nonworking household, even if one or more members other than the reference person were employed. Consumer units with reference persons who considered themselves involuntarily unemployed or who were working without pay were excluded from the study. These units were a small percentage of the units examined; thus, excluding them should not affect the results of the analysis.

Two-thirds of the consumer units examined fell into the nonworking group. Of these, 79 percent had reference persons who classified themselves as retired. The remainder of the nonworking group consisted of reference persons who considered themselves disabled, taking care of family or home, going to school, or doing something else. Many of these persons are elderly single women who never have worked and, therefore, do not consider themselves retired. Often, they are widows receiving Social Security payments from their deceased husbands' employment.

Because income has such an important influence on spending habits, households were further divided into low–, medium–, and high–income groups. Low income was defined as an annual after-tax household income of less than $15,000. Medium household income was defined as income between $15,000 and $29,999 annually, and high household income was defined as $30,000 or more per year.

Characteristics

Examining household characteristics affords insight into how households spend their income. Table 2 presents selected characteristics of elderly households, including weighted U. S. averages where appropriate.[7] Computed means of expenditures, also weighted averages, are shown in table 3. Two-thirds of the households

with reference person aged 62 to 74 are classified as nonworking.

The reference persons of the working group were younger and had attained higher levels of education than their nonworking counterparts. Higher education is usually associated with higher labor earnings, and with higher labor earnings, the opportunity costs of retirement are greater. Hence, the greater concentration of more educated reference persons within the working group may indicate that retirement is being postponed among these younger individuals.

Among all three income divisions of the participants, the working groups had higher incomes. Within the low– and middle–income groups, the income differences between the nonworking and working were not notable. However, substantial differences existed within the high-income group, chiefly because that group has no upper income limit in its definition. Accordingly, the within-group variation for the high-income group will be higher compared to that for the other two groups, and caution is suggested when evaluating the expenditure differences between the high–income working and nonworking households.

The working groups were more likely than the nonworking groups to have multiple vehicle ownership and more likely to own at

Table 3. **Average annual expenditures of consumer units with reference persons aged 62–74, by after-tax income and work status, Consumer Expenditure Survey, 1986–87 complete income reporters only**

Item	All consumer units[1]	After-tax income					
		Less than $15,000		$15,000 to $29,999		$30,000 and over	
		Not working	Working	Not working	Working	Not working	Working
Total expenditures	$18,707	$11,928	$14,931	$20,285	$21,660	$31,104	$39,917
Food	2,994	2,197	2,350	3,497	3,206	4,986	4,982
Food at home	2,130	1,723	1,750	2,523	2,163	3,241	3,002
Food away from home	864	474	601	973	1,042	1,745	1,980
Alcoholic beverages	178	101	102	192	267	277	446
Housing	5,437	3,909	4,870	5,689	5,623	8,982	9,932
Shelter	2,793	1,969	2,607	2,694	2,981	4,410	5,571
Owned dwellings	1,706	1,023	1,558	1,781	1,949	2,943	3,734
Rented dwellings	696	756	815	584	605	493	694
Other lodging	391	191	235	329	429	974	1,144
Utilities, fuels, and public services	1,630	1,361	1,520	1,765	1,713	2,210	2,265
Household operations	278	175	195	286	171	615	717
Domestic services	205	129	117	204	106	504	554
Other household expenses	74	45	78	83	65	111	163
Housefurnishings and equipment	735	404	548	943	758	1,748	1,379
Apparel and services	837	456	569	897	953	1,944	1,893
Men and boys	168	77	119	181	193	409	416
Women and girls	386	227	278	402	407	806	900
Children under 2	17	9	12	21	16	42	31
Other apparel products and services	267	142	160	293	335	687	545
Transportation	3,552	1,913	3,039	4,304	4,831	5,421	7,779
Gasoline and motor oil	724	500	630	867	884	1,154	1,146
Other transportation expenses	2,828	1,413	2,409	3,437	3,947	4,267	6,633
Health care	1,523	1,324	1,305	1,791	1,440	2,108	1,937
Health insurance	614	528	537	779	652	780	684
Medical services	578	477	449	600	547	982	904
Prescription drugs, medical supplies	331	319	319	411	241	346	349
Entertainment	818	394	531	920	1,217	1,725	1,878
Personal care	213	138	173	247	243	388	390
Reading	147	95	112	169	160	257	304
Education	94	32	53	49	73	167	480
Tobacco and smoking supplies	197	158	184	267	223	239	219
Miscellaneous	375	284	337	341	276	638	810
Cash contributions	1,063	713	499	1,087	1,014	1,814	2,894
Personal insurance and pensions	1,272	210	803	828	2,124	2,148	5,961
Life and other personal insurance	324	169	247	417	395	483	791
Retirement pensions, Social Security	949	41	557	411	1,729	1,664	5,170

[1] In this study.

NOTE: Because of rounding, sums of subcategory entries do not always equal totals for corresponding categories.

Table 4. **Share of average annual expenditures and T-statistics calculated from differences in shares, consumer units with reference persons aged 62-74, by after-tax income and work status, Consumer Expenditure Survey, 1986–87**

Item	Income								
	Less than $15,000			$15,000 to $29,999			$30,000 and over		
	Not working	Working	T-statistic	Not working	Working	T-statistic	Not working	Working	T-statistic
Total expenditures (percent)	100.0	100.0	—	100.0	100.0	—	100.0	100.0	—
Food	18.5	15.8	2.13	17.3	14.8	2.19	16.1	12.5	3.85
Food at home	14.6	11.9	2.74	12.7	10.2	3.03	10.8	7.7	4.40
Food away from home	3.9	3.9	–.00	4.6	4.6	–.02	5.3	4.9	.86
Alcoholic beverages	.9	.7	1.35	1.0	1.2	–1.94	.9	1.1	–1.48
Housing	32.9	32.7	.05	28.2	26.1	1.09	29.0	25.0	2.21
Shelter	16.5	17.5	–.63	13.3	13.8	–.41	14.2	14.0	.16
Owned dwellings	8.6	10.5	–1.27	8.8	9.0	–.22	9.5	9.4	.09
Rented dwellings	6.3	5.5	.89	2.9	2.8	.15	1.6	1.7	–.30
Other lodging	1.6	1.6	.08	1.6	2.0	–1.09	3.1	2.9	.39
Utilities, fuels, and public services	11.4	10.2	1.47	8.7	7.9	1.38	7.1	5.7	3.13
Household operations	1.5	1.3	.42	1.4	.8	2.27	2.0	1.8	.39
Domestic services	1.1	.8	1.28	1.0	.5	2.03	1.6	1.4	.54
Other household expenses	.4	.5	–.52	.4	.3	.89	.4	.4	–.36
Housefurnishings and equipment	3.4	3.7	–.54	4.7	3.6	1.69	5.7	3.5	2.62
Apparel and services	3.8	3.8	.02	4.4	4.4	.05	6.3	4.8	1.74
Men and boys	.6	.8	–1.13	.9	.9	–.01	1.3	1.0	1.37
Women and girls	1.9	1.9	.12	2.0	1.9	.43	2.6	2.3	1.05
Children under 2	.1	.1	–.06	.1	.1	1.14	.1	.1	1.55
Other apparel products and services	1.2	1.1	.83	1.5	1.6	–.38	2.2	1.4	1.25
Transportation	16.1	20.4	–2.12	21.3	22.4	–.47	17.5	19.6	–1.14
Gasoline and motor oil	4.2	4.2	–.07	4.3	4.1	.56	3.7	2.9	2.87
Other transportation expenses	11.9	16.2	–2.24	17.0	18.3	–.57	13.8	16.7	–1.66
Health care	11.1	8.8	2.08	8.9	6.7	3.07	6.8	4.9	2.67
Health insurance	4.4	3.6	2.35	3.9	3.0	2.62	2.5	1.7	3.43
Medical services	4.0	3.0	1.21	3.0	2.5	.90	3.2	2.3	1.44
Prescription drugs, medical supplies	2.7	2.1	1.48	2.0	1.1	4.30	1.1	.9	1.27
Entertainment	3.3	3.6	–.45	4.6	5.6	–.61	5.6	4.7	1.35
Personal care	1.2	1.2	–.04	1.2	1.1	.82	1.3	1.0	1.99
Reading	.8	.8	.61	.8	.7	1.18	.8	.8	.54
Education	.3	.4	–.58	.2	.3	–.67	.5	1.2	–1.58
Tobacco and smoking supplies	1.3	1.2	.58	1.3	1.0	1.71	.8	.6	1.80
Miscellaneous	2.2	2.0	.29	1.4	1.0	.92	1.7	1.7	.03
Cash contributions	6.0	3.4	1.28	5.4	4.7	.61	5.9	7.3	–.74
Personal insurance and pensions	1.8	5.4	–6.74	4.1	9.8	–4.95	6.9	15.0	–6.46
Life and other personal insurance	1.4	1.7	–.93	2.1	1.8	.26	1.6	2.0	–.80
Retirement, pensions, Social Security	.3	3.7	–8.09	2.0	8.0	–8.20	5.4	13.0	–6.73

NOTE: Because of rounding, sums of subcategory entries do not always equal totals for corresponding categories.

least one vehicle. Because there often were more earners than just the reference person in these households, and because workers need daily transportation to and from their workplaces, frequent demands for transportation are expected in these households. Within the lower income group, 85 percent of the working households owned at least one vehicle, compared to 72 percent of the nonworking households.

In general, older households have higher rates of home ownership as compared to younger households. For instance, data published from the 1986 – 87 Consumer Expenditure Survey show that 78 percent of households with reference person over the age of 65 own their homes, compared to 57 percent of all other households. Across all the income groups studied in this article, the nonworking were more likely to own their homes without mortgages.

Expenditures

The mean annual expenditures by income and work status from table 3 were used to compute expenditure shares in table 4. Then, from these shares, T-statistics were computed to determine whether there were any differences between expenditure shares within each of the income and work status groups.[8] A positive T-statistic greater than two indicates

Table 5. **Shares of sources of income of consumer units with reference person aged 62–74, by after-tax income and work status, Consumer Expenditure Survey, 1986–87, complete income reporters only**

Item	All consumer units[1]	Income					
		Less than $15,000		$15,000 to $29,999		$30,000 and over	
		Not working	Working	Not working	Working	Not working	Working
Money income before taxes	$20,099	$8,370	$9,361	$21,633	$22,822	$49,063	$61,368
Wages and salaries	34.8	3.3	40.9	15.2	51.9	32.9	58.9
Self-employment income	6.0	–.2	2.9	.3	7.1	3.2	15.3
Social Security, private and Government retirement	45.4	85.0	50.7	69.1	32.2	37.4	15.9
Interest, dividends, rental income, other property income	11.5	6.4	3.0	13.3	7.3	25.2	8.9
Unemployment and workers' compensation, veterans' benefits	.7	1.5	.3	1.1	.3	.8	.2
Public assistance supplemental security income, food stamps	.8	3.3	1.2	.3	.4	.2	.1
Regular contributions for support	.4	.6	.2	.3	.5	.3	.3
Other income	.3	.2	.9	.3	.2	.0	.5
Personal taxes	6.7	5.1	6.7	3.5	7.8	6.8	9.0
Federal income taxes	5.2	3.8	4.5	2.5	5.8	5.7	7.3
State and local income taxes	1.0	.6	1.5	.6	1.3	.9	1.4
Other taxes	.4	.7	.7	.4	.6	.2	.2

[1] In this study.

that the nonworking group spent a larger share on the expenditure item at the 5–percent level of significance.

From table 4, it is plain that, across all income groups, nonworking households spent more than working households on food prepared at home. Also, high-income nonworking households allocated a larger share than did high–income working households for total housing expenditures, even though they were more likely (61 percent versus 41 percent) to own their homes mortgage free. (In the low– and middle–income groups, working households spent a larger share on total housing expenditures than did nonworking households.) This is perhaps accounted for by the significantly higher share the high–income nonworking households spent on utilities, fuels, and public services, and on housefurnishings and equipment. Because the latter category includes infrequently purchased and large–ticket–price items, expenditure share differences in this category are likely related to factors not examined here, such as household inventory. By contrast, utilities and the like are usually frequently purchased items that would not be expected to vary significantly within an income group. Because the nonworking elderly households are probably made up of one or more retirees, these households contain people who are home more often and use more utilities, fuels, and public services.

Among lower income elderly households, transportation expenditures were significantly higher for the working, as opposed to the nonworking, group. This is to be expected because of the greater incidence of vehicle ownership within the working group. A decision must be made concerning the mode of primary transportation, and, among low-income working elderly, a higher percentage of households chose ownership of a vehicle because of the frequent demand for transportation. Higher vehicle ownership, coupled with frequent use, increased the transportation outlays for working households.

Health care expenditures reported in the Consumer Expenditure Survey are out-of-pocket expenditures. Hence, those who are uninsured or who must pay their own insurance premiums will necessarily spend more on health services and products. Across all three income groups, the expenditure shares for health insurance were significantly higher for the nonworking group. Because these households generally are not covered by an employer–paid health care package, they must provide coverage themselves or obtain coverage under public plans such as medicare. Medicare and other public health insurance programs, however, are not a complete substitute for employer–paid coverage; consequently, we observe higher shares by the nonworking households. (Of course, payments for physicians' services under medicare

are the same for all participants and, therefore, would constitute a lower share for the higher income group.) Also, nonworking households are more likely to purchase supplemental insurance, and persons who retire between ages 62 and 65 are not eligible for medicare and so may pay more for private insurance during those years. Finally, related to health care, middle–income nonworking elderly households spent a higher share for prescription drugs and medical supplies than did their working counterparts, probably because medicare does not cover these drugs and supplies.

Across all income levels, the working group had notably higher expenditure shares for retirement, pension, and Social Security contributions. The reason for this is obviously that older nonworking individuals will not be contributing these expenditures anymore. Note, however, that expenditures for these items are not expected to be zero for the nonworking elderly because some members of the household may be employed and contribute through their work to Social Security and individual retirement funds.

Income

Shares of sources of income are shown in table 5. Regardless of income level, the working group received most of its income from wages and salaries, while the nonworking received the bulk of its income from Social Security and retirement benefits. In the lower income class, the working group also depended heavily on Social Security and retirement benefits, accounting for 51 percent of income, as against 41 percent for wages and salaries. This heavy dependence on retirement benefits probably means that many low–income households were semiretired.

The share of income from wages and salaries was greatest for the high–income group. Just under 60 percent came from this source for those who worked. Even high–income nonworking households received 33 percent of their income from wages and salaries. It is readily apparent that the high–income group retained substantial earning power.

Unlike the lower income groups, the high-income nonworking relied heavily on interest, dividends, and rental income. This source accounted for 25 percent of the group's total income. Absent other considerations, individuals in these households may have been able to retire earlier than their low–income counterparts because of their substantially higher unearned income. In a similar manner, self–employment income was a small fraction of total income for all households except the high–income working, accounting for 15 percent of their income. Though obviously not contributory to early, complete retirement, self-employment does promote a degree of independence, both personal and financial.

Conclusion

This study has identified differences in expenditure patterns between working and nonworking older consumer units. These differences cannot be explained solely by income differences, particularly for the lower income households. For instance, low–income working households spent 25 percent more than their nonworking counterparts, even though their incomes were only 12 percent higher. Of course, some of the expenditure variation between working and nonworking households may be due to income, especially in the high–income group, where a significant difference in income already exists between working and nonworking households. For all three income levels, however, some expenditure variations can be explained by the difference in work status. Among these variations are expenditures for food prepared at home, health insurance, and Social Security and retirement contributions. □

Footnotes

[1] *Population Estimates and Projections*, Series P-25, No. 952, U.S. Department of Commerce, Bureau of the Census.

[2] For an overview of labor force projections by demographic characteristics, see Howard N Fullerton, Jr. "New labor force projections, spanning 1988 to 2000," *Monthly Labor Review*, November 1989, pp 3-12.

[3] A consumer unit is either (1) all members of a household who are related by blood, marriage, adoption, or other legal arrangements; (2) two or more persons living together who pool their incomes to make joint expenditure decisions; or (3) a person living alone or sharing a household with others, or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent. A person is considered financially independent if he or she provides the income for at least two of the three major expense categories of housing, food, and all other living expenses. The terms *consumer unit* and *family* are used interchangeably throughout.

[4] Beth Harrison, "Spending patterns of older persons revealed in expenditure survey," *Monthly Labor Review*, October 1986, pp. 15-17.

[5] In the Consumer Expenditure Survey, the reference person of a consumer unit is the first member named by the

respondent when asked to "Start with the name of the person or one of the persons who owns or rents the home." The relationships of the other members of the consumer unit are then determined with respect to the reference person.

[6] *Social Security Bulletin, Annual Statistical Supplement* (Social Security Administration, 1987), table 53.

[7] For information on the weighting procedure used in the Consumer Expenditure Survey, consult the *Handbook of Methods*, Bulletin 2285 (Bureau of Labor Statistics, 1988), Chapter 18.

[8] Standard errors used in T-statistic computations have been replaced by the coefficients of variation (cv's). The variances used in computing the cv's are calculated from mean expenditures using a pseudoreplication technique discussed in Philip J. McCarthy, *Data from Complex Surveys*, Series 2, No. 14 (Washington, DC, Government Printing Office, 1966) ; and Philip J. McCarthy, *Pseudoreplication, Further Evaluation and Application of the Balanced Half-Sample Technique*, Series 2, No. 31 (Washington, DC, Government Printing Office, 1969).

Because we are testing differences between shares and not means, the CV's have been adjusted for shares and pooled. If a is the mean expenditure for an item for the nonworking group, k is the total expenditures for that group, b is the mean expenditure for the item for the working group, and l is the total expenditures for the same group, then the pooled cv's for the shares are $(a/k)^2[(\mathrm{cv}(a))^2 + (\mathrm{cv}(k))^2 - 2(a/k)((\mathrm{cv}(a))^2)] + (b/l)^2[(\mathrm{cv}(b))^2 + (\mathrm{cv}(l))^2 - 2(b/l)((\mathrm{cv}(b))^2)]$.

The role of public policy

. . . the United States continues to make labor market policy as though *worker* is a masculine noun. Employed mothers in the United States are expected to "make it" under present rules and conditions, coping as best they can. American fathers are expected to sustain their primary investment in work. But the practice of both parents taking on the traditional male work role—each working full-time and not taking time off to meet child care needs—would be patently unacceptable in Sweden. Although most Swedes value work and occupational achievement as highly as most Americans, they value home and family to an even greater extent. From the Swedish viewpoint, women cannot merely be assimilated into the traditional male world of work. Rather, this world must be recast in ways that permit fathers as well as mothers to participate equitably in the "productions" of human beings and mothers no less than fathers to participate equitably in the production of goods and services.

—PHYLLIS MOEN

Working Parents: Transformations in Gender Roles and Public Policies in Sweden
(Madison, University of Wisconsin Press, 1989), pp. 146-47.