

Ward, R. & Bryant, E. (1986). A Case Study of HMO Medicare Enrollment. Gerontologist, 26 (6). 655-662.

Wisconsin Department of Health and Social Services (1987). HMOs and Medicare Eligible Low Income Elderly. July. Madison, WI: Bureau of Evaluation, Department of Health and Social Services.

Wolfson, D, C.W. Bell & D.A. Newbery (1984). Fallon's senior plan: A summary of the three year marketing experience. Group Health Journal, (Spring), 4-7.

## RESEARCH RELATED TO THE ELDERLY: DISCUSSION

Cynthia Sencindiver, University of Missouri<sup>1</sup>

The papers in this session are interesting and timely. One paper's focus is the "aging-in-place" phenomenon in elderly housing environments. The second paper looks at an age-old concern (caregiver abuse), but reverses the approach to examine the extent to which elders who are financially dependent abuse their caregivers. The third paper explores the alleviation of some elder's health insurance concerns through participation in a health maintenance organization (HMO).

Even though these papers may seem unrelated, the common thread is their subject, the elderly. We are all acutely aware of the changing demographics in this country and the swelling ranks of the over-65 age cohort. These (and other research) papers represent the beginning of a flood of research which will address the many and varied impacts these changes will have on us all.

My comments are based on the papers I received prior to the annual conference. If the authors revised their papers, my discussion may overlap with their final drafts.

### Stum on the "Aging-in-Place" Phenomenon

Given the changing demographics, more people are going to be faced with decisions about the appropriateness of independent living, either for themselves or for a relative. When is it time to move to a setting which offers one of many levels of dependent care? Who makes these decisions? Who should make them? These are very important questions which Dr. Stum raises in her research paper.

Some implications which were not mentioned in this paper include the following:

1. development of a needs assessment for housing managers to use to determine elderly resident's capacity to live independently
2. utilizing the Cooperative Extension Service to develop training seminars for housing developers and managers so that they are better prepared to deal with elders who are "aging-in-place"
3. accessing Cooperative Extension Service's ties with communities so that housing managers may establish linkages with community and support services, etc.
4. if a follow-up study is feasible, determine if new problems emerge as the "old old" (those persons 85 and older) "age-in-place"

### Stein on Abusive Elders

This is an unusual approach to a topic of real concern; however, the findings would seem to be exploratory. One reason for suggesting that the findings are exploratory is the fact that only the caregivers, not the elders who were cared for, were interviewed. Additionally, emotional abuse is not defined specifically in the questions asked of the caregivers but response categories are used to indicate the extent of emotional abuse felt or perceived.

There is the problem of inter-personal comparisons when using Likert type response scales. Does a response of "2: most of the time" mean the same thing to everybody whose response is just that? There is also concern about the method used to obtain the total abuse measure. Dr. Stein summed the scores across all abusive behaviors to arrive at the total. Was the reliability of the new scale tested? One suggestion might be to consider collapsing the categories of the total dependent abuse measure. Then a limited dependent variable form of analysis could be used.

The author mentions that interviewers were encouraged to converse with the caregivers during the interview. During the conversations, a lot of qualitative aspects of caregiving emerged, she reported. I would suggest that the author attempt some qualitative data analysis, either alone or in conjunction with quantitative data analysis, to provide a more complete picture of the caregiver/caretaker relationship.

Although there were probably too few cases to analyze quantitatively, I wonder if there were qualitative differences between those caregivers who cared for one elder versus those who cared for two (or more)? This kind of information may have been gleaned from the qualitative data.

Any time one party of a relationship has a chance to "tell it like it is," it seems only fair to get the "other side of the story." With this in mind, I would recommend a follow-up study that asks the elders questions about their finances. Some suggestions include:

1. Do you have any say in how your social security check (or pension, etc.) is spent?
2. Is your money co-mingled with your caregiver's money?
3. Do you know how much money you receive each month?
4. Do you know how much it costs to feed (clothe, house, transport, etc.) you per month?

### Stum (again) on HMO's

This paper explores an innovative approach to meeting the health care needs and financing of health care costs for low-income elderly consumers. Affordable health care for the elderly has received much publicity as of late and has been on the national agenda.

I wonder if the fact that about one-third of the sample were existing HMO members inflates the results? It seems that this group should have been analyzed separately from those who were not previously enrolled in an HMO.

The author mentions that the majority of participants were satisfied with their HMO. Do you have any information about the frequency and nature of their visits to the HMO? In other words, were the participants basing their evaluation of services received on one office visit for minor care or several visits for serious care? A measure of satisfaction based on frequency and nature of care would be much more meaningful.

<sup>1</sup>Assistant Professor of Family Economics and Management

There seems to be a role for the Cooperative Extension Service in continuing the educational efforts with respect to HMO's. CES is the link for dissemination of information from the university to the citizens of the state.

I wish the author had made some attempt at visualizing the "big picture." Is HMO subsidization/participation a viable solution to the growing problem of increasing health care costs and the burgeoning elderly population? What would a cost/benefit analysis look like?

## COMPARING THE LIVING STANDARDS OF HUSBANDS AND WIVES: IN AND OUT OF MARRIAGE

Roberta M. Spalter-Roth, Institute for Women's Policy Research and George Washington University<sup>1</sup>

-----  
This paper argues that analyzing the living standards of husbands and wives within families is a critical challenge for researchers concerned with the valid measurement of family well-being. No major data sets provide information about significant aspects of individual family members' living standards. The family remains a "black box" because it is treated as the natural unit of analysis. This paper defines living standards, reviews examples of inter-and intra-family data, finds these efforts guilty of methodological sexism, describes a small scale study that needs replication, and notes the importance of housework in any measures of living standards. It concludes with suggestions for two major changes in data collection efforts.  
-----

### STATEMENT OF THE PROBLEM

Discovering and analyzing the living standards of husbands and wives within families (intra-family living standards) is a critical challenge for social and economic researchers concerned with the valid measurement of family well-being. None of the major data sets currently available provides nationally-representative information about significant aspects of the production, distribution and consumption of resources within families or households that make up individual members' living standards. As a result, we can not know whether husbands or wives in the same family are better off or worse off and if intra-family inequalities change over time under different social, economic, or political circumstances.

Although currently available data sets allow us to compare the differences in the living standards of new families or households formed by ex-husbands and ex-wives, the family itself remains a "black box." This is because whole families are treated as the natural unit of analysis for the measurement of living standards by relevant national surveys, and little information on intra-family differences is available. In order to suggest why and how we should begin the process of changing these data sets, I will define living standards, review examples of the kinds of inter-and intra-family data that are currently available, find these current data gathering efforts guilty of methodological sexism, describe a small scale study that illustrates the need for more valid measurement, note the importance of housework in any measures of living standards by citing my own research, and conclude with the two major changes in data collection that I would like to see.

### DEFINITION OF LIVING STANDARDS

A rough indicator of living standards is the relation between the hours worked and the goods and services consumed by individuals. An example of this sort of measure is the "activity-wise calorie expenditures per day" used by Indian family and child welfare specialist Srilatha Batiwala in a collection of studies emphasizing the failure of existing methodologies to measure age and gender-based inequalities within families (1985). Along with her colleagues, who are doing some of the most innovative work in measuring intra-family differences in living standards, Batiwala's research shows that the distribution of food within a sample of Indian households does not correspond to the division of responsibilities. Indian wives suffer from "a calorie deficit" because they are expected to expend more energy working and consume less food than their husbands (1985:48). These harsh findings show the life and death importance of moving beyond "the tyranny of the household," as these Indian researchers call it, to measuring the inequalities in living standards within these households (Jain and Banerjee, 1985).

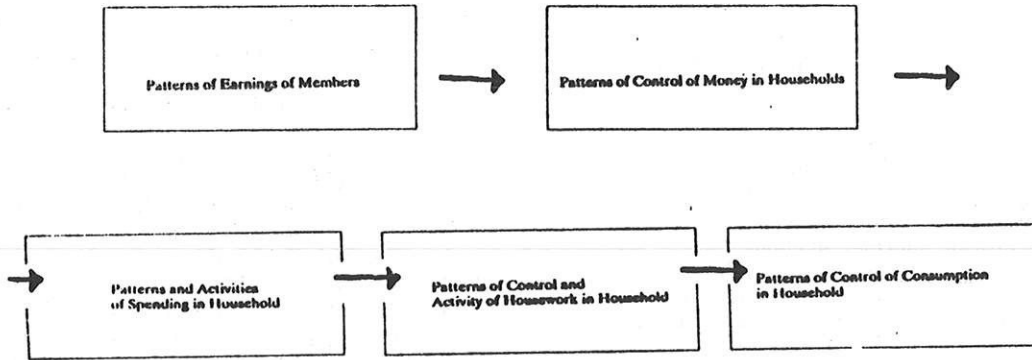
Along with structural measures, living standards can also be examined as a process. (See Figure 1). The process starts with household members connection to the extra-household economy and includes their hours of paid employment and the income that they obtain. (Income includes earnings and income obtained from other sources such as investments). The process then moves into the household and centers on patterns of control. As household economy shows that control over spending is significantly related to who earns how much of the families' income (Pahl, 1989). Once the money is spent and goods are obtained, these goods must be turned into consumable commodities via hours of housework. Thus, food must be cooked, pots must be washed, sheets must be laundered, washing machines must be kept repaired, and so forth. The process ends with actual consumption of the transformed or "final goods" by family members.

Following in the footsteps of other researchers, it is my hypothesis that these roles are deeply gendered, with husbands and wives earning unequal amounts of income, doing different and unequal amounts of work, consuming different and unequal resources and having unequal control over the process. No data set, however, provides us with information on enough of the process to test this hypothesis and to make systematic comparison of the living standards of a nationally-representative sample of husbands and wives. What is currently available on a national basis are either intra-family income comparisons or inter-family expenditure comparisons.

<sup>1</sup>Deputy Director for Research and Adjunct Assistant Professor.

FIGURE 1

HOW DIFFERENTIAL LIVING STANDARDS ARE PRODUCED IN HOUSEHOLD



AVAILABLE DATA

The U.S. Department of Labor's Current Population Survey (CPS) regularly collects and publishes information on the earnings of husbands and wives within families. Table 1 presents the results of a recent study by the Institute for Women's Policy Research (IWPR) in which we used the 1988 CPS to provide information on the 12 largest prototypical family types in order to determine hypothetical child support payments. The Table shows wife to husband earning ratios in married couple dual earner families, and it shows the earnings of female householders compared to the imputed income of the non-custodial fathers of their children. Among dual-earner wives and husbands the earnings ratio ranged from a high of 58.8 percent in couples in which both husband and wife are managerial or professional workers to a low of 36.5 percent in couples in which the husband is a production, craft, or repair worker and the wife is a technical, sales, and administrative worker. The income level earned by wives was somewhere between the 1988 poverty level for a family of four (\$11,600) and a lower-level living standard for a family of four (\$13,100), with the one exception of the wives who are managerial and professional workers. Among the female-headed households, only those employed as technical, sales and administrative workers (the most common type) earn slightly more than the lower-level living standard. What is equally important to note from this Table is the extremely small family income contribution of non-custodial fathers.

In an additional IWPR study (currently in process) which investigates the relation between low-wage work and family poverty using data from the U.S. Bureau of the Census' Survey of Income and Program Participation (SIPP), we found that more than four out of ten working wives in dual-earner families with children earn poverty-level wages or below. Even assuming that these women and their children share the living standards of higher-earning males, these households can be viewed as one husband away from poverty. The living

standards of these women and children would plummet upon the death of the principal wage earner or upon divorce or desertion. All of us doing research on family well being are accustomed to statistics that show the poverty-level living standards of female headed families--even those who are employed--but we assume in our analyses that married women share equally the living standards of their husbands. But do they? We really do not know.

A second example of regularly collected, nationally-representative data vital to the measurement of living standards is the U.S. Department of Labor's Consumer Expenditure Survey (CES). Although the CES is designed to provide information on inter-family differences rather than information on the expenditures of individual household members, it does allow us to make some inferences about the living standards of husbands and wives in different types of households. A recent study by Jacobs et al. (1989) used the CES to compare expenditure patterns in families with and without wives in the paid labor force. Jacobs and her colleagues found that families with newly-employed wives spent more on work-related and time-saving items than families in which the wife did not go to work. These findings would lead us to assume a simple relationship between increases in wives' income and increases in their consumption, but findings on a control group of families with wives not in the paid labor force cast doubt on this simple relationship. The control group had bigger spending increases on women's apparel and food away from home than did the experimental group. Why is this? In the absence of systematic data, we can only speculate.

FAMILISM: SEXISM IN RESEARCH

Studies of family living standards using major data sets must, despite their intention, ignore intra-household production, distribution and consumption

TABLE 1

DESCRIPTION OF SOCIO-ECONOMIC CHARACTERISTICS LARGEST FAMILY TYPES FOR DETERMINATION OF CHILD SUPPORT

Rank	Family Type by Occupation	N + % Total Families in General Type (a)	Annual Income in 1987 Dollars (b)	Men's Earnings Ratio W/H x100	Women's Earnings Ratio W/H x100	# of Children	Homeowner or Renter
<b>Married Couples</b>							
1	Husband (Manag. and Profess.); Wife (Manag. and Profess.)	2,028,694 6.5%	\$ 81,950 (c)	\$ 51,062 (c) Ratio = 58.8	\$ 30,024 (c)	1	Homeowner
2	Husband (Manag. and Profess.); Wife (Housekeeping)	2,009,780 6.5%	\$ 45,015 (d)	\$ 42,751 (d) Ratio = NA	0	2	Homeowner
3	Husband (Manag. and Profess.); Wife (Tech, Sales, Admin.)	1,724,924 5.6%	\$ 49,432 (e)	\$ 34,134 (e) Ratio = 37.7	\$ 12,881 (e)	1	Homeowner
4	Husband (Prod., Craft and Repair); Wife (Housekeeping)	1,687,262 5.4%	\$ 25,156 (f)	\$ 24,162 (f) Ratio = NA	0	4	Homeowner
6	Husband (Prod., Craft and Repair); Wife (Tech, Sales, Admin.)	1,547,181 5.0%	\$ 35,701 (g)	\$ 25,090 (g) Ratio = 36.5	\$ 9,170 (g)	2	Homeowner
7	Husband (Oper, Fab. and Laborer); Wife (Housekeeping)	1,481,367 4.8%	\$ 15,336 (h)	\$ 14,154 (h) Ratio = NA	0	2	Renter
8	Husband (Tech, Sales, and Admin.); Wife (Tech, Sales and Admin.)	1,465,986 4.7%	\$ 40,958 (e)	\$ 25,316 (e) Ratio = 51.5	\$ 13,029 (e)	1	Homeowner
9	Husband (Oper., Fab., and Laborer); Wife (Tech, Sales, and Admin.)	1,331,869 4.3%	\$ 33,574 (g)	\$ 21,653 (g) Ratio = 50.3	\$ 10,884 (g)	2	Homeowner
10	Husband (Tech, Sales and Admin.); Wife (Housekeeping)	1,271,342 4.1%	\$ 35,987 (i)	\$ 34,997 (i) Ratio = NA	0	3	Homeowner
<b>Female-Headed Families (i)</b>							
5	Head (Tech, Sales, and Admin.)	1,631,277 5.3%	\$ 15,198 (j)	(\$ 29,355) (k) Ratio = 53.4	\$ 14,269 (j)	1	Renter
11	Head (Service)	1,053,249 3.4%	\$ 7,756 (l)	(\$ 23,245) (m) Ratio = 29.0	\$ 6,747 (l)	2	Renter
12	Head (Not in Labor Force or Going to School or Public Assistance)	937,858 3.0%	\$ 4,390 (n)	(\$ 8,868) (o) Ratio = NA	\$ 4,390	2	Renter

NA = Not Applicable  
Source: Institute for Women's Policy Research analysis based on special tabulations from the March 1988 Current Population Survey.

- a Type is determined by occupational studies of husband and wife in the case of married couple types or by occupational studies of female head in this type of family. Totals include all families in the specific type regardless of income, number of children or homeowner/renter status.
- b Earnings included earnings plus income from all other sources such as prepoerty income, investment income, social security
- c Average family income is for 3rd quartile for this type of couple with one child and both husbands' and wives' earning is at the 3rd quartile with one child.
- d Average income is the median for the category with two children and men's earnings are at the median for husbands with two children.
- e Average income is the median for the category with one child and men's and women's earnings are the median for the husband and the wife with one child.
- f Average income is the median for the category with four children and men's earnings are at the median for husbands' earnings with four children.
- g Average income is the median for this type of couple with two children and men's and women's earnings are the median for the husband and the wife with two children.
- h Average income is the median income for renter households who comprise more than 41% of this type and men's earnings are at the median for renter households.
- i Average income is the median for the category with three children and men's earnings are at the median for husbands with three children.
- j For female headed households earnings for men (shown in brackets) indicate the earnings of hypothetical former husbands or children's fathers from whom these 2-headed households might receive child support. We assume these men are not living in the household.
- k Average income is the median for divorced women in this category (the largest type). Fifty five percent of this general category are renters.
- l Average men's earning is based on the median earning of a married male managerial and professional worker (the type of husband most likely to have been married to a woman employed as a technical, sales, or administrative worker), less 14 percent (based on Garfinkle and Ollerich's (1989) estimates that divorced, non-custodial male parents earn 14 percent less than married men).
- m Average is median income for this category with two children.
- n Average earning is based on the assumption that the former husband is employed as a production, craft, or repair worker (with a former wife who was a housekeeper who has two children) less 14% decrease in earnings for non-custodial male parents (based on Garfinkle and Ollerich's (1989) estimates). We assume that the former house-keeping wife had to go to work after divorce and gained employment as a service worker.
- o Average income is based on the transfer income received by this type of family with two children. The largest category of female heads in this type are single (never married).
- p This is the average income in 1987 dollars for a never married male non-custodial parent according to Garfinkle and Ollerich (1989).
- q Women's earnings in this case is income from AFDC.

Citation: "Noncustodial Fathers' Ability to Pay Child Support." Irwin Garfinkle and Donald Ollerich. *Demography* (forthcoming, 1989).

patterns. Eichler (1988) labels this omission as "familism," and she categorizes it as one type of sexism in research methods. She defines it as treating the family (and the husband and wife within it) as the smallest unit of analysis, in which family members are assumed to share uniform goals, experiences, equal access to resources and to benefit equally from changes in resources (1988:8). Some of the most widely used indicators of living standards such as median family income, family expenditures, and per capita income are guilty of this form of methodological sexism.

In contrast to the methodological sexism of mainstream economists who view the family as a utility-maximizing unit and marriage as a situation in which neither the husband nor the wife can be worse off (see, for example, Becker, 1981), feminist scholars in the United States have examined the family as the locus of hierarchical gender roles as well as an altruistic pooling unit. The work of sociologist Jessie Bernard (1982) and economist Heidi Hartmann (1981) are milestone contributions to this kind of analysis.

### SMALL SCALE STUDIES

Small scale studies that disaggregate the family down to its individual members do find significant differences in intra-family living standards and that individual members' living standards change at uneven rates (for example, when the wife gets a paying job). Some of the most interesting work currently is being done in the United Kingdom (see, for example, Brannen and Wilson, 1987).

In one such study Pahl (1989) uses a small-scale sample survey to examine, first, the relationship between spouses' economic position outside the household and his or her power within it and, second, the relationship between economic power within the household and spending on food and daily living standards. Pahl finds that there is a significant relationship between the proportion of family income earned by the wife and the amount of her control over household spending. She also finds that the amount spent on housekeeping is related to three factors: the level of household income; the source of income; and the control of income within households. She finds that, although husbands contribute more money absolutely to the household, wives contribute a higher percentage of their income. Pahl concludes that increasing women's wages is likely to produce bigger increases in family living standards than giving the same sum to fathers. I would suggest that this finding has critical implications for the well-being of women and children in the United States and it deserves replication on a national basis.

### THE IMPORTANCE OF HOUSEWORK

Although Pahl's research is pathbreaking, it leaves the analysis of living standards at the point of expenditures and omits the crucial role of housework in the process of producing living standards. Unlike expenditure data which, although collected for family units as a whole, is at least collected on a national basis, the U.S. Bureau

of the Census does not count hours of unpaid housework. According to Folbre and Abel (1988), in 1870 the Bureau made explicit that enumerators were not to count the work of unpaid houseworkers as gainful employment. Data on homemakers were collected in the 1930 Census but, for a variety of reasons, were not continued in later censuses (Conk, 1981). As a result of these decisions millions of women have been transformed from laborers and producers to dependents. The U.S. Bureau of the Census still does not count women's non-market activities and the impact of this unpaid work on living standards.

Fortunately, limited information on hours of housework is collected on an annual basis by the University of Michigan's nationally-representative Panel Study on Income Dynamics (PSID). My own research (Spalter-Roth, 1984), which compared husbands' and wives' living standards in dual-earner household over the decade of the 1970s, took advantage of the availability of PSID housework data to develop an indicator that I called the "real pay" of working husbands and working wives. The measure divides the annual earnings of husbands or the annual earnings of wives by their respective hours of wage work and housework, as follows:

$$\text{Real Pay} = \frac{\text{Annual Labor Income}}{\text{Annual Hours of Wage Work} + \text{Housework}}$$

This indicator, I argue, is more reflective of the activities required to produce living standards than are more traditional income or earnings measures because it includes the invisible labor necessary to transform wages into expenditures and into consumable goods. When hours of housework are included in a living standards measure, the gap between husbands and wives decreases. I found that, on the average, the ratio of wives to husbands "real pay" was 31 cents to each dollar in 1968. By 1979, their real pay was 45 cents to each dollar. This increase in wives' living standards, relative to their husbands, was a result of their spending more hours at paid work, less hours at housework and of getting their husbands to do slightly more hours of housework. This research is currently being updated to investigate changes in husbands' and wives' relative living standards during the first half of the 1980s. Although the "real pay" indicator does allow us to compare husbands and wives and it does include the necessary work of turning income into consumable goods, it does not include differences in expenditure and consumption patterns between husbands and wives. This work remains to be done.

### CONCLUSIONS

To do this work I am calling for two major changes in national data collection efforts (especially federal efforts) in order to produce more valid measurements of living standards. The first major change is to disaggregate the family, especially husbands and wives, in order to investigate the intra-household processes and the relative levels of living of family members. The second major change is to include information about

hours of housework in surveys currently collecting income and expenditure data. The availability of this data will allow us to answer general questions such as: To what extent are families or households the locus of inequalities and/or altruism? Who is better off and who is worse off within households? How relative living standards change over time as a result of changing social, economic, and political circumstances? The availability of these data would also allow us to answer specific questions such as: Does increasing husbands' versus wives' earnings will improve children's living standards? Relatively speaking, to what extent do married father and/or mothers support each other or their children (in terms of both money and housework)?

Recent studies in Africa, Asia and Latin America (Dwyer and Bruce, cited in Pahl, 1989) have suggested that the proportion of household income spent on food and daily living expenses varies according to the extent to which women have control of household finances. Given concerns in about the growing poverty of women and children, there is a critical need for similar data generation in the United States. Sometimes more valid measurement can result in a greater public consciousness that may create a demand for an improvement in the living standards of those whose levels of living most need improving. Disaggregating the family and including hours of housework are two important steps in building this consciousness.

#### REFERENCES

- Batiwala, Srilatha (1985) "Women in Poverty: The Energy, Health, and Nutrition Syndrome," pp. 38-49 in Devaki Jain and Nirmala Banerjee (eds.) Tyranny of the Household: Investigative Essays on Women's Work. Shakti Books.
- Becker, Gary S. (1981). A Treatise on the Family. Harvard University Press.
- Bernard, Jessie (1972-82). The Future of Marriage. Yale University Press.
- Brannen, Julia and Gail Wilson (1987). Give and Take in Families. Allen and Unwin.
- Conk, Margo A. (1981). "Accuracy, Efficiency and Bias: The Interpretation of Women's Work in the United States Census Statistics of Occupation." Historical Methods (14):65-72.
- Eichler, Margit (1988). Nonsexist Research Methods: A Practical Guide. Allen and Unwin.
- Folbre, Nancy and Marjorie Abel (1988). "Women's Work and Women's Households: Gender Bias in the U.S. Census." Paper presented at a session on Feminist Perspectives in Demography and the Annual Meetings of the Population Association of America, New Orleans, Louisiana, April 21-21, 1988. For additional information contact Folbre at the Department of Economics, University of Massachusetts, Amherst, Massachusetts.
- Hartmann, Heidi I. (1981). "The Family as the Locus of Gender, Class and Political Struggle: The Example of Housework." Signs: Journal of Women in Culture and Society. 6 (No.3; Spring); 366-394.
- Jain, Devaki and Nirmala Banerjee (1985). "Introduction" in Devaki Jain and Nirmala Banerjee (eds.) Tyranny of the Household: Investigative Essays on Women's Work. Shakti Books.
- Pahl, Jan (1989). Money and Marriage. MacMillan Press, LTD.
- Spalter-Roth, Roberta M. (1984). "A Comparison of the Living Standards between Husbands and Wives in Dual-Earner Couples, 1968-1979: A Feminist Analysis." Ph.D. dissertation, The American University, Washington, D.C.



# COMPARISON OF (PUBLIC) FAMILY INCOME SUPPORT SYSTEMS FOR FAMILIES WITH MINOR CHILDREN IN GREAT BRITAIN, WEST GERMANY, AND THE UNITED STATES

Ingo Fischer, University of Frankfurt (1)

## INTRODUCTION

Industrialized countries belonging to the Western World have established different schemes of family promotion through income support. The topic of this paper is a comparison of public family income support systems in the United States, Great Britain, and West Germany. Within the field of public income support it will examine the major programs providing direct cash benefits as well as income tax reliefs.

Limitations of this paper may be indicated by figuring the four broad areas of welfare: tax welfare, social welfare, occupational welfare, private welfare.

Occupational welfare, provided by employers through benefits, as well as private welfare, provided by private organizations and private persons, may contribute significantly to the welfare of families. The same is true for in-kind benefits.

If the excluded benefits and welfare areas differ drastically between the countries under review the picture developed by this paper will be distorted.

Other important facts of intermediate quality with regard to our analysis, which influence families welfare and income situation, are labor market situation and factor incomes, payroll taxes, and family sizes. These factors and their impact on families well-being have to be evaluated by an empirical study (Ellwood, 1988; Family Policy Studies Centre, 1989; Brown, 1987).

Last but not least, national family policy objectives are different. They may substantially influence the program design. The paper neither compares national policy goals nor does it evaluate each system according to its own or other goals. That is why no final judgement can be drawn.

## FAMILY AND PUBLIC INCOME SUPPORT - DEFINITION ASPECTS

The term 'family' does not comprise a clear-cut concept as to what it means. For the purpose of our discussion we define a family as an adult person or a (married/unmarried) couple each living with at least one minor child in a common dwelling and with no other adults present (two-generation unit). Since a relationship by blood, marriage, or adoption is no precondition of our definition it also comprises cohabiting couples with minor children.

To define what is meant by public income support the connection of two separated public support systems has to be considered. Some programs provide direct benefits which are cashed out to the recipient. Income tax reliefs lead to a reduced tax liability by the tax payer compared to a situation without tax reliefs. In respect of disposable income for families there is no difference whether their purchasing power will be increased by transferring direct cash benefits to them or by paying less taxes if a positive tax liability exists.

## DISTRIBUTIONAL ASPECTS OF CASH BENEFIT TYPES AND TAX RELIEFS

The provision of direct cash benefits is based on three different basic assessment principles. Therefore three types of cash benefits emerge: social insurance benefits, universal benefits, and welfare benefits.

Social insurance benefits require past contributions paid for a specified period before eligibility can be established. Due to historical reasons contributions are usually linked to an employment. The basic feature of social insurance benefits is that their rates are more or less strongly related to former earnings or contributions. They are intended to replace a wage or salary but always at a level below the former earnings. It depends on the level of former earnings and the rules figu-

(1) Diplom-Volkswirt, research associate

ring the cash benefits whether family needs or other needs are considered or not.

In contrast to social insurance benefits, a basic feature of universal benefits is their availability to persons or groups of persons only due to some simple eligibility requirements like citizenship in society and incidence of children. Actual income or other criteria play only minor or no roles. They are mostly paid at a low flat rate. Thus their absolute value is equal to all recipients but their relative value decreases for higher incomes.

In common with universal benefits, welfare benefits are usually available for the total population. But they come along with an income or means test which restricts the benefits to needy persons. Welfare benefits usually close the gap between assessed needs and reckonable resources. Consequently their absolute and relative value decreases when other resources increase.

Income tax reliefs, on the other hand, may be called hidden, concealed, or implicit benefits. To detect tax reliefs two structural components have to be separated: a normal tax structure (benchmark) and departures from it (reliefs). The simplest way to define a benchmark is to choose the regulations for a single tax unit as reference. In general, a reference situation has to set assumptions about the tax base, the tax unit, the tax rate, and the assessment period (2).

Assuming a comprehensive tax base and a progressive tax schedule four dominant categories of tax reliefs can be identified: tax exemptions, tax allowances, tax credits, and special rate reliefs. We omit aspects of different accounting periods or the realisation versus accruals. It should be noted that theoretically each type may be designed to result in the same income effects (Peffekoven, 1972).

Tax exemptions exclude incomes or sources of income from the tax base and, hence, can be judged as an equivalent to a direct benefit to the extent of the non-paid tax. The absolute benefit is greater for persons with higher marginal tax rates. The relative benefit depends on the rate structure.

Tax allowances are deductions from the tax base and, therefore, decrease the taxable income. Non-decreasing allowances are of increasing absolute value for higher income groups. The relative value depends on the actual form - e.g. fixed, proportional to income, or proportional up to a ceiling - and may result in progressive, regressive, or proportional relative benefits.

Tax credits are deductions from the assessed tax amount. They may be wastable or non-wastable. Non-wastable credits turn into a direct cash benefit if the credit amount is bigger than the assessed tax, or the tax payable is reduced by the full credit amount. In contrast, wastable tax credits may only reduce the tax payable to zero. Tax payers with low or no tax liability may exhaust the wastable credit only partially or not at all. If the credit is a fixed amount its relative importance decreases when taxable income rises.

Special rate reliefs are reduced tax rates for all or certain levels of taxable income compared to the reference schedule. If reliefs are proportional, e.g. by a fixed percentage point reduction at each rate level, the absolute benefits increase when taxable income rises.

The combined income effect of several tax reliefs may be less than the sum of single effects.

#### (PUBLIC) FAMILY INCOME SUPPORT SYSTEMS UNDER REVIEW

##### Direct cash benefits

To analyze and compare the core programs of public family income support the approach is conceptualized by six functional areas. Table 1 presents the results for these areas for the years 1980-85. The basic type of program (UB = universal benefit; SI = social insurance benefit; IT/MT = income-/means-tested benefit) is indicated by the abbreviations in parenthesis. The following paragraphs discuss some general aspects of the detected programs and will mention relevant elements of programs not shown in Table 1.

(2) See OECD (1984): 18.

TABLE 1. Core Cash Benefits for Families and Family Promoting Elements of Other Cash Benefit Programs in Great Britain, West Germany, and the United States

	Great Britain	West Germany	USA
A. Universal benefits for child.	Child Benefit (UB), One-parent Benefit (UB)	Child Benefit (UB)	
B. Benefits to substitute child support		Advance Maintenance Payments (UB)	
C. Benefits in case of birth	Maternity Pay, Maternity Allowance (SI)	Maternity Pay (SI) (since '86: Child-rearing Benefit, UB/IT)	
D. Benefits for survivors	NIF: Widowed Mother's Allowance (SI)	Stat. Retirement Ins.: Widows/Widowers Pension, Orphans Pension (SI)	OASDI: Widows/Widowers/Orphans Insurance Benefit (SI)
E. Family favoring elements of other programs	Housing Benefit (IT), Increases for dependents of NIF beneficiaries (SI)	Housing Benefit (IT), Unemployment Benefits (SI/MT)	Spouses' and child's benefit of OASDI beneficiaries (SI)
F. Benefits to provide a minimum income	Family Income Supplement (IT) Supplementary Benefits (MT)	Social Assistance (MT)	AFDC (MT), EITC (income tax relief) (Food Stamps)

UB = universal benefit; SI = social insurance benefit;  
IT/MT = income-/means-tested benefit

Universal benefits in case of children.

The most striking finding among this group of benefits is the non-existence of a direct cash benefit for children in the United States. Both European countries provide a flat-rate Child Benefit starting with the first child. In Germany the rate increases for children of higher order of birth, whereas in Great Britain it remains constant for all children. Additionally, the British system pays a monthly lump-sum increase to single parents (One-parent Benefit). Furthermore, both European statutory retirement systems comprise regulations which take into account child-rearing periods.

The German as well as the British benefit are not sufficient to meet the needs of a child assumed by the national minimum income systems, except one situation. A

single parent with one child under 6 in Great Britain gets about the same it would get by Supplementary Benefits. Although the rates of German Child Benefit increase by order of birth a gap always remains between assessed needs according to Social Assistance and the Child Benefit rates paid, even so the gap decreases.

Benefits to substitute child support.

It is common that family law stipulates the duty of a provider to support family members independent of a marriage breakup. If maintenance liabilities are not fulfilled by the liable person due to economic inability, unwillingness, or other reasons public transfers may step in.

All existing benefit programs under review assume that within a (two-parent) family the income is at least shared in such a

way that nobody is in need. Therefore no corresponding program meeting such contingencies can be found.

The only public program found which explicitly takes up the problem of none or insufficient maintenance payments is the German Advance Maintenance Payment scheme. In case of a one-parent family it provides for insufficient or non-existing child support. Maintenance for a child-rearing parent is not recognized as a need to be met. Furthermore, the program has three other restrictions. First, the upper age limit of children is set to 6 years. Second, the duration of payment may be at maximum 3 years. And third, the level of benefits is insufficient compared to the Social Assistance standard.

Due to the remaining risk Social Assistance, the German minimum income program, has to cover additional needs for needy persons. Since neither a child support substituting program exists in Great Britain nor in the U.S. their national minimum income programs have to take over the responsibility for insufficient or non-existing child support and maintenance payments if other income is not available.

Each national retirement insurance system comprises benefits for divorced widows/widowers raising a child of a deceased contributor. But the eligibility requirements and benefit levels are very different.

#### Benefits in case of birth.

Besides small grants for all child-bearing mothers in Great Britain and Germany to cover the basic costs of a confinement, in Great Britain and West Germany female working employees have the right to paid leave for a certain period before and after birth.

The British and German benefits substitute earnings and may be categorized as a two-layer payment. The basic layer consists of a social insurance-based benefit provided by the relevant program. The second layer is an addition related to former earnings paid by the employer. The British employer can reclaim a rebate of the Maternity Pay from the Department of Employment. In general, the duration of payments is longer in Germany than in Great Britain. Since the benefits of the second layer end sooner than those of the first layer the recipients fall back on the lower benefits. In Germany the receipt of Maternity

Pay comprises a cost-free coverage by the statutory insurances for retirement, health, and unemployment.

In 1986 German government introduced a universal transfer named Child-rearing Benefit, which established two important improvements. First, not only mothers but even fathers are eligible if they meet the requirements. Second, the benefit is independent of work status. An employed parent entitled to Maternity Pay (during maternity leave) gets the higher of both benefits. Child-rearing Benefit is paid for up to 10 months (since 1988: 12 months) but it is income-tested starting at the seventh month.

#### Benefits for survivors.

All countries under review protect the survivors of deceased contributors to statutory retirement insurance. The German Statutory Retirement Insurance grants benefits to widows/widowers and orphans. The widow/widower must be over 45 years of age or raising a child under 18. Similar basic regulations can be found for OASDI but with a higher age limit for widows/widowers who do not raise a child.

In contrast, the British NIF always dealt with widows benefits only. For the first 6 months after death of a contributor almost all widows get a transitional benefit independent of an up-bringing situation. Afterwards widows who are under 40 years of age may claim a benefit if they raise a child under 16. Children of the deceased are considered for an increase to the widows benefit. No orphans pensions are available.

#### Family promoting elements of other programs.

Other programs not explicitly directed towards family income support take into account different needs of families. Housing benefits are a prominent example. In Germany and Great Britain Housing Benefits are graduated by the family size but independent of the status of family members.

The British NIF, as noted above, pays family increases in addition to contributors benefits to almost all benefit types. German Unemployment Benefits (Unemployment Insurance Benefit, Unemployment Assistance) are reduced if the beneficiary is not the provider for a child. For other German programs either no recognition of

family background exists at all or it is done indirectly through relating benefit rates to net wages which itselfs depend on income tax payments.

In the United States OASDI benefits in case of retirement or disability are explicitly added up by 50 % for spouses and each child under 18 subject to a family maximum. Unemployment Insurances provide family supplements in some States. No other important benefits promote families in the U.S..

#### Benefits to provide for a minimum income.

Food Stamps, even though not a cash benefit program, as well as AFDC are the most important programs for the U.S. in this group. Due to different regulations in the States it is not guaranteed that AFDC benefit payments cover the difference between a family's need standard and it's assessed resources. Furthermore, the eligibility is restricted to lone parents or families with an unemployed father. Both restrictions are important defects of this program.

Great Britain has also a welfare program (Family Income Supplement) which is targeted on a special group namely families with a working head and insufficient earnings. This program shall be the complement to Supplementary Benefits, because they are not available for full-time working people. Nevertheless, both programs are different. Family Income Supplement is income-tested and grants only 50 % of the difference between a family's needs standard and the short-falling income but only up to certain amounts. In contrast, German Social Assistance basically covers the whole population independent of work status. It is means-tested and pays the difference between a family's needs standard and it's disposable income if there are no assets.

#### Tax Reliefs

Each national income tax system under review uses joint taxation for earnings of married couples with the option of individual taxation. In Germany and the United States income-splitting is applied for spouses. The tax schedule consists of progressive rates in all three countries (3).

(3) See OECD (1986a): 17-35.

Table 2 shows the detected tax reliefs. Three findings are worthwhile to be pointed out. First, tax exemptions can be found for almost all benefits in the European countries. Non-taxation has different impacts on different income levels. In case of means-tested benefits it is likely that these recipients are not liable to income tax due to basic personal allowances. But universal benefits and social insurance benefits, which are at least partially exempted, lead to higher tax reductions for higher income groups.

Second, tax credits as an instrument to reduce tax liability for families can only be found in the United States. Both U.S. tax credits are earnings-related favoring lower income groups. Finally, the overview shows that Great Britain uses the tax route to support families the least. The tax allowance for incapacitated spouses or single parent families is the only core tax relief besides tax exemptions.

#### THE INTERACTION OF FAMILY INCOME SUPPORT SYSTEMS

To study the interaction of different elements of family income support and earnings, income calculations of model families based on realistic assumptions are a useful tool to procede.

An examination undertaken for Great Britain and Germany can be presented which chose 5 different family types and a single earner as examples to test each system (Table 3). Two income definitions considering the benefits available and the needs of a family were calculated assuming gross earnings of the head of family at five levels compared each to the corresponding income of the single earner. Since we concentrate on relative income positions no statement can be made about the absolute income levels or poverty situations.

(Modified) disposable incomes were defined as gross earnings of an average production work wage, less income taxes (considering only standard tax reliefs) and payroll taxes, plus all available benefits minus housing costs (rents according to representative low-cost housing accommodations including British local authority domestic taxes). (Modified) disposable income was weighed by an equivalence scale (4) resulting in (modified) equivalent income.

(4) See footnote (b) of Table 3.

According to (modified) disposable incomes all families in both countries are better off than the single earner at each gross earnings level. A typical pattern can be found for German families. Starting at 60% of average gross earnings, rising factor incomes go along with decreasing relative

positions of (modified) disposable incomes up to a turning point. Then the relative standing of the families improve which is due to the income-splitting for income tax purposes for married couples or the single-parent allowance. The receipt of

TABLE 2. Core Income Tax Reliefs for Families with Minor Children in Great Britain, West Germany, and the United States in 1980-85

Type of relief	USA	Great Britain	Germany
Tax exemptions	AFDC, child support payments	Child Benefit, One-parent Benefit, Family Income Supplement, Maternity Allowance (Housing Benefit, Supplementary Benefits)	Child Benefit, Child-rearing Benefit (since '86), Maternity Pay, Unemployment Benefit (a), (Housing Benefit, Social Assistance), maintenance payments to (ex-) spouse (b)
Tax allowances			
- lump-sum	for each child	- spouse incapacitated to help with bringing up children, or single person with child under 16 (or child in full-time education/training)	- for each child - single person with dependent child(ren) - expenses for education of each child - expenses for house-keeper incurred due to sick or incapacitated child
- partially deductible	(two-earner married couple, upper limit)		- extraordinary financial burdens due to legal, moral, or factual reasons (->lower limits of burdens expected to bear by tax payers with children)
Tax credits			
- non-refundable	child care credit for working parents		
- refundable	Earned Income Tax Credit		
Tax tariff			
- zero-rated first bracket	(higher zero-rated bracket for married couples filing jointly independent of childr.)		
- special rates	(lower rates for heads of households and married couples filing jointly)		(income splitting of joint income by married couples independent of children)

Note: Reliefs in brackets are not restricted to families with children.

(a) In case of other taxable income, Unemployment Benefit is included to assess the marginal tax rate.

(b) Up to a maximum; liable to income tax for recipient

Sources: Harvey (1984)

OECD (1986a)

Prentice-Hall (1987)

Wichtige Steuergesetze (1986)

TABLE 3. (Modified) disposable income (a) and (modified) equivalent income (b) of selected model families with a full-time earner compared to a single full-time earner at different levels of gross earnings in Great Britain and West Germany in April 1984

Income definition Family type Country	Gross earnings as per cent of average gross earnings (e)			
	60 %	85 %	100 %	150 %
<u>(Modified) disposable income</u>				
Single earner				
GB	1.00	1.00	1.00	1.00
D	1.00	1.00	1.00	1.00
Married couple				
GB	1.30	1.10	1.09	1.06
D	1.08	1.03	1.06	1.20
Married couple/2 children (c)				
GB	1.79	1.29	1.21	1.13
D	1.51	1.16	1.14	1.23
Married couple/3 children (d)				
GB	2.12	1.42	1.29	1.19
D	1.99	1.43	1.33	1.34
Lone parent with 2 children (c)				
GB	1.85	1.32	1.26	1.17
D	1.30	1.08	1.09	1.10
<u>(Modified) equivalent income</u>				
Single earner				
GB	1.00	1.00	1.00	1.00
D	1.00	1.00	1.00	1.00
Married couple				
GB	0.77	0.65	0.64	0.62
D	0.63	0.61	0.62	0.70
Married couple/2 children (c)				
GB	0.66	0.48	0.45	0.42
D	0.56	0.43	0.42	0.45
Married couple/3 children (d)				
GB	0.62	0.42	0.38	0.35
D	0.59	0.42	0.39	0.39
Lone parent with 2 children				
GB	0.92	0.66	0.63	0.58
D	0.65	0.54	0.55	0.55

(a) Gross earnings less income taxes and payroll taxes plus available cash benefits minus housing costs.

(b) (Modified) disposable income weighed by an equivalence factor. Weights are 1.0 for head of family, 0.7 for a spouse, and 0.5 for each child.

(c) Children aged 2 and 6 years.

(d) Children aged 8, 12, and 15 years.

(e) See OECD (1986b): 13-7, 74-5 and 102-3.

Source: Parker/Fischer (1987) and author's calculations

Social Assistance transfers and Housing Benefits cause the relatively good position of families with children at the 60% gross earnings level (and 85% level for the 3-children family).

The relative disposable incomes of British families (including childless couples)

fall when gross earnings increase. All British model families with children pay the same absolute tax amount corresponding to the same gross earnings level. Additionally, all families with children at the 60% level receive FIS which is the only means-tested benefit available for them. The families with children receive Child Benefits. British family income

support elements lead to significantly better relative positions of families at the 60 % level than in Germany, especially for the British lone parent. Her/his relative position is better due to the One-parent Benefit and the FIS regulations which promote lone parents in Great Britain more than comparable instruments of German programs. At levels above average gross earnings the relative standing of British two-parent families is worse than for their German counterparts except for the lone parent due to the One-parent Benefit and FIS regulations.

(Modified) equivalent incomes take into account the needs structure of different family types according to the chosen equivalence scale. It is most striking that all families at all income levels are worse off than the single earner in both countries. Among the families with children lone parents hold the best position which is the result of an empirically less significant assumption - full-time earnings of the parent.

Although no comparable figures are available for the U.S. we suppose at each income level a worse relative position of each family type than for their European counterparts. Since there are no universal benefits and only AFDC for lone parents no benefits can especially promote complete low-income families. According to other tax reliefs of the Federal Income Tax we expect, similar to the impact of the German income tax reliefs, high income families to improve their position. This reasoning is supported by model family calculations made by Kahn/Kammerman for an earlier year (5).

Calculations based on comparable empirical data by Smeeding/Torrey/Rein (1988) elaborated the potential power of the poverty gap reduction by actually paid transfers. Though their figures consider all public transfers for families they are a good approximation of the three basic types of cash benefits for families we separated in Chapter III.

The results shown in Table 4 were calculated using the Luxembourg Income Study data set which provides representative micro data for the years 1979 (Great Britain and the U.S.) or 1981 (West Germany) (6). The poverty gap is the difference between gross income of pretax/pretransfer poor families with minor children, excluding public transfers, and families (converted) U.S. poverty line (using purchasing power parities for Great Britain and West Germany).

It is remarkable that only British and German two-parent families received total public transfers which would have eliminated their pretax/pretransfer poverty gap. The average gaps for both U.S. family types were dramatic whereas in the European countries only single-parent families did on average not receive sufficient benefits to bring them up.

According to the structure of transfers received social insurance-based transfers played the dominant role for both family types in Germany. In Great Britain means-tested benefits and social insurance-based transfers contributed in about equally to the poverty gap elimination of two-parent families. British single-parent families relied much more on means-tested benefits.

TABLE 4. The role of public transfers in reducing the poverty gap among families with children

Family type and country	Poverty gap reduction rate (a)	Percentage of total poverty gap reduction			Total
		Social insurance	Means-tested program	Child allowances	
(Two-parent) families with children					
Great Britain	1.17	38	38	24	100
West Germany	1.06	68	11	21	100
United States	0.65	29	71	--	100
Single-parent families					
Great Britain	0.90	15	63	22	100
West Germany	0.84	67	16	18	100
United States	0.58	7	93	--	100

(a) This rate is calculated by dividing total public transfers to the pretax/pretransfer poor by the total poverty gap. Source: Smeeding/Torrey/Rein (1988): 111

(5) See Kahn/Kammerman (1983): 16.

(6) See Smeeding/Torrey/Rein (1988): 91-99.



Universal benefits contributed to a slightly higher extend to poverty gap reduction of British families than of German families. The U.S. transfer system paid overwhelmingly means-tested benefits to pretax/pretransfer poor persons. Only for two-parent families social insurance-based transfers formed a significant income source.

#### CONCLUSIONS

Comparisons of tax reliefs and cash benefits for family income support show that it is difficult to generalise about the merits of each of these instruments. Conclusions depend unequivocally on the goals of the programs, the type of tax reliefs and cash benefits applied as well as further factors like income tax characteristics, earnings (levels), etc.. Nevertheless a number of specific conclusions can be drawn:

(A) Most forms of applied tax reliefs for families in the countries under review favor higher income groups and they are restricted to those with a positive tax liability.

(B) Only some cash benefits in Great Britain and West Germany are dedicated to support children independent of other factors like resources of parents or contributions paid to social insurance.

(C) The United States provide the least developed income support system. The European countries cover in about the same contingencies of families but with different effects as to earnings levels and family types.

#### REFERENCES

Brown, J. C. (1987). The Future of Family Income Support. London.

Ellwood, David T. (1988). Poor Support, Poverty in the American Family. New York.

Family Policy Studies Centre (1989). Lone Parent Families in the European Countries, Final Report prepared in the course of the Medium Term Community Program "Equal Opportunities for Women" of the European Communities. London.

Harvey, Eric L. (1984). Tolley's Income Tax 1984-85. Croydon.

Kahn, Alfred J./Kamerman, Sheila B. (1983). Income Transfers for Families with Children, An Eight-Country Study. Philadelphia.

OECD (1984). Tax Expenditures, A Review of the Issues and Country Practises. Paris.

OECD (1986a). Personal Income Tax Systems. Paris.

OECD (1986b), The Tax Benefit Position of Production Workers 1981-1985. Paris.

Parker, Hermione/Fischer, Ingo (1987). Family Incomes in Four Countries. Unpublished manuscript.

Pefferkoven, Rolf (1972). "Freibetrag oder Steuerkredit? Zu einem Problem der Einkommensteuerreform," Finanzarchiv, N.F. 30 (No. 3): 392-417.

Prentice-Hall (1987). Federal Tax Handbook. Paramus, N.J..

Smeeding, Timothy/Torrey, Barbara Boyle/Rein, Martin (1988). "Pattern of Income and Poverty: The Economic Status of Children and the Elderly in Eight Countries", Palmer, John L./Smeeding, Timothy/Torrey, Barbara Boyle (Eds.). The Vulnerable. Washington, D.C.: 89-119.

Wichtige Steuergesetze (1986). Bearbeitet von der NWB-Redaktion. Herne/Berlin.

## LIVING ARRANGEMENTS OF YOUNG ADULTS LIVING INDEPENDENTLY: EVIDENCE FROM THE LUXEMBOURG INCOME STUDY

Kathleen S. Short, U.S. Bureau of the Census and Thesia I. Garner, Bureau of Labor Statistics<sup>1</sup>

---

Age and household distributions affect income packaging and income packaging may affect the age distributions of households. Larger public transfers may make it possible for individuals with lower labor force activity rates, such as the very young and the very old, to set up their own households. If household formation is sensitive to changes in income and changes in income are sensitive to household formation, then the measurements of poverty and income distribution suffer from a bias due to this simultaneous relationship. This paper is the result of developmental research to study one side of the relationship. We conducted a logit analysis to identify the relationship between living alone among individuals in the 15-24 year age group and sources and levels of income. Data from the Luxembourg Income Study were analyzed to determine whether differences exist across countries. The results show that different types of income affected the propensity to live alone differently and that the relationships themselves differed among the countries under study.

---

### INTRODUCTION

One of the important applications of the Luxembourg Income Study (LIS) data base has been the comparison of poverty rates and distributions of income across nations. This is an important as well as highly intriguing issue. Unfortunately, these are not easy to measure, since it is difficult to standardize any national measures across countries for comparisons.

One difficulty is the difference in the age composition of the populations in the countries under comparison. Different age structures result in different household structures and people of different ages have different propensities to reside in "poor" households. A country with a large proportion of elderly living on small pensions would look poorer than a country with a large cohort of middle-age earners, even though elderly individuals in the second country had typically smaller pensions than those in the first.

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

... phenomenon may lead to the conclusion that programs to increase the incomes of needy groups are unsuccessful because the number of poor units has not declined or has even increased. ... moderate increases in the incomes of the poor will enable them to live apart from relatives and hence, will actually lead to increases in the number of people counted as poor. Their situation may be improving, in the sense that they have more income and are better able to afford the privacy and other commodities they desire, but the statistician engaged in the counting poor households may not detect this improvement at all.

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

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

We began our investigation with the belief that the age distribution of households affects income packaging, and that income packaging may affect the age distribution of households. This latter relationship implies, for example, that larger public transfers make it possible for individuals with lower labor force activity rates, such as the very young or the very old, to set up their own households. If household formation is sensitive to increases in income, then the measurements of poverty and income distribution may suffer from a bias due to this simultaneous relationship, if we do not control for the concomitant effect on household structures. We limited our analysis to one side of the relationship, identifying variables related to whether an individual lives alone or with others. The sample included families or households in which the head or reference person was in the 15-24 age group. Individuals in this age group were selected since the young are expected to be more sensitive to economic variables when deciding which living arrangements they will pursue. We focused on the following question: Of those young people living independently (not in their parental homes), how do incomes from various sources affect their decision to live alone? The sample did not include all persons in the 15-24 age group, only those living independently. A logit analysis of the living alone question was conducted using data from five countries (Canada, the Federal Republic of Germany, the United Kingdom, Australia, and the United States) included in the LIS data base to determine whether differences across countries exist. In the next section of this paper, background on the relationship between income and household formation is presented. The following sections include a description of the analysis, data, results, and conclusions.

---

<sup>1</sup>Economists. The views expressed are those of the authors and do not reflect the policies of the U.S. Bureau of the Census or the Bureau of Labor Statistics.

## BACKGROUND

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

Hedstrom and Ringen (1985) examined the standard of living of young and old families cross-nationally as determined by varying income transfer policies. Using LIS they examined the relative economic position of families of various ages in seven industrial nations around 1980. The countries they examined were Canada, Germany, Israel, Norway, Sweden, the United Kingdom, and the United States. Hedstrom and Ringen noted that the seven countries for which they conducted their analysis differed both in the availability of various forms of income and in family composition. They reported further that the age composition of a population is likely to affect the packaging of income in several different ways. "An increase in the proportion of elderly people, for example, will reduce the role of earnings, and by affecting the relative numbers of 'supporters' and 'supported', increase the size of the public redistributive system and the relative role of public transfer."

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

Trends in household formation provide important information concerning the issue of income packaging. Trends in household formation in Europe from the 1960s are described in "Economic and Social Features of Households in the Member States of the European Community", a 1983 Eurostat publication. One of the most significant trends noted in European countries has been that households, as observed through the general population censuses in the 1960s and 1970s, have increased in number and decreased in size. This change included a trend toward more households with no earners, made up of widows and students primarily. Data from the 1977 Labour Force Sample Survey, as described in this study, showed evidence of a tendency for individuals to become heads of households at earlier ages. This trend of an increasing proportion of younger households was most notable in Germany and France.

Kiernan (1986) conducted a study of the living arrangements of young adults in six west European countries. She noted that, "The proportion of young people living in non-family households (i.e., living alone or with friends) might be regarded as a guide to the preference or opportunities for independent living." Kiernan finds,

in her examination of the 1982 European Economic Community Labour Force Survey, that this proportion is lowest in the United Kingdom and Ireland, and highest in West Germany and Denmark. The study also included the Netherlands and France. Kiernan noted that Danish youth leave home at younger ages and at a faster pace than young people in other countries, and suggested this may result from the fact that Denmark has a housing policy that recognizes the need to provide affordable housing to young people. In the United Kingdom public sector housing is generally reserved for families with children.

Smith, Rosen, Markandya, and Ullmo (1984) examined the demand for housing, headship rates, and household formation in Canada, France, Great Britain, and the United States. They discussed the rapid increase in non-family household formation that occurred in the 1960s and 1970s. In Canada, France, and the United States, the rate of growth of non-family headship rates increased most for the youngest age group, those aged 15-24 years. They theorized that headship rates for household types and age groups are a function of disposable income, housing cost, availability of public housing, and such socio-economic variables as divorce rates and female labor force participation rates. They reported that income was important in the determination of headship rates for all ages except the 65 and over category in France and the United States. The income elasticity was highest in the youngest age group. On the other hand, the price of housing variable was significant for all groups except for the 15-25 age groups in France. The availability of public housing was only important in the determination of headship rates of the elderly.

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

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

## ANALYSIS

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

Given that our sample was composed of young people who had made the decision to live independently, we were concerned with the question about how they subsequently chose to live in the different countries for which we had data. For young people living independently, we were interested in determining how income from various sources affected their decision to live alone.

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

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

where; Y = income  
 i = source of income  
 ED = education of household head  
 LFP = labor force attachment  
 Sex = sex of household head  
 Age = age of household head  
 MS = marital status  
 Country = dummy variable per country

A logit model was specified using SPSS-X (1986), the only statistical package available to us for use with the LIS data. All computer programs were electronically mailed to Luxembourg via BITNET. This was necessary since the LIS data are not directly accessible to researchers.

## DATA

The data used in this analysis were from the Luxembourg Income Study. The countries included were the United Kingdom, the Federal Republic of Germany, Australia, Canada, and the United States. Currently, there are ten country data sets in LIS, our choice of these five was based on similarity of available variables and reference units.

The independent variables and their definitions are listed in Table 1. The income measures were made comparable by conversion to 1979 United States dollars using the Organization for Economic Cooperation and Development (OECD) Purchasing Power Parities and the U.S. Consumer Price Index. Three income variables were included for each country: EARN79\$, which included wages, salaries, and self-employment income; TRAN79\$, which included means-tested, social security, and private transfer income; and OTHIN79\$, which included cash property income, pension incomes, and other cash income. Measures of labor market opportunities in

TABLE 1. Definition of Variables

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

the respective countries as well as housing costs were expected to be captured by country dummy variables included in the equation both separately and as interaction terms with the various income variables. Education was recoded roughly for each country to represent at least a high school education. The omitted category was not a high school or equivalent education. An interaction term of age and education was included to incorporate differing effects of age as education varied. Labor force participation represented the presence of any earners in the household. The earner could have been the household head or any other member in the household. The omitted category was no earners in the household. The sex dummy variable represented whether the household head was male. Age was included as a continuous variable. Marital status was represented by including a dummy variable for married or living together. For some of the countries included in the sample, living together was a marital status category. The omitted category included single, divorced, separated and widowed, where distinguishable, for each country.

### RESULTS

The sample included 5664 households; of these 2894 were one person households. The distribution of the sample by country is presented in Table 2. The greatest percentage of individuals aged 15-24 who lived independently and alone resided in Germany (65 percent), while the smallest percentage of individuals with these characteristics resided in the United Kingdom (35 percent).

TABLE 2. Sample Frequencies by Country

Country	Total Sample	Number Living Alone
Canada	1449	795
Federal Republic of Germany	117	72
United Kingdom	406	142
United States	1721	798
Australia	1971	1087
	5664	2894

Means and standard deviations of the variables included in the logit estimation are listed in Table 3 for the 5664 cases of young households in the combined countries sample. These are unweighted statistics. Earnings represented earnings of the household head only, while transfer and other income were divided by household size to be per capita measures. The means of the country dummy variables represent their proportion of the sample. German youth represented the smallest proportion of the sample, while Australian youth represented the largest proportion. About 23 percent of the combined sample of young people living independently had more than a high school or equivalent education, while nearly 95 percent were in the labor force. Almost 64 percent were male. The mean age of those in the sample was 21.6. Only 32 percent were married or living with someone.

Table 4 includes the results of the logit regression for which the dependent variable equaled 1 if an individual lived alone; these results represent the log of the odds of the probabilities that a young adult, living outside the parental home, lived alone. Our major finding is that different types of income affected the propensity to live alone differently and that the effects themselves differed among the countries under study. (The Chi-Square goodness-of-fit measure is not presented since it is considered to be invalid when individual observations are used for logit analysis [SPSS-X 1986]).

TABLE 3. Means and Standard Deviations of Variables

VARIABLES	MEAN	STD DEV
LA	.512	.500
EARN79\$ <sup>a</sup>	7130.681	5762.956
TRAN79\$ <sup>b</sup>	378.700	858.502
OTHIN79\$ <sup>b</sup>	197.202	934.365
CA	.256	.436
GER	.021	.142
UK	.072	.258
US	.304	.460
AUS	.348	.476
ED	.234	.423
LFP	.946	.225
SEX	.638	.481
AGE	21.576	1.948
MS	.317	.466
EDAGE	5.166	9.386
CANEAR	1995.581	4735.045
CANTRA	103.167	447.904
CANOTH	47.283	371.219
GEREAR	134.550	1292.688
GERTRA	7.718	126.036
GEROTH	.000	.000
UKEAR	458.822	2157.456
UKTRA	79.022	454.756
UKOTH	2.118	21.983
USEAR	2365.187	4939.241
USTRA	92.482	531.068
USOTH	78.382	681.436
AUSEAR	2176.542	4047.205
AUSTRA	96.310	374.623
AUSOTH	69.419	544.138

<sup>a</sup>Earnings of household head

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

For the omitted country, the United States, earnings were positively related to the probability to live alone. In addition, transfer and other types of income were significantly related to living alone among the young people in the United States, at the 10 percent level of significance. Transfer incomes were negatively associated with the propensity of young people to be in a single person household. This result was not surprising for the United States since the receipt of transfer income from Aid to Families with Dependent Children is contingent upon having a child.

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

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

The parameter for the dummy variable representing the United Kingdom is not statistically significant in the equation, however;

TABLE 4. Estimated Model Parameters and Standard Errors<sup>a</sup>

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

<sup>a</sup>Parameter estimates based on the following logit model:

$$\log(p/(1-p)/2 + 5 = \text{constant} + X\beta.$$

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

\*Statistically significant at the 0.10 level.

\*\*Statistically significant at the 0.01 level.

earnings had a greater positive effect on living alone in the United Kingdom than they did for youth living in the United States. Transfer incomes in the United Kingdom, unlike in Germany, were positively correlated with living alone. For the United Kingdom, this could be related to special transfer programs designed to assist the youth. Other types of income have no additional effect in the United Kingdom.

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

For the sample as a whole, those with an earner were more likely to live alone than were those without an earner. Males, who were not married, were more likely to live alone than were unmarried females. For this sample, increases in age were negatively related to living alone, which means individuals were more likely to marry or to live with someone with age increases. However, if our sample had included all individuals in the 15-24 age group, including those living in their parent's home, we might have found that age and living alone were positively related. Not surprisingly, being married was highly negatively correlated with living alone.

## CONCLUSIONS

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

Comparisons of household income distributions among countries depend upon the packaging of incomes in the various countries, which itself affects the household formation process that, in its turn, affects income distribution measures. This study shows the differential response to incomes from different sources by individuals under the age of 25. A more thorough study of this important process needs to be conducted to understand the impact that this process has on comparisons of income distributions and inequality. Since data are not available in the LIS data files for individuals living in their parental homes, future analyses need to be designed to account for the presence of sample truncation. Specific information concerning institutional differences among countries also needs to be included in future investigations.

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

## REFERENCES

- Becker, Gary S. (1974). "A Theory of Marriage." in T.W. Schultz (ed.), Economics of the Family. Chicago. University of Chicago Press.
- Beresford, John C. and Alice M. Rivlin (1966). "Privacy, Poverty, and Old Age," Demography. 3(1):247-258.
- Buhmann, Brigitte, et al. (1987). "Improving the LIS Income Measure: Toward Microdata Estimates of the Size of Cash and Noncash Income in Eight Countries," LIS-CEPS Working Paper #13. Luxembourg Income Study.
- Cutright, P. (1970). "Income and Family Events: Getting Married," Journal of Marriage and the Family. 32:628-637.
- Danziger, Sheldon et al. (1982). "Work and Welfare as Determinants of Female Poverty and Household Headship," Quarterly Journal of Economics. 97: 519-534.
- Goodman, Jr., John L. (1986). "Economic Determinants of Household Formations and Living Arrangements," Working Paper Series, Economic Activity Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System. (No. 66; December).
- Hedstrom, Peter and Stein Ringen (1985). "Age and Income in Contemporary Society," LIS-CEPS Working Paper #4, Luxembourg Income Study.
- Heer, David, et al. (1985). "The Clustered Nest: Evidence That Young Adults Are More Likely to Live at Home Now Than in the Recent Past," Sociology and Social Research. 69 (3): 436-444.
- Hill, Daniel and Marcha Hill (1976). "Older Children and Splitting Off," Greg Duncan and James Morgan, (eds.). Five Thousand American Families - Patterns of Economic Progress. (Vol. IV). University of Michigan.
- Kiernan, Kathleen (1986). "Leaving Home: Living Arrangements of Young People in Six West-European Countries," European Journal of Population. 2(2): 177-184.
- Michael, Robert T., Victor R. Fuchs, and Sharon R. Scott (1980). "Changes in the Propensity to Live Alone: 1950-1976," Demography. 17 (1): 39-56.
- Smeeding, Timothy, Gunther Schmaus, and Serge Allegreza (1985). "An Introduction to LIS." Luxembourg Income Study - LIS-CEPS Working Paper # 1. Presented to the First LIS Research Conference, Luxembourg, July.
- Smeeding, Timothy, Barbara Boyle Torrey, and Martin Rein (1988). "Patterns of Income and Poverty: The Economic Status of the Young and Old in Eight Countries." In J. Palmer, T. Smeeding, and B. Torrey, eds., The Well-Being of Children and Elderly in the U.S.: Intertemporal and International Perspectives. Washington, D.C.: Urban Institute Press.
- Smith, Lawrence B., Kenneth T. Rosen, Anil Markandya, and Pierre-Antoine Ullmo (1984). "The Demand for Housing, Household Headship Rates, and Household Formation: An International Analysis," Urban Studies. 21 (4): 407-414.
- SPSS-X User's Guide, Edition 2 (1986). Chicago: SPSS Inc.
- Wolf, Douglas (1984). "Change in Household Size and Composition Due to Financial Incentives," Journal of Human Resources. 19 (1): 87-103.

---

The authors thank Arthur J. Norton and Rachel Connelly at the U.S. Bureau of the Census for comments on an earlier draft of this paper. Norton is a sociologist in the Population Division and Connelly is an economist visiting the Bureau as an ASA Fellow.

COMMENTS ON "CROSS-NATIONAL COMPARISONS  
WITH IMPLICATIONS FOR RESEARCH AND  
POLICY: RESULTS FROM THE LUXEMBOURG  
INCOME STUDY"

Marilyn E. Manser, Bureau of Labor  
Statistics<sup>1</sup>

The papers in this session utilize the Luxembourg Income Study (LIS) data to address various questions concerning well-being. The data they present reveal considerable diversity among the countries studied, which are all developed countries, in terms of income sources and labor markets. These differences complicate all sorts of inter-country comparisons and considerable effort is needed to understand them.

The purpose of the paper by Shelley Phipps is to explain gender differences in wages across three countries, Australia, Sweden, and the U.S. The LIS is well-suited for this topic, although the data it contains, like most data sets, are lacking one variable that it would be very useful to have for this topic, namely, actual labor market experience.

A possible data problem concerns the extent to which the industry or occupational groupings are defined differently across countries. From the Appendix it can be seen that there are some differences. The necessity to make these categories comparable is one reason why setting up a data set such as the LIS is useful. Nonetheless, I would have welcomed some discussion by the author of why these differences are likely to be unimportant enough to make these comparisons across countries reasonable and also which categories might be the most different.

The analysis of sources of differences in the ratio of the mean female wage rate to the mean male wage rate is interesting. The author's idea of also looking at a measure of the distribution is a good one, but my major concern with the paper involves the choice of distributional measure employed. In particular, she uses an "equally-distributed equivalent" wage rate,  $w^*$ , which has no meaning as a measure of dispersion of the actual wage distribution but rather is defined based on an arbitrarily-chosen social welfare function (SWF). In particular, she uses

Atkinson's (1970) mean of order  $r$  SWF defined as:

$$(1) \quad SW = (1/n \sum_{i=1}^n w_i^r)^{1/r},$$

$$r \leq 1, r \neq 0,$$

where  $r$  is an "inequality-aversion" parameter. If  $r$  equals 1, this is just the average wage rate, but for  $r < 1$  this is a hypothetical value. Notice that in Table 3, which country has the lowest value of  $w^*$  depends on choice of  $r$ , and the value of  $w^*$  will vary even when there are no reversals of rank. Consequently, the author's conclusions about which variables affect the distribution, which are based upon one particular value of  $r$ , are not supported in general by her analysis. At a minimum, the analysis should be done using various values of  $r$ . Alternatively, it would be interesting to analyze measures which do not require specifying a SWF. One possibility would be to look at the median; comparing the results using the median to those using the mean would indicate whether skewness affects the results. The usual measure of dispersion is the variance, although for purposes here considering the coefficient of variation (the standard deviation divided by the mean), a measure of relative variation, would be useful. Studies looking at distributional effects often look at income groups, say quartiles for example, and something along those lines could possibly be another alternative.

A final point concerns the specification used to explore the impact of personal and family characteristics on the ratios of female to male average wages. Certain variables may have different impacts on male and female wage equations (it is for this reason that such equations are typically estimated separately), so that these ratios may be better explained by variables such as the percent of female workers with kids and the percent of male workers with kids rather than the ratio of one to another.

The paper by Ingo Fischer compares the existence and features of various types of income support programs in Great Britain, West Germany, and the U.S. He recognizes in his introduction that he

<sup>1</sup>Assistant Commissioner for Economic Research. The views expressed are those of the author and do not reflect the policies of the BLS.



is looking only at certain "major programs" of public family income support, and that in doing so he is ignoring other aspects of the tax/transfer system and the private sector that affect the economic well-being of families. Unfortunately, he is correct that it is necessary to draw the line somewhere, but it is useful to keep in mind that this choice may be very important. It may be the case that by drawing the line on what to exclude in varying ways one could reach varying conclusions about economic welfare across countries.

It is widely recognized by economists that various tax and transfer policies can affect all sorts of individual decisions, including household formation (as discussed in the Short and Garner paper) and labor supply (as discussed by Killingsworth (1983), for example). Both types of effects are important, but here I wish to focus on the latter. Clearly, the economic well-being of children and families is affected by whether one or both parents work in the market. There are substantial differences across the three countries considered here in women's work effort.

For example, comparing all married women in West Germany and the U. K. in 1986, 53 percent work in the U.K. vs. 42 percent in West Germany.<sup>2</sup> For prime age women (25-49), the figures are 68 percent in the U.K. vs. 55 percent in West Germany. Comparing married mothers with dependent children in Great Britain with those in the U.S., 49 percent of those in Great Britain worked in 1982-84 versus 57 percent in the U.S. in 1983.<sup>3</sup> The differences were much more dramatic for not-married mothers: 39 percent in Great Britain versus 65 percent in the U.S.

In view of these differences, research on the contribution of earnings to family well-being for these countries would be a useful complement to an effort such as this one, which focuses on the impact of tax and transfer programs on family well-being taking earnings and other income as given. In terms of the present paper, I would like to have seen more recognition of the importance of earnings as a source of family income support. Also, given how many two-earner families there are, it would be useful if Table 2 included them.

<sup>2</sup>Data are from the European Community Labor Force Survey, 1986.

<sup>3</sup>Data are from the General Household Survey (for Great Britain) and the Current Population Survey (for the U.S.).

Finally, it seems misleading to ignore housing benefits in the U.S just because they are not cash payments provided by the Federal government. If they cannot be captured for the U.S., then it would be more symmetric to leave them out for the other countries as well.

Like Phipps, Kathleen Short and Thesia Garner utilize the LIS microdata for comparisons across five countries. For their purposes, the data seem somewhat limited. Their analysis refers only to living arrangements of those who live outside their parents' home. Although they are forced into this restriction, it would be useful, at least to me, if they would provide some information on the percentages of these youth in each of the countries they focus on. Ideally, for looking at household formations, longitudinal panel data that follow all individuals, not just household heads and their spouses, are what are needed. For looking only at youth, BLS's National Longitudinal Survey of Labor Market Experience (NLS) provide what is needed; there is a similar survey of youth for Australia also. For the population as a whole, the Survey of Income and Program Participation (SIPP) for the U.S. and perhaps the Socio-economic Panel (SEP) for West Germany would be useful.

It is difficult to know how to interpret an equation for the percent of youth not living with their parents who choose single-person households, and it would be useful if the authors would provide some insight into this. In fact, the percentages of youth in these various family type categories is the result of a number of decisions: whether to marry, whether to have children, and whether to work. As is widely recognized in the economics literature, each of these choices can be affected by various exogenous factors--wage rates, parents' situation, and attributes of tax and transfer programs, among other things. The equation estimated by the authors includes things that are therefore endogenous: earnings and transfer income. For instance, Short and Garner find that "transfer incomes reduce the propensity of young people to be in single person households." This is hardly surprising, for U.S. youth at least, since, as can be seen from Fischer's paper, except for youth receiving Social Security survivors or disability benefits, eligibility for major transfer program benefits is generally restricted to those with children. It may be more reasonable to conclude that being a single person household reduces the propensity of young people to receive transfer