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# Gender Differences in Poverty and its Duration: An Analysis of Germany and Great Britain

By Elisabetta Ruspini\*

## Summary

*This study considers the differences in poverty dynamics between women and men in Great Britain and the western states of Germany using data from the British Household Panel Survey (BHPS) and the German Socio-Economic Panel (GSOEP). It finds that women are disproportionately at risk of poverty in both countries, but especially in Great Britain.*

## 1. Introduction

Panel data trace the economic outcomes of individuals over time. For this reason, they are well-suited to the statistical analysis of social change and dynamic behavior. The value of panel data to social science and social policy has been clearly established in the area of transitions into and out of economic deprivation. For example, researchers using the American Panel Study of Income Dynamics (PSID) have documented both movements into and out of poverty and a close association between such transitions and changes in household composition, especially for women and children (Duncan, Coe, and Hill 1984; Corcoran, Duncan, and Hill 1984; Burkhauser and Duncan 1989; Bane and Ellwood 1986). Other results from the PSID longitudinal study have shown that spell durations differ depending on how the spell begins. Poverty spells are longer for a female head of household with a child and longer still when the spell begins at the point that the female head gives birth to a child (Bane and Ellwood 1986).

The disproportionate vulnerability of women arises from the interaction of the labor market, domestic circumstances, and the welfare system. Low income from wages or from social assistance combined with caring responsibilities at home creates a poverty trap for women that can be sprung with a change in marital status. The likelihood of a dramatic fall in economic well-being is far greater for women than men after critical events such as the death of a spouse, divorce, or separation. Corcoran, Duncan, and Hill (1984) show that a divorced mother faces the double economic bind of assuming complete responsibility for her children's care while attempting to make up for her ex-husband's lost income with small child support payments and poorly paid wage labor. Burkhauser et al. (1990) show that the same is true in Germany.

While this type of analysis is well-documented in the United States, lack of data has made such studies much rarer in Europe. The emergence of two European-based data sets now make such analysis possible. This study uses dynamic analysis to show the gendered nature of economic poverty in Europe by pointing out differences between the

poverty risks of women and men in two different European welfare systems, those of the western states of Germany and the United Kingdom. Esping-Anderson (1990) argues that conservative/corporalist countries like Germany provide greater social protection than liberal countries like Great Britain, so one expects to find lower minimum standards of living and greater gender inequality in Great Britain.

This paper focuses on two hypotheses: (1) females have longer poverty spells than men in both Germany and Great Britain and (2) poverty spells are longer in Great Britain than in Germany.

## 2. Time, Gender, and Poverty

Because mature European longitudinal data are only now becoming available, the interaction between time and poverty in Europe has not been extensively studied. The lack of data capable of capturing the dynamic nature of poverty has retarded the development of a paradigm that successfully explains the causes of a permanent poverty class in European countries.

It is undeniable that duration of time in poverty constitutes a central element in the measurement of poverty (Duncan, Coe, and Hill 1984; Hill 1985; Bane 1986; Bane and Ellwood 1986; Muffels 1992; Muffels and Bergman 1992; Duncan 1993a, 1993b; Buck et al. 1994), and thus is essential for the development of policies that are able to mitigate long-term poverty. Walker and Ashworth (1993) argue that the recognition that poverty is a longitudinal phenomenon and that spells of poverty begin and end requires attention to the circumstances associated with people becoming poor and to the factors that cause spells of poverty to end. This view shifts social policy objectives from relieving poverty to its prevention.

In examining poverty spells, it is important to disaggregate by gender for at least three reasons. First, women cannot simply be added to existing analyses. Second, substantial differences are likely to exist between women and men in their poverty dynamics over the life cycle. Third, events that cause spells of poverty to begin or end are different for women and men.

The United Kingdom and the western states of Germany have very different social welfare objectives. Lewis and Ostner (1994) argue that, while both countries stress the primacy of the family and treat adult women as dependent wives for the purpose of social entitlement, they differ as to the extent to which they have developed policies, transfers, or services to promote marriage and family life and to compensate for the risks and disadvantages for women in their

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Table 1

**Adult Poverty Rates in Germany and Great Britain Using Household  
and Individual Sharing Units for Women and Men (Unweighted Results), 1991 to 1994**

Year	Household Sharing Unit						Individual Sharing Unit					
	Women			Men			Women			Men		
	40 Percent	50 Percent	60 Percent	40 Percent	50 Percent	60 Percent	40 Percent	50 Percent	60 Percent	40 Percent	50 Percent	60 Percent
Germany <sup>1)</sup>												
1991	3.2	6.4	6.4	1.9	4.0	8.4	15.7	20.6	25.2	4.7	5.5	6.5
1992	3.3	6.8	6.8	2.0	3.9	7.9	14.0	20.3	24.2	4.5	5.5	6.1
1993	3.3	7.8	7.8	2.2	5.4	10.4	15.0	20.0	24.3	3.3	4.2	5.0
1994	3.2	7.8	7.8	1.7	5.0	9.8	14.2	18.4	23.4	3.0	4.1	4.8
Great Britain												
1991	14.7	24.1	30.3	9.0	16.2	21.8	47.0	50.6	54.1	21.9	22.8	23.7
1992	14.3	22.4	29.4	8.7	15.0	21.5	46.9	50.4	53.2	24.6	25.6	26.3
1993	15.0	22.8	29.5	10.2	16.1	22.0	45.6	49.0	52.2	25.3	26.2	27.2
1994	13.9	22.5	29.5	8.6	15.0	21.0	44.8	47.8	51.0	24.9	25.8	26.7

<sup>1)</sup> Western states of Germany.

Source: Author's calculations from GSOEP and BHPS data.

male-centered labor markets. Both operate welfare states on a family breadwinner logic. The norms of a "male breadwinner" and, "secondary" female wage earner are built into their welfare systems and welfare provisions. The results, according to Daly (1995), are social welfare systems centered on market-related risks that are not capable of equally protecting women and men from poverty.

### 3. Some Methodological Issues: Poverty Lines, Equivalence Scales, Unit of Measurement

Poverty lines can be set in a variety of ways. This study uses a relative concept of poverty. The poverty lines are defined as 40, 50, and 60 percent of median monthly household equivalent income and median monthly earned individual income<sup>1</sup>. Those below the 40 percent line are classified as "very poor," those below the 50 percent line as "poor," and those below the 60 percent line as "near poor."

These relative measures are used to examine differences in poverty between men and women in the two countries relative to a common standard of living. By using different poverty lines it is possible to reduce to some degree the arbitrary choice of a single line. To adjust household income by household size, this study uses the equivalence scale suggested by Buhmann et al. (1988) and Burkhauser, Smeeding, and Merz (1996): its scale elasticity lies around 0.5<sup>2</sup>.

The issue related to the sharing unit is particularly relevant. Millar and Glendinning (1988) and Daly (1995) have argued that the household sharing unit measure of income is not particularly useful in studies of the differences in poverty between women and men since it masks unequal distribution of resources and consumption within the

household. On the other hand, an individual sharing unit assumes the unlikely circumstance that no sharing or pooling of resources takes place within a household. To show the sensitivity of results to sharing unit choice this study measures poverty using both types of sharing units.

### 4. Trend and Mobility Analyses

Table 1 uses data from the British Household Panel Survey and the German Socio-Economic Panel for the years of 1991 through 1994 to estimate poverty rates for the United Kingdom and the western states of Germany.

Over all years, poverty rates are greater in the United Kingdom than in Germany and poverty is greater among women in both countries, which is consistent with Esping-Andersen (1990). This is true using both a household sharing unit and an individual sharing unit. However, the difference in the prevalence of poverty between women and men is much greater using an individual sharing unit. For example, using the 50 percent poverty line in 1991, in

<sup>1</sup> It is important to note that household and individual incomes are only available at the gross level in the BHPS. Poverty lines, based on individual income are only for the population aged 18 to 64.

<sup>2</sup> Equivalence scales can be represented by one single parameter: the equivalence scale elasticity, that is, the power by which needs increase as household size increases. More precisely, I assume that equivalent income (EI) can be equated to disposable income (D) and size of household (S) in the following way:  $EI = D/S$ . This parameter expresses the variation in resources needed to maintain the well-being level of the household as the number of members varies. It can range between the extreme elasticities of zero and one: zero implies that the economies of scale are perfect and one indicates their absence (Buhmann, Rainwater, Schmaus, and Smeeding 1988).

Table 2

**Distribution of Poverty Spells between 1991 and 1994 in Germany<sup>1)</sup>**  
**Using Household and Individual Sharing Units for Women and Men (Unweighted Results)**

	Poverty Line Relative to Median					
	Women			Men		
	40 Percent	50 Percent	60 Percent	40 Percent	50 Percent	60 Percent
Household Sharing Unit						
Never poor	93.1	85.9	76.9	95.4	90.2	82.6
One year spell	3.9	7.1	9.7	3.2	5.8	8.2
Two years continuously	1.4	2.2	3.6	0.7	1.9	3.2
Two years not continuously	0.3	1.0	1.9	0.1	0.4	1.4
Three years continuously	0.6	1.6	2.6	0.4	0.8	1.8
Three years not continuously	0.2	0.4	1.4	0.1	0.2	1.0
Four years	0.7	1.7	3.9	0.2	0.7	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Individual Sharing Unit						
Never poor	74.6	67.6	62.2	91.9	90.3	88.9
One year spell	11.0	12.1	12.5	4.8	5.4	6.0
Two years continuously	3.9	5.9	7.0	2.2	2.5	2.8
Two years not continuously	1.2	1.5	1.8	0.3	0.4	0.6
Three years continuously	3.2	4.5	5.0	0.7	1.0	1.0
Three years not continuously	1.4	1.4	2.1	0.1	0.1	0.1
Four years	4.6	7.0	9.4	0.0	0.3	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

<sup>1)</sup> Western states of Germany.  
Source: Author's computations from GSOEP data.

Germany 20.6 percent of women and 5.5 percent of men had individual incomes of less than 1,100 DM a month (50 percent of median monthly household equivalent income), while in Britain 50.6 percent of women and 22.8 percent of men had individual incomes less than 297 pounds sterling a month (50 percent of the median monthly household equivalent income). Such results confirm the Daly (1995) view that both social welfare systems are less protective of women than men.

Tables 2 and 3 make use of the dynamic nature of panel data to show how long those who drop into poverty remain in that state. Men and women at each poverty line are divided into those who were never poor and those who were continuously poor over the four years of this analysis<sup>3</sup>. The results would suggest that income mobility is rather high and that poverty is a permanent situation only for a small part of the population, a result also found by Deeck and Van Den Bosch (1989), Duncan (1984), and Headey, Habich, and Krause (1990). Most people are poor only for a short time, the majority living in poverty between one and two years. Focusing on the 50 percent line, in Germany, only about 1 percent of the population was poor in all four years, whereas in the United Kingdom 5.2 percent was poor over all four years. Hence, not only is a greater share of the population poor in Great Britain than in Germany but the typical spell in poverty is longer.

Although individuals who remain poor for a long time constitute only a small proportion of those who become

poor in both countries, the outcomes of women and men are substantially different. Women's poverty spells are longer in both countries, demonstrating the greater vulnerability of women to economic deprivation, especially in the United Kingdom. Using a household sharing unit, 1.7 percent of German women are continuously poor over all four years compared to 8.7 percent in Great Britain. For men, the rates are 0.7 percent for Germany and 4.0 percent for Great Britain.

The spell patterns in Tables 2 and 3 also show that individuals tend to move into poverty, out of poverty, and back into poverty over the four-year period. Hence, a large share of those who have experienced economic deprivation for two or more years find themselves below the poverty line intermittently.

The empirical evidence presented in the preceding tables has a number of implications. For most people who fall into poverty, poverty is not a long-term phenomenon. Hence, policies need to recognize and distinguish between the permanent poor and the majority who are intermittently poor. This is particularly true for women, since they are, on the one hand, at greater risk of persistent poverty and, on the other hand, more vulnerable to income fluctuations.

<sup>3</sup> A spell of poverty has been defined as beginning in the first year that income is below the poverty line after having been above it, and as ending when income is above the poverty line after having been below it (Bane and Ellwood 1986).

Table 3

**Distribution of Poverty Spells between 1991 and 1994 in Great Britain  
Using Household and Individual Sharing Units for Women and Men (Unweighted Results)**

	Poverty Line Relative to Median					
	Women			Men		
	40 Percent	50 Percent	60 Percent	40 Percent	50 Percent	60 Percent
Household Sharing Unit						
Never poor	73.7	64.6	57.1	81.8	73.7	66.3
One year spell	12.3	12.5	13.9	10.5	11.6	13.7
Two years continuously	4.8	5.9	6.6	3.1	4.7	5.5
Two years not continuously	1.7	2.1	1.9	1.1	1.8	1.6
Three years continuously	2.7	3.8	4.5	1.6	2.6	3.8
Three years not continuously	1.5	2.5	2.7	0.7	1.5	2.1
Four years	3.3	8.7	13.3	1.1	1.5	6.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Individual Sharing Unit						
Never poor	45.4	41.4	37.8	67.9	65.8	65.4
One year spell	27.8	24.7	22.4	23.3	22.8	21.8
Two years continuously	6.2	7.1	7.6	3.7	4.5	5.0
Two years not continuously	4.3	5.0	4.7	2.3	2.8	3.1
Three years continuously	4.1	5.2	5.9	1.3	1.6	2.2
Three years not continuously	3.7	4.8	5.4	0.8	1.2	1.4
Four years	8.5	11.9	16.2	0.7	1.2	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

*Source:* Author's computations from GSOEP data.

They, in fact, constitute the majority of the intermittent poor. Consequently, women's deprivation cannot be understood and overcome using classic policy instruments based on the view that poverty is a static, permanent, gender-neutral phenomenon.

### 5. Conclusions

Longitudinal analysis is a more complete approach to understanding the nature of poverty than is cross-sectional analysis, since panel data bring to light the dynamic and gendered nature of deprivation and the changes occurring within the poverty paths of women and men.

From a dynamic perspective, women's greater vulnerability to poverty is found in two elements. Women's poverty spells are longer in both Germany and Great Britain. This is true using either a household or an individual sharing unit. Second, women have a higher risk of falling

into poverty and are also more likely to enter and exit poverty intermittently.

Gender is a differentiating factor for poverty. Differences in the incidence and evolution of poverty are evident in both countries and such diversities reflect what has been called the feminization of poverty. In terms of the distribution of risks to becoming poor, these results show that Great Britain has a higher poverty rate than Germany, as predicted by Esping-Andersen (1990). In addition, women have higher poverty rates, are more vulnerable to income fluctuations, and are more likely to suffer from permanent poverty than men in both countries.

These results suggest that the disproportionate risks of poverty found in earlier studies of United States poverty patterns also exist in Europe and that the gendered and dynamic nature of poverty in Europe also requires a reevaluation of social policies in order to reduce the disproportionate risk of poverty experienced by women.

## References

- Bane, M.J. 1986. "Household Composition and Poverty." In S.H. Danziger and D.H. Weinberg (eds.), *Fighting Poverty: What Works and What Doesn't*. Cambridge: Harvard University Press.
- Bane, M.J. and D.T. Ellwood. 1986. "Slipping Into and Out of Poverty: The Dynamics of Spells," *The Journal of Human Resources* 21.
- Buck, N., J. Gershuny, D. Rose, and J. Scott (eds.). 1994. *Changing Households: The BHPS 1990 to 1992*. ESRC Research Center on Micro-Social Change, Colchester, University of Essex.
- Buhmann, B., L. Rainwater, G. Schmaus, and T. Smeeding. 1988. "Equivalence Scales, Well-Being, Inequality and Poverty: Sensitivity Estimates across Ten Countries Using the Luxembourg Income Study (LIS) Database," *The Review of Income and Wealth* 34(2): 115-142.
- Burkhauser, Richard V. and Greg J. Duncan. 1989. "Economic Risks of Gender Roles: Income Loss and Life Events over the Life Course," *Social Science Quarterly*, 70(1) (March): 3-23.
- Burkhauser, R.V., T.M. Smeeding, and J. Merz. 1996. "Relative Inequality and Poverty in Germany and the United States Using Alternative Equivalency Scales," *The Review of Income and Wealth*, 42(4).
- Burkhauser, R.V., G.J. Duncan, R. Hauser, and R. Berntsen. 1991. "Wife or Frau, Women Do Worse: A Comparison of Men and Women in the United States and Germany Following Marital Dissolution," *Demography* 28(3) (August): 353-360.
- Burkhauser, R.V., G.J. Duncan, R. Hauser, and R. Berntsen. 1990. "Economic Burdens of Marital Disruptions: A Comparison of the United States and the Federal Republic of Germany," *The Review of Income and Wealth* 36(4) (December): 319-333.
- Corcoran, M., G.J. Duncan, and M. Hill. 1984. "The Economic Fortunes of Women and Children: Lessons from the Panel Study of Income Dynamics," *Signs* 10(2): 232-248.
- Daly, M. 1995. "Sex, Gender, and Poverty in the British and (West) German Welfare States." Paper presented at the Conference, "The Cost of Being a Mother, the Cost of Being a Father," European Forum, European University Institute, Florence, March 24-25.
- Deleeck, H. and K. Van Den Bosch. 1989. "The Measurement of Poverty in Comparative Context: Empirical Evidence and Methodological Evaluation of Four Poverty Lines in Seven EC Countries." Paper presented at the Seminar on "Poverty Statistics in the European Community," Noordwijk, The Netherlands, October 24-26.
- Duncan, G. (ed.). 1984. *Years of Poverty, Years of Plenty: The Changing Economic Fortunes of American Workers and Families*. Ann Arbor, Michigan: Institute for Social Research.
- Duncan, G., R.D. Coe, and M. Hill. 1984. "The Dynamics of Poverty." In Greg Duncan (ed), *Years of Poverty, Years of Plenty: The Changing Economic Fortunes of American Workers and Families*. Ann Arbor, Michigan: Institute for Social Research.
- Duncan, G., B. Gustaffson, R. Hauser, G. Schmaus, S. Jenkins, H. Messinger, R. Muffels, B. Nolan, J.C. Ray, and W. Voges. 1993a. "Poverty and Social-Assistance Dynamics in the United States, Canada, and Europe." Working Papers of the European Scientific Network on Household Panel Studies, Paper No. 4, Colchester, University of Essex.
- Duncan, G., B. Gustaffson, R. Hauser, G. Schmaus, H. Messinger, R. Muffels, B. Nolan, and J.C. Ray. 1993b. "Poverty Dynamics in Eight Countries." Working Papers of the European Scientific Network on Household Panel Studies, Paper No. 5, Colchester, University of Essex.
- Esping-Andersen, G. 1990. *The Three Worlds of Welfare Capitalism*. Cambridge: Polity Press.
- Headey, B., R. Habich, and P. Krause. 1990. "The Extent and Duration of Poverty: Is Germany a Two-Thirds Society?" Wissenschaftszentrum Berlin für Sozialforschung, Working Paper No. P90/103, pp. 90-103.
- Hill, M.S. 1985. "The Changing Nature of Poverty," *The Annals of the American Academy of Political and Social Sciences* 479: 31-47.
- Lewis, J. and I. Ostner. 1994. "Gender and the Evolution of European Social Policies," ZeS-Arbeitspapier n. 4, Zentrum fuer Sozialpolitik (ZES) — Center for Social Policy Research, University of Bremen.
- Millar, J. and C. Glendinning. 1988. "Gender and Poverty," *Journal of Social Policy* 18: 363-381.
- Muffels, R. 1992. "Dynamics of Poverty and the Determinants of Poverty Transitions." Working Papers of the European Scientific Network on Panel Studies, Paper No. 48, Colchester, University of Essex (revised version).
- Muffels, R. and J. Bergmann. 1992. "Designing Issues in the British Household Panel Survey." Working Papers of the ESRC Research Centre on Micro-Social Change, Paper No. 2, Colchester, University of Essex.
- Walker, R. and K. Ashworth. 1993. *Poverty Dynamics: Issues and Examples*. Aldershot: Avebury.