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Poverty in a Multidimensional Perspective

Great Britain and Germany in Comparison

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Abstract

This paper deals with the issue of poverty in a comparative and multidimensional perspective. Based on Townsend's concept of relative deprivation, we analyse what people can afford compared to their perceived necessities for decent living. We will analyse definitions of living standard and social deprivation within two European countries which provide sufficient data and differ in their institutional settings: Britain and Germany. The assumption is that different welfare regimes and different social policies will bring about dissimilar deprivation risks. In addition, the concept of deprivation is combined with income poverty to focus on those who are affected by both shortages, low income and a low standard of living. With a multivariate analysis deprivation risks other than income are examined. Indicators of subjective well-being show the effect different poverty levels have on people's satisfaction in several life domains. The results underline the importance of taking into account different poverty aspects; standard of living turns out to be the main factor to explain overall life satisfaction and can well be seen as the core of multidimensional poverty research.

Das vorliegende Arbeitspapier versteht sich als Beitrag zu einer Armutsforschung in mehrdimensionaler und komparativer Perspektive. Auf der Grundlage von Townsends Konzept der Relativen Deprivation werden Vorstellungen von einem angemessenen Lebensstandard in Großbritannien und Deutschland analysiert und den tatsächlich realisierten Lebensbedingungen gegenübergestellt. Es wird untersucht, ob sich unterschiedliche Wohlfahrtsregime und sozialpolitische Regelungen in ungleichen Deprivationsrisiken niederschlagen. Durch die Kombination des Deprivationsansatzes mit Einkommensarmut können verschiedene Armutslagen herausgestellt werden, die auf unterschiedliche Art und Weise Benachteiligung bedeuten. Mit Hilfe eines multivariaten Analyseverfahrens wird untersucht, welchen Einfluß andere Faktoren als Einkommen auf das Deprivationsrisiko ausüben. Indikatoren des subjektiven Wohlbefindens zeigen, daß die verschiedenen Armutsaspekte mehr als eine methodische Differenzierung darstellen: Niedriger Lebensstandard und niedriges Einkommen in Kombination haben erhebliche Zufriedenheitseinbußen in verschiedenen Lebensbereichen zur Folge. Die Ergebnisse unterstreichen die Relevanz, Armutsanalysen nicht nur auf Einkommen zu beschränken. Im Hinblick auf die allgemeine Lebenszufriedenheit haben Lebensstandard-Indikatoren eine hohe Erklärungskraft und können als wichtige Dimension einer multidimensionalen Armutsforschung angesehen werden.

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1 Introduction¹

Even in advanced European welfare states poverty has again become an issue of widespread attention in recent years. Although the standard of living has risen continuously for most, changes in labour force participation and cuts in social benefits have widened the gap between rich and poor. Poverty, deprivation and social exclusion have been rediscovered as social facts and subjects of social inquiry.

In Western European countries poverty research is based on relative concepts. This means that independent of a country's level of welfare there is always a part of the population which is below a decent standard of living. Research usually concentrates on poverty in terms of income, although several other considerations have enlarged the field. Subjective measurements, for example, focus on a person's opinion about the minimum income he or she needs to make ends meet (Hagenaars 1991). Deprivation measurements aim at a wider social definition of poverty and point out deficiencies in several areas of life such as household goods, work, education, health or housing (Townsend 1979, Mack/Lansley 1985, Gordon/Pantazis 1997, Glatzer/Hübinger 1990, Andreß 1999). In this broader sense, all forms of social integration and participation are unequally distributed. They are regarded as important dimensions of today's poverty research and covered by the term "social exclusion" (Silver 1994, Room 1995, Kronauer 1997, Levitas 1998).

In this paper we analyse differences in the standard of living in two European countries, which – at first glance – share quite similar living conditions. Both Great Britain and Germany are developed Western European nations with high levels of welfare. Nevertheless, they differ in their type of welfare state regime and their degree of income inequality. Using the concept of relative deprivation (Townsend 1979), we are able to show what people in both countries regard as necessary for a decent standard of living as compared to their actual living conditions. We will focus on those groups which suffer from a very low standard of living. In addition, we will combine the concept of deprivation with income poverty. Such a procedure is a response to the urgent need for multidimensional poverty research. However, empirical realization is quite exceptional; above all this is true with regard to cross-national research (Andreß 1998).

Our aim is to show that differences in social policy and income distribution bring about dissimilar deprivation risks. Furthermore, we hope to identify country-specific relationships between low income and low standard of living. By differentiating between East- and West Germany, we add a special dimension concerning different levels of welfare within the same institutional arrangement.

Our paper proceeds as follows: First we will introduce the concept of relative deprivation which serves as the basis of our analyses. Next we characterize the two different types of welfare regime that are associated with Germany and the United Kingdom. Our empirical analysis deals with the notions of an acceptable standard of living in the two countries and

the distribution of deprivation. We then move to the connection between low income and low standard of living and continue with a characterization of those who suffer from both aspects of poverty. We will test the significance of deprivation risks and the interrelating effects in both countries with a multivariate analysis.

For the German case we are able to demonstrate important differences in the subjective well being, which is associated with one or the other aspect of poverty. The results stress the importance not only of multidimensional poverty research in terms of objective indicators but also of the integration of social indicators into poverty research which show the consequences of poverty in people's attitudes and satisfaction.

2 The Concept of Relative Deprivation

Comparing standard of living in cross-national perspective is a significant challenge. The way it is measured in various countries often follows different theoretical and conceptional frameworks and hence ends up with data of very limited comparability. The European Household Panel offers a data base that contains information about material standard of living, but without a definition of what a decent standard of living might be in the respondents' perspective (Layte/Maitre/Nolan/Whelan 1999). Besides these technical and methodological issues, the cultural boundedness of a national standard of living poses another challenge for purposes of comparison. What seems sufficient as a decent standard of living in one country might not be a useful guideline in another.

Our empirical analysis is based on the concept of relative deprivation, which goes back to Peter Townsend (1979). Relative deprivation means a standard of living that is below the average in several respects – resources, capabilities, consumption, and rights. Deprivation and poverty are linked with exclusion from everyday life. By taking the average standard of living as a guiding principle to establish a deprivation line, the definition of deprivation is necessarily related to a society's notion of adequate living conditions, which themselves clearly reflect the actual achieved level of welfare. This predominantly Anglo-saxon research tradition was used as the basis of the 'Breadline Britain' study, carried out in 1983 and 1990. A subjective component supplemented the original concept: People were asked about their idea of what a minimum standard of living should be, which items were necessary and which could be done without. This subjective dimension entails an important advantage. Cross-national comparison must always cope with the problem that countries differ in their system of values and attitudes. With the respondents' definition of a minimum

standard of living, it is possible to integrate such national differences in the analysis to a certain extent. Even within a single country considerable differences exist, especially between age groups.

An important difference between income poverty and deprivation is thus evident here. Income is a prerequisite for a decent standard of living. But other features of one's financial life such as property, debts or special burdens are also input factors that determine the transformation of a household's financial budget into a more accurate measure of one's standard of living. For this reason the analyst has to consider both kinds of poverty measurements, the indirect one via income, and the direct one via actual patterns of consumption.

Sweden, the Netherlands and Germany did survey research on the basis of this concept, though the subjective dimension was not included in each of these countries. For reasons of comparability and data access, we have to restrict our analysis to the 'Breadline Britain' data of 1990 (Gordon/Pantazis 1997) and the German Welfare Survey of 1998 (Habich/Noll/Zapf 1999).²

Similar to the debate of where to establish a poverty line, the definition of deprivation is influenced by normative and political attitudes. Like income, standard of living is a continuum and hence the drawing of a poverty or deprivation line remains artificial and arbitrary, although it is the only feasible way to focus on the segment of the population that lives in poverty. Deprivation covers several aspects of poverty, which information on income does not, and can therefore be very close to the every day situation of a household. Nevertheless, one can be deprived without being poor, simply because the degree of deprivation is very high, though sufficient income seems to be available. Both dimensions of poverty - financial resources and actual living conditions - combined with very careful operationalizations and clearly stated definitions promise a more detailed picture.

3 Great Britain and Germany: National Characteristics

Why compare Great Britain and Germany? There are three main reasons. First, Germany and Great Britain can be characterized as prototypes of different welfare regimes. One of the most influential typologies of welfare state models is Esping-Andersen's "Three Worlds of Welfare Capitalism" (1990). According to his scheme, Great Britain represents a liberal welfare regime, whereas Germany represents a conservative one. Criteria for the typology and for the clustering of nations are the degree of the de-commodification of provision, the distributional impact of services and benefits, and the state/market mix in pension provision. These features are products of national history: of the nature of working

class mobilization, of political coalitions of classes, and of the historical legacies of regime institutionalization. Welfare regimes are not only characterized by different institutional arrangements, but also by specific stratification systems as an outcome of social policy and by different "moral" logics behind these policies. Esping-Andersen's typology has received some criticism, especially in its classification of Britain. As an alternative, Castles and Mitchel (1993) for example, describe Great Britain as representative of a fourth model, the labourite welfare state. However, for our purpose, it is of lesser importance which label fits Britain best; what is crucial is that Britain and Germany can be characterized as different welfare systems.

From the very beginning, British social policy was designed to fight poverty. Social assistance is basically demand-oriented. Its purpose is to guarantee a basic standard of living for everyone, but not to promote equality in a broader sense. Benefits are directed mainly to a clientele of low income groups, usually from the working class. In addition to the social security system, the state provides various forms of private insurance. The basic idea of the liberal tradition is that the state has to prevent poverty, but should not intervene in the stratification system produced in the market. People should not opt for welfare instead of work. Therefore, entitlement rules are strict, means-tested and to some extent stigmatizing.

In Germany, the preservation of status differentials was, and is, the predominant principle. Financial transfers are allocated according to previous income. As a consequence, rights are attached to class and status. By compulsory insurance, the state supplements the market as a provider of welfare. On the other hand, the emphasis on upholding status differences means that its redistributive impact is relatively low. With the means-tested social assistance (Sozialhilfe), the German system also contains an instrument especially designed to fight poverty. East Germany was a socialist welfare state for more than four decades. In the socialist model of a collectivist welfare regime, the communist state was the only provider of social welfare. The main instruments were non-targeted, object-related subsidies (Müller 1995). After unification, the welfare institutions of West Germany were transferred to the East.

The second reason to compare Germany and Great Britain lies with the fact that poverty, especially income poverty, is much more widespread in Great Britain than in Germany. Irrespectively of where one draws the poverty line, at the 40-, 50-, or 60%-level of median or average income, a greater share of the British population is affected by poverty. The same holds true if one leaves the poverty line constant, but uses different equivalence scales (Kohl 1992). In the latest Human Development Report, a new Human Poverty Index for industrialized countries is constructed, containing indicators of income poverty, social exclusion (measured by the long-term unemployment rate), deprivation in knowledge (ability to read and write "far from adequate"), and deprivation in survival (percentage of people likely to die before age 60). Among the 17 leading OECD-countries, Great Britain ranks fifteenth, whereas Germany ranks third, only behind Sweden and the Netherlands (Human Development Report 1998: 28). During the past decade, income inequality has risen slightly in West Germany, and there has been a moderate increase in the number of

poor. In Great Britain by contrast, there has been a sharp increase in both income inequality and the number of poor. Inequality, measured by the Gini index, rose from about 23 to 33 within twelve years, a greater increase than in any other OECD-country, with the exception of the United States (Eurosocial 1996). According to data from Gottschalk and Smeeding (1997), the increase was even stronger in Great Britain than in the U.S.. During this same period, the share of the population living in income poverty in the United Kingdom climbed from 8% (1979) to 19% (1993/94) (Oppenheim 1998: 297).

Because of unification, East Germany, of course, is a special case. Under state socialism, income distribution was egalitarian and poverty was a rare phenomenon, at least not covered by official or academic statistics. If one considers East Germany as a society of its own, income inequalities and the number of poor increased moderately during transformation, while the standard of living improved for the majority of the population. However, unification merged two different societies with different social structures. Compared to the higher standard of West Germany, a quarter of the East German population was poor in 1990. As it turned out, much of this "new" poverty was transitional. Living conditions improved rapidly, even though income and the average standard of living are still higher in West Germany. In 1997 mean equivalent household income was about 15% lower than the mean income in West Germany (income adjusted for the different price levels). In nominal value, the mean income was 20% lower. Thus, concerning poverty rates we have the ranking West Germany, East Germany and – with the highest rates – Great Britain. What is especially striking is the fact that social expenditures, measured as the share of GNP, are nearly the same in both countries: 29% in Germany, 28% in Great Britain. The similarity in total expenditure and the dissimilarity in poverty rates can thus be explained by the different social policy approaches pursued in the two countries.

Finally, the third reason of comparison is that the average standard of living, measured by purchasing power parities, is about ten percent lower in Great Britain than in the unified Germany. This is mainly an effect of a more productive economy and higher wages in Germany. If we consider differences in living conditions between West and East Germany, Great Britain finds its place in the middle between the two Germanies, closer to East Germany than to West Germany.

4 Data, Hypotheses and Results

In both studies, the Breadline Britain Survey and the German Welfare Survey, the standard of living is measured by a long list of items, containing mainly consumer goods and household equipment, but also social and financial activities. For the purpose of cross-national comparison, we can use 14 items, of which 11 items are literally equivalent, and three items functionally equivalent. Following the concept of relative deprivation, respondents have been asked whether they regard such goods and activities as necessary for a decent standard of living; and they have been asked whether they themselves can afford them or not. These data can be analysed on two different levels: on the level of marginals for each item; or by building up an index which combines these items.

4.1 Necessities and Shortages

A general impression of the public attitudes to a range of goods and activities is shown in figure 1, with the percentage of respondents perceiving items as necessities for a decent standard of living. In both countries some basic goods like a bath inside the apartment, one cooked meal per day or a washing machine are considered absolutely necessary. On the other hand, only few people consider it necessary to have a dishwasher, a computer, a videorecorder or to go to a restaurant once a month.

In a comparative view, more British regard inviting friends for dinner as important, but far fewer believe a phone or a car is essential. To show cross-national differences in quantitative terms, we summed up the answers regarding six basic goods as "necessary" in a total score. This score is lowest in Great Britain. Notions of an acceptable standard of living are more restricted in Great Britain than in Germany, presumably either due to the concentration of social policy on very basic needs or due to the lower average standard of living, or to a combination of both. Generally there is a high correlation between the ownership of goods and perceiving them as necessities (Lipsmeier 1999: 291). Surprisingly, the score is highest for East Germany, not for West Germany. One plausible explanation might be that the experience of shortages of many goods in the planned economy lead now to high expectations and claims. Lipsmeier (ibid: 286f) argues that East Germans primarily refer to the remaining differences in living conditions between East and West Germany as a dimension of comparison, which leads to a collective view of deprivation. For that reason more items might be regarded as necessary for a decent standard of living by East Germans.

Figure 1: Necessities and Shortages in Great Britain, East Germany and West Germany

	Perception of Necessities (Percentage of population claiming items as necessity)			Shortages (Percentage of population lacking each item because they cannot afford it)		
	GB	G(E)	G(W)	GB	G(E)	G(W)
Bath inside apartment	95	93	93	0	1	1
One cooked meal per day	89	91	87	1	1	1
Washing machine	73	92	88	4	1	1
Regular savings*	68	44	39	29	30	19
New clothes, not second hand*	65	26	23	4	23	15
Television	58	72	59	1	0	0
Phone	57	77	74	7	2	1
Holiday abroad*	55	34	30	21	20	15
Invite friends for dinner once a month	38	17	18	10	16	11
Car	27	62	46	17	9	8
Take family out for dinner once a month	17	12	11	22	22	11
Videorecorder	12	15	12	10	6	6
Computer	5	14	13	15	14	10
Dishwasher	4	12	20	18	17	10

* only functional equivalent wording

Data Sources: Breadline Britain Survey 1990, German Welfare Survey 1998.

Our assumption is that due to greater inequality in income distribution and due to the policy of only modest welfare benefits, a larger part of the population is excluded from a decent standard of living in Great Britain than in Germany. Figure 1 also shows how large the part of the population is that cannot afford goods and activities. Basically we can see the same pattern in the three societies. Only very few respondents cannot afford those items perceived as absolute necessities. The figures are higher for those activities which are the most expensive ones (like going on holiday) or which presuppose a continuous surplus of money (like regular savings). Nevertheless, the share of population that cannot afford any of these items never exceeds 30%. This underlines the fact that the standard of living is generally high for the majority of people. Overall, in Great Britain more respondents say that they cannot afford several items, whereas these figures are lowest in West Germany.

4.2 Distribution of Deprivation

To move beyond these single items, we have computed an index of deprivation (proportional deprivation index: PDI). This index measures to what extent respondents fall below an acceptable standard of living as defined by the population. The computation is based on the aggregated judgements of necessities in each country differentiated between age groups on the one hand; and on the individual information of whether the respondent can afford these items or not, on the other. If a person can afford all items, her score equals zero. The more items a person cannot afford and the more important these items are according to public opinion, the higher is a person's deprivation score (Halleröd 1995, Böhnke/Delhey 1999).³

Figure 2 shows the average level of deprivation, which is highest in Great Britain and followed by East Germany. Considering overall deprivation, West Germany has the lowest degree. The average deprivation values for PDI-deciles show the high percentage of population which is not effected by deprivation at all. A zero score goes up to the fifth decile in the UK and up to the sixth decile in Germany. That means that the standard of living in both countries is generally high, but more people in Germany are able to afford all items shown on the list above than in the United Kingdom.

Deprivation scores rise more sharply in Great Britain. Whereas in East and West Germany a low standard of living is mainly concentrated on the last PDI-decile, it is more widespread in Great Britain. The number of missing items people cannot afford goes up to six on the average out of a list of 14 items.

To analyse who is mainly affected by deprivation we computed the index for several socio-demographic groups. We assume that because of the principle of status preservation in Germany, the risk of being affected by deprivation is lower for unemployed and pensioners in Germany than in Great Britain. Figure 2 again shows that on the whole West Germany has always the lowest degree of deprivation, followed by East Germany. Once more we find the highest figures in Great Britain. What is most striking is that the long-term unemployed in each country show a significantly higher degree of deprivation compared with the national average. Surprisingly the unemployed in Germany suffer from a similar low standard of living than East German and English unemployed do. Such small differences between the two countries do not fit our expectation. One plausible explanation might be that many unemployed persons are no longer entitled to get financial benefits related to their former occupation. In addition, the principle of status preservation only works for those who acquired access to the social insurance system via their former occupation. That means, if they did not work long enough or did not pay into any social insurance system, there is no right to claim for a social benefit. Status preservation only applies for those who fulfill certain conditions, which perhaps can no longer be taken for granted for a growing part of the population.

Figure 2: Distribution of Deprivation

PDI-Deciles	Deprivation-score, mean			Number of missing items, mean		
	GB	G(E)	G(W)	GB	G(E)	G(W)
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4	0	0	0	1	0	0
5	0	0	0	0,4	0	0
6	.21	0	0	1,3	0	0
7	.63	.21	.20	1,4	1,1	1,1
8	.91	.46	.45	2,8	1,8	1,8
9	1.45	.83	.82	3,8	3,3	3,2
10	2.52	1.65	1.81	6,3	5,8	6,1
All	.58	.42	.30	1,6	1,6	1,1
Gender						
Men	.50	.40	.28	1,4	1,5	1,0
Women	.65	.44	.32	1,8	1,7	1,2
Family Type						
Couple, no children	.42	.35	.23	1,2	1,4	0,9
Couple, <= 2 children	.43	.42	.25	1,3	1,6	1,0
Couple, > 2 children	.75	.57	.49	2,2	2,1	1,8
Single parent	1.40	1.00	.88	3,8	3,4	3,2
Occupational status						
Full time	.38	.30	.19	1,1	1,2	0,7
Part time	.63	.48	.31	1,5	1,8	1,1
Unemployed < 12 month	.73	.68	.76	2,3	2,5	2,4
Long term unemployed	1.50	1.06	1.58	3,9	3,5	5,1
Retired	.59	.24	.22	1,6	1,2	1,1
Maximum	6.63	6.61	6.13	14	14	14

Data Sources: Breadline Britain Survey 1990, German Welfare Survey 1998.

Other groups with a high risk of deprivation are single parents and families with more than two children. We also see that pensioners in Germany are better off than in Great Britain. Nevertheless, British pensioners show a deprivation score only slightly above the average of the whole population. On these grounds our hypothesis that the unemployed and pensioners are much more affected by deprivation in Great Britain than in Germany must be rejected. Although scores are highest in Great Britain, the structure of who is affected by deprivation and the relation to the national average are rather similar. If we take a look at the scores for those working part time, we see a slight difference between the two countries, presumably reflecting the higher level of wages in Germany. There is also a difference in the degree of deprivation between men and women in the two nations, with a bigger gender gap in favour of men in the United Kingdom.

4.3 Deprivation and Income

As we have pointed out above, income inequality is much stronger in the United Kingdom. Is there a difference in the connection between income and standard of living in both nations? Which income groups also suffer from strong deprivation?

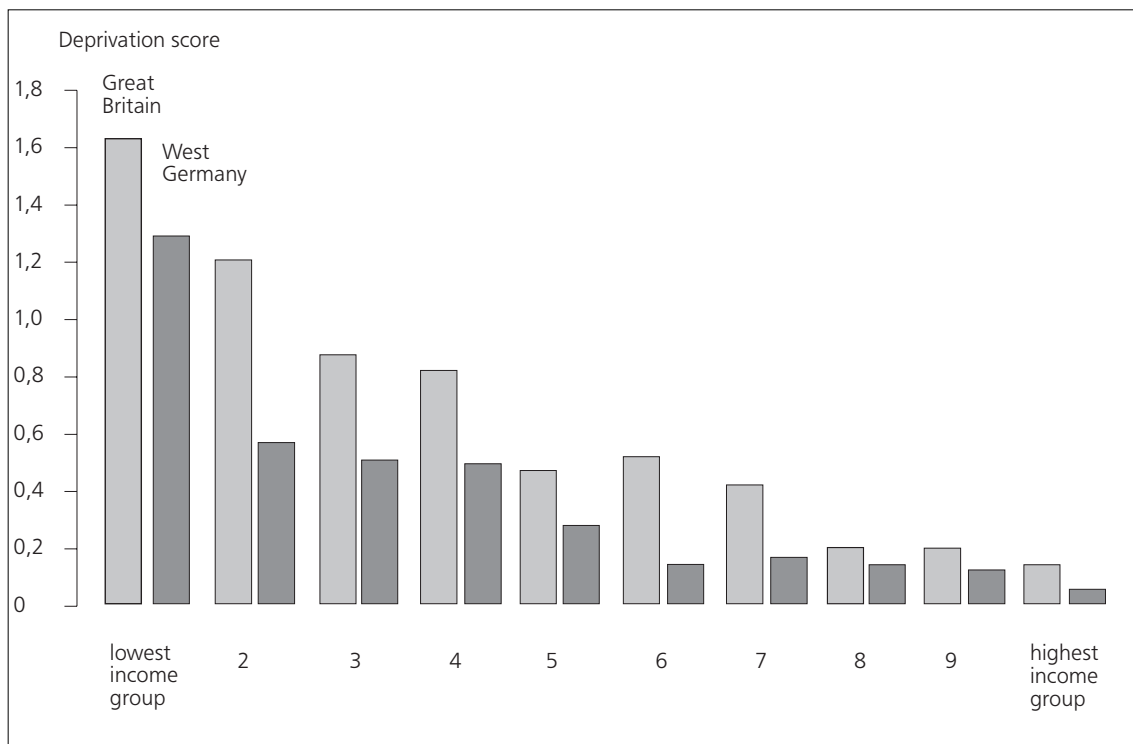
Correlations between income (we took the average household income, on the basis of an equivalent scale) and standard of living are $-.32$ in West-Germany, $-.35$ in East-Germany and $-.39$ in the United Kingdom. The lower the income, the higher the level of deprivation. This is especially true for Great Britain.

Figure 3 shows income groups and the related deprivation means. Because of the rather slight differences between East and West Germany we only compare Great Britain and West Germany. Deprivation in each income group is much higher in Great Britain. Noticable is the obvious concentration of a low living standard in the lowest income group in West Germany. In comparison, strong deprivation also affects the second income decile in the United Kingdom. Another figure that demonstrates the stronger relationship of low income and deprivation in Great Britain shows the proportional size of those who suffer from both aspects of poverty: low income (measured by the 50%-average income level) and low standard of living (measured by the West German score for the last deprivation percentile, 1.01) The overlap shows that 11% of the british population belong to the so-called 'truly poor' (Halleröd 1995) (see figure 4). This segment of 'truly' poor is larger than in East Germany (7%) and almost three times larger than in West Germany (4%). At the same time it becomes obvious that both aspects of poverty must not necessarily go hand in hand as one usually might expect. If we restrict our analyses to one criterium to establish a poverty line, for example 50% of the average household income, we systematically ignore those who suffer from poor living conditions as a result of other reasons. From a methodological point of view, these results evidently point to the importance of a more detailed poverty picture with multidimensional indicators.

A closer look at the structure of the truly poor reveals that we find single parents and unemployed in this group to a great extent (Böhnke/Delhey 1999: 29). This is even more the case for Britain, where 47% of the single parents and 39% of the unemployed are 'truly poor'. These socio-demographic groups are the same as those, which face a high poverty if we observe only one poverty dimension. The question is which factors must be given to constitute a minor group exposed to poverty in both dimensions. Further research has to take into account aspects of time and social networks, which might play an important role in this regard.

For those who belong to one of the other poverty segments - deprivation without income poverty or vice versa - we see the same pattern in the two countries: The deprivation-segment is twice as large as the income-poverty-segment. However, the cross-national differences concerning the amount of deprivation and income poverty persist.

Figure 3: Income Deciles and the average level of deprivation in Great Britain and West Germany



Data Sources: Breadline Britain 1990, German Welfare Survey 1998.

Figure 4: The Relationship of Income Poverty and Deprivation (% of population)

	Income Poverty AND Deprivation	Deprivation without Income Poverty	Income Poverty without Deprivation
Great Britain	11 %	15 %	8 %
Germany East	7 %	11 %	5 %
Germany West	4 %	6 %	3 %

Data Sources: Breadline Britain 1990, German Welfare Survey 1998.

4.4 Deprivation Risks

Summing up our empirical results up to now, we can point out two findings: first, the level of deprivation is highest in Great Britain, lowest in West Germany. East Germany finds itself in the middle, yet closer to West Germany than to the UK. The group of the unemployed, especially the long-term unemployed, is the only exception, with the highest scores in West Germany. This might be an effect of the reduced entitlements to get status related benefits when outside the labour force for a long period in Germany. Second, the connection between low income and low standard of living is strongest in Great Britain. Due to higher income inequality more people at the lower end of the income scale suffer from deprivation.

Living conditions are influenced by the degree of responsibility of the state to help in case of unemployment, single parenthood, health problems or old age and should cause different deprivation risks. As to unemployment, a German with a so called "normal working biography" - i.e. a full time job and a continuous working biography with social insurance contributions - receives benefits for one year covering up to 60% of his last employment's income. The long-term unemployed and people who do not fulfill certain preconditions must rely on smaller means-tested benefits. In Great Britain, unemployment benefit or income support is standardized, independent of the former income level, e.g. a formerly high standard of living is reduced heavily and can only be stabilized through private insurance. Duration, and to some extent even the amount of the benefit, depends on family relations, age and property. In general, unemployment in Great Britain means a high risk of deprivation in any case, while in Germany the status preservation principle helps to weaken the consequences of unemployment at least for certain groups. Highly at risk are the long-term unemployed, those who work part time and do not pay insurance contributions regularly or who cannot rely on family support (Clasen 1994; Walker/Ashworth 1998; Wendt 1993; Weber/Leienbach/Dohle 1991). Differences in family policy or gender related policies are also likely to have an impact on deprivation risks (McKay 1998; Meyer 1994; Sainsbury 1994; Hobson 1994, Lewis 1993, 1997). But according to our empirical results, differences in deprivation risks between the two countries seem to be reduced to the level of deprivation. Although there are important differences in social policy and welfare benefits, the structure of deprivation risks seems to be the same.

Our next empirical step tests the influence of several independent variables on the level of deprivation. Income is one - and presumably the main - factor causing deprivation. What is of interest now, is the effect that other variables have on deprivation excluding the impact of income, which raises important questions concerning welfare policy and its outcomes on poverty and deprivation rates. The access to non-monetary resources and to free services can differ as widely between nations as the level of financial support and the ability to make ends meet with a given amount of money. Halleröd argues that "... the real problems of deprivation occur, not at the very moment that income falls under a certain level, but when

Figure 5: Deprivation and its determinants in Great Britain: Logistic Regression Results (odds ratios)

	Single effects	Single effects controlled for income	Model covering all aspects simultaneously
Income (reference category: highest income group)			
Second quintile	2,27		2,36
Third quintile	5,36**		5,37**
Fourth quintile	11,91***		10,02***
Lowest income group	36,46***		24,69***
Occupational Status (Full time)			
Part time	4,07***	2,25*	2,09
Unemployed < 12 month	7,83***	1,77	1,78
Long-term unemployed	13,95***	3,15***	3,29***
Retired	2,27***	0,83	0,80
Household Composition (couple without children)			
Single household	1,97**	0,89	0,82
Couple, <= 2 children	0,84	0,74	0,61
Couple, > 2 children	1,87	1,18	1,00
Single parent	8,09***	2,53**	1,51

Significance level: * p < 0.05 ** p < 0.01 *** p < 0.001

Data Source: Breadline Britain 1990.

all savings are depleted and when the need for new clothes, maintenance of the car, the house, etc. can no longer be neglected.” (Halleröd 1998: 286). Therefore, though income is an important factor that determines the prevalence of deprivation, special living conditions such as unemployment or lone parenthood might have far-reaching consequences for a household’s long-term financial situation.

To answer such questions properly we computed several logistic regression models (DeMaris 1992, Andreß/Hagenaars/Kühnel 1997). The dependent variable is a dichotomous one with the categories ”deprived” and ”non-deprived”. As a deprivation line we took again the PDI-score indicating the highest PDI-decile in each country. As determinants of poverty in terms of deprivation we used income quintiles, occupational status, and household composition as categorical variables. The question is: Does occupational status as well as household composition still have an effect on the level of deprivation when income is included as a control variable in the model? This would help to emphasize the impact of other determinants on the prevalence of deprivation independent of financial resources.

Figure 5 presents the results for Great Britain. The first column shows three regression models, all computed separately for each of the independent variables. When controlling for income (column 2) the odds ratios decline to a great extent remaining significant only for long-term unemployed and single parents. When analyzing all aspects simultaneously

Figure 6: Deprivation and its determinants in Germany: Logistic Regression Results (odds ratios)

	Single effects		Single effects controlled for income		Model covering all aspects simultaneously	
	West	East	West	East	West	East
Income (reference category: highest income group)						
Second quintile	2,26	1,09			2,40	1,16
Third quintile	1,87	2,61			1,90	2,68
Fourth quintile	9,09***	6,18*			9,08***	6,11*
Lowest income group	23,51***	30,44***			17,74***	23,27***
Occupational Status (Full time)						
Part time	2,47**	1,88	2,27*	1,45	2,32*	1,52
Unemployed < 12 month	8,45***	3,15**	6,29***	1,46	4,88**	1,53
Long-term unemployed	34,98***	7,23***	11,88***	2,37*	11,13***	2,16*
Retired	1,42	0,58	1,07	0,45*	0,75	0,29**
Household Composition (couple without children)						
Single household	2,51***	2,15**	1,60*	1,57	1,68*	2,12*
Couple, <= 2 children	0,80	1,11	0,47**	0,71	0,39*	0,52*
Couple, > 2 children	2,59**	2,18	0,97	1,54	0,80	1,12
Single parent	9,20***	7,60***	3,01**	3,05*	2,08	2,22

Significance level: * p < 0.05 ** p < 0.01 *** p < 0.001

Data Source: German Welfare Survey 1998.

(column 3), the long-term unemployed are the only group that show a significant effect in addition to income. This is due to the interrelation between occupational status and household composition. For the lowest income quintile the risk of deprivation is 25 times higher than the risk exposure for the highest income group. Surprisingly, there is a remarkable decline of the odds ratios of the lowest income quintile when analyzing all variables in a single model. Independent of the income variable, the long-term unemployed have a deprivation risk three times higher than the reference category, which are full time workers.

We will now compare these results with the logistic regression models for West and East Germany. First of all, the levels of the odds ratios are lowest in West Germany and highest in Britain, which confirms the results shown above. Similar to the British model the effects of occupational status and household composition decline heavily when the impact of income is controlled for. Nevertheless, the weakened effects remain significant - this is even more true for West Germany where both short and long-term unemployed are highly at risk. The impact of income in East Germany is concentrated on the lowest income group, whereas Britain shows significant coefficients up to the third income quintile. The figures also confirm the fairly good position of East German senior citizens, who have a lower

deprivation risk in comparison to the reference category of the full time workers. This can be explained by the continuous and full time working biographies of both East German men and women in the former GDR, which lead to high pension entitlements in post-unification Germany. In West Germany, too, the deprivation risk of single parents loses its significant effect when controlling for income and occupational status. The impression is that the effects of income are highest in Great Britain, whereas in East and West Germany the income variable is also the main influencing factor, but does not weaken the other aspects as strongly as in Britain.

4.5 Poverty Aspects and Subjective Well-being

These poverty analyses were based on objective living conditions. On top of that we are interested in the subjective dimension: How do the four poverty and welfare groups - non-poor, deprived, poor in terms of income, and 'truly' poor - correspond to indicators which measure the subjective well being in several life domains? The German Welfare Survey offers the possibility of analysing satisfaction scores concerning household income, standard of living and overall life satisfaction. With regard to the debate about social exclusion, we will add an indicator measuring satisfaction with the possibilities of participating in normal economic, political, cultural and social life. Finally, we will examine objective and subjective determinants explaining overall life satisfaction. This will help us to argue in favor of a multidimensional approach in poverty research that includes not only objective living conditions in terms of income and standard of living, but also subjective indicators like satisfaction in certain life domains.

With regard to the mean values shown in figure 7, the fact is most impressive that those suffering from both aspects of poverty (truly poor) generally have the lowest satisfaction scores. There is a remarkable distance between the satisfaction scores of those who are poor in terms of only one poverty aspect, standard of living or income, and those, who suffer from both poverty dimensions at the same time. This can be taken as an argument for different poverty affection. Within the group of the poor it is possible to identify another section that is even worse off. The group of the non-poor always shows the highest degree of satisfaction with values higher than the average of the whole sample. Differences between East and West Germany correspond to the lower income level in East Germany: Satisfaction with household income and standard of living is higher in West Germany. Nevertheless differences in the overall life satisfaction are rather small. Satisfaction with the possibilities of participating in normal social life decreases mainly for deprived persons and the 'truly poor'. Poverty in terms of income alone is obviously not enough to have a strong influence here.

Figure 7: Satisfaction with certain life domains differentiating between poverty segments in East and West Germany 1998 (means).

	Satisfaction with standard of living		Satisfaction with household income		Satisfaction with possibilities of participating in normal social life		Overall life satisfaction	
	West	East	West	East	West	East	West	East
All	7,3	6,6	6,9	5,9	7,5	6,6	7,7	7,2
Non-poor	7,6	7,1	7,3	6,6	7,7	6,9	7,9	7,6
deprived	5,6	4,9	5,3	3,7	6,2	5,7	6,3	6,1
Poor in terms of income	6,1	5,9	5,1	4,1	7,1	6,6	7,1	6,7
,truly' poor	4,4	3,4	3,6	2,3	5,5	4,5	5,8	5,7

Satisfaction is measured with a 0-10 scale: 0 = completely dissatisfied; 10 = completely satisfied.
Data Source: German Welfare Survey 1998.

Figure 8: Objective and subjective determinants of overall life satisfaction in West and East Germany 1998 (regression coefficients)

	West Germany		East Germany	
	Bivariate estimates	Including all variables simultaneously	Bivariate estimates	Including all variables simultaneously
Subjective indicators ¹ :				
Satisfaction with standard of living	.60	.50	.65	.51
Satisfaction with household income	.51	.07	.56	.12
Objective indicators:				
Household income ²	.23	n.s.	.26	n.s.
Standard of living ³	-.38	-.17	-.45	-.12
Explained variance		42%	46%	

n.s. = not significant.

¹measured with a 0-10 scale.

² Equivalent household income, adjusted for the different price levels.

³ Proportional Deprivation Index Scores (high score means high level of deprivation).

Data Source: German Welfare Survey 1998.

Overall life satisfaction is an indicator to measure a subjective evaluation of all living conditions and circumstances in sum. With a linear regression model we are able to show the influence that our poverty indicators have on overall life satisfaction (figure 8). As explanatory variables we used two subjective indicators (satisfaction with standard of living and satisfaction with household income) and two objective indicators (household income and standard of living), which both served as our poverty measures up to now. The bivariate estimates all show significant effects on life satisfaction, with higher values in East Germany. When we include all variables in the model, only satisfaction with standard of living remains an explanatory ‘objective’ factor with a high beta coefficient. Household income even loses its significant effect in East and West Germany. This is a strong argument to include standard of living into poverty research, because it represents every day living conditions in a more reliable way than income does and is obviously closer to people’s subjective well being. The satisfaction with the standard of living, which is of course highly interrelated with the consumption possibilities and lifestyle performances due to the available income covers the dominant factor that explains overall life satisfaction in this model.

5 Conclusion

To sum up our results, we emphasize the following points: First, according to our analysis, standard of living is lowest in Great Britain, and living conditions are more unequally distributed and more strongly related to income position. Second, there are no differences in the structure of deprivation risks in the two countries: unemployed, single parents and families with more than two children are most vulnerable in each country.

This means that different welfare regimes lead to different levels of deprivation on the whole. But within both countries, social policy does not seem different enough to bring about dissimilar deprivation risks.

As the logistic regression results show, income is the main predictor of deprivation prevalence. In Britain, only long-term unemployment is responsible for deprivation risks separately from the income level. In Germany, income weakens all other effects on deprivation, too, but to a slightly lesser extent.

We would also like to note that a more detailed list of comparable items would have been preferable to the list used in this study, including more social and financial activities in order to reduce the predominance of consumer goods. With a more extensive set of indicators, deprivation could be measured in a broader sense, as intended by Townsend, and would not be so restricted to the material features of poverty. So far, it is difficult to explain the

differences we have found and to decide whether it is the countries' level of welfare, the structure and extent of inequality, or the institutions of social policy that are mainly decisive. In order to find reliable answers, a broader range of countries would also be desirable.

According to our results, the different poverty levels have a significant impact on subjective well-being. Low income and low standard of living combined, result in very low satisfaction scores compared to those who are affected by only one aspect of poverty. In addition, we argued that satisfaction with the standard of living has the greatest explanatory effect on overall life satisfaction. From a methodological point of view, this is strong evidence that one should rely on a multidimensional set of indicators when measuring poverty. Indeed, standard of living seems to be closer to everyday life chances and people's evaluation of their current living conditions than income.

Notes

- 1 Large parts of this paper have been presented at the 4th Conference of Sociology , Will Europe work?' in Amsterdam, August 1999, organized by the European Sociological Association. We thank David Gordon for his kind cooperation concerning data access.
We also are grateful to Daniel Ziblatt who undertook the correction of our English.
- 2 The Breadline Britain Survey 1990, carried out by Marketing and Opinion Research International (MORI), funded by London Weekend Television (LWT) and by the Joseph Rowntree Foundation, is a national representative survey especially designed to measure the extent and nature of poverty in Great Britain. 1319 adults were interviewed face to face in a quota sample. Additional fieldwork with 512 interviews was carried out among households living in particular deprived areas. The German Welfare Survey has been conducted since 1978 every five years in West Germany and also in East Germany since 1990. The representative sample covers objective living conditions and subjective well-being for several life domains. 1998 indicators to measure the standard of living were added to the questionnaire, but again the survey aims at characterizing the level of welfare of the society as a whole, rather than concentrating on poverty research. Our working sample consists of 1680 cases for Great Britain, 1914 cases for West Germany and 989 cases for East Germany.
- 3 For other index constructions see Muffels 1993, Andreß 1999.

References

- Andreß, H.-J. (ed.) (1998): *Empirical Poverty Research in a Comparative Perspective*. Aldershot/Brookfield: Ashgate.
- Andreß, H.-J. (1999): *Leben in Armut. Analysen der Verhaltensweisen armer Haushalte mit Umfragedaten*. Opladen.
- Andreß, H.-J./Hagenaars, J. A./Kühnel, S. (1997): *Analyse von Tabellen und kategorialen Variablen*. Berlin/Heidelberg.
- Böhnke, P., Delhey, J. (1999): *Lebensstandard und Armut im vereinten Deutschland*. WZB Discussion Paper FS III 99-408.
- Castles, F.G. / Mitchel, D. (1993): *Worlds of Welfare and Family of Nations*. In: Castles, F.G. (ed.), *Families of Nations. Patterns of Public Policy in Western Democracies*. Aldershot, pp. 93-128.
- Clasen, J. (1994): *Paying the Jobless. A Comparison of Unemployment Benefit Policies in Great Britain and Germany*. Aldershot/Brookfield: Avebury.
- DeMaris, A. (1992): *Logit modeling: practical applications*. Sage University Paper. Newbury Park.
- Esping-Andersen, G. (1990): *The three worlds of Welfare Capitalism*. Princeton University Press.
- Eurosocial (1996): *Arbeit und Einkommen in OECD-Ländern*. In: *Journal für Sozialforschung*, vol. 36, no.1, pp. 109-125.
- Glatzer, W., Hübing, W. (1990): *Lebenslage und Armut*. In: Döhring, D./Hanesch, W./Huster, E.-U. (eds.), *Armut im Wohlstand*. Frankfurt am Main, pp. 31-55.
- Gordon, D., Pantazis, C. (1997): *Measuring poverty: Breadline Britain in the 1990s*. In: Gordon, D., Pantazis, C. (eds.), *Breadline Britain in the 1990s*. Aldershot, pp. 5-47.
- Gottschalk, P./Smeeding, T.M. (1997): *Cross-national Comparisons of Earnings and Income Inequality*. In: *Journal of Economic Literature*, no.2, vol. 35, pp.633-687.
- Hagenaars, J. A. (1991): *The definition and measurement of poverty*. In: Osberg, I. (ed.), *Economic inequalities and poverty. International perspectives*. Armonk, pp. 133-156.
- Habich, R., Noll, H.-H., Zapf, W. (1999): *Subjektives Wohlbefinden in Ostdeutschland nähert sich westdeutschem Niveau. Ergebnisse des Wohlfahrtssurveys 1998*. In: Informationsdienst Soziale Indikatoren (ISI), No. 22, June 1999, pp. 1-6.
- Halleröd, B. (1995): *The Truly Poor: Direct and Indirect Consensual Measurement of Poverty in Sweden*. In: *Journal of European Social Policy*, 1995, 5 (2), pp. 111-129.
- Halleröd, B. (1998): *Poor Swedes, poor Britons: A comparative analysis of relative deprivation*. In: Andreß, H.-J. (ed.), a.a.O., pp. 283-311.
- Hobson, B. (1994): *Solo mothers, social policy regimes, and the logics of gender*. In: Sainsbury, D. (ed.), *Gendering welfare state*. London, pp. 150-169.
- Human Development Report (1998). United Nations Development Programme. New York, Oxford.
- Kohl, J. (1992): *Armut im internationalen Vergleich. Methodische Probleme und empirische Ergebnisse*. In: Leibfried, S./Voges, W. (eds.), *Armut im modernen Wohlfahrtsstaat*. Opladen, pp. 272-299.
- Kronauer, M. (1997): *"Soziale Ausgrenzung" und "Underclass": Über neue Formen der gesellschaftlichen Spaltung*. In: *Leviathan*, 1/1997, pp. 28-49.

- Layte, R./ Maitre, B./ Nolan, B./ Whelan, Ch.T. (1999): Income, Deprivation and Economic Strain: An Analysis of the European Community Household Panel. Paper for the 4th European Sociological Association Conference, Amsterdam, August 18-21.
- Levitas, R. (1998): *The inclusive Society? Social Exclusion and New Labour*. London.
- Lewis, J. (ed.) (1993): *Women and Social Policies in Europe. Work, Family and the State*. Aldershot.
- Lewis, J. (1997). *Lone Mothers: The British Case*. In: J. Lewis, *Lone Mothers in European Welfare Regimes. Shifting Policy Logics*. London/Philadelphia, pp. 50-75.
- Lipsmeier, G. (1999): Die Bestimmung des notwendigen Lebensstandards - Einschätzungsunterschiede und Entscheidungsprobleme. In: *Zeitschrift für Soziologie*, 4/28, August 1999, pp. 281-300.
- Mack, J., Lansley, S. (1985): *Poor Britain*. London.
- McKay, St. (1998): Exploring the dynamics of family change: lone parenthood in Great Britain. In: Leisering, L./Walker, R. (eds.), *The dynamics of modern society. Poverty, policy and welfare*. Bristol.
- Meyer, T. (1994): The German and British Welfare States as Employers. Patriarchal or Emancipatory?. In: Sainsbury, D. (ed.), *Gendering welfare state*. London, pp. 62-81.
- Muffels, R. (1993): *Welfare Economic Effects of Social Security. Essays on Poverty, Social Security and Labour Market: Evidence from Panel Data*. Tilburg.
- Müller, F. (1995): Status and Perspectives of Social Security Systems in Eastern Europe. In: Lachmann, W. / Rösner, H.J. (eds.), *Social Security in Social Market Economy*. Sankt Augustin, pp. 257-271.
- Oppenheim, C., 1998: Der Anstieg von Armut und Ungleichheit in Großbritannien. In: Voges, Wolfgang, Yuri Kazepov (Hg.), 1998, *Armut in Europa*. Wiesbaden: Verlag Chmielorz GmbH. S. 294-307.
- Room, G. (ed.) (1995): *Beyond the threshold. The measurement and analysis of social exclusion*. Bristol.
- Sainsbury, D. (ed.) (1994): *Gendering welfare state*. London
- Silver, H. (1994): Social Exclusion and Social Solidarity – three Paradigms. In: *International Labour Review*, No. 5-6, Vol. 133, S. 531-578.
- Townsend, P. (1979): *Poverty in the United Kingdom*. Harmondsworth/Middlesex/Berkeley.
- Walker, R./ Ashworth, K. (1998): *Welfare Benefits and Recession in Great Britain*. In: Leisering, L./Walker, R. (eds.), *The dynamics of modern society. Poverty, policy and welfare*. Bristol, pp.199-220.
- Weber, A./Leienbach, V./ Dohle, A. (1991): *Soziale Sicherung in Europa. Die Sozialversicherung in den Mitgliedstaaten der Europäischen Gemeinschaft*. Baden-Baden.
- Wendt, B. J. (1993): "Sozialstaat" und "Welfare State" - Unterschiedliche Traditionen im Vergleich. In: Lottes, G. (ed.), *Soziale Sicherheit in Europa. Renten- und Sozialversicherungssysteme im Vergleich*, Heidelberg, pp. 29-55.