

Luxembourg Income Study Working Paper Series

Working Paper No. 114

Family Poverty and the Labor Market

Michael Förster

01/07/94

(scanned copy)



FAMILY POVERTY AND THE LABOUR MARKET

**AN INTERNATIONAL COMPARISON OF LABOUR MARKET PARTICIPATION
AND WORKING TIME ARRANGEMENTS BASED ON ANALYSIS OF
MICRODATA FROM THE LUXEMBOURG INCOME STUDY**

Michael F. Förster

July 1994

The author would like to thank Lee Rainwater, Gaston Schaber, Heinz Stapf and Uwe Warner for helpful suggestions and comments on the first draft of the paper.

TABLE OF CONTENTS

1.	THE BACKGROUND	1
2.	DATA SOURCES AND METHODOLOGICAL CHOICES	3
3.	PARTICIPATION IN THE LABOUR MARKET	4
4.	WORKING TIME ARRANGEMENTS OF FAMILY MEMBERS	11
4.1	Couple families	12
4.2	Single parent families	14
5.	RECIPIENTS OF UNEMPLOYMENT BENEFITS	16
6.	CONCLUSIONS	19
7.	FURTHER RESEARCH REQUIREMENTS: THE LUXEMBOURG EMPLOYMENT STUDY	21
	REFERENCES	25

LIST OF TABLES AND CHARTS

Table 1	Poverty rates of non-aged families with three or four persons, by number of earners in the family	5
Table 2	Absence of earnings: representation index for poor families with children	6
Table 3	Couples with a full-time working head and an inactive spouse, in percent of all non-aged couple families	12
Table 4	Working patterns of non-aged couple families, and respective poverty rates	13
Table 5	Working patterns of non-aged single parent families, and respective poverty rates	15
Table 6.	Proportion of non-aged families receiving unemployment benefits	17
Table 7.	Families receiving unemployment benefits exceeding one third of their disposable income, by age of family head	18
Table 8.	Family type, work arrangement and well-being level	23
Chart 1.	Labour force status of the family head in non-aged families, by poverty status of the family	8
Chart 2.	Labour force status of the spouse in non-aged couple families, by poverty status of the family	10

1. THE BACKGROUND

The phenomenon of poverty in wealthy societies is not a new one. Throughout the whole postwar period, a (more or less) small part of the society was not able to participate sufficiently in economic and social life due to a lack of income resources. This population was traditionally composed of individuals and families who heavily depended on public and/or private transfers or who were excluded from them, such as parts of the elderly, persons excluded from the labour market (e.g. invalids), refugees or marginalised groups.

What is new, however, is the observation of insufficient income resources among families and persons who were generally sheltered from poverty in the last decades, such as families within the working or working-age population. A number of recent comparative poverty studies based on analysis of the Luxembourg Income Study (LIS) come to the conclusion, that in the past two decades, the incidence of poverty has, to some extent, shifted from the elderly population to younger, working-age populations (see, for example Smeeding et al. 1988; Smeeding/Rainwater 1991; Förster 1993). The pattern found was the following: whereas poor pensioner households are clustered towards relatively higher low-income cut-offs (such as 60% of the median income), younger vulnerable families are clustered towards very low income cut-offs (such as 40% of the median). This observation is not restricted to the 14 OECD countries included in the LIS data base but has also been found recently for Spain (Stapf 1994, forthcoming) and Hungary (Förster/Tóth 1994). This implies that labour market phenomena are increasingly important for a thorough analysis of poverty. Questions to be addressed in the present paper are the following:

- * what is the importance of employment, unemployment and non-activity for the income situation of different types of families?
- * which types of 'working arrangements' (full-time/part-time distribution within a family) give best shelter from poverty?
- * what is the role of unemployment benefits?

Market incomes represent for the biggest part of non-elderly families the most important component of total disposable income. Until the period of the first important recession in Western industrialised countries at the beginning of the seventies, employment of the household head was considered a sufficient guaranty for (modest but certain) income resources. This situation has changed since then, in particular due to the emerging of unemployment. The disequilibria on the labour market concern particular groups at risk such as younger families and lone parents¹.

¹ Due to the availability of the income micro data, the following analysis covers a year in the mid- to the end eighties. The recent raise in unemployment in most of the OECD countries at the beginning of the nineties might well have lead to even more drastic results.

Among the working-age population, young people at the beginning of their working career are of special concern. In the last ten to twenty years, this age group has experienced a substantive increase in unemployment, in particular long-term unemployment (especially in Western Europe). The unemployment rate for persons aged under 25 doubled from 8.6 per cent in 1975 to 17.4 per cent in 1986 (average for 15 OECD countries). About one quarter of the young unemployed have experienced long-term unemployment throughout the 1980ies (average for 17 OECD countries). As these young people have either no or limited employment history, they are, in general, not eligible for employment-related social insurance benefits (such as unemployment compensation) to alleviate periods of unemployment. If they experience long periods of joblessness, they are very likely to be discouraged from active search for work, and become dependent on publicly provided social safety nets (e.g. on means-tested social assistance). In addition, withdrawal from the labour market at an early stage in the life-cycle reduces the lifetime earning capacities.

Lone-parent families, in particular single mothers, are a second group at risk. The number of these families in OECD countries has substantially increased since the seventies to about 10 to 15 per cent of all families with children (OECD, 1990). Their family members, women and children, are particularly vulnerable to economic disadvantages. A specific problem for lone parents is that a -- necessary -- participation in the labour market increases at the same time the costs for education. One question for the analysis is therefore whether labour force participation and working patterns of single mothers have different impacts on their relative income status compared to couples families.

But not only groups at risk are concerned by labour market disequilibria. Also, the traditional work pattern of one-earner families -- a full-time employed family head with a spouse not in the labour force (caring for children and the home) -- has become more and more blurred and no longer makes up the majority of families.

Several developments have contributed to these new patterns. First, there is the growing labour force participation of women in all OECD countries. Second, structural changes in the labour market for adult men resulted in growing unemployment in traditional branches of the labour market (for example, manufacturing). But also, employment per se constitutes no longer a guaranty for relative well-being. On the one side of the income distribution -- the top end -- there is a growing number of families, in which both partners have a full-time job and who decide to have no children ('DINKS'). On the other side of the income distribution, however, we observe for the first time situations of long-time poverty among (not only large) families in which one partner has an unskilled full-time job and the other does not (or cannot) work. This means that there is a growing economic need to rely on more than one income. This latter aspect, the impact of different patterns of employment among families on their relative income position is a key aspect of the following analysis.

2. DATA SOURCES AND METHODOLOGICAL CHOICES

The analysis is based on the second wave of the micro data files from the Luxembourg Income Study (LIS), i.e. for a year between 1985 and 1987. It covers, where possible, ten European countries -- Austria, Belgium, France, Germany, Italy, Luxembourg, Netherlands, Norway, Sweden, United Kingdom-- and three non-European countries -- Australia, Canada and the United States. A detailed description of LIS can be found in Smeeding et al. (1990) and de Tombeur et al. (1994) (LIS Working Paper 7). Questions of data quality and limitations are discussed in detail in Hackauf et al. (1990) and OECD (1994, forthcoming).

The labour market affects firstly the working-age population. As the present paper studies labour market phenomena in the frame of families, the reference units of the subsequent analysis are non-aged families. These are defined as families with a head aged less than sixty. Pensioner households are therefore excluded from all estimates.

Low disposable family income is used as a poverty indicator. The reference period for incomes is one year. Negative incomes have been bottom-coded, according to a similar procedure proposed in OECD (1994)². The focus of this paper is cross-country comparison. Therefore, poverty is defined in relative terms, i.e. with respect to the average income in the society. The presented poverty rates are classical head-count ratios based on the economic distance approach (Fuchs 1967): the percentage of families with incomes below 50% of the median income.

Incomes have been adjusted for family size with the help of an equivalence scale described as 'policy based scale' (Förster 1993: 17) since the assumed weights for additional family members come close to those inherent in a number of social programmes in many countries. This equivalence scale³ has an elasticity of 0.55 and is flatter than the 'classical' one proposed by OECD (1982). However, in recent years, comparative studies for international organisations (EUROSTAT 1994, OECD 1994) increasingly make use of such a policy based scale that assumes higher economies of scale in larger families.

The available data allow different methods of assessing the role of the labour market. Chapter 3 below analyses the participation in the labour market making use of the number of earners and the magnitude of earnings as proxies for employment; it also uses labour force status data which is linked to the income status of families. Chapter 4 looks in detail at different working time arrangements patterns (full-time and part-time employment) among family members. Chapter 5 examines the incidence and importance of unemployment benefits received by families.

² Half of the studied countries report negative disposable incomes. These have been recoded to a small positive value which corresponds to the lowest found percentage of the first decile in those countries which report only positive incomes.

³ The assumed weights are the following: 1 for one person, 0.5 for a second person, 0.38 for a third person, 0.3 for a fourth person, 0.225 for an additional person.

3. PARTICIPATION IN THE LABOUR MARKET

There is some evidence for a negative relationship between the strength of economic activity of family members and the risk of a family being in poverty. In a first approach, economic activity is proxied by the presence of earnings for a person. **Table 1** shows the significance of this relationship: in all countries studied, the poverty rate decreases with additional earners in the family. The rates shown refer to families consisting of three or four persons: this family size constitutes about half of all non-aged families (between 40% and 60%, depending on the country). In families without earners, poverty rates are extremely high, in particular in the three non-European countries (84 to 94%). In European countries, 'only' between one third and half of these families are poor. A possible explanation for this difference is that social provisions in European countries are, in general, more generous and help keeping at least a small percentage of families without earners above the poverty line (50% of the median). By far the lowest poverty rate for those families (14.5%) is recorded for the Netherlands: this country has, among other provisions, a universal and quite generous programme for invalidity pensions which, strictu sensu, can at least partly be seen as an income support programme. If there is only one earner within a family of three or four, poverty rates are slightly higher than for all families in most countries and significantly so in Canada, the United States and Norway. As soon as a second earner enters the family, poverty rates fall at least by half, in Austria, Luxembourg and the Netherlands even down to half a percent of all three or four person families.

Table 1.
Poverty rates of non-aged families with three or four persons,
by number of earners in the family

	no earner	one earner	2 and more earners	All 3 or 4 person families
Australia 85/86	90.8	14.8	3.6	12.8
Austria 87	37.0	3.0	0.5	2.5
Belgium 85	30.1	5.3	0.9	4.7
Canada 87	84.4	22.6	4.1	11.1
France 84	47.0	8.2	2.7	7.6
Germany 84/85	25.9	7.2	2.1	5.6
Italy 86	50.5	13.6	3.3	10.1
Luxembourg 85	26.0	4.3	0.5	3.9
Netherlands 87	14.5	4.3	0.6	4.2
Norway 86	(a)	23.4	1.9	2.7
Sweden 87	(a)	7.5	2.9	3.5
United Kingdom 86	57.7	13.5	2.1	13.8
United States 86	93.7	29.9	7.3	16.6
Average (unweighted)	50.7	12.1	2.5	7.6

Source: LIS micro data base; own calculations

Non-aged families: families with a head under age 60.

Poverty rate: percent of families with an adjusted family income below 50% of the median income.

(a) sample size too small.

An alternative way to assess the importance of employment is through the earnings of a family. Defined in this way, employment would then refer to aggregate employment in each family. We have seen the crucial role of employment for the well-being of families. The following analysis tries to measure the impact of the absence of earnings on families with children (absence of earnings means that we can assume that there is no family member employed); at the same time, the relative importance of different family types is regarded. The results are shown in **Table 2** in the form of a poverty representation index for different family types with children. The representation index is the proportion of poor families of one type in all poor families divided by the proportion of this family type in the reference population (here: non-aged families with children). For example, if a family type comprises 30 per cent of the poor population but only 6 per cent of the total population, it is represented five times more often in the poor population -- the representation index is 5.0.

Table 2.

Absence of earnings: Representation index for poor families with children

	Lone parents	Couples with 1 or 2 children	Couples with 3 or more children	All non-aged families with children
Australia 1984/85	5.0	4.7	5.2	5.0
Canada 1987	5.9	5.9	6.0	5.9
France 1984	6.7	9.2	10.2	8.2
Germany 1986	8.8	7.6	13.7	8.7
Netherlands 1987	2.0	2.5	4.7	2.4
Sweden 1987	3.1	10.6	12.6	7.6
United Kingdom 1986	1.0	4.2	4.0	3.3
United States 1986	4.2	3.5	3.8	4.0
Average (unweighted)	4.6	6.0	7.5	5.6

Source: LIS micro data base; own calculations

Non-aged families: families with a head under age 60.

Poverty rate: percent of families with an adjusted family income below 50% of the median income.

It is not surprising that all family types without earnings are highly over-represented in the poor population (in relation to their proportion in the total population). However, there are marked differences as to the extent of this over-representation across countries. For all families with children, the Netherlands, the United Kingdom and the United States have relatively low representation indices (families without earnings are represented 2½ to 4 times more often in the poor population). On the other side, in France, Sweden and Germany having no earnings (i.e. no employed persons in the family) increases the proportion of families with children among the poor population seven to eight times.

Single parent families account for around half of all families with children without earnings, except in the United States where they constitute a considerable majority (75 per cent) (tables not shown). However, they are -- in relation to couple parents -- less represented in the poor population in the included European countries: France, Germany, the Netherlands, Sweden and the United Kingdom. In these countries, it is in particular large families without earnings (couples with three children or more) which are over-represented in the poor population. This means that having no employment and, thus, relying on transfers has relatively more impact on the poverty status of these families in European countries.

In Australia, Canada and the United States, there is no significant difference in the representation indices for single parents, couples with one or two children and couples with three and more children, without earnings. All these family types are represented four to six times more often in the poor population.

A related question is therefore: what is the importance of earnings, versus net transfers, for moving different types of families (or persons) above defined poverty levels? A study based on analysis of LIS data on the economic well-being of children and adults in nine OECD countries (Rainwater 1989) examines this question. For children in single mother families the study concludes that "... *not having mother's earnings would have made more children poor than would the lack of social transfers*", the only exception being the Netherlands. This is not the case for children in two parent families.

Earnings are only a proxy for employment. The labour force status of a person can be defined with the standardised labour force concept (ILO 1982). It distinguishes between:

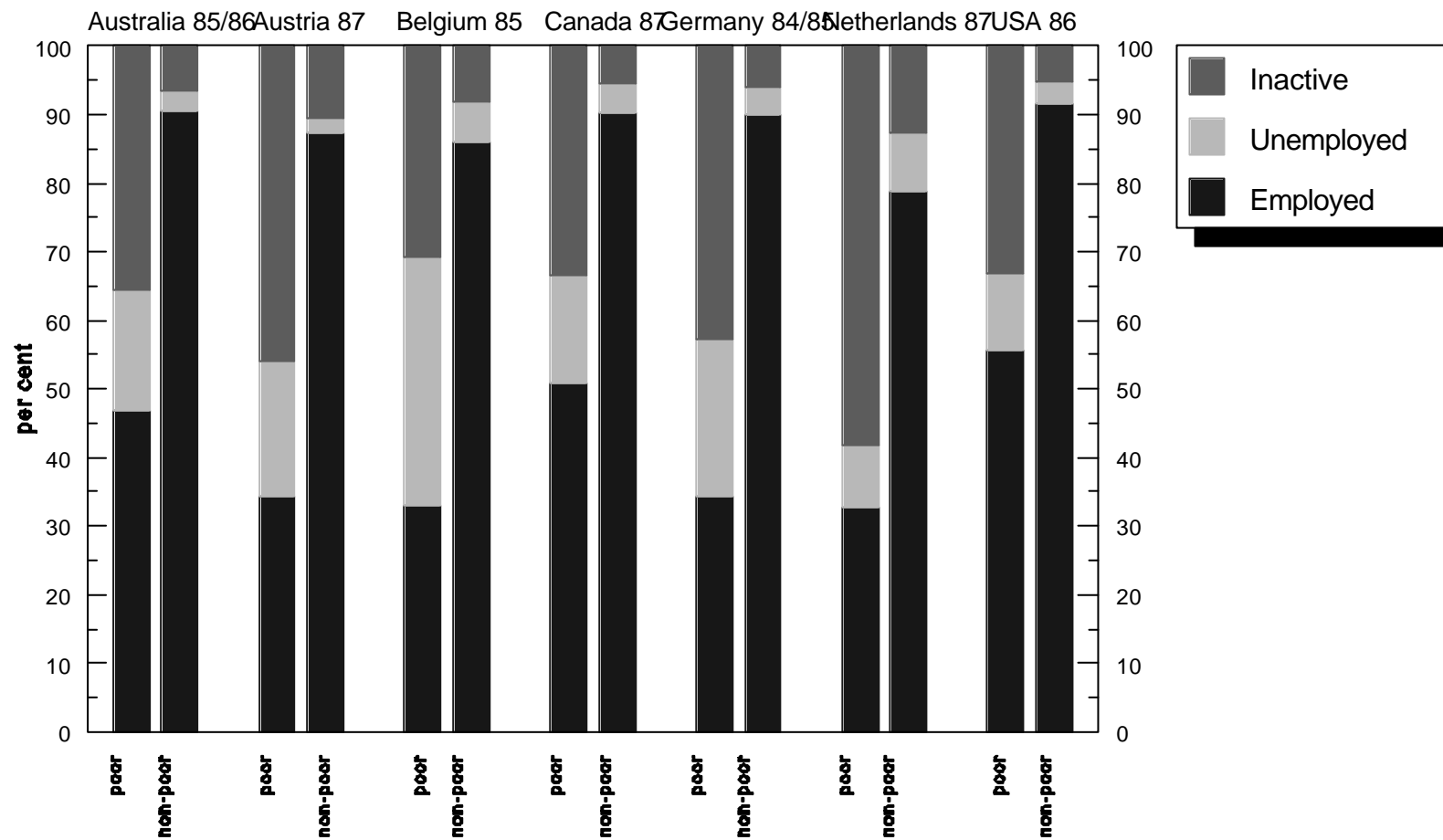
- employed (including underemployed persons)
- unemployed
- inactive (including discouraged workers)

Although this disaggregation is available only for some countries in the LIS data base, and not generally in standardised form, the results of the analysis of labour force status in conjunction with income status are worth presenting. **Chart 1** decomposes the labour force status of the family head into employed, unemployed and not in the labour force (inactive), for poor and non-poor (non-aged) families in seven countries. Labour force patterns among family heads in non-poor

families are remarkably similar across six of the seven countries: about 90 per cent of them are employed, 6 to 10 per cent are not in the labour force, the rest being unemployed. Only in the Netherlands are there less family heads employed (with an equally higher proportion of unemployed and non-active heads).

In the case of poor families, employment rates of family heads are much lower in all countries. However, there are substantial differences between the European and the non-European countries: whereas about half of the heads of poor families in Australia, Canada and the United States are employed, they are only around one third in Austria, Belgium, Germany and the Netherlands. Since at the same time overall family poverty rates are higher in the three non-European countries, this means that a relatively high proportion of employed is poor in these countries. A study on working hours of the Canadian low-income population (Evans/Chawla 1990) confirms this result for Canada 1988: One fifth of the poor population had a full-time full-year work (50% in the case of large families, 12% in the case of lone parent families). This has led to a re-enforced discussion about the "working poor". A concrete social policy result in the United States

Chart 1
Labour force status of the family head
in non-aged families



Source: LIS microdata basis; own calculations

was the expansion of the Earned income tax credit (EITC) under the Clinton administration in 1994, according to the guideline of "making work pay".

An interesting finding refers to labour force patterns of the family head in families with many children (three or more) (the tables not shown). For non-poor families, there is no difference in the decomposition of the labour market status of the family head between families with many children and all families. However, in all countries studied, the labour force participation (employment **and** unemployment) of family heads in poor families with many children is higher than in all poor families. Non-activity accounts for only for 20 to 30 per cent. This means that the phenomenon of 'working poor' is stronger in families with many children, and that it concerns also the European countries.

Both unemployment and non-activity among family heads are four to six times higher among poor families (with the notable exception of unemployment in the Netherlands). The conclusion is that it is not only unemployment but rather **non-employment** which can be defined as a determinant for poverty.

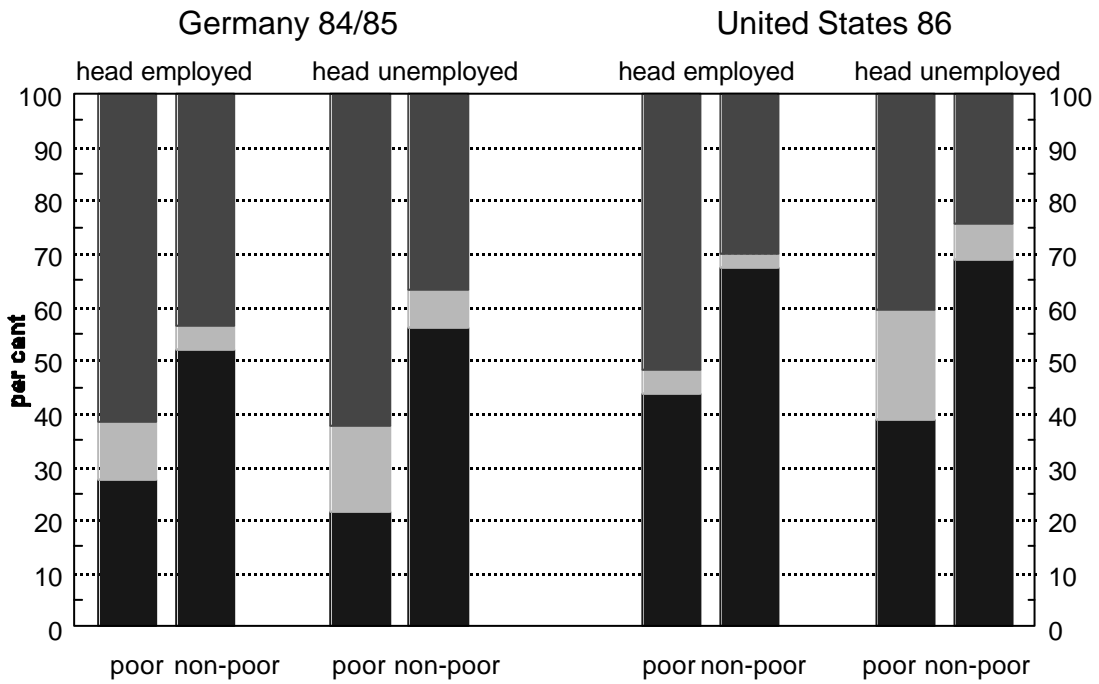
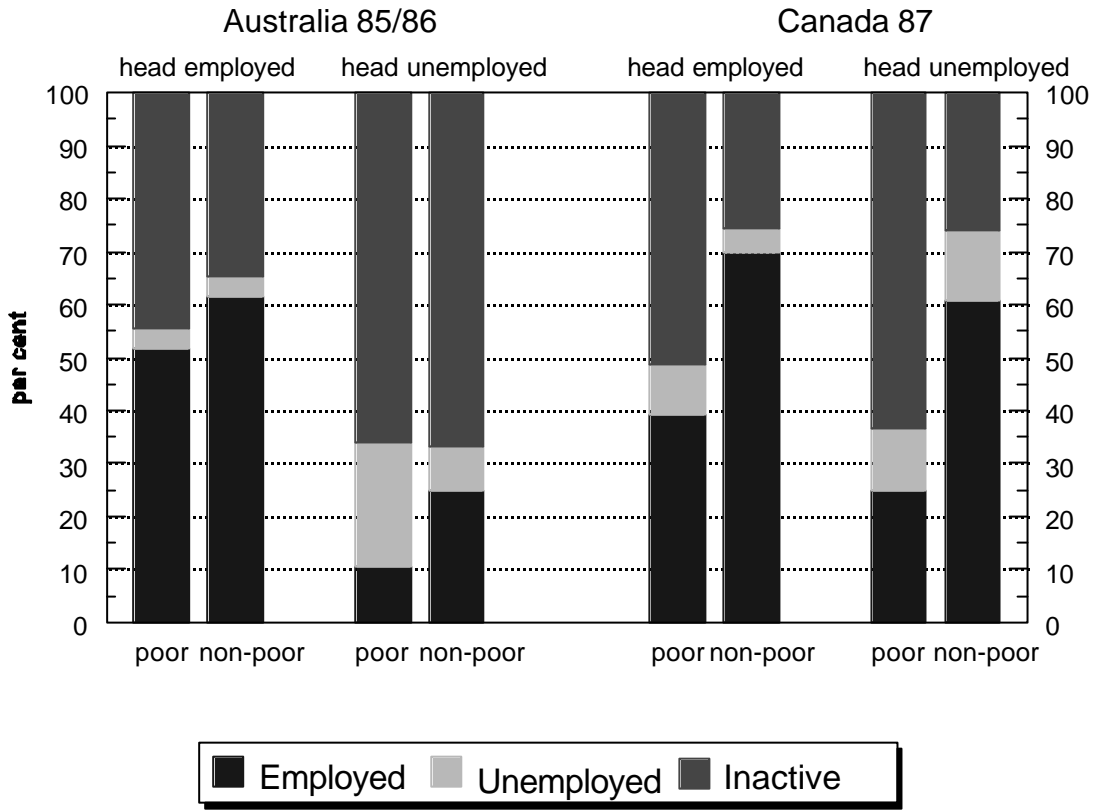
On the supply side of the labour market, decisions of individuals are not only influenced by parameters such as wage and institutional setting. Also, the social and the family situation represent an important factor, i.e. the disposable family income and the labour force participation of other persons in the family. **Chart 2** shows the labour force status of the spouse in couple families: in those where the head is employed and in those where he is unemployed⁴.

Regarding non-poor families, unemployment of spouses is as twice as high when the family head is unemployed himself, in all four countries. In the first case, the employment rates are lower in Australia and in Canada, and higher in Germany and the United States. But also in the case of poor families, unemployment among spouses (but not necessarily in-activity) is higher in families with an unemployed family head in all four countries (substantially higher in Australia and the United States) and employment rates of spouses are lower when the head is unemployed.

This leads to the conclusion that, under certain circumstances, there exists an accumulation of risks: if in a couple the family the head is unemployed, and the family has low incomes, then there is also a bigger risk that his or her spouse is unemployed.

⁴ Due to small sample sizes, results can be presented only for Australia, Canada, Germany and the United States.

Chart 2
Labour force status of the spouse
in non-aged couple families



Source: LIS microdata basis: own calculations

In addition, these findings illustrate well the "poverty trap" problematique in social systems which are based on means-testing: in Australia -- the only country in which this system is also applied to unemployment compensation⁵ -- the spouses of employed persons in poor families have the highest employment rate among the four countries analysed, while Australian spouses of unemployed persons have by far the lowest employment rate. In a (family income based) means-tested system the partner of a person relying on transfers might be reluctant to work insofar as the total family's transfer income is reduced as earnings increase: the total disposable family income would therefore not increase even when the partner would start up working.

4. WORKING TIME ARRANGEMENTS OF FAMILY MEMBERS

It has already been noted that the growing disequilibria on Western labour markets have lead to new forms of organisation of economic activities within families, in particular increasing part-time work. **Table 3** shows that the 'traditional' work arrangement in families with two partners -- a full-time employed family head with a spouse not in the labour force (caring for children and the home -- no longer constitutes the majority of families. This type of work arrangement appears, however, more often in families with children than in those without. Across countries, we find a higher proportion of the 'traditional' work pattern in the Continental European countries: the Netherlands and Luxembourg (over 50%), Austria, Belgium and Germany (about 40%)⁶.

This paper will not consider to which extent part-time work is or can be interpreted as 'voluntary' and as 'involuntary'⁷. Rather, the question here is which combinations of full-time and part-time employment for a given family structure (couples, singles) provide best shelter from the risk to be poor.

Table 3.

⁵ The unemployment benefit system has been changed recently in Australia, partly in response to phenomena pointed out above; in 1994, the receipt of unemployment compensation is no longer strictly tied to a family income means test.

⁶ Since the benchmark of our analysis, the importance of 'traditional' working time arrangements has further decreased. As an example, a recent study for Luxembourg (Gailly 1994) shows that one third of employees have 'atypical' working times in 1993.

⁷ In 1991, around 3 % of the labour force have been estimated to work involuntarily part-time (unweighted OECD average for 17 countries), with percentages of over 5 percent in Australia, Canada, the Netherlands and Sweden (OECD 1993: 17).

Couples with a full-time working family head and an inactive spouse,
in percent of all non-aged couple families

	families without children	families with children	All couple families
Australia 85/86	24.4	39.3	34.4
Austria 87	n.a.	n.a.	41.0
Belgium 85	42.0	40.6	41.2
Canada 87	20.5	31.0	27.1
Germany 84/85	32.3	47.8	40.9
Luxembourg 85	45.8	66.2	58.0
Netherlands 87	31.7	61.7	50.1
United Kingdom 86	16.0	30.1	24.9
United States 86	22.5	33.9	29.6
Average (unweighted)	26.1	39.0	38.6

Source: LIS micro data base; own calculations.

Non-aged families: families with a head under age 60.

Full-time defined as working 35 hours or more per week.

4.1 Couple families

Table 4 compares poverty rates for couple families for different combinations of employment arrangements of the family head and his or her spouse. First, it is confirmed that the presence of a second worker in a family reduces significantly the poverty rate. In couples where both the head and his or her spouse are working full-time the risk to be poor is minimised. Nonetheless, in two countries -- Australia and the United Kingdom -- poverty rates for these couples are as high as 6.6 per cent and 6.3 per cent, respectively. On the other hand, we observe the highest poverty rates for families in which neither of the partners is working: between 15 and 49% of all couple families. But also families in which the head is part-time working and the partner is not working have a higher risk to be poor, although poverty rates vary greatly across countries: from around 6% in Belgium and the Netherlands to around 30% in Australia and the United Kingdom; the other countries having rates of between 10 to 20%. In general, there is little difference in poverty rates between couple families where both partners are working full-time and those where the head is working full-time and the spouse part-time. Exceptions are Canada and the United States where the low-income rate doubles when the partner is working part-time instead of full-time.

Table 4.

Working patterns of non-aged couple families, and respective poverty rates

		both partners working full-time	head full- time spouse part-time	head part-time spouse full-time	head full-time spouse not working	both partners working part-time	head part-time partner not working	both partners not working	All couple families
Australia 85/86	percent poverty	25.9 6.6	26.4 7.5	1.4 6.8	34.4 9.7	0.8 15.1	1.1 30.7	7.7 40.6	11.1
Belgium 85	percent poverty	24.6 1.9	12.3 0.2	(a) (a)	41.2 2.5	(a) (a)	2.5 6.4	12.0 15.2	3.8
Canada 87	percent poverty	37.1 2.1	21.2 4.9	1.4 10.9	27.1 10.8	0.9 19.8	1.5 21.0	5.6 41.8	8.5
Germany 84/85	percent poverty	19.5 1.1	19.0 1.0	1.2 1.0	40.9 3.1	1.0 7.0	1.7 10.9	5.9 37.6	4.8
Luxembourg	percent poverty	21.4 0.0	7.6 1.5	(a) (a)	58.1 4.3	(a) (a)	(a) (a)	6.5 13.7	4.0
Netherlands 87	percent poverty	11.0 0.0	16.7 0.4	(a) (a)	50.1 4.4	(a) (a)	3.0 5.8	11.5 11.4	3.8
Sweden 87	percent poverty	33.5 2.1	46.0 2.1	2.9 1.7	9.1 6.6	3.7 5.2	1.4 15.1	1.1 32.5	3.3
United Kingdom 86	percent poverty	21.3 5.2	28.3 7.6	0.9 6.9	24.9 11.7	1.4 6.2	39.4 15.2	21.9 36.3	12.1
United States 86	percent poverty	34.5 3.9	15.3 8.8	2.7 9.7	29.6 11.9	1.9 17.5	2.9 27.2	6.6 38.3	11.2

Source: LIS microdata basis; own calculations.

Poverty rate: percent of families with an adjusted income below 50% of the median income.

Full-time defined as working 35 hours or more per week. (a) sample size too small.

When looking at couple families in which one person is working full-time and the other part-time, we find that the poverty risk is, in general, independent of which one of the two partners is working full-time and which one part-time (the head or his or her spouse): only in Canada is the poverty rate lower when it is the family head who is working full-time.

Second, those countries which (still) have a relatively high proportion of couple families with the traditional work arrangement between spouses (head full-time employed, spouse non-active) -- Belgium, Luxembourg, Germany, and Netherlands with 40 to 58 per cent of all couple families -- also have the lowest poverty rates for this family type: between 2.5 and 4.4 per cent. On the other hand, in countries which have a small proportion of this working-time arrangement, these families also have higher poverty rates, in particular the United Kingdom with the one of the highest rates (15.2 per cent). One can therefore assume that different changes in family work arrangements across countries are also related to different developments in returns from (full-time) work.

It is interesting to compare two family types where there is approximately one full-time worker: the 'traditional' work arrangement with the one in which we have two part-time workers (columns four and five in Table 4). In most countries, two partners working part-time have a higher poverty rate than couples where the head is working full-time. This is particularly the case in Germany, the United States and Canada. In these three countries, the rate is almost doubled. To the contrary, in Sweden and the United Kingdom, two part-time working partners have significantly lower poverty rates than families with one full-time working head. This finding corresponds to results from a recent study comparing poverty in Sweden and the United States (Danzinger and Jantti 1992). This study reports that (market income based) poverty among families with children where both parents are working part-time is lower than in families where only the father is working full-time in Sweden, but higher in the United States (18.8 per cent and 16.8 per cent in Sweden, and 12 per cent and 18.5 per cent in the United States).

4.2 Single parent families

Single parents are undoubtedly a vulnerable group in the society. Many recent studies find high poverty risks for these families across all countries which are studied here, with the exception of Sweden (see, for example, Hauser/Fischer 1985, Wong et al. 1992, Soerensen 1990, Förster 1993, Bradshaw/Millar 1992, OECD 1990a). Also for single parents, employment plays a prominent role: **Table 5** shows that in most of the countries, half or more of single parent families are employed (between 45 and 60%). Two extreme cases are the Netherlands, where almost three quarters of single parents are not working, and Sweden, where this concerns only one single parent out of ten. The highest percentages of full-time work (almost 50 per cent) occur in the two North-American countries. Part-time employment concerns around one tenth to one fifth of all single parent families, except in Sweden where this form of employment is particularly popular: about one single parent out of two is working under this arrangement.

Table 5.
Working patterns of non-aged single parent families and respective poverty rates

		Not working	Working part-time	Working full-time	All single parents
Australia 85/86	percent	53.4	12.1	34.4	100
	poverty rate	82.0	65.3	11.7	55.7
Belgium 85	percent	46.0	13.7	40.3	100
	poverty rate	34.4	5.3	5.4	18.7
Canada 87	percent	39.1	12.7	48.2	100
	poverty rate	82.9	50.1	20.6	48.7
Germany 84/85	percent	44.0	20.3	35.7	100
	poverty rate	55.0	41.9	5.2	34.5
Luxembourg 85	percent	53.3	(a)	40.2	100
	poverty rate	20.5	(a)	10.9	17.5
Netherlands 87	percent	71.6	17.1	11.3	100
	poverty rate	12.7	12.4	6.7	12.0
Sweden 87	percent	10.4	45.7	44.0	100
	poverty rate	25.0	6.0	1.7	6.1
United Kingdom 86	percent	54.5	23.9	21.7	100
	poverty rate	33.2	27.3	11.1	27.0
United States 86	percent	39.6	12.7	47.8	100
	poverty rate	84.0	62.8	29.0	55.0

Source: LIS micro data basis; own calculations.

Full-time defined as working 35 hours or more. (a) sample size too small.

Poverty rate: percent of families with an adjusted income below 50% of the median income.

Poverty rates of not-working single parents are very high in the three non-European countries (over 80 percent); but also in Belgium, Germany and the United Kingdom between one third and half of these families are poor. The Netherlands show a particular pattern: in this country, single parents have a relatively low overall poverty rate (second lowest after Sweden) where this concerns both working **and** not-working families and also, the form of employment plays less a role. In all other countries, employment reduces poverty rates for single parents significantly. In Belgium and Sweden, part-time employment is sufficient to reduce the poverty rate to about 6 percent. A reduction to this relatively low percentage also takes place in Germany and the Netherlands, but only through full-time work. There are also considerable differences in the reduction of poverty through full-time versus part-time work in Australia, and, to a lesser degree, in Canada and the United

States. In these countries, single parents have to work full-time to have poverty rates which are similar to those of couple families where both partners are working part-time.

We can thus conclude that part-time work may be a sufficient source to significantly reduce the risk of poverty:

- i) for couples when the partner is working full-time;
- ii) for couples when the partner is working part-time in Sweden and the United Kingdom and;
- iii) for single parents in Belgium and Sweden.

We have been using a rather broad definition of full-time and part-time work (with a cut-off line of 35 hours). The conclusions above become firmer in the case of more restrictive definitions (e.g. part-time work under 25 hours). In this case, the respective poverty rates for single mothers would be close to 75 per cent in Australia and Canada, and 12 per cent in Sweden.

5. RECIPIENTS OF UNEMPLOYMENT BENEFITS

Another way to look at the impact of unemployment is through the analysis of this group of families which is in receipt of unemployment benefits. One has to take into account, however, that the different countries analysed make use of quite different systems of support in the case of unemployment. In many countries, there are parallel systems (e.g. early retirement schemes) which have a similar character and can hardly be distinguished from genuine unemployment compensation. In addition, long-term unemployed typically receive social aid type transfers since in most countries, eligibility for unemployment benefits exhaust after a certain period⁸. In the following, unemployment benefit means the transfer to unemployed persons out of unemployment insurance, except for Australia where this benefit is means-tested and paid out of the federal budget.

The relation between the presence and the magnitude of this transfer in a family's income package and its relative income status is examined in **Table 6**. Firstly, we observe that around eight to nine tenth of all non-aged families do not receive unemployment benefits at all; the percentage is almost the same for poor families -- in Canada and Sweden it is even slightly higher. This is due to the fact that unemployment compensation is, for most of the families, just one element out of many in the income composition. Moreover, in most countries unemployment benefits are employment-related transfers and therefore more equally distributed between poor and non-poor families.

⁸ A concise and comparative description of systems of unemployment compensation can be found in OECD 1990b, or U.S. Department of Health 1993. Also, the Institutional Database (IDB) of the Luxembourg Income Study contains the key parameters of the different unemployment schemes for the countries studied.

Table 6.
Proportion of non-aged families receiving unemployment benefits

		Receiving unempl. benefits		Not receiving unemployment benefits
		UE benefit less than 1/3 of DPI	UE benefit more than 1/3 of DPI	
Australia 85/86	All families	8.1	4.7	87.2
	Poor families	5.3	20.6	74.1
Belgium 85	All families	8.4	7.4	84.2
	Poor families	0.8	30.1	69.1
Canada 87	All families	19.8	3.5	76.7
	Poor families	11.5	8.5	80.0
Germany 84/85	All families	9.8	1.8	88.4
	Poor families	8.7	8.6	82.7
Luxembourg 85	All families	(a)	(a)	99.0
	Poor families	(a)	(a)	(a)
Netherlands 87	All families	0.6	3.2	96.2
	Poor families	(a)	(a)	96.9
Norway 86	All families	5.9	0.7	93.4
	Poor families	4.7	1.6	93.7
Sweden 87	All families	9.7	4.4	85.9
	Poor families	4.2	4.2	91.6
United Kingdom 86	All families	9.2	2.1	88.7
	Poor families	1.8	10.1	88.1
United States 86	All families	8.4	0.5	91.2
	Poor families	6.5	1.7	91.8

Source: LIS microdata basis; own calculations.

DPI: disposable income, adjusted for family size. (a) sample size too small.

Australia and Belgium constitute the two striking exceptions: in both countries, the percentage of poor families receiving unemployment benefit is twice as high as the percentage for all families: 30 percent, versus 15 percent. This can be explained by the design of the unemployment compensation system in these countries: Australia is the only country in which the receipt of unemployment compensation is entirely independent on employment history. Belgium, on the other hand, is the only country in which there is practically no upper time limit for the receipt of unemployment benefits.

However, when unemployment benefits become a substantial part of a family's income package (defined here as exceeding one third of the disposable income), poor families are over-represented in all countries except Sweden: the proportion then is two to four times higher.

Again, Australia and Belgium constitute two extreme cases -- with percentages of 20 and 30 %, respectively -- due to the above mentioned reasons.

Table 7.

Families receiving unemployment benefits exceeding one third of disposable income, by age of the family head

		head under 25	head 25 - 34	head aged 35 - 45	head 45 -60	All families
Australia 85/86	percent	24.2	29.5	18.6	27.7	100.0
	poverty rate	84.8	78.6	77.8	50.9	72.8
Belgium 85	percent	14.9	32.7	21.4	31.0	100.0
	poverty rate	34.0	25.5	20.8	17.3	23.2
Canada 87	percent	19.9	33.2	24.2	22.7	100.0
	poverty rate	50.0	35.6	36.5	32.2	37.9
Germany 84/85	percent	22.7	15.5	45.0	16.8	100.0
	poverty rate	58.5	77.3	28.1	22.9	41.4
Netherlands 87	percent	17.7	34.1	17.7	30.6	100.0
	poverty rate	13.0	11.4	0.0	5.0	7.7
Norway 86	percent	(a)	39.6	30.9	29.5	100.0
	poverty rate	(a)	10.3	47.0	0.0	18.6
Sweden 87	percent	40.6	29.4	17.6	12.3	100.0
	poverty rate	13.0	7.7	13.0	18.8	12.1
United Kingdom 86	percent	20.8	34.7	23.8	20.8	100.0
	poverty rate	61.9	65.7	70.8	47.6	62.4
United States 86	percent	7.1	48.7	25.0	19.1	100.0
	poverty rate	100.0	66.7	52.4	80.6	68.4

Source: LIS micro data basis; own calculations. (a) sample size too small.

Poverty rate: percent of families with an adjusted income below 50% of the median income.

Table 7 analyses this sub-population, i.e. non-aged families which receive a substantial amount of unemployment benefit. There are significant differences across the nine countries studied: poverty rates for these families range from around 10 per cent in the Netherlands and Sweden to around 20 to 40 per cent in Belgium, Canada and Germany and up to about two third of all families in the United Kingdom, the United States and Australia. In all countries except Sweden, it is the youth (families headed by persons under age 25) who have by far the highest poverty incidence⁹. As pointed out above, this group is of special concern, since the members of these families are at

⁹ In the United States, this concerns even the totality of all very young families with substantial unemployment compensation. On the other hand, the share of very young in all non-aged families with substantial unemployment compensation is also the lowest in this country.

the beginning of their working career and face dramatic consequences if they become transfer dependent.

6. CONCLUSIONS

Having studied the impact of employment, unemployment and non-activity on the relative income status of non-elderly families as well as different working patterns (full-time/part-time employment) among different family types, we can conclude that:

- i) unemployment and non-activity are one of the strongest determinants for families' poverty, especially in European countries;
- ii) employment, not only of the family head but also of other family members (in particular the spouse), is a key element in taking families out of poverty;
- iii) part-time employment, although of growing importance for the income composition of poor families, is in most countries not sufficient for a family to escape poverty - unless there is another earner in the family.
- iv) families, in particular young families, which rely to a big part on unemployment benefits have above average poverty risks.

The policy implication is that in order to alleviate poverty, traditional social policy (income maintenance programmes) should be combined with active labour market measures. Such a policy would encourage labour force participation and at the same time (e.g. in the case of single mothers) provide enhanced child care facilities. A second policy consideration relates to poverty among those who are in full-time employment (the "working poor"). In a number of countries in which this phenomenon has been of growing concern, several measures to assist those families have been introduced or re-enforced since the benchmark date of our analysis (1985 to 1987). These include the Family Credit (former FIS) in the United Kingdom, the Earned Income Tax Credit (EITC) in the United States, or the Family Allowance Supplement (former FIS) in Australia.

An interesting topic for further analysis will therefore be to evaluate to which extent new subsidies have reduced poverty among those family types identified above. Scholz (1994) has undertaken a first evaluation of the new EITC programme 1993 in the United States. Three results concerning the programme design are noteworthy: first, labour supply incentives are assumed to be highest among households not working or working only a little, whilst they are expected to be negative for households in the phase-out range of the credit (more than half the eligible population). Second, the EITC design creates financial incentives to marry for low- or zero earning taxpayers with children, and incentives to separate (or not to marry) for couples with children when each has modest earnings. Third, the design deliberately quits the 'traditional' aim of target efficiency. Scholz (1994: 5) concludes that, although the programme "*increases by over 33 percent the number of*

taxpayers with incomes below the poverty line who will be eligible for EITC,, the fraction of total EITC payments that directly reduce the poverty gap falls from 47 to 36 percent".¹⁰

In more general terms, the main policy question for the 1990ies is to find coherent strategies for reducing poverty while maintaining or creating work incentives, on both the labour supply and the labour demand side. Besides the Earned Income Tax Credit, a number of other policy instruments is currently under discussion in many of the Western industrialised countries: the Credit Income Tax, the Negative Income Tax, the Earnings Supplement, the Basic Income Guarantee, the Wage Rate Subsidy and the Employer-based Marginal Employment Subsidies.¹¹

¹⁰ It has to be noted, however, that these estimates are based on the national (absolute) U.S. poverty line which corresponds to a (relative) poverty line of about 40% the median income. Estimates in this paper are based on a poverty line which refers to 50% the median income (see section 2.)

¹¹ An excellent description of these instruments and a discussion of their pros and cons can be found in Haveman (1994).

7. FURTHER RESEARCH REQUIREMENTS: THE LUXEMBOURG EMPLOYMENT STUDY¹²

Several Working Papers analysing the LIS microdata have been focused on labour market issues: McFate/Fischer 1989, Wolff 1990, Dirven et al. 1990, Phipps 1993 and Phipps 1994. A thorough comparative analysis of working poor in five countries is given in O'Connor/Smeeding 1993.

All these studies use, in general, two key variables to depict the situation of employed: earnings (or number of earners in a household) as a proxy for employment, and hours of work to distinguish between full-time and part-time employment. The labour force status, and the importance of unemployment compensation, which allow to analyse the unemployed population separately from the whole pool of non-employed, have so far not been explored. Chapter 3 and Chapter 5 of this paper provide some estimates on the poverty status of unemployed using the mentioned information.

However, information on the labour force status, and unemployment in particular, is poorly collected in income surveys. In addition, not for all countries we could recode the labour force categories according to the strict ILO guidelines (ILO 1958, ILO 1982). In order to do so, we need to rely on the adapted instrument: labour force surveys.

In this view, the Luxembourg Employment Study (LES) is a new project associated with LIS at CEPS/INSTEAD with the aim of making available to researchers a set of labour force surveys from the early 1990ies in order to study labour market related issues using internationally comparable micro data. Analysis of labour market behavior on an individual level or in the frame of a household, of educational and occupational patterns, of retirement decisions, and related issues also would enhance interdisciplinary research (economics, sociology, political science). Similar to the procedure followed by LIS, national micro data are standardised and stored on the Luxembourg Government mainframe computer (Centre Informatique de l'Etat) and can be accessed from remote sites, without allowing any direct access to the individual data.

The following research areas would be stimulated by the LES project; this list is by no means exhaustive:

- analysis of unemployment and employment turnover; the differences in the structure of the European labour market on the one side, and the North American on the other;
- the rapid transformation in Eastern European labour markets: labour shedding and differences in the development of unemployment;
- regional patterns of income and employment and progress in achieving social cohesion goals;

¹² This section draws on discussions with Jon-Eivind Kolberg and Uwe Warner.

- relationship between human capital and economic performance;
- social policy effects of welfare state programmes; the role of unemployment insurance and assistance;
- comparative studies of social stratification;
- migration issues: movement of individuals within countries, and between countries;
- labour market behaviour of the elderly; retirement decisions;
- clarification of the structure of unemployment across regions, occupations, educational categories, gender, age, etc.

Countries which are intended to be integrated into LES are, besides member states of the European Union, other Western European countries (EFTA), Central and Eastern European reform countries, and oversea countries (US, Canada, Australia)¹³.

In general, labour force surveys are well developed and their structures, based on the ILO definitions of economic activity (labour force concept), are more compatible than those of other national surveys, such as income or household budget surveys. In order to facilitate comparative research, a standardised list of variables for the labour force surveys stored at LES has been developed. The structure of this list is based on the 1992 EUROSTAT classification of aggregates related to the labour force. Around 90 variables will be grouped into twelve main groups:

- I. Demographic background
- II. Work status
- III. Employment characteristics - first job
- IV. Information about second job
- V. Previous work experience of persons not in employment
- VI. Search for employment
- VII. Situation of inactive person
- VIII. Education and training
- IX. Situation one year before survey
- X. Labour force status: employment-unemployment-inactivity
- XI. Earnings and income
- XII. Technical items

¹³ In mid-1994, six micro data sets from labour force surveys for a year between 1990 and 1993 were stored on the Luxembourg mainframe computer (Austria, Hungary, Luxembourg, Norway, United Kingdom, United States).

Although information on earnings and income (group XI) is, in many countries, not covered in the respective labour force surveys¹⁴, there could be a widespread number of possibilities to analytically link research based on LES with research based on LIS. As an example, analytical questions of the type presented here in sections 3 and 4 could lead to test hypotheses as to the importance of changing labour force participation of individuals and blurring working arrangements within families and households. This is illustrated in **Table 8**. Disposable income (DPI) is used here as an indicator for well-being.

Table 8.
Family type, work arrangement and well-being level

<i>Family type</i>	<i>Work arrangement</i>		
	traditional (1 active, 1 inactive)	modern (2 actives)	precarious
'traditional' (e.g. 1 head, 1 spouse, kids)	\emptyset DPI ?	\emptyset DPI or > \emptyset DPI ?	< \emptyset DPI ?
'modern' (e.g. DINKS)	\emptyset DPI ?	> \emptyset DPI ?	\emptyset DPI or < \emptyset DPI ?
at risk (e.g. single parents)	< \emptyset DPI ?	< \emptyset DPI or \emptyset DPI ?	< \emptyset DPI ?

Such a kind of analysis would furthermore take into account and compare different types of labour market organisation in different countries and their outcomes (e.g. degree of labour standards, unionisation, flexibilities etc.)

Finally, the main angle of view of the LES project is that of international comparison. Analysis of structural problems on Western labour markets can learn from experiences of transition countries, and vice versa. A thorough comparative analysis of labour markets and labour market behaviour between Western European countries, North America and reform countries in transition will help to understand better phenomena of disequilibria such as persistently high rates of unemployment.

¹⁴ Among the first six LES data sets mentioned above, information on earnings and income exist for Austria and the United States.

REFERENCES

- Bradshaw, J. and Millar, J. (1991), "Lone Parent Families in the UK". Department of Social Security. Research Report No. 6
- Danziger, Sh. and Jantti (1992), "Does the Welfare State Work? Evidence on Antipoverty Effects From the Luxembourg Income Study". LIS Working Paper No. 74
- De Tombeur, C., Milne, D., Warner, U., Gornick, J. and Randell, R. (1994), "LIS Information Guide". LIS Working Paper No. 7
- Dirven, H.J., Lammers, J. and Ultee, W.C. (1991), "Working But Still Economically Dependent?". LIS Working Paper No. 53
- EUROSTAT (1994), "Objective monetary poverty: study on trends". Working Party Document POV 62/94
- Evans, J.M. and Chawla, R.K. (1990), "Work and relative poverty", in Perspectives Summer 1990, pp. 32-40, edited by Statistics Canada.
- Förster, M.F. (1993), "Comparing Poverty in 13 OECD Countries - Traditional and Synthetic Approaches". LIS Working Paper No. 100
- Förster, M.F. and Tóth, I.G. (1994), "Income Poverty and Households' Income Composition in Hungary". Paper presented to the Third Prague International Workshop on Social Responses to Transformations in East-Central Europe. Prague, May 1994.
- Gailly, B. (1994), "Les horaires de travail atypiques". Population et emploi, No.2, June 1994, pp. 4-5.
- Hackauf/Randell/Coder/Smeeding/Warner (1990), "Final Report for the Statistical Office of the European Community Project on Technical Documentation and Income Data Quality for the Luxembourg Income Study Database: Phase Two". EUROSTAT 1990
- Hauser, R. and Fischer, I. (1985), "The Relative Economic Status of One Parent Families". LIS Working Paper No. 6
- Haveman, R. and Buron, L. (1993), "Escaping Poverty Through Work: The Problem of Low Earnings Capacity in the United States, 1973-88". Review of Income and Wealth, Series 39, Number 2, June 1993, pp. 141-157
- Haveman, R. (1994), "Reducing Poverty While Increasing Employment: A Primer on Alternative Strategies, and a Blueprint". University of Wisconsin-Madison.

- McFate, K. and Fischer, I. (1989), "Not Working: A Preliminary Look at Households With No Earners in the U.S., U.K., Canada, Germany and Sweden", LIS Working Paper No. 35
- O'Connor, I. and Smeeding, T.M. (1993), "Working but Poor: A Cross-National Comparison of Earnings Adequacy". LIS Working Paper No. 94
- OECD (1982), "The OECD List of Social Indicators". Paris 1982
- OECD (1990a), "Lone-Parent Families. The Economic Challenge". Paris, 1990
- OECD (1990b), "Labour Market Policies for the 1990s". Paris, 1990
- OECD (1993), Labour Force Statistics 1970-1991. Paris 1993.
- OECD (1993), "Employment Outlook 1993". Paris 1992
- OECD (1994), "Income Distribution in OECD Countries: The Evidence From the Luxembourg Income Study". Paris, 1994 (forthcoming)
- Phipps, S.A. (1993), "Determinants of Women's Labour-Force Participation: An Econometric Analysis for Five Countries". LIS Working Paper No. 99
- Phipps, S.A. (1994), "Poverty and Labor Market Change: Canada in Comparative Perspective". LIS Working Paper No. 108
- Rainwater, L. (1989), "Inequalities in the Economic Well-Being of Children and Adults in Ten Nations". LIS Working Paper No. 19
- Raymond, J. (1987), "Bringing Up Children Alone: Policies for Sole Parents". Social Security Review - Issues Paper No. 3, Canberra 1987.
- Smeeding, T./Torrey, B./Rein, M. (1988), "Economic Status of Children and the Elderly in Eight Countries". *The Vulnerable*, pp. 89-119
- Smeeding, T./ O'Higgins, M./Rainwater,L. (1990), "Poverty, Inequality, and Income Distribution in Comparative Perspective."
- Smeeding, T./Rainwater,L. (1991), "Cross-National Trends in Income Poverty and Dependency: The Evidence for Young Adults in the Eighties." LIS Working Paper No. 67
- Soerensen, A. (1990), "Single Mothers, Low Income, and Women's Economic Risks. The Cases of Sweden, West Germany and the United States". LIS Working Paper No. 60

Stapf, H. (1994), "Alterssicherung in Spanien". Dissertation, Universität Frankfurt am Main, 1994 (forthcoming).

Wolff, K. (1990), "An International Comparison of Married Women's Labour Force Participation: A Cross-Country Analysis in Seven Countries". Lis Working Paper No. 48.

Wong, Garfinkel and McLanahan (1992), "Single-Mother Families in Eight Countries: Economic Status and Social Policy". LIS Working Paper No. 76