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To What Extent Do Family Policy and Social Assistance Transfers Equitably Reduce the Intensity of Child Poverty? A Comparison between the US, France, Great Britain and Luxembourg

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A COMPARISON BETWEEN THE US, FRANCE,  
GREAT BRITAIN AND LUXEMBOURG**

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**January 2001**

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EQUITABLY REDUCE THE INTENSITY OF CHILD POVERTY?  
A COMPARISON BETWEEN THE US, FRANCE, GREAT BRITAIN AND LUXEMBOURG <sup>1</sup>**

*By Bruno Jeandidier and Etienne Albiser (ADEPS, University Nancy 2 and CNRS)*

Children are not the actors of their socio-economic situation, they benefit or suffer from their parents' one. Even if social politics sometimes put forward a principle of the right of the child, in the end it is the standard of living of the household in which the child lives which imposes itself. In the North European countries major social transfer schemes, depending on the presence of dependent children, answer to multiple objectives (birth rate support, reduced inequality in the standard of living of families, compensation towards the cost of the child, aid towards reconciling the family and professional lives of the parents, etc.), while in fact these contribute towards improving the standard of living of the family and therefore of the children. In parallel, social assistance transfers, not specifically targeted towards the children, try to ensure a minimum guaranteed income for the most deprived households and can be situated more explicitly and strictly in terms of assistance to the poorest families: "(...) *most of the cash benefits that the American government gives to families with children go to "welfare mothers" - single parents who have no job (...)*"<sup>2</sup>.

To what extent do these schemes allow the children to escape from poverty? This is the question we try to answer in this comparative study. The objective is therefore not so much to carry out a diagnosis of the financial poverty of children as to evaluate the effect, in terms of support towards the standard of monetary living, of the social transfer systems for the benefit of the children in the four countries of analysis. On the European side we have chosen on the one hand the examples of France and Luxembourg; the social assistance and family allowances in these countries may be closely related (for example by the way of an explicit family policy), but they are applied in very different settings – Luxembourg, when compared to France, has a mean standard of living which is higher, a low percentage of poor households, a very low unemployment rate, as well as a firmly rooted concept of the traditional family. On the other hand, we have taken into account the case of Great Britain because Great Britain, contrarily to the two first European countries, has an explicit political will of strict neutrality toward family life. On the American side, despite the strong differences in the social transfer systems among the states, we have chosen to treat United States on their whole.

Our approach does not limit itself to carrying out a global balance consisting solely of measuring the percentage of children sheltered from poverty thanks to social transfers, or by measuring the reduction, because of social transfers, of the poverty gap affecting children; it also attempts to trace possible flaws of the transfer schemes in the four countries: does the entanglement of multiple transfers generate categories, among the children, of "dropped by the side"? Such a question boils down to characterising the specific national schemes: which kinds of children or families do they target? But it also shows the degree of equity of these schemes toward children.

1. CHILD POVERTY: DATA, METHODOLOGY AND OVERALL RESULTS IN TERMS OF EFFICACY AND EFFICIENCY

Before tackling the question of the influence of social transfers onto child poverty, we present the survey data we used, the adopted methodology as well as the state of monetary poverty of the children in the four countries.

Four national surveys were used: the Luxembourg Socio-Economic Panel carried out by CEPS (wave n°3, 1996, 2.654 households), the French part of the European Community Household Panel carried out by INSEE on behalf of Eurostat (wave n°1, 1994, 7.321 households), the British Household Panel Survey carried out by Essex University (wave n°3, 1993, 4.354 households) and, from Luxembourg Income Study (LIS), the March Current Population Survey carried out by the Census Bureau (1994, 56.873 households)<sup>3</sup>.

The monetary poverty indicator we use is based on the totality of these households, according to a relative approach and in a classical way: a household is considered to be poor when its income per consumption unit is less than 50% of the median standard of living. The equivalence scale gives to each household a number of consumption units which equals the square root of the size of the household (for a justification of this choice, cf.

B. Atkinson, L. Rainwater, T.M. Smeeding 1995, p. 21). The household poverty rate is about twice as high in France in comparison to Luxembourg<sup>4</sup>, which betrays a more important inequality in the standards of living in France, since we use a relative poverty criteria. In the United States and in Great Britain, the household poverty rate is clearly higher than in the two others European countries (just over three times higher than in Luxembourg, and just over double for France).

Table 1: Poverty rate of households

	United States	France	Great Britain	Luxembourg
<b>Total number of households in the sample</b>	56873	7321	3867	2654
<b>Poverty rates</b>				
All households	18.2%	10.4%	19.6%	5.4%

Once the diagnosis is applied to the level of the households, one may then simply consider a child to be poor when it lives in a poor household, the child being defined as an individual aged 15 year at the most (the age at which schooling is no longer compulsory in France and Luxembourg).

To assess the impact of family policy and social assistance transfers on child poverty, the same monetary poverty threshold is applied to a standard of living from which the social transfers in question have been deducted. In that way one can distinguish, by subtraction, the proportion of children having a standard of living higher than the poverty threshold *thanks* to the social transfers<sup>5</sup>.

The analysis so far in terms of poverty is simplistic in that it does not take into account the seriousness of poverty. Yet it would appear legitimate, even necessary, in order to comment upon the efficacy of the transfer systems, to differentiate the situation of the children depending on whether their standard of living "before transfer" is, or not, close to the poverty threshold. Indeed, the closeness of this threshold facilitates the passage to beyond thanks to the transfers. In other words, an identical quantity of transfers could safeguard a more or less important percentage of children from poverty depending on whether the "before transfer" poverty intensity is more or less low. We measure the seriousness of poverty in terms of a relative discrepancy between the standard of living and the poverty threshold, and we use an index of the intensity of poverty<sup>6</sup> which takes into account both the poverty rate and the seriousness of poverty.

When we measure poverty in terms of the proportion of children (rather than the proportion of households) living under the poverty threshold, the comparison France-Luxembourg is far less contrasted: the poverty rates in the two countries are similar (7%)<sup>7</sup>. Even if, on the one hand, numerous children in a household are the reason for a low standard of living, and, on the other, large families automatically carry a proportionally heavier weight in the statistics of child poverty rates, the child poverty rate in France is still less important than the poverty rate for households. Yet the opposite can be observed for Luxembourg, betraying an effect of structure, which varies among countries, from the point of view of poverty rates among households with and without children, the poverty rate of the latter is higher than the former in France (11.9% against 6.8%), contrary to what can be observed in Luxembourg (4.5% against 7.4%).

As for the child poverty rate in the two Anglo-Saxon countries, it is more than three times higher than for France and Luxembourg. Not only is the inequality in the standards of living much more obvious in the two Anglo-Saxon countries than in the two European countries, but it is also far more unfavourable to American and British children than their French and Luxembourg counterparts.

Table 2: Rates, severity and intensity of poverty of children aged less than 16 years old, with or without taking into account family policy and social assistance transfers

	UNITED STATES			FRANCE		
	Without benefits (1)	With benefits (2)	Relative decrease (1-2) / (1)	Without benefits (1)	With benefits (2)	Relative decrease (1-2) / (1)
Poverty rate	27.6%	24.6%	<b>11%</b>	19.4%	7.0%	<b>64%</b>
Relative seriousness	55%	35%	<b>36%</b>	35%	24%	<b>31%</b>
Intensity index	15.2%	8.7%	<b>43%</b>	6.8%	1.7%	<b>75%</b>

	GREAT BRITAIN			LUXEMBOURG		
	Without benefits (1)	With benefits (2)	Relative decrease (1-2) / (1)	Without benefits (1)	With benefits (2)	Relative decrease (1-2) / (1)
Poverty rate	31.2%	23.3%	<b>25%</b>	22.3%	7.2%	<b>68%</b>
Relative seriousness	68%	30%	<b>56%</b>	27%	16%	<b>41%</b>
Intensity index	21.4%	7.0%	<b>67%</b>	6.2%	1.2%	<b>81%</b>

In France as in Luxembourg, one child out of five would live below the poverty threshold if family policy and social assistance transfers are not being taken into account. More than two thirds escape from poverty thanks to these transfers. If the poverty rates "before transfer" are slightly higher in Luxembourg than in France, those calculated "after transfer" are along the same lines in the two countries. This tells of a slightly superior performance, on the level of the fight against poverty, of the Luxembourg allowance system <sup>8</sup>.

In the United States, slightly more than one quarter of children would be living below the poverty threshold if the social assistance transfers were not taken into account. The impact of these transfers is much less significant than in the two European countries: at best one-tenth of the poor "before transfer" children escapes from poverty thanks to the Welfare transfers. If the "before transfer" poverty rate of British children is higher than the American one, the relative decrease in poverty is more important across the Channel than in the United States, as one out of four poor children escapes from poverty thanks to benefits; it then results in an "after transfer" poverty rate of the same importance in these two countries <sup>9</sup>.

If poverty is measured in terms of seriousness, it is interesting to point out that the comparative France-Luxembourg results become reversed: while the "before transfer" poverty rate is higher in Luxembourg, compared to France the seriousness of poverty in Luxembourg is weaker <sup>10</sup>. This approach in terms of seriousness shows a higher efficacy of benefits in Great Britain compared to the United States: while the "before transfer" seriousness of poverty is much more important in Great Britain than in the United States, the "after transfer" seriousness of poverty is definitely weaker (high deduction rate of the seriousness of poverty).

Taking simultaneously into account the poverty rate and the seriousness of poverty allow us to emphasise the extent of the effects of transfers on children poverty in Great Britain. While, from the four countries of the comparison, Great Britain has the highest intensity of poverty rate, the intensity of poverty "after transfer" in this country is comparable to that of the United States. In terms of the decrease of the intensity of poverty, British transfers appear to be far more efficacious than American benefits (reduction rate of about 67%, vs. 43%). However, the decrease of the intensity of children poverty is less important than in France (75%) and in Luxembourg (81%).

This comparison of the decrease of the intensity of poverty can be extended by the analysis of the efficiency of these four transfer systems. To this end, the decrease of poverty has to be compared to its cost. Then, in the next table, we present the indicator of poverty intensity reduction per dollar, in parity of purchase power, of transfer allowed to each child; firstly for poor children "before transfer" (specific efficiency) and, secondly, for the whole children (global efficiency).

Table 3: Decrease of the intensity of poverty and efficiency

	United States	France	Great Britain	Luxembourg
Decrease of the intensity of poverty: (1)	43%	75%	67%	81%
Average amount of transfer per poor child "before transfer": (2)	188	227	309	325
Average amount per child: (3)	60	129	153	249
Index of specific efficiency: (1) / (2)	0.23	0.33	0.22	0.25
Index of global efficiency: (1) / (3)	0.72	0.58	0.44	0.33

According to the specific efficiency indicator, France and Luxembourg appear to be more efficient than the two other countries, with an advantage for France. Therefore, Luxembourg is the more efficacious at the cost of a more expensive benefits package (with an efficiency result which is hardly superior to the United States and Great Britain ones). From the point of view of global efficiency, United States have the best result; this results essentially from the fact that very few transfers are allowed to non poor children: the small amounts of benefits are mainly allowed to poor children, which is a sign of global efficiency. On the contrary, with a generous family policy and social assistance transfers scheme toward all children, Luxembourg appears to be hardly efficient to reduce the poverty intensity (this is not inconsistent with a high degree of efficiency).

This as such indicates an appreciation of the performance of the four transfer systems. Yet a judgement based on these sole global indicators is not sufficient. In fact one has to gauge the effects of transfers on the various sub-groups of poor children so as to detect possible selective effects (inequity) with which these transfers systems must be debited.

## 2. THE IMPACT OF FAMILY POLICY AND SOCIAL ASSISTANCE TRANSFERS ON CHILD POVERTY ACCORDING TO THE CHARACTERISTICS OF CHILDREN: AN ANALYSIS IN TERMS OF EQUITY

When grasping poverty on the level of monetary living, the poverty factors represent disadvantages, which reflect either lack of sources of income or increased needs.

More specifically from the point of view of child poverty, the number of children in the family constitutes the main parameter which determines the level of needs (and is the only parameter explicitly taken into consideration when calculating the poverty threshold). But the age, the schooling level, the health of children, etc., could also be retained as such factors, since they are also associated with specific consumption needs.

On the income side, naturally we look at the situation of the parents in relation to an activity, on the one hand, by distinguishing situations of non-activity without replacement income, from those normally associated with a replacement income (pension, invalidity, unemployment), and, on the other hand, by distinguishing between reduced and full-time activity. Yet the activity status, and more specifically the remuneration level, are themselves the result of individual factors of the parents which are interesting enough to also be taken into account: age, training level, professional category, nationality, size of the home town. Finally, the marital status of the parents (life as a couple vs. single parent) represents the second dimension to be taken into account in this type of analysis: if single-parenthood is, in fact, synonymous with the lack of a spouse's income, it can also, in the case of families, be the cause for completely lacking primary income when the single parent, obliged by childcare, finds himself in the impossibility to be active on the labour market.

The profile of the poor child before the intervention of family policy and social assistance transfers, in other words if only primary and replacement incomes are taken into account, is relatively conform with the underlying hypotheses of the selected poverty factors (cf. Annex 2) <sup>11</sup>.

Because of this inequality of children facing poverty, we could expect these systems of welfare benefits, according to an equity logic, retain the poverty factors as many parameters according to which the amount of benefits would vary. Then, the more important would be the poverty seriousness, the more important would be the amount of benefits. In others words, we can define the equity principle as the distribution of transfers

proportional to the poverty gap. There is strict equity when the relative reduction of the poverty gap is equal for all poor "before transfer" children. In that case, first, the transfers would not change the rank order of people according to their standard of living, and secondly, if the reduction rate is superior to 100%, all poor children will escape from poverty and, on the contrary, if this rate is inferior to 100%, no child will escape from poverty thanks to transfers. Is this equity principle observed? Of course not because, in the four countries, only a proportion of children escape from poverty thanks to transfers. Then, who are the children who suffer from the inequity of the transfers? Are these "dropped by the side" different from one country to another? These are the questions we treat according to two approaches. These approaches are based on two indicators which illustrate our equity principle: the probability of escaping from poverty and the rank reversal in the distribution of the standard of living.

#### A. The decisive characteristics of the probability of escaping from poverty thanks to family policy and social assistance transfers

The aim of this analysis consists in estimating the individual probability of escaping from poverty thanks to family policy and social assistance transfers. If the equity principle was strictly applied, the probability of escaping from poverty would be the same for all poor children and no characteristic would have an influence on this probability. But this is not the case. We therefore aim to identify the characteristics which have a negative effect on this probability of escaping from poverty, in order to stress the inadequacies of the transfers schemes toward these types of children.

This step is based, with the help of a Logit regression, on the estimated probability of escaping from poverty thanks to transfers. The population being analysed is therefore limited to "before transfer" poor children only. The dependent variable takes the value "1" when the child crosses the poverty threshold because of the transfers, and "0" otherwise. We then use a specification which is in keeping with the approach so far expressed in terms of poverty rate (being or not under the poverty threshold). However, by introducing the standard of living "before transfer" as an explanatory variable, this approach is situated in the line of our analysis in terms of poverty intensity, because the factors explaining the escape from poverty thanks to the transfers have to be interpreted "the seriousness of poverty being taken into account".

According to this approach, in terms of the probability of escaping from poverty (cf. table n°4), it clearly appears that two pairs of countries are opposed. On the one hand, Great Britain and Luxembourg appear relatively equitable as few characteristics are significantly linked to the probability of escaping from poverty thanks to the transfers. On the other hand, France and the United States have transfers systems which are far more discriminant.

In this respect, the French system is almost caricatured. Then, *ceteris paribus*, single children are the "dropped by the side" from these transfers: in comparison with children belonging to single child families, the "odd ratio" indicator is multiplied by almost five for children belonging to families with two children, and by fifteen for children belonging to large families. This results from a double effect: on the one hand, the absence of family transfers for single child families and, on the other hand, the increases of benefits according to the number of children and the existence of specific benefits for families with at least three children (*Complément familial et Allocation parentale d'éducation* for example).

Table 4: Analysis, with the help of a logistic regression, of the probability that a child below the age of 16 years escapes from poverty thanks to family policy and social assistance transfers

	FRANCE (1993-94)			GREAT-BRITAIN (93)			LUXEMBOURG (96)		UNITED-STATES (94)	
Explanatory variables	Averages	Odds Ratio		Averages	Odds Ratio		Averages	Odds Ratio		
<i>Constant</i>	1	-	***	1	-	***	1	-	***	
One child < 20 years	0.13	Ref.	-	0.17	Ref.	-	0.13	Ref.	-	
Two children < 20 years	0.24	4.67	***	0.33	0.84	ns	0.39	1.52	ns	
Three children or more < 20 years	0.63	14.74	***	0.50	0.56	ns	0.48	4.29	**	
Presence of at least one child aged ...										
- 0 - 2 years	0.37	2.75	***	0.41	1.19	ns	0.42	3.15	**	
- 3 - 5 years	0.51	1.04	ns	0.49	0.49	*	0.45	1.92	ns	
- 6 - 9 years	0.57	2.02	***	0.52	1.44	ns	0.58	4.66	***	
- 10 - 15 years	0.64	4.30	***	0.49	0.43	*	0.51	1.70	ns	
- 16 - 19 years	0.23	2.39	**	0.13	2.81	**	0.15	2.36	ns	
Nationality / ethnic origin of the mother, by default, of the father:										
- (1)	0.78	Ref.	-	0.82	Ref.	-	0.45	Ref.	-	
- (2)	0.17	2.89	***	0.07	0.41	ns	0.29	0.32	***	
- (3)	0.05	5.21	***	0.08	1.59	ns	0.26	0.40	**	
- (4)	-	-	-	-	-	-	-	-	-	
Age of the mother, by default, of the father:										
- < 30 years	0.22	2.57	***	0.37	0.33	**	0.29	1.34	ns	
- 30 - 39 years	0.58	1.72	ns	0.49	1.33	ns	0.53	0.73	ns	
- 40 years or more	0.20	Ref.	-	0.14	Ref.	-	0.18	Ref.	-	
Number of disabled non-actives:	0.04	2.22	ns	0.08	4.32	***	0.07	2.29	ns	
Two parents, two employed or more, or one employed and no unemployed	0.49	Ref.	-	0.18	Ref.	-	0.63	Ref.	-	
Two parents, at most one employed and at least one unemployed	0.25	1.47	ns	0.26	1.84	ns	0.13	1.23	ns	
Two parents, no employed no unemployed	0.07	3.70	**	0.06	6.53	***	0.03	0.51	ns	
Single parent family, one employed or more	0.07	3.03	***	0.13	0.80	ns	0.14	1.05	ns	
Single parent family, no employed	0.12	5.42	***	0.37	1.63	ns	0.07	2.20	ns	
Monthly standard of living "before transfer" (in PPP)	360	1.016	***	185	1.012	***	667	1.006	***	
<i>Dependent variable:</i>										
<i>Escape from poverty = 1</i>	0.64			0.25			0.68		0.11	
<i>R<sup>2</sup> Cox-Snell</i>		0.46			0.40			0.34		0.13
<i>% of correctly forecast cases (cut value = 0.5)</i>		85%			85%			79%		89%
<i>Number of observations</i>	882			633			295		10,228	

Significance thresholds (Wald-criterion): \* (10%); \*\* (5%); \*\*\* (1%); ns (not significant at the 10%-threshold).

Nationality / ethnic origin:

France: (1)= European Union; (2) = African; (3) = Other.

Great-Britain: (1) = White; (2) = Black; (3) = Indian or Other.

Luxembourg: (1) = European Union excepted Portugal; (2) = Portugal; (3) = Other.

United-States: (1) = White; (2) = Afro-American; (3) = Hispanic; (4) = Native or Other.

Taking into account the age of children shows that children aged three to five years are the "losers" from the French benefits system: belonging to this age bracket excludes from the eligibility to supplements for ages of the *Allocations familiales* and from the eligibility to benefits for small children (APJE, APE, long API) and to educational grant or to *Allocation de rentrée scolaire*. The positive discrimination policy towards single parent families (API, ASF, RMI, higher resources ceiling for eligibility to *Complément familial*) is clearly showed by the coefficients associated to this status; on the contrary, couples, except inactive couples, are less likely to escape from poverty thanks to transfers. However, we can notice with some astonishment the absence of a



significant link between the probability of escaping from poverty and the presence of invalid people in the household, because both AAH and AES are taken into account in the analysis. One of the possible explanations could result from the fact that the handicap is self-reported; it then can regroup heterogeneous situations, some of them making people eligible to benefits, whereas the others do not.

The effects associated with the age of the mother (younger mothers have a higher probability of escaping from poverty than others) and with the nationality of the mother (mothers from European Union have a smaller probability of escaping from poverty than others) are far more difficult to interpret. Does this result from a more important prevalence of unemployment for young people, and then of an effect of ASS or, according to the same logic, of an effect of the maternity allowance of a more important prevalence of maternity for young mothers? How to explain the unexpected result, from the point of view of nationality (because there is no international agreement, many foreigners do not have the same rights than nationals, then we could expect a negative effect, *ceteris paribus*, on the probability of escaping from poverty)? As for the level of standard of living, he is positively linked to the probability of escaping from poverty thanks to the transfers. This could seem strange, or even be interpreted as an evidence of an anti-redistributive effect of transfers. However, it emphasises a trite reality: the nearer is the standard of living from the poverty threshold, the more people increase their probability of escaping from poverty thanks to transfers (even with small amounts of benefits). This positive link between "before transfer" standard of living and the probability of escaping from poverty thanks to transfers is also a common result in the four countries.

Even if the transfers system in the United States is very different from the other ones, the American situation appears to be similar, but with more important effects, to the French one (the only differences are observed for the age of the mother and the presence of invalid persons in the household).

On the contrary, family and social assistance policy in Luxembourg seems far more neutral in the ground of an eventual positive or negative discrimination towards child poverty. We can only notice, first, that the odd ratio indicator is multiplied by four for large families, which probably results from the progressiveness of the amount of family benefits ("*allocations familiales*") according to the number of children in the family, and secondly, that transfers give a positive advantage to children belonging to two different age brackets: small children aged less than three years (postnatal benefits) and children aged 6 to 9 years (the positive effect on the probability of escaping from poverty perhaps results from the *allocation de rentrée scolaire*, benefit for children aged 6 or more, but it is astonishing this kind of effect is not observed for children aged 10 to 15 years as this benefit is majored from the age of 11 years). However, what looks like clearly as a significant inequity in Luxembourg system is what happens to children of foreign mothers (Portuguese or non European): *ceteris paribus*, their likelihood of escaping from poverty is more than two times smaller than those of children from Luxembourg mothers. But according to other points of view (single parents, activity status of the parents, presence of invalid people, age of the parents), the Luxembourg system seems equitable as no discrimination can be noticed: the likelihood of escaping from poverty thanks to transfers is not significantly different for one subgroup of children or another.

The results for the case of Great Britain are approximately the same. This absence of (positive) discrimination according to the number of children could be linked to the absence of progressiveness of benefits (Family Credit, One parent Benefit, Income Support) according to the birth rank of children and to the small amount of the supplement of the Child Benefit allowed to single child families: the British benefit system gives only a significant positive advantage, in terms of the probability of escaping from poverty, to children from inactive parents<sup>12</sup>, to invalid children or children living with an invalid, or to children living in families with at least one young adult (16-19 years)<sup>13</sup>. This last discrimination could result from the increases of Family Credit and Income Support according to the age of children. However, we can be astonished by the opposite effect (negative discrimination) for children aged 10 to 15 years (whereas these children are allowed an increase of the benefits in comparison with younger children) and wonder on the causes of this same effect for children aged 3 to 5 years even if no supplement of benefit is allowed to them. On the contrary, the benefit system seems to be negatively discriminating toward young mothers. The same explanations than those used in the case of France could perhaps be invoked to explain this phenomenon.

#### B) The decisive characteristics of the change of rank, in the standard of living distribution, due to transfers from family and social assistance policy.

If we free from the criterion of the poverty threshold, we can analyse the equity of family policy and social assistance benefits systems towards poverty, in studying the changes, due to transfers, of rank order, according to

standard of living, of poor people "before transfer". According to our definition, the less there are rank reversals due to transfers, the more equitable is the system. The assessment of the level of equity can first be undertaken by the way of Atkinson-Plotnick and Cowell indexes (cf. annex n°3) <sup>14</sup>. We can also identify, with the help of an ordinary least square regression, the characteristics which are associated to a decrease of ranks; then we can detect the types of children which are disadvantaged by these transfers systems. First, we begin by the global approach.

If we measure the inequity of the transfers systems by the synthetic indicator proposed by Cowell (cf. table 5), transfers appear to be slightly inequitable <sup>15</sup> in the four countries, whatever the degree of aversion against inequality. Nevertheless, the inequity level is variable according to countries. Then, rank variations are the less important (in terms of number and/or extent) in France, and the more important in the United States: for poor children "before transfer", the inequity level in the United States would be three times higher than the one observed for France. Luxembourg and Great Britain have the middle positions: for poor children before transfer, the inequity level in Luxembourg is slightly higher than the French one, and the inequity level in Great Britain is slightly less than the double of French one.

Table 5: Comparison of rank reversals indicators (inequity of transfers systems) applied to poor children, aged less than 16 years, "before transfer"

	United States	France	Great Britain	Luxembourg
<b>Index of Cowell <math>C_0</math></b>	0,1021	0,0292	0,0557	0,0394
<b>Index of Cowell <math>C_1</math></b>	0,0884	0,0285	0,0520	0,0308
<b>Index of Atkinson-Plotnick</b>	0,1621	0,1746	0,1660	0,2235

However, this international rank order is questioned by the Atkinson-Plotnick indicator. According to this latter indicator, Luxembourg appears to be the most equitable country, the other three having quite the same degree of equity (and the United States would be the less inequitable country). In front of such uncertainty, we will be careful not to conclude in a deciding way on the degree of equity of these four transfers systems.

Whatever the degree of inequity, the reasons of this inequity can vary according to countries. Table 6 presents the results of the estimations of four regressions whose dependent variable is the advantage of rank due to transfers. Generally, we can notice that, for the main part, we find out, with no surprise, the same conclusions than those obtained with the previous approach in terms of likelihood of escaping from poverty thanks to transfers. We then will underline few differences between these two approaches.

First, whatever the country, the "before transfer" standard of living has a negative impact. This results from the existence of a really vertical redistribution dimension in these different transfers systems: *ceteris paribus*, children with the smallest standard of living lose less ranks than children with the highest standard of living, which means that the former gains ranks in comparison with the latter, but it also means there is no strict equity, the poorer having the advantage of a positive discrimination.

For France, contrarily to the previous approach, the presence of invalid persons in the household appears to be positively linked to the gain of ranks; this result is more in accordance with what we could expect from the impact of AAH and AES. However, from the point of view of the family structure, only single-parenthood – reinforced by an effect of no employment – is positively linked to the gain of ranks, whereas in the previous approach we also noticed a higher probability of escaping from poverty thanks to transfers for inactive couples (which could be explained by the collection of APE). At last, our astonishment related to the impact of the nationality of the mother on the probability of escaping from poverty is a bit reduced because the positive advantage linked to nationality is only observed for children with an African mother.

In the case of Luxembourg, the positive impact of the progressiveness of the amount of family benefits according to the number of children is more systematically observed than in the previous approach: it is observed not only for large families, but also from the second child. The strong effect of age, in the previous approach, relative to the 6-9 years old children (effect we try to explain, with caution, as the result from the *Allocation de rentrée scolaire*) is no more significant in this new approach. More astonishing, in terms of rank reversals of standard of living, the transfers system of Luxembourg is no more discriminating toward the nationality of mother. Nonetheless children from single parent families with at least one working adult get a rank advantage due to the transfers system. This result seems surprising, as there is no specific benefit for single parents in Luxembourg.

What is also surprising is the change in the results between both approaches in the case of Great Britain. According to the analysis in terms of poverty threshold, only children from inactive couples distinctly increased their probability of escaping from poverty thanks to transfers; now, all family shapes contrast significantly from the reference class (couples with at least two working adults or couples with one working adult and one unemployed). The other difference to be noticed is the great positive discrimination towards children with a black mother (in the previous approach, the impact was not significant).

**Table 6: Analysis, with the help of an OLS regression, of the factors explaining the changes of ranks in the standard of living distribution thanks to family policy and social assistance transfers, concerning the children, below the age of 16 years, who are poor without social transfers**

Explanatory variables	FRANCE (1993-94)			GREAT-BRITAIN (93)			LUXEMBOURG (96)			UNITED-STATES (94)		
	Means	Coefficients		Means	Coefficients		Means	Coefficients		Means	Coefficients	
<i>Constant</i>	1	-222	***	1	-34	ns	1	48	**	1	-1340	***
One child < 20 years	0.13	Ref.	-	0.17	Ref.	-	0.13	Ref.	-	0.12	Ref.	-
Two children < 20 years	0.24	36	*	0.33	20	ns	0.39	48	***	0.31	156	**
Three children or more < 20 years	0.63	112	***	0.50	32	ns	0.48	116	***	0.57	334	***
Presence of at least one child aged ...												
- 0 - 2 years	0.37	94	***	0.41	1	ns	0.42	52	***	0.42	95	**
- 3 - 5 years	0.51	54	***	0.49	1	ns	0.45	-15	*	0.49	163	***
- 6 - 9 years	0.57	94	***	0.52	-22	ns	0.58	6	ns	0.56	277	***
- 10 - 15 years	0.64	132	***	0.49	4	ns	0.51	12	ns	0.54	214	***
- 16 - 19 years	0.23	104	***	0.13	-4	ns	0.15	-21	*	0.20	308	***
Nationality / ethnic origin of the mother, by default, of the father:												
- (1)	0.78	Ref.	-	0.82	Ref.	-	0.45	Ref.	-	0.44	Ref.	-
- (2)	0.17	95	***	0.07	123	***	0.29	-9	ns	0.29	114	**
- (3)	0.05	6	ns	0.08	15	ns	0.26	-4	ns	0.24	-45	ns
- (4)	-	-	-	-	-	-	-	-	-	0.03	725	***
Age of the mother, by default, of the father:												
- < 30 years	0.22	41	**	0.37	-44	**	0.29	-8	ns	0.34	197	***
- 30 - 39 years	0.58	31	**	0.49	4	ns	0.53	-15	ns	0.45	126	**
- 40 years or more	0.20	Ref.	-	0.14	Ref.	-	0.18	Ref.	-	0.21	Ref.	-
Number of disabled non-actives	0.04	65	**	0.08	98	***	0.07	11	ns	0.17	644	***
Two parents, two employed or more, or one employed and no unemployed	0.49	Ref.	-	0.18	Ref.	-	0.63	Ref.	-	0.31	Ref.	-
Two parents, at most one employed and at least one unemployed	0.25	15	ns	0.26	84	***	0.13	5	ns	0.06	372	***
Two parents, no employed no unemployed	0.07	-16	ns	0.06	90	***	0.03	15	ns	0.05	1541	***
Single parent family, one employed or more	0.07	86	***	0.13	52	***	0.14	22	**	0.27	648	***
Single parent family, no employed	0.12	116	***	0.37	73	***	0.07	6	ns	0.31	1552	***
Monthly standard of living "before transfer" (in PPP)	360	-0.44	***	185	-0.19	***	667	-0.20	***	336	-1.14	***
<i>Dependent variable: change of ranks</i>	0			0			0			0		
Adjusted R <sup>2</sup>		0.54			0.29			0.58			0.22	
Number of observations	882			633			295			10,228		

Significance thresholds: \* (10%); \*\* (5%); \*\*\* (1%); ns (not significant at the 10%-threshold).

*Nationality / ethnic origin:*

France: (1)= European Union; (2) = African; (3) = Other.

Great-Britain: (1) = White; (2) = Black; (3) = Indian or Other.

Luxembourg: (1) = European Union excepted Portugal; (2) = Portugal; (3) = Other.

United-States: (1) = White; (2) = Afro-American; (3) = Hispanic; (4) = Native or Other.

At last, in the case of the United States, the differences between the two approaches are restricted. We note nonetheless that, in the approach in terms of rank variations, the age of the mother appears as a significant factor: the younger is the mother, the more important would be the gain of ranks for the child (in the other approach, in terms of exit of poverty, this characteristic was not significant). Otherwise, the relative importance of effects related to the age of the children vary according to the approach. For example, in the first approach, the cohabitation with a young child (0-2 years old) increases, with a rather big extent compared to others age brackets (odd ratio = 1.39), the probability of escaping from poverty, and, on the contrary, the cohabitation with a young adult (16-19 years old) has a minor effect (odd ratio = 1.20). in the second approach, the hierarchy is in the reverse order: the regression coefficient associated to young children equals 95 while the coefficient associated to young adults equals 308. But apart from these two marginal differences, the conclusions, in terms of factors explaining the probability of escaping from poverty or the gain of ranks of standard of living are similar in the United States.

To conclude, let us review the main comparative results from this analysis of the impact of family policy and social assistance benefits on children poverty.

In terms of efficacy, to reduce the poverty rate or to reduce the intensity of poverty, French and Luxembourg benefits systems appear extremely more efficacious than American welfare and far more efficacious than the British social assistance.

In terms of efficiency, if we take into account the cost of transfers allowed to poor children "before transfer", France and Luxembourg are still the most efficient countries, but the gap between the four countries are highly reduced because the efficacy of the two continental European countries is obtained at the cost of a global cost far more important than in the two Anglo-Saxon countries. And then, if we use an efficiency criterion which take into account the relative cost to the whole children, and not only the cost relative to poor children, United States appear to be the most efficient, followed by France, Great Britain and, at last, Luxembourg.

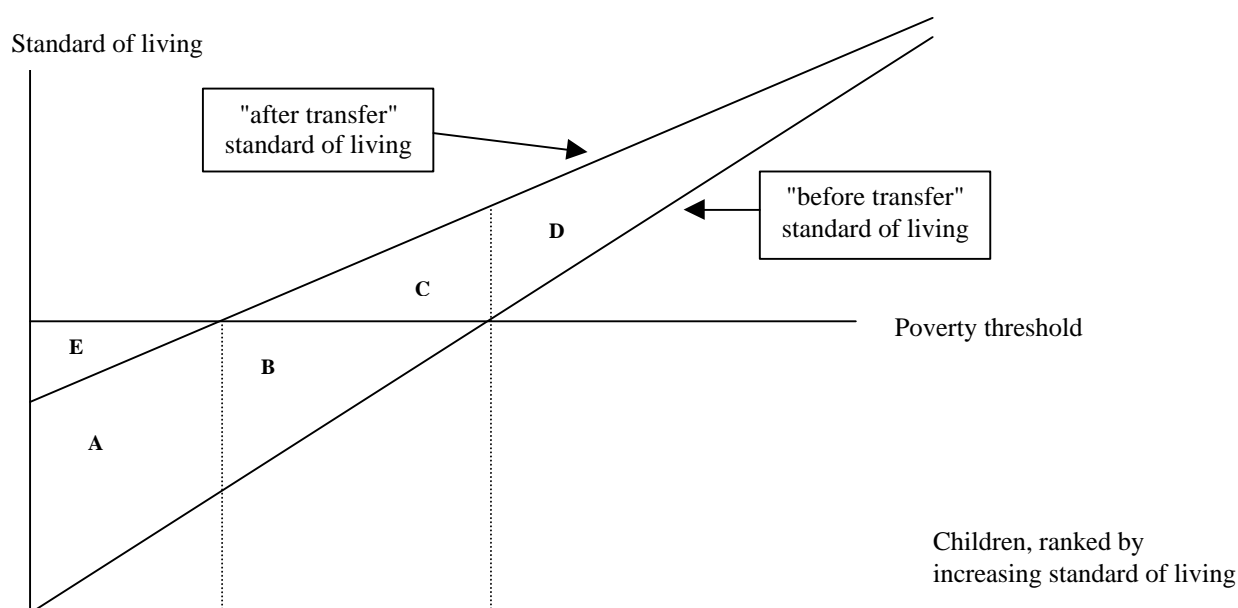
In terms of equity, it seems difficult to get a ranking between the four transfer systems because the two equity indexes used give opposite results. Nonetheless, our own econometric estimations of the probability of escaping from poverty thanks to transfers, and of the rank advantage in the distribution of standard of living, allow to distinguish two different pairs of countries. Great Britain and Luxembourg do not seem to get a transfers system explicitly discriminating on the observed criterions. In these two countries, few characteristics of the poor children have a significant impact on dependent variables. This results from some equality of poor children towards the transfers system. However, in the two other countries, France and the United States, characteristics of the children are significantly linked to the likelihood of escaping from poverty or to the gain in terms of ranks. This could be interpreted in two different ways. On the one hand, these results show that transfers policies have the aim of explicit targeting (positive discrimination towards few subgroups of children) and, on the other hand, this targeting policy could be seen as an evidence of inequity because poor children who are not targeted (or badly targeted) by the benefit system are the dropped by the side of this system.

More generally, it seems that, behind these results, lie two opposed conceptions of the transfers systems of the family and social assistance policy. Global statistics from table 7 illustrate these two conceptions. Firstly, there is obviously a great difference of the generosity degree between Anglo-Saxon system and the system of France and Luxembourg. For example, whereas American transfers represent, in average, about one percent of the standard of living, in France, their relative share is ten times higher. However, apart from this degree of generosity, when studying the destination of these funds of the social redistribution, we discover two situations which are extremely opposed. In France and Luxembourg, transfers from family and social assistance policy are typical from the universalist conception. To be persuaded of it, we need only to notice that two thirds (France) or even seven tenths (Luxembourg) of the standard of living due to transfers are allowed to non poor children "before transfer". On the contrary, the transfers policy from the two Anglo-Saxon countries are typical from a selective approach: in the United States, 86% (A+B+C) of the standard of living due to transfers are allowed to the sole "before transfer" poor children (and 82% [A+B] contribute to the decrease of the poverty gap); in Great Britain, these shares represent respectively 63% and 55%.

Table 7: Comparison of indicators of budgetary funds (from the family policy and social assistance), expressed in proportion of the standard of living

	France	Great Britain	Luxembourg	United States
Share, in the total standard of living, of family policy and social assistance transfers (all children)	10%	12%	14%	1%
<b>A:</b> share of the transfers allowed to "after transfer" poor children	9%	44%	7%	67%
<b>B:</b> share of the transfers allowed to children escaping from poverty (thanks to transfers) and reducing the poverty gap	12,5%	11%	12%	15%
<b>C:</b> share of the transfers allowed to children escaping from poverty and granted beyond the poverty gap	12,5%	8%	10%	4%
<b>D:</b> share of the transfers allowed to children who are not poor "before transfer"	66%	37%	71%	14%
All transfers allowed (A+B+C+D)	100%	100%	100%	100%
<b>E:</b> "after transfer" poverty gap, in percentage of the whole transfers allowed.	7%	27%	4%	107%

Help to interpret table 7



In France and Luxembourg, a strong family policy gives most of the transfers without resources conditions, according to a principle of universality, to follow objectives which explicitly aim at the well-being of the family and/or the child, and then without having as the main objective the fight against poverty; this family policy, coupled with the social assistance package, which is more marginal, but explicitly conceived as a safety net against poverty, protects from poverty a big proportion of children. On the American side, and to a lower extent, in Great Britain, a Welfare policy, which focuses more on the question of the fight against poverty in general, seems to take no notice of the specificity of the child. Then, this policy appears to be inefficient in leaving a little less than one on four children under the poverty threshold. Of course, the counterpart of the "success" of the countries from continental Europe is a big cost. But the acceptance of such a cost, by households of France and Luxembourg, perhaps results from the fact that this is a highly universal system. Opposed to France and Luxembourg, where these policies are rather efficient and expensive but well accepted because they benefit to the great majority of people, American and British benefits systems are less efficient, relatively cheap, but perhaps (that is a question) less accepted because they benefit to a small minority.

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## **Annex 1: Family policy and social assistance transfers to be taken into account in the analysis**

### **France**

**Family policy:** Allocations Familiales (AF), Allocation d'Éducation Spéciale (AES), Allocation de Soutien Familial (ASF), Allocation Parentale d'Éducation (APE), Indemnités journalières d'arrêt maternité, Aide à la Famille pour l'Emploi d'une Assistante Maternelle Agréée (AFEAMA), Allocation Pour Jeunes Enfants (APJE), Complément Familial (CF), Allocation de Rentrée Scolaire (ARS), Allocation de Parent Isolé (API), School Grants.

**Social assistance:** Allocation aux Adultes Handicapés (AAH), Allocation de Solidarité Spécifique (ASF), Revenu Minimum d'Insertion (RMI), Minimum Vieillesse (MV), local assistance.

### **Luxembourg**

**Family policy:** Allocation de Maternité, Allocation Prénatale, Allocation de Naissance, Allocation Postnatale, Allocations Familiales, Allocation Spéciale Supplémentaire, Allocation de Rentrée Scolaire, Allocation d'Éducation, parental leaves.

**Social assistance:** Revenu Minimum Garanti (RMG), Allocation Spéciale pour Personne gravement Handicapée.

### **Great-Britain**

**Family policy:** Child Benefit, One Parent Benefit, Family Credit, Maternity Allowance, Educational Grant.

**Social assistance:** Income Support, Severe Disablement Allowance, Invalidity Pension, Widowed Mother Allowance.

### **United-States**

**Social assistance:** Aid to Families with Dependant Children (AFDC), Food stamps, Earned Income Tax Credit (EITC), School lunch, Low income House Energy Assistance Act (LIHEAD).

## **Annex 2: “before transfer” intensity of poverty**

First, if the intensity of poverty globally decreases with the age of children in Great Britain, in Luxembourg and in the United States, this is most certainly related to the fact that in comparison with younger children, older children automatically have on average older parents who are therefore higher-income earners than younger parents at the start of their professional career. However, it should be noticed that this logic is not strictly followed because, except in the case of Great Britain, the poverty intensity is slightly higher for 3 to 5 years old children than for younger children. As for the age of the youngest child, it discloses, as does the age of the child himself but even more clearly, the link between the children's and the parents' ages. Thus, in the four countries, the highest poverty intensity rates affect children belonging to a family where the youngest child is still very small (less than 5 years); in France and Luxembourg, the poverty intensity is slightly higher for families where the youngest child is 3 to 5 years old than for families where the youngest child is younger.

It is therefore not astonishing that the “before transfer” poverty rate increases with the number of children, which explicitly illustrates the reality of the economic hardship which the child represents for the household budget, even bearing in mind the economies of scale taken into account by the equivalence scale. The case of single children departs somewhat from this logic in France and Great Britain: the poverty intensity rate among single children is superior to the poverty intensity rate for two siblings. One of the reasons of this result comes from the fact that single children live proportionally more often in lone parents families.

Whether it is the father or the mother, the same age effects can be observed as mentioned above: the “before transfer” poverty intensity rates are higher for children living with young parents (20-29 years old) than for those living with parents of middle age (more than 30 years old)<sup>16</sup>. Even if the “before transfer” poverty intensity of children living with old parents (49 years old and older fathers) is higher than the average only in France, the poverty intensity for these children is always higher than that of children with middle age parents.

Even if it is not entirely satisfactory to draw a parallel between the nationalities (in France and Luxembourg) and the ethnic origins (in Great Britain and in the United States), it must be pointed out that, in the same way as in the two European countries where the nationals show lower “before transfer” poverty intensity rates than foreigners (mainly non-European), in the two Anglo Saxon countries the average “before transfer” poverty intensity rates among whites are obviously lower than for the other ethnic groups.

The absence of the mother (a rare phenomenon: 1% in the three European countries; 4% in the United States) can only in Luxembourg and in Great Britain be associated with a higher “before transfer” poverty intensity rate than the average. But when the family is headed by a single woman (this concerns just under 10% of the children in France and Luxembourg, vs. The double in Great Britain and 24% in the United States), the “before transfer” poverty intensity rate is more than three times higher than the average in France (vs. 2.7 times higher in the United States and in Great Britain, and 2.5 times higher in Luxembourg). This is the massive phenomenon from these past two decades, supported by many studies<sup>17</sup>, and which characterises the poverty of single-parent families. The fact that, in the four countries, “before transfer” poverty intensity rates are typically lower for children with married parents is naturally linked partly to the single-parenthood but also, again, to the age factor since young couples get married more and more frequently after the first child(ren). On the contrary, the highest poverty intensity rates are observed for children with separated or divorced mothers in the three European countries, while in the United States the poverty intensity rates are the highest for children with lone mothers.

When looking at the job characteristics of the parents, one observes, whatever the country, a very strong influence from parents' unemployment on the “before transfer” child poverty intensity rate. The father's non-activity has the same effect, but less strong. The mother's non-activity cannot be interpreted in the same way, depending on the countries. In Luxembourg, mothers' non-activity is very widely spread (68% of children in Luxembourg live with an inactive mother, vs. only 33% in the United States, 34% in France and 44% in Great Britain), thereby constituting the social norm and not necessarily a discriminating factor when it comes to poverty. In France, Great Britain and in the United States, however, the fact that children of non-working mothers reach a distinctly higher “before transfer” poverty intensity rate than average, would seem to indicate that the non-activity of the mothers hides numerous situations of disheartened unemployed women.

As for the poverty intensity per the schooling level of the parents, it illustrates well, in the four countries, the link between poverty and the remuneration level (and/or employability), since the “before transfer” poverty intensity rates are higher than the average for children whose parents have got very little schooling and these rates decrease when the schooling level of parents increases.



The characteristics related to the household structures summarise the preceding observations. In the four countries, the poverty intensity, before taking into account transfers, is all the more important since the child lives in a single-parent or a large family, and/or the number of active adults decreases, and/or the number of unemployed persons increases<sup>18</sup>, and/or there is at least one non-active disabled adult in the household<sup>19</sup>. However, in Luxembourg, conversely to the three others countries, the fact that one adult in the household is non-active (and neither retired nor disabled) is not linked to a higher than average poverty intensity rate. This is due to what we mentioned above concerning the low activity rate among the mothers of Luxembourg families.

Table A2-1

	UNITED STATES					FRANCE					GREAT BRITAIN					LUXEMBOURG				
<i>Poverty threshold : 50 of the median standard of living, with the number of CU = square root of the number of persons in the household</i>	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfers	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer
<b>All children</b>	100,0	27,6	15,2	24,6	8,7	100,0	19,4	6,8	7,0	1,7	100,0	31,2	21,4	23,3	7,00	100,0	22,3	6,2	7,2	1,2
<b>Characteristics of the child:</b>																				
* < 3 years	18,0	31,4	17,4	28,1	10,5	17,6	18,1	6,3	7,5	1,9	19,6	39,0	24,7	34,3	9,3	19,4	26,0	7,3	6,3	0,7
* 3 - 5 year	19,9	30,7	17,5	27,7	10,0	19,5	21,4	7,9	9,9	2,5	21,4	37,3	23,5	34,9	8,1	20,8	22,8	7,5	10,5	2,3
* 6 - 9 years	25,6	28,0	15,3	24,7	8,5	24,6	18,5	6,1	6,2	1,4	24,1	37,4	22,1	30,5	7,2	27,6	22,1	5,5	4,8	0,8
* 10 - 15 years	36,5	23,9	12,9	21,0	7,2	38,3	19,5	6,6	5,8	1,4	34,9	36,1	17,7	27,6	4,8	32,3	20,0	5,2	7,5	1,1
<b>Characteristics of the sibship</b>																				
* number of children < 20 years																				
- one	18,2	18,7	9,3	16,9	6,0	20,9	11,5	4,1	8,8	2,2	17,7	29,6	19,7	21,7	6,9	18,5	14,5	3,0	8,4	1,5
- two	40,0	21,3	11,1	18,9	6,7	43,4	10,9	3,3	4,9	1,2	45,3	22,9	13,8	15,4	4,4	46,3	19,2	5,0	7,5	1,5
- three	24,9	30,9	17,1	27,8	10,0	22,8	23,3	7,2	7,0	1,9	24,9	35,4	25,0	27,1	8,6	24,2	27,7	6,9	6,8	0,3
- four	10,0	39,9	22,7	34,9	11,7	9,1	43,5	18,7	14,5	2,9	7,7	37,7	29,4	29,4	9,8	8,8	33,5	16,4	4,1	1,4
- five and more	6,9	58,5	37,3	50,5	18,2	3,8	78,1	28,9	3,2	0,3	4,3	88,9	72,5	80,1	19,9	2,1	53,3	13,9	8,9	0,8
* age of the youngest																				
- < 3 years	32,7	35,1	19,8	31,2	11,4	30,0	23,5	8,5	7,6	1,9	33,1	38,8	28,7	32,0	10,6	34,1	27,5	7,7	6,9	0,7
- 3 - 5 year	24,0	29,3	16,6	26,3	9,2	25,5	23,3	8,6	9,7	2,2	24,0	33,0	24,0	26,6	7,6	25,7	23,2	8,6	9,2	2,3
- 6 - 9 years	22,7	23,8	12,6	20,8	7,1	23,0	15,0	4,3	3,9	0,9	22,1	25,9	15,7	16,7	4,5	22,1	20,6	3,3	4,9	0,6
- 10 - 15 years	20,5	18,0	9,3	16,0	5,4	21,5	13,8	4,7	6,3	1,5	20,8	22,4	12,9	12,7	3,3	18,2	13,6	3,8	7,3	1,1
<b>Characteristics of the mother:</b>																				
* no mother in the household	3,9	33,8	16,6	29,7	9,7	0,7	13,3	7,6	13,3	3,9	1,5	61,0	39,6	41,9	10,5	1,0	45,4	10,4	4,5	0,1
* age of the mother																				
- < 20 years	0,6	70,9	43,5	65,8	28,6	0,2	64,2	27,2	21,9	11,1	0,3	37,0	36,6	37,0	12,8	0,1	71,1	15,1	0,0	0,0
- 20 - 29 years	19,5	44,2	26,1	40,3	15,0	17,0	24,1	8,5	11,7	2,9	22,8	49,7	35,5	42,4	13,7	17,7	36,7	9,7	11,3	2,0
- 30 - 49 years	70,9	22,1	11,8	19,6	6,7	80,5	18,4	6,4	5,9	1,4	74,4	24,8	16,8	17,0	4,9	79,5	18,9	5,5	6,3	1,0
- > 49 years	5,1	31,7	17,6	24,5	8,8	1,5	19,0	5,7	10,8	3,1	1,1	40,9	7,8	28,0	7,9	1,7	22,9	2,7	9,8	1,5
* marital status																				
- bachelor	7,7	75,3	56,3	67,7	29,1	10,6	26,7	11,5	13,9	3,2	7,7	65,1	48,3	53,8	15,9	4,0	41,4	13,7	18,4	4,6
- married	72,1	16,1	6,5	14,2	4,2	81,2	17,2	5,7	5,5	1,4	75,0	18,4	11,0	12,0	3,4	88,0	19,3	5,0	5,5	0,9
- separated/divorced	14,3	55,3	35,6	50,1	19,3	6,6	32,6	13,4	13,6	2,9	14,0	74,2	58,6	62,9	20,8	5,5	51,2	18,9	26,4	2,9
- widow	1,9	48,5	24,2	38,5	12,5	0,9	41,0	9,4	5,1	1,0	1,8	60,9	37,0	39,6	9,2	1,5	24,3	7,0	6,1	3,2

Table A2-2

	UNITED STATES					FRANCE					GREAT BRITAIN					LUXEMBOURG				
<i>Poverty threshold : 50 of the median standard of living, with the number of CU = square root of the number of persons in the household</i>	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfers	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer
<b>All children</b>	100,0	27,6	15,2	24,6	8,7	100,0	19,4	6,8	7,0	1,7	100,0	31,2	21,4	23,3	7,00	100,0	22,3	6,2	7,2	1,2
<b>Characteristics of the mother</b>																				
<b>* labour market position</b>																				
- employed	58,9	15,3	6,0	13,0	4,0	57,4	7,4	2,1	2,8	0,7	53,3	11,2	5,6	6,7	1,5	27,9	17,7	4,2	8,2	1,1
- unemployed	4,0	56,0	35,1	51,9	18,6	7,8	42,0	17,9	22,5	4,3	1,7	73,5	50,4	56,7	12,9	1,9	84,1	31,0	33,2	9,2
- disabled	4,1	61,7	41,5	50,3	18,5	1,2	19,8	5,6	3,7	2,2	0,8	62,6	43,6	30,5	5,4	0,6	36,6	3,7	8,4	0,3
- other non-active	29,1	43,1	27,3	39,8	15,3	32,8	35,1	12,4	10,6	2,9	42,7	52,9	38,9	41,9	13,5	68,6	22,1	6,3	6,1	1,0
<b>* nationality/ethnic origin</b>																				
- (1)	64,7	17,4	8,4	15,4	5,0	89,2	16,3	5,7	6,6	1,5	89,8	27,5	18,4	20,0	6,0	56,9	12,7	2,8	2,8	0,4
- (2)	14,7	52,6	34,8	46,9	18,4	3,1	16,3	5,7	7,0	2,3	2,7	87,1	82,2	84,8	22,7	15,4	41,2	11,5	17,4	3,0
- (3)	2,7	22,5	16,1	18,2	7,8	5,0	67,5	21,6	11,2	2,0	4,2	57,6	38,0	41,7	15,4	18,0	16,8	3,9	3,9	1,1
- (4)	0,8	39,0	23,1	33,7	12,4	1,8	52,8	26,9	15,3	9,6	-	-	-	-	-	8,6	61,8	23,7	25,3	3,3
- (5)	13,1	48,5	26,0	43,9	15,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>* level of education</b>																				
- primary educ. at most	6,1	63,6	35,2	58,0	21,0	15,6	44,9	17,1	12,1	3,1	20,6	54,2	38,5	40,8	12,3	29,6	44,3	12,8	16,0	2,2
- lower secondary educ.	43,6	36,5	21,3	32,4	11,7	45,5	21,7	7,2	8,9	2,0	43,4	30,2	20,4	23,7	7,6	41,9	16,1	4,3	5,0	0,8
- long secondary educ.	27,6	19,8	9,7	17,3	5,8	16,4	10,1	3,3	4,8	1,2	12,1	19,1	10,9	11,1	2,8	15,4	10,1	2,8	1,8	1,2
- university education	18,7	5,3	2,3	5,0	1,7	21,6	3,5	1,2	0,8	0,2	22,3	16,3	11,8	11,5	3,0	12,0	3,4	0,6	0,0	0,0
<b>Characteristics of the father:</b>																				
<b>* no father in the household</b>	24,0	61,3	41,4	54,9	21,9	8,1	44,3	22,6	22,9	6,0	19,4	76,4	59,0	64,6	20,5	9,4	45,2	15,4	20,9	3,8
<b>* Age of the father</b>																				
- < 30 years	9,4	32,9	13,4	30,1	8,8	9,5	24,8	7,2	11,4	2,7	11,9	42,8	30,9	34,7	11,8	6,8	32,9	10,5	20,1	1,6
- 30 - 49 year	60,0	14,4	5,7	12,6	3,7	76,0	14,0	4,2	4,4	1,0	65,2	15,9	9,0	9,8	2,4	78,8	19,0	4,9	4,6	0,9
- 50 years and over	6,6	18,8	9,4	13,3	5,4	5,6	38,3	11,5	3,8	1,0	3,5	26,6	11,3	6,3	1,8	5,1	18,8	5,3	5,4	1,0
<b>* Marital status</b>																				
- bachelor	1,2	40,9	21,4	35,2	13,1	8,1	21,6	5,2	7,7	1,2	3,2	40,0	27,5	25,6	8,5	2,1	42,2	11,0	13,3	0,8
- married	72,1	16,1	6,5	14,2	4,2	80,8	16,9	5,4	5,3	1,3	74,9	18,4	10,8	11,7	3,3	87,0	19,2	5,0	5,4	0,9
- separated/divorced	2,4	30,0	14,0	26,5	7,9	2,7	14,4	6,0	2,7	0,7	2,5	50,8	37,6	45,0	10,8	1,1	37,5	17,6	20,8	4,4
- widow	0,4	33,7	17,2	31,6	9,2	0,2	-	-	-	-	0,1	100,0	74,1	100,0	20,9	0,4	22,2	4,0	0,0	0,0

*Nationality / ethnic origin* : **France** : (1) = France ; (2) = European Union ; (3) = African ; (4) = Other. **Great-Britain** : (1) = White ; (2) = Black ; (3) = Indian or Other. **Luxembourg** : (1) = Luxembourg ; (2) = Portugal ; (3) = European Union excepted Portugal ; (4) = Other. **United-States** : (1) = White ; (2) = Afro-American ; (3) = Native ; (4) = Asian or Other ; (5) = Hispanic.

Table A2-3

	UNITED STATES					FRANCE					GREAT BRITAIN					LUXEMBOURG				
<i>Poverty threshold : 50 of the median standard of living, with the number of CU = square root of the number of persons in the household</i>	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfers	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer
<b>All children</b>	100,0	27,6	15,2	24,6	8,7	100,0	19,4	6,8	7,0	1,7	100,0	31,2	21,4	23,3	7,00	100,0	22,3	6,2	7,2	1,2
<b>Characteristics of the father:</b>																				
<b>* Labour position</b>																				
- employed	68,0	13,0	4,1	11,6	3,1	82,3	13,0	2,9	3,1	0,6	67,3	7,4	2,6	3,9	1,0	86,0	16,8	3,7	4,6	0,7
- unemployed	2,8	45,7	23,8	42,7	14,3	4,4	61,4	30,1	31,0	7,1	8,5	92,0	68,5	75,2	21,7	2,3	90,4	57,0	42,3	6,3
- non-active	5,2	53,9	35,4	45,2	18,2	4,3	38,9	18,3	16,7	5,5	4,7	75,0	48,7	36,9	9,8	2,3	68,7	11,7	11,8	2,1
<b>* Nationality/ethnic origin</b>																				
- (1)	56,1	11,9	4,4	10,4	2,9	80,9	12,7	3,4	4,4	0,9	75,0	18,2	11,0	11,7	3,3	55,3	10,5	2,5	1,2	0,1
- (2)	7,0	24,1	11,5	20,8	6,4	3,7	19,6	6,7	6,5	3,1	0,9	70,6	62,5	70,6	15,7	12,8	42,1	11,0	17,7	2,9
- (3)	2,3	20,6	14,9	15,6	7,3	5,1	65,7	21,0	12,2	2,3	2,7	45,7	23,8	23,9	5,0	15,1	15,6	3,3	3,5	1,3
- (4)	0,8	31,5	15,4	28,9	11,1	1,3	55,6	25,6	3,0	7,7	-	-	-	-	-	7,5	62,5	20,8	24,5	2,8
- (5)	9,8	39,2	15,9	35,9	11,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>* Level of education</b>																				
- primary educ. at most	5,2	53,8	24,9	48,3	16,3	15,1	44,5	14,7	10,1	2,7	17,2	44,8	30,0	29,9	8,1	21,1	47,6	13,3	14,8	2,1
- lower secondary educ.	30,6	23,3	9,4	20,4	5,8	42,6	16,4	3,9	5,5	1,0	23,9	22,6	13,8	16,8	4,7	32,0	17,2	3,4	4,6	0,6
- long secondary educ.	19,3	10,6	4,1	9,1	2,7	13,8	6,3	2,3	3,3	0,8	10,3	11,5	4,1	4,3	0,8	16,8	9,5	1,4	1,4	0,2
- university education	21,0	4,7	1,7	4,3	1,4	19,7	2,9	0,9	1,5	0,5	29,0	7,1	3,6	4,0	1,4	20,1	4,1	3,3	1,8	0,7
<b>Characteristics of the household:</b>																				
*single parent household	27,9	57,4	37,9	51,3	20,2	8,9	41,8	21,3	22,3	5,8	20,8	75,3	57,7	63,0	19,8	10,4	45,0	14,9	19,2	3,3
* two parents household	72,1	16,1	6,5	14,2	4,2	91,1	17,2	5,3	5,5	1,3	79,2	19,6	11,8	12,8	3,6	89,6	19,7	5,3	5,8	0,9
<b>* size of the household</b>																				
- two persons	3,8	42,1	26,0	38,6	15,7	2,7	31,6	13,6	26,3	5,8	5,1	75,3	53,9	59,0	18,9	2,1	38,3	8,8	21,3	3,4
- three persons	18,3	28,9	16,9	26,6	10,0	18,7	12,6	4,5	8,2	2,1	17,7	31,8	21,9	24,8	7,8	17,6	22,5	6,3	11,1	1,7
- four persons	36,2	21,0	11,4	19,1	6,8	40,3	11,1	3,6	4,5	1,3	43,9	23,3	14,2	15,3	4,9	40,7	16,1	3,7	5,9	1,3
- five persons	23,2	26,5	13,8	23,4	8,0	23,5	19,7	6,5	7,1	1,8	21,6	25,8	18,1	19,9	5,4	26,0	26,4	6,9	6,3	0,4
- six persons	10,3	31,1	16,4	26,8	8,2	9,5	36,1	13,0	9,6	1,5	7,8	32,5	22,0	24,3	7,0	10,1	27,6	13,8	4,5	1,4
- seven persons and more	8,2	46,2	26,4	38,3	13,1	5,2	69,6	25,8	6,5	1,4	3,9	86,8	74,5	77,0	20,2	3,6	36,7	8,4	5,1	0,5

*Nationality / ethnic origin* : **France** : (1) = France ; (2) = European Union ; (3) = African ; (4) = Other. **Great-Britain** : (1) = White ; (2) = Black ; (3) = Indian or Other. **Luxembourg** : (1) = Luxembourg ; (2) = Portugal ; (3) = European Union excepted Portugal ; (4) = Other. **United-States** : (1) = White ; (2) = Afro-American ; (3) = Native ; (4) = Asian or Other ; (5) = Hispanic.

Table A2-4

	UNITED STATES					FRANCE					GREAT BRITAIN					LUXEMBOURG				
<i>Poverty threshold : 50 of the median standard of living, with the number of CU = square root of the number of persons in the household</i>	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfers	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer	Structure of the population of children	Poverty rate before transfer	Poverty intensity before transfer	Poverty rate after transfer	Poverty intensity after transfer
<b>all children</b>	100,0	27,6	15,2	24,6	8,7	100,0	19,4	6,8	7,0	1,7	100,0	31,2	21,4	23,3	7,00	100,0	22,3	6,2	7,2	1,2
<b>Characteristics of the household:</b>																				
<b>* typology of the household</b>																				
- single parent, 1 child	6,4	36,8	21,0	33,0	12,6	3,1	30,5	13,4	25,2	5,5	5,7	68,9	48,9	53,3	17,0	3,8	29,8	6,6	16,7	3,0
- single parent, 2 children	9,4	51,4	32,7	46,2	18,2	3,5	31,0	12,4	14,1	3,5	6,7	66,8	49,0	54,3	16,7	4,9	53,8	17,2	23,6	3,5
- single parent, 3 children or more	12,0	73,3	51,0	65,3	25,3	2,3	69,5	43,8	30,5	9,5	8,5	86,3	70,3	76,3	24,0	1,7	55,3	26,0	13,2	3,6
- two parents, 1 child, no other adult	10,0	10,7	3,9	9,9	3,0	15,7	8,6	2,6	6,5	1,8	11,5	11,0	6,0	7,1	2,3	12,8	11,4	2,2	6,8	1,0
- two parents, 1 child, others adults	1,8	8,7	3,5	7,7	2,7	2,1	4,6	2,0	2,3	1,0	0,6	20,3	14,8	11,6	5,2	2,2	12,2	1,7	2,0	0,3
- two parents, 2 children, no other adult	28,0	11,6	4,4	10,4	3,2	37,0	9,4	2,5	4,2	1,0	37,7	15,3	7,8	8,7	2,3	38,1	16,0	3,7	5,6	1,3
- two parents, 2 children, others adults	2,6	13,0	4,5	10,0	2,9	2,9	6,6	2,1	3,3	1,1	0,9	11,2	1,2	0,0	0,0	3,5	5,2	1,6	2,6	0,6
- two parents, 3 children or more, no other adult	26,3	23,3	9,4	20,5	5,8	29,9	29,5	9,1	6,3	1,3	27,9	29,4	20,2	21,5	6,2	29,8	29,9	9,6	6,7	0,6
- two parents, 3 children or more, others adults	3,4	23,3	10,8	18,9	6,7	3,5	49,7	18,4	12,9	2,8	0,5	1,3	0,9	0,0	0,0	74,0	21,1	2,1	0,0	0,0
<b>* number of employed</b>																				
- none	12,1	87,9	71,0	81,9	35,4	7,4	83,7	49,9	48,2	13,9	20,6	97,2	80,0	82,1	26,6	4,9	80,7	39,6	28,1	6,6
- one	36,8	34,4	13,9	29,8	9,0	43,0	25,9	6,0	6,5	1,1	35,1	29,5	13,5	16,6	4,1	70,6	23,3	5,6	7,3	1,1
- two or more	51,1	8,6	2,5	7,1	1,9	49,6	4,2	1,0	1,4	0,5	44,3	1,7	0,3	1,2	0,1	24,5	7,9	1,3	2,8	0,4
<b>* number of unemployed</b>																				
- none	90,6	25,5	14,0	22,7	8,1	87,3	15,3	4,7	4,8	1,2	88,9	24,7	16,5	18,2	5,6	95,4	19,5	4,3	5,5	0,8
- one	8,4	47,5	26,8	42,2	14,3	11,4	45,9	20,2	20,0	4,6	10,7	82,3	60,4	64,4	18,1	3,9	78,9	47,3	42,4	9,3
- two or more	0,9	53,7	32,1	46,5	16,1	1,3	60,9	31,6	41,2	6,6	0,4	100	62,3	62,7	17,9	0,7	100,0	34,0	33,3	8,3
<b>* number of disabled (non active)</b>																				
- none	92,7	25,4	13,6	22,9	8,1	97,6	19,1	6,7	6,9	1,7	96,7	29,7	20,5	22,9	7,0	97,0	21,4	6,2	7,1	1,2
- one or more	7,3	56,3	36,3	45,8	16,4	2,4	67,0	27,5	11,0	3,4	3,3	74,8	48,3	33,9	7,1	3,0	50,0	7,5	7,6	0,9
<b>* number of non-active (disabled excluded)</b>																				
- none	60,6	19,2	9,1	16,7	5,5	53,5	11,7	4,1	5,6	1,1	47,6	13,4	7,1	8,6	1,9	24,1	23,4	6,6	11,8	1,8
- one	33,6	38,2	22,4	34,8	12,6	34,5	24,9	7,8	8,2	2,2	47,3	46,5	33,7	36,5	11,6	62,7	21,8	5,6	5,6	0,8
- two or more	5,8	54,9	37,7	46,9	19,5	12,0	37,9	15,8	9,9	3,1	5,1	55,4	41,0	38,1	11,4	13,2	23,2	8,4	6,7	2,0

### Annex 3: Inequity indexes

- The Atkinson-Plotnick index (varying between 0, absence of inequity, and 1, maximum degree of inequity):

$$A - P = \frac{2 \sum_i REp_i (BEp_i - BOp_i)}{\sum_i \sum_j |BOp_i - BOp_j|}$$

- Cowell's indexes (varying between 0, absence of inequity, and the infinity)

$$C_0 = \frac{\sum_i BOp_i \ln \left( \frac{BOp_i}{BEp_i} \right)}{N \quad B} \quad ou \quad C_{-1} = \frac{\sum_i BEp_i \ln \left( \frac{BEp_i}{BOp_i} \right)}{N \quad B}$$

with REp the equitable rank, that is to say the rank before redistribution, ROp the observed rank "after transfer" (people being ranked according to their after transfers well-being level), BOp the observed level of well-being "after transfer", BEp the equitable well-being level, N the population number, B the average well-being level. The equitable well-being level corresponds to the well-being an individual would have obtained, after transfer, if transfers do not create rank reversals. This theoretical well-being levels are computed from the observed level of well-being "after transfer" and "before transfer" ranks: the equitable well-being of an individual is the "after transfer" well-being level whose rank number equals the "before transfer" rank number of this person.

## Notes

<sup>1</sup> This research develops the works presented during the Conference "Child Well-Being in Rich and Transition Countries", Luxembourg, September 1999: Jeandidier B. *et alii* (1999).

<sup>2</sup> B.R. Bergman (1996), p.7.

<sup>3</sup> French data put at our disposal by D.R. INSEE of Lorraine. Data from Luxembourg given by M. ZANARDELLI from CEPS-INSTED in Luxembourg. American data provided by K. VLEMINCKX from the Luxembourg Income Study (LIS-CEPS-INSTED) in Luxembourg. British data supplied through professor J. DITCH from SPRU of York.

<sup>4</sup> In the case of France, the household poverty rate which we calculated can be compared to the one published by INSEE: according to the so-called "OECD-moderate" poverty line, S. Lollivier and D. Verger (1997) obtain a household poverty rate which is equal to 11.7% on the basis of the same data source. As for J.-M. Hourriez and B. Legris (1997), they calculate a rate for the year 1995 (1993 in our case) which is equal to 10.4%, starting from another source and a methodology which can be compared to ours. For Luxembourg, CEPS/INSTED has estimated (not published), on the basis of data from the same survey, and always along the "OECD-moderate" poverty line, a household poverty rate varying between 4.6% and 6.2% for the years 1994 to 1997; our own estimate is therefore correctly situated in this bracket. For Great Britain, according to a study in progress of the CEPS from Luxembourg, using the first wave of the European Community household Panel (net incomes of 1993), the poverty rate of British households would equal 14.2%, on the basis of a poverty threshold equal to 50% of the median of standard of living (modified OECD equivalence scale); the difference with our own estimation (19.6%) would result from the fact that, contrarily to data from ECHP (and from the three others countries of our study), BHPS provides gross incomes. Finally, for the United States, P. Hausman (1994) cites, on the basis of data from the 1991 MCPS, the figure of 23.2% of poor households according to the poverty threshold which is equal to half a median income per consumption unit measured with the Oxford scale; this percentage is not very far from our own figuring.

<sup>5</sup> It is not the sum of all social transfers, which are analysed here. Two categories are retained: on the one hand, those which are explicitly dependent on the presence of children (in whose absence the transfer will not be made); and, on the other hand, those with the characteristics of a guaranteed minimum income (these transfers do not depend on the presence of children, but the presence of children can increase the amount of benefit, these benefits are paid on condition of resources and guarantee a rather low minimum income). These different transfers are presented in the synthesis tables of annex n°1. Not taken into account are neither the impact of the principal social security transfers concerning the insurance logic (retirement pensions, sickness and accident insurance payments, unemployment insurance allowances), nor of the impact of social transfers in kind (e.g. quasi-free services towards childcare, purchasing vouchers etc.), nor of private aid (granted by charitable organisations or employers). Housing aid is also excluded because of its difficult international comparability (it may indeed be in the form of allowances but sometimes also of tax rebates on real-estate loans). Neither are the granted fiscal advantages in the presence of dependent children taken into account as these are not known in the surveys used for the present study.

<sup>6</sup> It is a Forster index with an *alpha* parameter which is equal to one (thus without specific hypothesis as to poverty aversion):  $1 / N * \sum_{i=1}^{i=n} ((S - R_i) / S)^\alpha$ ; where N indicates the total number of children, n the number of poor children, S the poverty threshold, and R the standard of living.

<sup>7</sup> In the case of France, we do not know the estimates of the child poverty rate carried out from another source. It is therefore difficult to assess the correctness of our own estimates. Let us simply state that N. Herpin and L. Olier (1996) estimated at 10% the number of children aged 0 to 25 years (against 0 to 16 years concerning us) who live under the threshold of poverty type "OECD-moderate" in 1995. In the case of Luxembourg, an estimate of the child poverty rate does not exist, as far as we know. Finally, for the US, one can cite the estimates by L. Rainwater and T.M. Smeeding (1995): on the basis of the Luxembourg Income Study the poverty rate of children aged less than 18 years reached 21.5% in 1991 (equivalence scale: square root of the size of the household, slightly adjusted to take into account the age of the head of the household). According to S. Danziger, S.K. Danziger and J. Stern, in G.A. Cornia and S. Danziger (1997), the official poverty rate of children aged less than 18 years in the United States reached 21.9% in 1992 (23% in 1993 according to B.R. Bergmann, 1996, p.3). in the case of Great Britain, our estimation is close to the poverty rate quoted by J. Micklewright and K. Stewart (1999, from B. Bradbury and M. Jäntti): according to data from Luxembourg Income Study, in 1995, child poverty rate (for children aged less than 18 years) equals 21.3% ("NFS" equivalence scale).

<sup>8</sup> On the basis of the second wave of the European Household Panel (1995) and a slightly different methodology (the poverty threshold being equal to 50% of the *average* equivalent adult income - the equivalence scale not being explained -, the estimate is calculated in percentages of households with at least one child below the age of 26 years, and not in terms of children aged 16 years and lower as in our case), P. Montigny and J.-M. Saunier (1998) reach an inverse conclusion: they estimate that in France the family policy and social aid transfers allow 45% of households with children to escape from poverty, against only 36% in Luxembourg.

<sup>9</sup> Not limiting themselves to the sole family policy and social assistance transfers, but taking into account the sum of all social transfers, L. Rainwater and T.M. Smeeding (1995), using a slightly different methodology (cf. our note above) find relatively identical poverty-reducing rates for Luxembourg in 1985 (64% vs. 68% according to our estimates) and a slightly higher rate for France in 1984 and United States in 1991 (respectively 74% and 17%, vs. 64% and 11%); however, their estimation for Great Britain is very different from ours (67%, against 25% in our estimations), which could result from differences of field or of period (1986 against 1993 for our estimations) while the child poverty is increasing over the period. As per an OECD-study, cited by B.R. Bergmann (1996) on p. 6, thanks to social transfers (family and accommodation allowances, unemployment insurance) and to contributions (taxes on income and social contributions), the child-poverty reduction rate measured against a threshold equal to half the median family income on a not-precised equivalence scale, would have reached 10% in the US and 77% in France in the years 1984-87.

<sup>10</sup> Despite the differences in methodology, P. Montigny and J.-M. Saunier (1998) have noticed the same phenomenon: the "before transfer" poverty rate of households with children aged 26 years and less is higher in Luxembourg (27% against 20% in France), but the intensity of poverty (relative discrepancy from a threshold equal to 50% of the average standard of living) is lower in Luxembourg (35% against 37% in France).

<sup>11</sup> On the whole these four pictures of before transfer child poverty intensity are rather similar. By way of conclusion, one should remember the following differences:

- "before transfer" child poverty is higher in Great Britain than France and Luxembourg (21%, vs. respectively 7% and 6%), and is nearer from the one observed in the United States (17%);
- the hypothesis that the poverty rate should decrease with the age of the child, being directly linked to the parents' age, does not hold true for France, and is partially true in the cases of Luxembourg and the United States (the intensity is higher for children aged 3 to 5 years old than for those aged less than 3 years old);
- if the "before transfer" intensity poverty rate does indeed increase with the number of children, one may nevertheless note that in France and in Great Britain, California single children experience poverty more frequently than children from a family of two children;
- the mother's absence in the family is only linked to a higher intensity of poverty rate in Luxembourg and Great Britain (but the results, based on very small numbers, are probably not very robust);
- while, in the three European countries, children whose mother is divorced or separated have the highest "before transfer" intensity of poverty rate, in the case of United States the highest rates are linked to children of lone mothers;
- contrary to the French, British and American situations, the fact that the mother is non-active is not a factor linked to a high intensity of poverty in Luxembourg, since non-activity among mothers is an extremely widespread behaviour in this country.

<sup>12</sup> This effect is surprising because of the absence of benefits for inactive (not disabled) persons. Does this result from Income Support? even if this benefit is allowed to people with no employment, or people working few hours per weeks, and implies these people to look for a job and to be registered in the Unemployment benefit office, they could declare themselves inactive in the questionnaire.

<sup>13</sup> For other age brackets, coefficients are non significant or slightly significant.

<sup>14</sup> These indicators take into account the number of rank reversals, but also the extent of these rank reversals, that is to say the difference of standard of living between the observed standard of living after transfer and the "equitable" standard of living after transfer (the standard of living people would get if there was no rank reversal due to transfers).

<sup>15</sup> The inequity index varies between 0, in case of absence of rank reversal and then in case of equity, and infinity when there is a complete rank reversal.

<sup>16</sup> In the four countries, children with a very young mother (less than 20 years old) have a "before transfer" poverty rate clearly higher than the average (the difference is less apparent for Great Britain), but this result is based on small numbers.

<sup>17</sup> For instance, L. Rainwater and T.M. Smeeding (1995) calculated a "before transfer" poverty rate among children living in a single-parent family headed by a woman which, in France reached 56.4% (against 25.4% for the totality of children), in Luxembourg 55.7% (against 11.7% on average), in Great Britain 76.2% (against 29.6% in average) and for the United States 69.9% (against 25.9% on average). Our own estimates for these three countries are: 44.3% (against 19.4%), 45.2% against 22.3%) and 75.3% (against 31.2%) and 61.3% (against 27.6%).

<sup>18</sup> The poverty intensity decreases in Luxembourg when the number of unemployed adults in the household is superior to one, but this result is based on small numbers because the unemployment is very slow in this country.

<sup>19</sup> The notion of a disabled person differs according to the origin of the database, since the percentage of children living with a disabled person reaches 2%-3% in the two European countries, against 8%-9% in the two American states.