

Comparative Research on Household Panel Studies

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Public Child Support to Young Adults Living with their Parents

An international Dynamic Comparison

by

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Comparative Research on Household Panel Studies

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ABSTRACT :

While a large amount of facts have been gathered concerning the similarities and dissimilarities of family policies as they are commonly understood (i.e. support for babies and young children) accross developed countries, the evidence is not so impressive as far young adults are concerned. This category is indeed difficult to define, especially for family policy purposes, because young adults may belong either to families headed by their parents or to their own household. Anyway, some family benefits accrue to these people, directly or via their parents as long as they stay at the parental home.

Even if, from an administrative point of view, the problem is essentially a question of definition of beneficiaries categories, on the contrary, from an economic point of view, the questions raised are as follows : whatever the administrative definitions of entitlements and whatever the channel through which the money does benefit to these young adults, what is the profile of family transfers as these individuals age, as long as they belong to the parental household ? Do these benefits experience a sharp decrease at some age threshold ? Which threshold(s) ? Or do they steadily decrease, for every people or at least for some categories ? Are these profiles similar for various countries ?

The main aim of this paper is to give some insights about these questions, mainly through careful descriptions of the patterns in changing level of family benefits and standard of living as the grown-up ages. But, in addition, I will try, through plots, to test the two following hypotheses : first, may we consider the young adult earnings as an effective source of compensation of child support reduction ? Second, does the family adjust its labor supply as family transfers decrease, as if its members try to compensate, by additional earnings, the impact, on their standard of living, of the child support reduction ?

The data set used is the PACO one. I use, for four european countries, all the household panel waves available in PACO files at the beginning of 1996 : 7 years for Germany (1984-90) , 8 years for Luxembourg (1985-92), 6 years for France (Lorraine, 1985-90) and 3 waves for the UK (1991-93). I transformed these raw data in year-to-year transitions, pooled first separately for each country and, then, after conversion in ECU of all financial amounts, pooled for the four countries. The resulting global file includes more than 22,700 observations.

The paper is organized as follows : the first section is devoted to some questions of definitions and to a rapid overview of the literature. The second section presents the hypotheses to be tested and explains how it will be done. The third section describes the raw data and the methodological choices made to obtain data appropriate to the analysis. The fourth section sets out the results. The conclusion stresses the limitations of the analysis and offers some perspectives in terms of further research avenues as in terms of policies towards families with dependent children.

ACKNOWLEDGEMENT :

The data used in this study are from the public use version of the PACO datafiles, including data from the German Socio-economic Panel Study, the British Household Panel Study, the Lorraine Panel study, the Panel Study of Income Dynamics, the Luxembourg Household Panel Study, and the Hungarian Household Panel Study. The comparable variables in this data file were created by the PACO project, coordinated through the CEPS/INSTEAD in Luxembourg.

INTRODUCTION

A large amount of facts have been gathered concerning the similarities and dissimilarities of family policies across developed countries². But, most frequently, these family policies are studied as if they were restricted to public support accruing to families with babies, young children and teenagers : for instance, the model families ('cas-types' in french) built for the BRADSHAW et alii (1993) study deliberately restrict to children aged three, seven and fourteen. Similarly, in her comparative study about social protection in Europe, BOISSIERES (1994) takes as criterion the average amount of maternity-family-housing benefits per child under 15 ; and, in a companion paper (1995) devoted to a typology of family policy in Europe, the same author classifies the twelve countries according to eight priorities, none of which relates to young adults.

Indeed, very few studies include the case of young adults (defined, here, as sons and daughters aged 15 to 25 and still living at home).

One reason of this lack of research lies in the kind of the statistics provided by institutions in charge of family policy : because of their administrative nature, these data are usually limited to families including at least one child entitled to some allowance and, hence, ignore the situation of families without any young (or handicapped) child, but nevertheless supporting children still economically dependent ; these older children are either still living at parental home (and, in this case, they may get earnings) or living elsewhere³ while receiving, from their parents, a large portion of their income (e.g. students or young couples unemployed) and, possibly, coming back every weekend at parental home.

Another reason of the scarcity of research devoted to young adults considered as dependent children may stem from the macro-economic context : when the pressure on social budgets is high, it is less opportune to question the adequacy of the public provision of family benefits.

But, there is a clear recognition of the fact that the children are, nowadays, longer and longer financially dependent on their parents, both because of the lengthening of the schooling period and because of the structural difficulties to enter the labor market, especially for the first time⁴.

And the lack of administrative statistics appropriate to the study of young adults may be by-passed through surveys, especially panel surveys⁵ because they allow to follow the same people beyond the end of their eligibility to family benefits.

Consequently, it is interesting to try to exploit panel surveys to get a better understanding of the consequences, on families with dependent children, of the family policies as they are currently designed, i.e. with dramatic decreases in benefits as the children age beyond some age

threshold. But, what is even more attractive is to adopt, in order to do this, a comparative perspective, permitting to realize how various countries cope with the problem of the (upper) age limit associated with family allowances.

Such a perspective is now possible if one takes advantage of the opportunity offered by the PACO database, which brings together similar household panels from various countries (here, european ones : France, Luxembourg, Germany and the UK).

Namely, the PACO database allows us to address the following questions, related to young adults still living at home :

- * for each country, what is the profile of family transfers as these individuals age, as long as these individuals belong to the parental household ? More precisely, do these benefits steadily decrease or do they experience a sharp decrease at some age threshold(s) (which one(s) ?) ?

- * for the various countries, are these profiles similar (in terms of levels and slopes) ?

- * what are the consequences of these family benefits patterns on the household standard of living, providing that simultaneous increases in labour supply (by the youth him/herself or by the other household members) may occur ?

As far as we know, no statistical evidence does exist concerning the comparison, across european countries, of national age profiles of family benefits. In the special case of France, some literature (BLANC 1995, AMROUNI 1995, CAUSSAT 1995, GALLAND et MERON 1996, DUFLOS et alii 1995, MADINIER 1992, and, earlier, GOKALP 1981 and ROUSSEL 1978) is available about young adults living at parental home ('cohabitation parentale') ; but we are not aware of results based on panels, allowing therefore to neutralize the fixed (individual) effects which prevent to isolate the specific consequences of family benefits on household income. A recent work by Isabelle AMROUNI (1995) is the closest to our focus but, when she studies the amounts of family benefits as a function of child's age, she puts together two categories of young people : those living with their parents -as we do- and those living apart, - a quite heterogeneous group that we will exclude from our own analysis ; as we will argue, this undesirable mixture results in ambiguous conclusions, anyway very different from ours⁶, based only on young adults living with their parents.

The main aim of this paper is thus to give some insights about these facts, mainly through plots displaying family benefits, earnings and standard of living patterns, as the young adult ages.

These plots may help to explore, in particular, the two following hypotheses : first, do the young adult growing earnings fully (or less or more) compensate for decreasing public child support ? As we will explain, longitudinal data allow to measure the extent of this compensation, resulting in the notion of child cost variation. Hence, the second question is : does the other family members adjust their labour supply⁷ as family transfers decrease, in order to try to compensate, by additional earnings, the impact, on their standard of living, of the child-support's reduction ? Again, in that perspective, using comparisons between t and $t+1$ sources of income is well-suited ; and we are not informed of any research trying to test these hypotheses in a dynamic comparative framework, similar as what we are doing here.

The data set used is the PACO one. We use, for four european countries, all the household panel waves available in PACO files at the beginning of 1996. After making all financial amounts comparable in real terms (i.e. converting them into 1995 ECUS), we transformed these raw data in year-to-year transitions, pooled first separately for each country and, then, pooled for the four countries. After various minor restrictions limiting the population under study to stable families (as explained below), the resulting global file includes more than 20,000 observations.

The paper is organized as follows : the first section describes the data extracted from the PACO database and the technical choices made to transform them in variables appropriate to our analysis. The second section explains the methodology we use. The third section sets out the results. The conclusion stresses the limitations of the analysis and offers some perspectives in terms of further research avenues.

I. Data.

The data set used is the PACO one⁸. It will be unfair not to mention (and acknowledge for) the huge amount of work by the PACO team. But, nevertheless, using these data is by no means immediate : it requires long preliminary checks and numerous corrections⁹ before starting the analyses.

Four european countries are included in the analysis : France¹⁰, Luxembourg, Germany and UK¹¹.

For each of these countries, we use all the household panel waves available in PACO files at the beginning of 1996 : 7 years for Germany (1984-90) , 8 years for Luxembourg (1985-92), 6 years for France (Lorraine, 1985-90) and 3 waves for the UK (1991-93).

All the variables concerning financial amounts (e.g. family benefits, income,...) are on a monthly basis¹², and while at the beginning of the data transformation phase, they are expressed in current¹³ national currency, at a later stage, all amounts are made comparable across countries through conversion in a common unit, the ECU¹⁴, in 1995 values (to facilitate interpretation).

Let us turn now to the way we have created our files for analysis purposes.

First, we have selected, in each wave for each country, all « young adults » (as defined below) ; then, for each pair of successive panel waves, we have matched the cases present in both waves ; thus, we have obtained year-to-year transitions ; finally, we have pooled these files in two ways ; first separately for each country and, then, after conversion in 1995 ECUS of all financial amounts, we have pooled over the four countries. The resulting global file includes, at this stage (i.e. before some additional restrictions explained below), 22,706 observations (see Annex A for details on the samples sizes).

As far as weighting is concerned, we systematically use weights¹⁵ in calculations (i.e. weighted average values for plots, as well as weighted linear correlation coefficients).

II. Methodology.

We will explain, first, how we define « young adults ». Second, we will justify our choices about the child benefits variables we use. Then, we will discuss the way we implement the construction of age profiles. Finally, we will call for caution in interpretation of the plots.

A. First of all, we need some workable definition of the population to be studied : the « young adults »¹⁶.

From an international comparison perspective, it is better to avoid using national administrative definitions (i.e. definitions from an entitlement point of view, combining criterions like age, health, schooling status and earnings), because national definitions of beneficiaries categories do not necessarily coincide across countries. As a consequence, it is worth to adopt a definition based solely on an age criterion, encompassing a large range of years (for instance, people 15 to 25 years old¹⁷).

Hence, here, we adopt a quite large definition : we initially kept in the files every individual aged between 14¹⁸ years (and 0 month) to 26 years and 11 months, whose link with the head of household is « child »¹⁹. But, finally, due to limited numbers at age 14 and at age 26, we restricted our age brackets to 15-25.

Through these rules, we select young people belonging to families headed by their « parents », but we did not select those youths already heading their own household. We exclude the latter category because it is very heterogeneous, mixing young adults who, like students, are financially dependent of their parents to a large extent but living apart (a sub-category which could fruitfully have been merged with our « young adults », had we the information to select them²⁰) with young people heading their own household (or being a spouse or cohabitee) while clearly independent of the parents.

Pooling, for our four countries, all youths known for a pair of consecutive years, we obtain 22,509 observations. But the main aim of the study is to discover the pattern of family benefits as the youth is becoming older, *ceteris paribus* ; thus it should be ideally relevant to exclude from the population under study all cases in which changes occur in the family (like brothers or sisters turning 16 or 18, if these ages are family benefits thresholds ; or like a birth or a divorce, etc.), because these changes may result in variations of family benefits ; this kind of changes may blur the pattern we intend to observe, (i.e. family benefits as a function of youth's age). But we ignore all the circumstances (different across countries, due to various national family benefits schedules) resulting in such changes in family benefits ; and, probably, were we able to exclude all cases associated with such events, we will be left with too limited numbers.

Hence, to cope partially with the difficulty of holding things being equal, we restrict the analyses presented in this paper to the sub-sample including only young adults whose household may be considered as rather stable from year t to year $t+1$: starting from 22,509 observations, we first exclude household whose head or size²¹ has changed from t to $t+1$ (415 cases, corresponding to 457.0 in terms of weighted numbers); we also exclude the individuals whose link with the household head has changed

(N=30, and 21.4 after weighting). And, because we may assume that most changes in the number of children under 14 (present in the family) are due to a birth, we exclude the cases characterized by an increasing number of children under 14 (458 cases, reduced to 280.4 after weighting) ; namely, births to families are frequently associated to large increases in family benefits, obviously not linked with the variable of interest here - the aging of a grown-up. Finally, we drop cases in which youth's parents just become isolated (N=293, and 307.0 after weighting) or just « marry » (N=62, and 47.6 after weighting). At the end of this selecting process²², and allowing for individuals being excluded on more than one criterion, we come up with 20,748 observations for individuals 15-25 years old.

For sake of simplicity, the corresponding families will be referred to as «families without change».

But another major possible source of heterogeneity derives from the youth's work status : if the young adult earns a lot, it becomes unclear if he/she has to be considered as dependent. In order to explore this topics, we will compare the results obtained on the whole « without changes population » with those resulting from the restriction of the population to individuals whose status, both in wave t (Zi_statu) and in wave t+1 (i_status), indicates that they were probably highly financially dependent on their parents ; the corresponding statuses are « Under 16 years old », « Student », « Unemployed » and « Housewife ». This restriction results in dropping youths whose status in at least one wave was « Working », « Retired²³ » or « Other » (the latter category includes many cases - about one out of eight - but we prefer to exclude it, due to its unclear contents). One should be aware that it is difficult to go further in population restriction, because of vanishing numbers ; for instance, we tried to devote special attention to the sub-population of young children at school, but we observed that our « Student » category (including individuals declared as « Student » in both waves) was too restrictive to allow fruitful analyses by country and age (N=1,928 with so few cases for Germany and no cases for UK, a situation probably partly arising from categories definitions in PACO²⁴). The same kind of definition, applied to the « Unemployed » category, will result in even more limited numbers (449 cases).

These two nested sub-populations (including respectively 20,748 and 7,129 cases) will be used in comparing the age profiles of earnings and child benefits.

B. The second important choice is about the relevant variables to be considered concerning child benefits, earnings and child cost variation as well.

1. Child benefits variables.

If we define, according to JEANDIDIER et alii (1995) family policy as all public interventions conditioned by the fact that child(ren) is/are present (in the household)²⁵, we cannot restrict the analysis to the so-called « Family benefits » PACO variable ; but this variable, supplemented by some other income components linked to the presence of children, is a good starting point, though it does not include any tax exemption for dependent child(ren).

In Annex B we explain in detail how our child benefits variables are built, by adding relevant income components as they appear in the PACO database. In short, we start with a summing various family benefits (we will call this variable `HH_TRANS`); it will be our basic variable; let us indicate some magnitude orders: on average²⁶, these family benefits account for 6.0% of the household income (a share to be compared with 94.5% for earnings, 3.4% for pensions, 2.7% for capital income, 1.0% for social assistance and 0.6% for private transfers - like cash alimony or child support).

But, on the one hand, poor people can get substantial additional payments from Social assistance schemes if they have dependent children. And, on the other hand, public regulations enforcing the payment of private child support do exist in some countries, in conjunction with some allowances to which the custodian parent is entitled while child support is not fully paid (or not at all); these mechanisms suggest to add this kind of private cash transfers to the basic child benefits in order to get a more comprehensive notion of public child support.

Because these two additional components are not, on average, very large as compared to basic family benefits, and because they account for zero for a large majority of households (more than 90% for Social assistance, and almost all households for Private child support), we will not build distinct new variables, but just one, which will be used as a variant of basic child benefits. Hence, our `HH_FAMIL` variable is obtained in just adding to `HH_TRAN`, both `HH_WELFA` (standing for Household Welfare) and `HH_PRITF` (private transfers).

Of course, some other child supplements can be founded in other PACO variables (e.g. war related benefits for orphans), but they are shrouded in a set of so many other items exhibiting no clear link with child support, that we end up with the choice of not selecting them.

Of course, none of these variables (i.e. neither the PACO ones, nor our own variables) spares the usual cutting remarks²⁷ that can ever be addressed to international definitions (heterogeneity, especially).

2. Earnings variables.

As far as earnings are concerned, we use three variables: at the individual level, we pay attention only to the youth's earnings (`I_EARNIN`); at the household level, we have, similarly, `HH_EARNI`; our third variable is `HH_EXCLU`, i.e. the earnings of all Household members, EXCLUDING the youth's earnings.

These three variables allow us to study, firstly, the age profile of `I_EARNIN` (how the youth progressively or suddenly enters the labour market). Next, we can compare the age profiles of family benefits and household earnings²⁸.

3. Child cost variation.

Because the available data do not allow to calculate child costs to the household, we are unable to balance them against the various child allowances received by households with dependent children; in other terms, no attempt can be made here to measure the net cost of the youth; but, owing to the longitudinal nature of the data, we can evaluate, assuming the constancy of child cost from one year to the next, the

variation of this net child-cost (the opposite of $WNET_TRAN = WHH_TRAN + WI_EARNI$) : the variation of family benefits (an usually negative variation as the youth becomes one year older) is added, algebraically, to the variation in the possible earnings of the youth (an usually positive variation as the youth ages). Similarly we define $WNET_FAMI$, as the algebraic sum of WI_EARNI (as above) and WH_FAMI ($=WHH_TRAN$ as above, plus the algebraic variations of Social assistance WHH_WELF and private transfers WHH_PRIT).

If one assumes that the household fully benefits of these earnings (through direct sharing of youth's income or through decrease of his/her pocket money), this algebraic sum may be interpreted as an indicator of change with regard to the burden the family bears due to the youth : if the age pattern of this net variation departs from the horizontal line at the zero level, it means that, at some age, the child earnings increment does not exactly compensates the reduction in family benefits : a positive value for $WNET_TRAN$ will indicate a decreasing child cost, while a negative value will of course mean an increasing child cost.

One should be tempted to interpret this change, if positive, as indicating an over-reaction of youth's earnings to benefits decrease, resulting in an better standard of living for the whole family, and reciprocally if the change is negative. But this interpretation, while correct in terms of accounting (i.e. because the net result of the youth's labour supply behaviour is indeed a change in the family standard of living), might be challenged on two grounds : first, because means-tested child benefits typically react (through benefits reductions) to additional child earnings, the observed variation in the amount of benefits cannot be interpreted as the family benefits reduction to which the youth is supposed to react (this reduction, purely due to age, may be less than the final one) ; second, because two confounding factors, closely linked to age, act upon the youth's earnings : as the youth ages, his/her earnings are pushed upwards because he/she starts his/her working life and, simultaneously but on a minor mode, they may increase as a reaction to family benefits reduction. Hence, it seems quite unrealistic to attribute some measurable part of the youth's earnings increase to the decline in family benefits.

Thus, instead of reasoning in terms of young's reaction, we will only focus on the financial consequences, for the family as a whole, of these two simultaneous changes : decrease in family benefits, increase in youth's earnings. In particular we will not try to explain, through regression techniques, the youth's earnings by various factors among which the family benefits reduction, both because of the reciprocal causation resulting from the means-testing mechanism and because of the multicollinearity problem impeding to include simultaneously, as covariates, the variable of interest (family benefits, in level form or in variation form) and age dummies.

But, as far as the earnings of the other members of the family are concerned, does the same reasoning apply fully ? Indeed, the means-tested mechanism plays the same role ; but, in contrast with the youth, the other family members seem not being at a stage of their life cycle where labour supply should increase ; hence, the interpretation in terms of reaction to family benefits decrease looks like being less questionable. Unfortunately, there are two arguments against such an interpretation : on the one hand, among family members, some people may be young adults too ; on the other hand, the magnitude of family benefits decrease may be too small to isolate their own impact on labour supply, providing that other

factors (as the last child entering the school, an event we do not control for here) may have much larger effects on labour supply.

As a consequence, we will avoid reasoning in terms of young's or other family members' labour supply reactions to decreases in family benefits. We will only observe the various patterns of some income components as the youth ages (family benefits, his/her earnings, other household members' earnings), plot the net variation of child cost and measure the net consequences of all these changes on the family standard of living, without any attempt of causal interpretation.

C. Now, how can we implement the construction of age profiles describing the patterns of variation in the levels of family benefits and standard of living as the grown-up ages ?

Ideally, these profiles should be observed through panels following-up the individuals from age 15 to age 25 (at least). Then, we should use some technique helping to cope with these thousands of individual profiles (gross average, age by age, or more sophisticated tools, like Principal Components Analysis or Classification or Segmentation allowing to make more homogeneous sub-groups of individual trajectories).

To obtain enough cases at each age, we would need either a very large-size panel, lasting 11 years (=number of waves required to obtain profiles from age 15 to age 25) so that the numbers of the cohort of youths aged 15 in the first wave would be sufficient for the analysis, or a panel of more limited size but lasting much longer, so that children very young at the first wave, e.g. 8 years old, could be followed up to their 25th anniversary (i.e. 18 years later).

But, here, we obviously do not have enough waves, for each national panel, to proceed this way : instead of the 11 waves (or more) for each country, we only have 8 waves for Luxembourg, 7 for Germany, 6 for France and 3 for the UK.

As a consequence, we are unable to trace longitudinally, strictly speaking, the changes in family transfers, occurring as the child is aging. We are forced to choose an alternative solution : the year-to-year perspective. Through this kind of calculation, we capture - but not isolate - the variations of family transfers associated to the fact that this child is older (here, he/she has one year more) ; but, as we explain below, we must not interpret the whole time sequence (i.e. the set of values of family benefits at each age) in a life-cycle perspective, even if, from one pair of waves to the next, most of the individuals are the same.

D. Call for caution in interpretation of the plots.

First of all, we need to stress that the age profiles we display on our plots are not built in a way allowing interpretations in terms of evolutions through the life cycle of families : because we only pool two-years transitions, each national curve should not be understood as the average pattern of family benefits amounts seen as a function of time ; rather, one should rather think of these curves as a succession of partly unrelated points, each of them concerning a particular sample of individuals (not without, of course, large overlaps among successive samples)²⁹.

Second, one should stress that they are bivariate representations of a multivariate phenomenon : the incrementation of the age of one child in the family is not, of course, the sole possible cause of variation in family benefits : other children age simultaneously, the parents may work more or work less, and so on ; with possible consequences on family benefits as well.

Even if causation goes, undoubtedly, from age to benefits, the specific causal effect we are interested in (going from the fact the child is becoming older, to the variation in benefits) is not clearly distinguishable from the effect of other causes. We reduce this kind of possible disturbances through limiting the analysis to so-called « population without changes », and we hope that our calculations, done on quite large numbers, will offer the opportunity of some compensation between opposite outliers.

III . Results

The three questions we intend to address, as far as young adults aged 15-25 still living at home are concerned are the following :

- * for each country, what is the profile of family transfers as these individuals age, as long as these individuals belong to the parental household ? More precisely, do these benefits steadily decrease or do they experience a sharp decrease at some age threshold(s) (which one(s) ?) ?

- * for the various countries, are these profiles similar (in terms of levels and slopes) ?

- * what are the consequences of these family benefits patterns on the household standard of living, providing that simultaneous increases in labour supply (by the youth him/herself or by the other household members) may occur ?

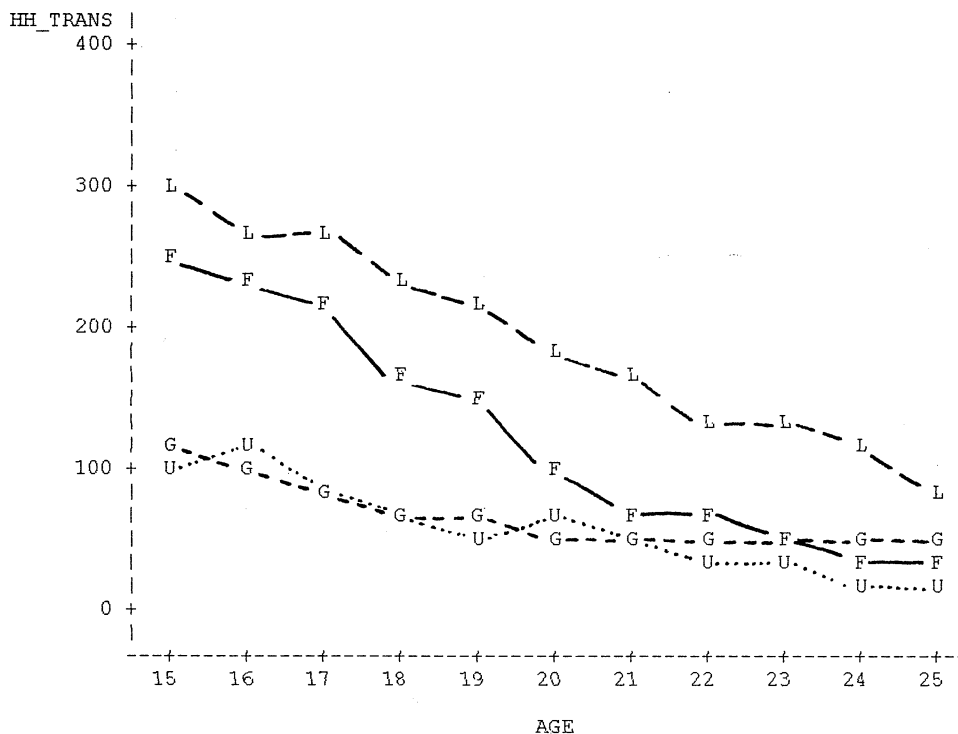
The first two questions will be addressed through the same plots, displaying at one and the same time the family benefits profiles for each country. The third question will be answered in four steps : firstly, we will show the patterns of youth's earnings, secondly the curve showing the variation in child cost, thirdly the patterns of other family members' earnings, and, finally, the consequences on the household standard of living.

A. What is the profile of family transfers as a child ages from 15 to 25, providing he/she still belongs to his/her parental household ? And, for the various countries, are these profiles similar (in terms of levels and slopes) ?

1. The plot of average HH_TRANS along age, by country (Figure 1), exhibits, as expected, four trend decreasing curves. While France and Luxembourg start (at age 15) at a quite high level ('generous' benefits), UK and Germany start with benefits somewhat 2.5 to 3 times lower ; in addition, as a logic inference because each curve has to reach about zero at some age on the right side of the plot, the slopes of the french and luxembourgeois curves are steeper than the two others. But this plot shows also something more original, the pattern between the two age limits,

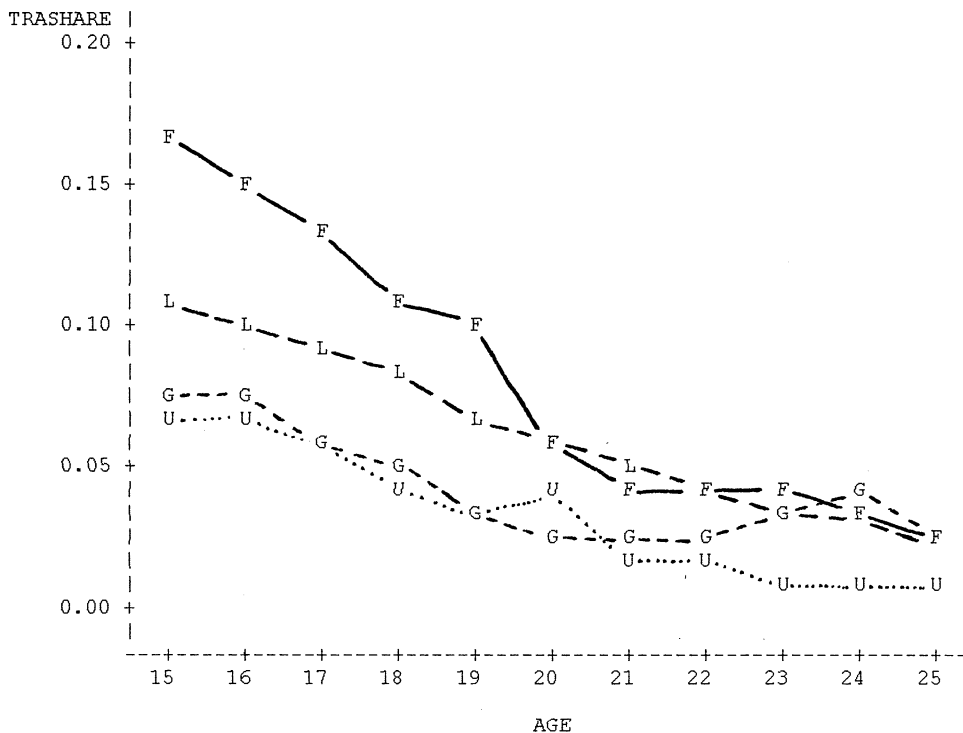
country by country : in Luxembourg, benefits approximatively decrease along a straight line, while in France the decrease is stronger up to 20, with very low and quasi constant benefits beyond, i.e. at age 21 and after. Approximatively the same conclusion holds for Germany but, due to a much less steep slope from 15 to 20, the break at 21 is quite imperceptible, as is the slight upwards orientation beyond age 22. As far as UK is concerned, the overall instability of the figures (at least partly due to more limited numbers, a consequence of the use of three panel waves only) prevents any spotting of some break.

FIGURE 1 : Plot of HH_TRANS*AGE. Symbol is value of COUNTRY.



2. While these results, in terms of benefits levels, may be called into question because they rely highly on exchange rates, the results in terms of age profiles, whatever the level, are more robust. Hence, attention should be paid on slopes rather on intercepts. Another way to prevent possible biases due to the conversion into ECUS consists in using, instead of financial amounts, their share as components of household total income. The resulting picture (Figure 2) differs somewhat from the preceding one : the curve for Luxembourg starts, this time, far below (and not above as in figure 1) the french one and these two curves merge from age 20 to 26. The German curve exhibits a bending profile, taking the form of a flat U. And the UK curve shows some parallelism with the Luxembourg one.

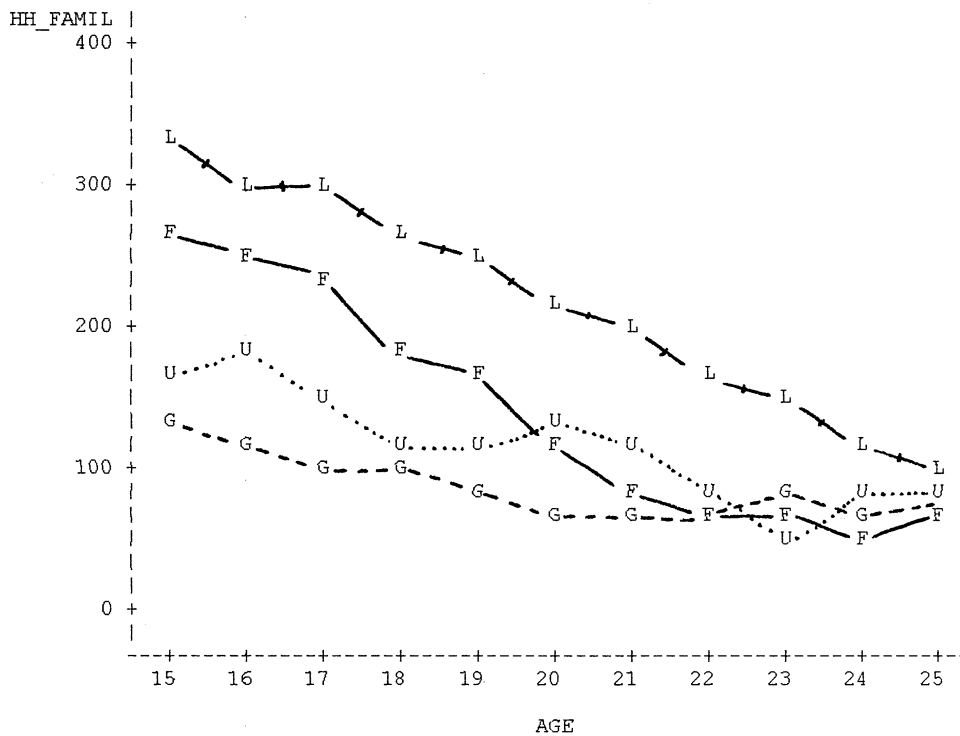
FIGURE 2 : Plot of TRASHARE*AGE. Symbol is value of COUNTRY.



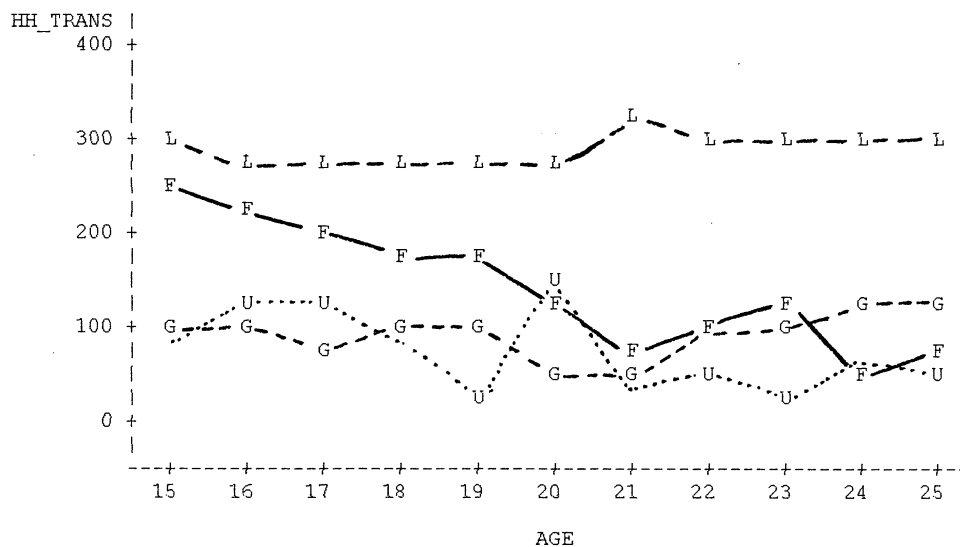
3. Now the question is : do these conclusions hold if we move to a more comprehensive notion of child benefits or to some sub-populations, more homogeneous in terms of financial dependency ?

If we substitute, as child benefits variable, HH_FAMI to HH_TRAN (the first variable adding welfare and alimony to the latter), the picture (figure 3) is very similar, with the exception of the UK curve, still unstable but pushed upwards allowing to the great magnitude, in the UK, of what is classified by PACO as social assistance benefits.

FIGURE 3 : Plot of HH_FAMIL*AGE. Symbol is value of COUNTRY.



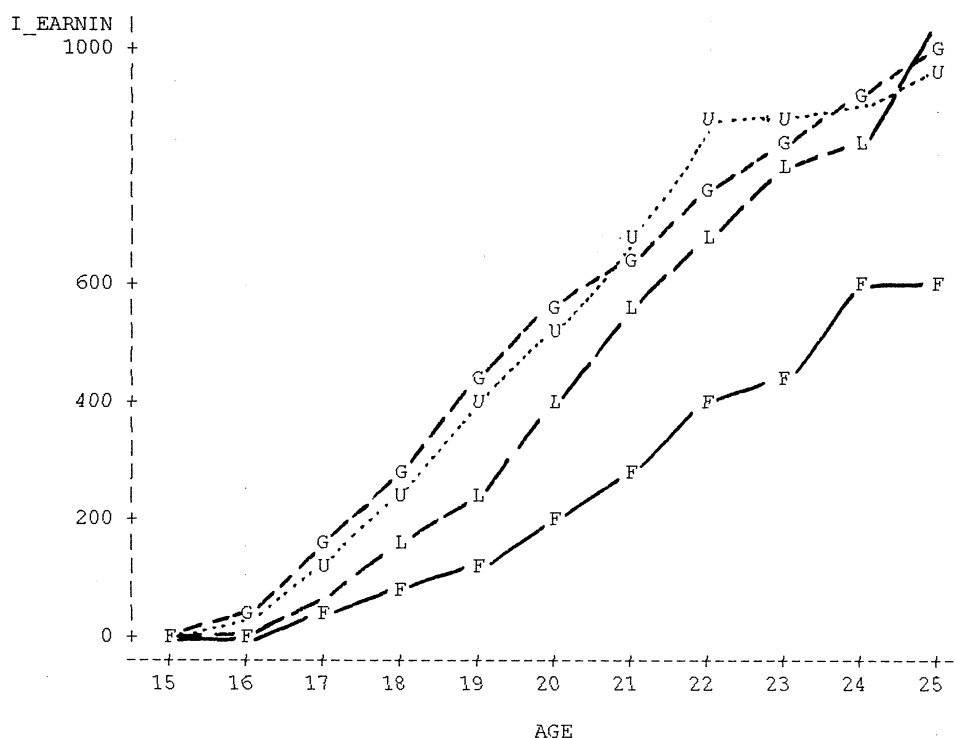
4. A more questionable aspect is the way results depend of the sub-population under study : if we restrict the analysis to dependent individuals (as defined above), the picture (figure 4) changes dramatically as far as Luxembourg is concerned : the curve no longer decreases, and is remarkably flat at a high level, indicating that Luxembourg supports young adults as long as they are dependent, in sharp contrast with France, for instance, when the public support is clearly trend decreasing, with some instability in the right-most part of the curve, probably attributable to vanishing number of cases (97 cases for age 21 but 65, 43, 16 and 17 after).

FIGURE 4 : Plot of HH_TRANS*AGE. Symbol is value of COUNTRY.
(dependent children only)

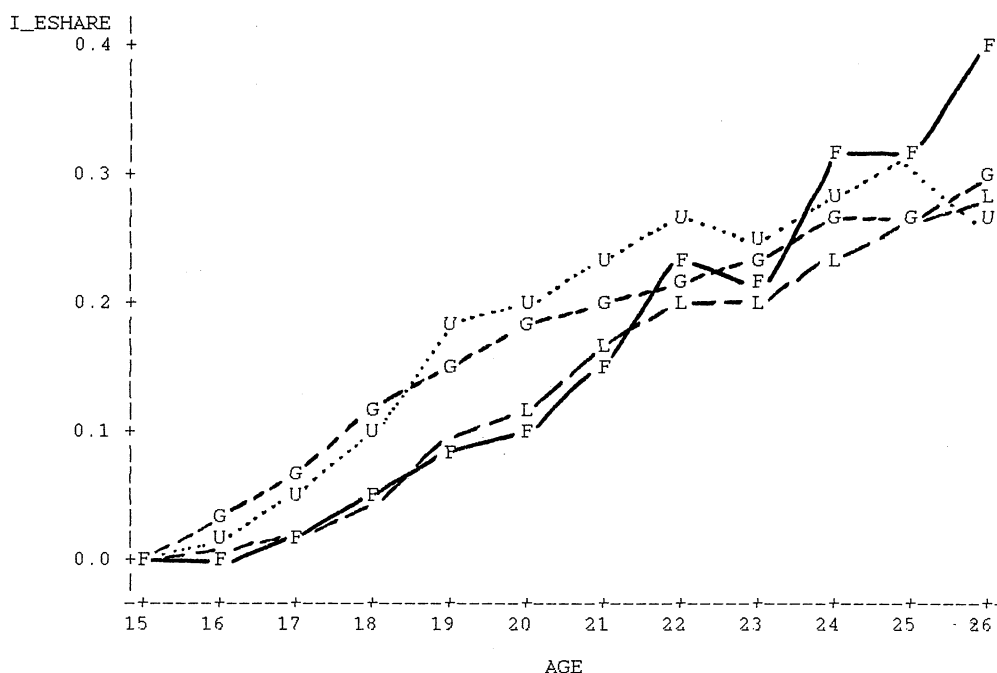
B. The patterns of youth's earnings.

The second question to be answered through plots is about the profile of the youth's earnings as he/she ages. Figure 5 shows curves of course ascending, but ascending differently across countries : German and British youths seem, on average, to start early, followed by Luxembourg young adults and, lagging behind, by French, who, in addition, earn much less, at each age, than other people born in the same year as them. And the gap between France and the other countries is widening in absolute terms as the youth ages.

FIGURE 5 : Plot of I_EARNIN*AGE. Symbol is value of COUNTRY.



But, again, comparing the levels may be called into question : thus, if we turn to income share, the french curve fills the gap and, after being under the others (up to 22 years), crosses them and ends far higher than the three others. As a consequence the overall lesson is not surprising : youth's earnings follow, in each country a steady increasing trend. The more interesting thing is that we can tell which part these earnings represent at each age : something like 3% in addition for each year above 15 (e.g. 21% at 22), with only slight differences across countries.

FIGURE 6 : Plot of $I_ESHARE*AGE$. Symbol is value of COUNTRY.

Note that, if we restrict the population to the dependent children, the earnings patterns are, as expected, no longer increasing, but rather horizontal. But on this plot (not reproduced here due to space limitations but available from the author) some noticeable differences appear across countries : as the earnings profile in Luxembourg is permanently at a near zero level, the German curve, while unstable at some ages, is clearly higher than the others, with an average earnings amounting to about 100 ECUS per month.

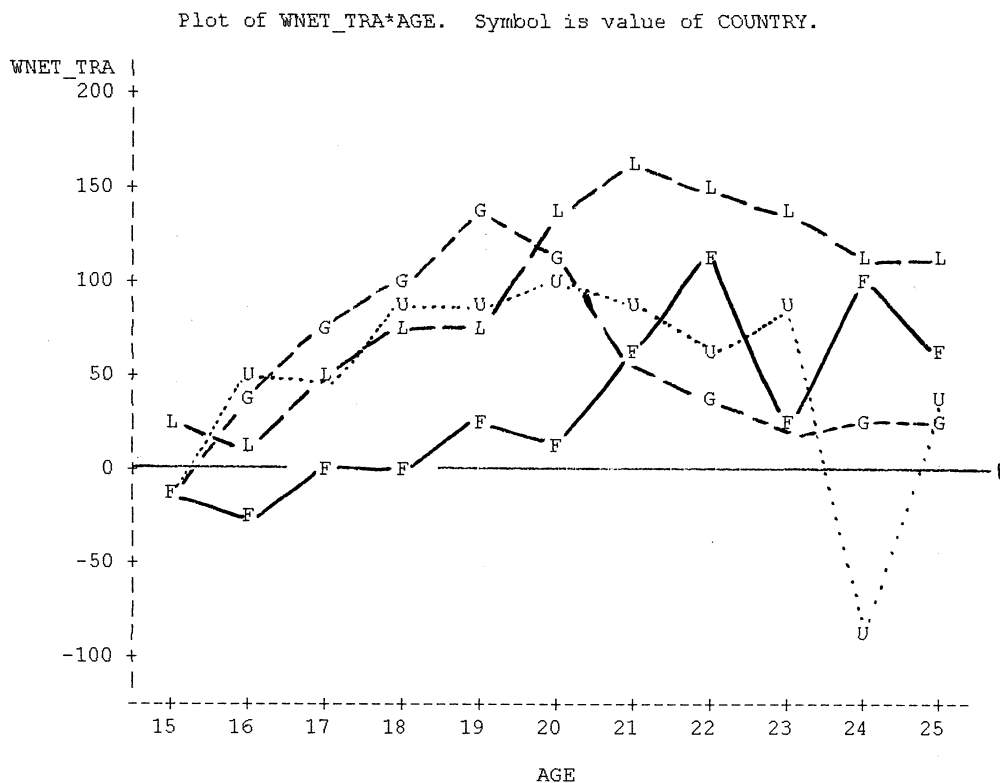
C. The variation in child cost.

At least on average, family benefits decreases, when compared with young adult's earnings increases, are of less and less importance, as the youth becomes older. It follows that, with the exception of France for ages below 19, the variation in child cost is always negative (and, hence, $WNET_TRAN$ is always positive, because the $WNET_TRAN$ is the opposite of the child cost variation), indicating that, for the family, the net child cost is alleviating as the youth ages.

Now, despite some instability virtually associated to any difference variable, figure 7 leads to comments like : the year-to-year variation of the net child cost ($-WNET_TRA = -WHH_TRAN - WI_EARNI$), while positive, does not follow the same pattern across countries (the increase in the young adult's earnings starts with an increasing overcompensation of the decrease in child benefits ; and, beyond some age, specific to each country, the overcompensation, while still playing, decreases in magnitude).

But the most interesting part of these curves is the left-half one : namely, up to, say, 20, benefits do change by substantial amounts, allowing to interpret $WNET_TRA$ as the balance between beginning youth's earnings and family benefits reductions ; while, when these benefits approach zero, the only valid interpretation of $WNET_TRA$ should be in terms of I_EARNIN profile : $WNET_TRA$ decreases as the youth's earnings curve goes past an inflexion point. With this limitation in mind, one should comment this way : from 16 to 19, the overcompensation is clear and increasing for Germany, Luxembourg and UK, while about nonexistent for France. This result will hold whatever the exchange rates used for the conversion in ECUS.

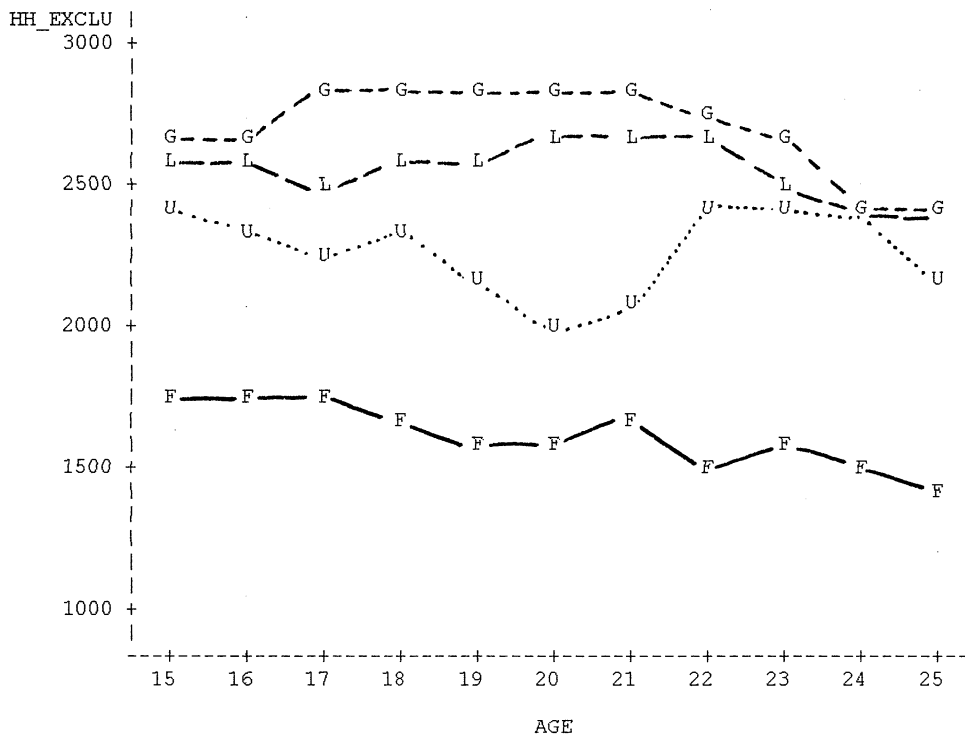
Figure 7 : Year-to-year variation of the opposite of the net child cost (in 1995 ECUS per month)



D. Patterns of other family members' earnings.

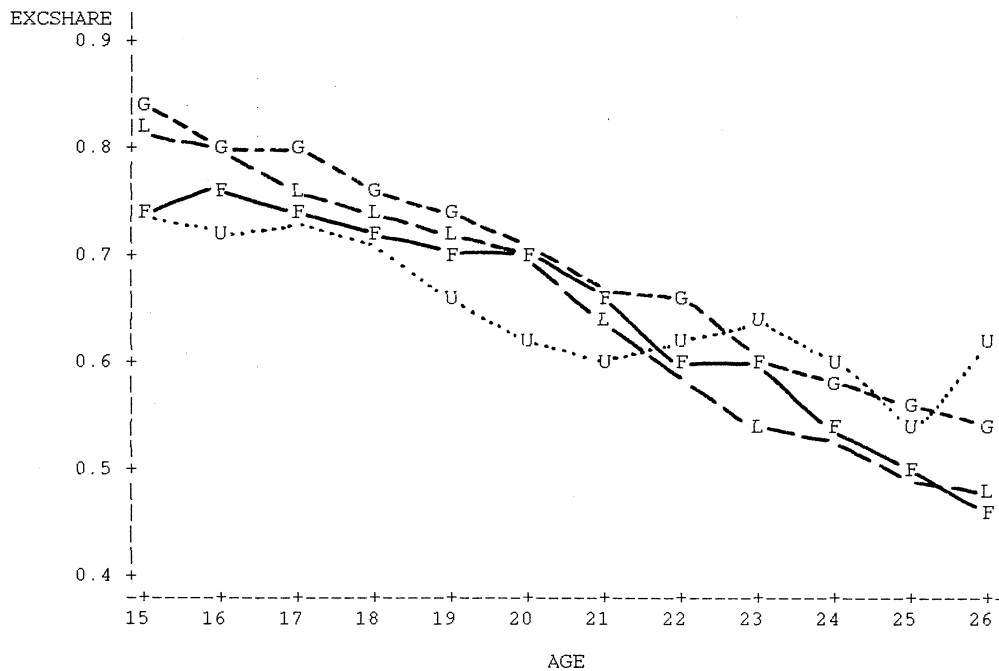
The next question to be answered through plots is about the profile of the household labour supply as the youth ages. Figure 8 shows how, from one panel wave to the next, the household labour supply - excluding youth's one - varies (here, labour supply is approximated through monthly earnings). The conclusion is that the labour supply of other family members does not vary according to the same time schedule in the four countries : in France, the trend is clearly decreasing beyond 17, while in Luxembourg, the trend is approximatively horizontal, at least up to 22 (and then decreasing) ; the German curve is characterized by an increase from 16 to 17, a clear stability up to 21 and then a decrease, as if the other family members worked a lot more as the youth is unable to get, by him/herself, earnings high enough³⁰.

FIGURE 8 : Plot of HH_EXCLU*AGE. Symbol is value of COUNTRY.



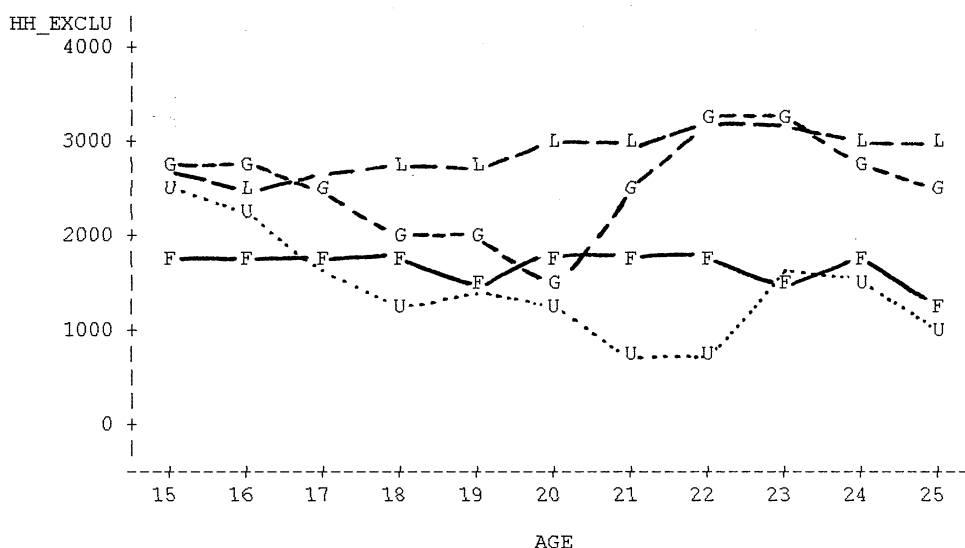
Anyway, the plot of the corresponding income share (figure 9) shows that the three curves decrease together, following a not so wide channel, decreasing by 2% per additional year up to 20 (from about 80% for 15 to about 70% at 20) and, then, decreasing at the same pace for Germany (reaching 54% at age 26) but more rapidly, by something like 4% per year, for Luxembourg and France (reaching 47% at age 26).

FIGURE 9 :Plot of EXCSHARE*AGE. Symbol is value of COUNTRY.



If we restrict the population to the dependent children, we expect curves more upwards-oriented, or at least not decreasing. It is true for France (figure 10) and for Luxembourg. But, while the UK curve should not be interpreted beyond 17 (due to insufficient numbers), the German curve decreases from 16 to 20 (why?) and, then, increases up to 23, decreasing again beyond 23.

FIGURE 10 : Plot of HH_EXCLU*AGE. Symbol is value of COUNTRY.
(dependent children only)

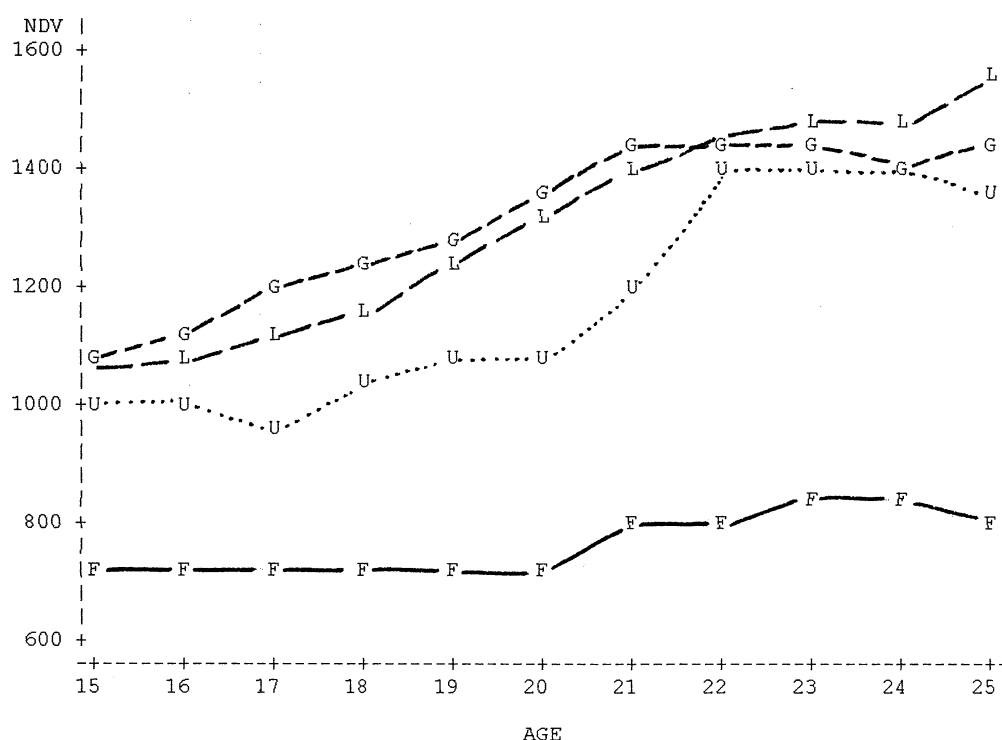


Here, we do not assume any causal link between these earnings profiles and the age pattern of family benefits. But whatever the possible relationships between these benefits, the youth's earnings and the other members' earnings, the different ways these key variables change have direct effects on the household standard of living. The following plot throws some light on this question.

E. Consequences on the household standard of living.

If one makes the assumption that the household does not share its resources with other people (e.g. student sons/daughters, living elsewhere), one may wonder about the consequences, on the household standard of living, of these decreasing child benefits trends. But the result depends, by construction, on the trend of other components of household income and on the trend of family composition. Mainly due to very different trends in total household income, the standard of living curves displayed by figure 11 look like very different among countries : in absolute terms (ECUS) or in growth rate terms, France is characterized by a very slow increase in standard of living, as compared with the three other countries. German and Luxembourg curves increase sharply up to age 21, and then approximatively stabilize. For UK, the slope becomes suddenly steep from age 20 to age 22.

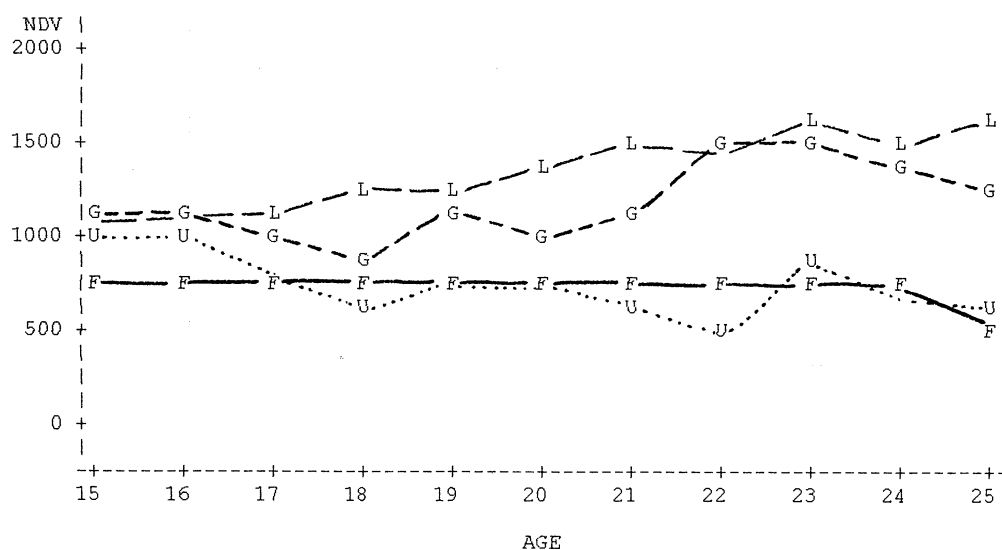
FIGURE 11 : Plot of NDV*AGE. Symbol is value of COUNTRY.



Calculations not reproduced here demonstrate that this conclusion holds with classical calculation of standard of living (i.e. total income divided by OXFORD equivalence scale) as with per capita income.

And if the analysis is restricted to dependent children, though one may expect some decreases in the standard of living because the children are not working, such decreases rarely occur in fact (figure 12). In the french case, the standard of living for these families is remarkably stable, around 730 ECUS/month.

FIGURE 12 : Plot of NDV*AGE. Symbol is value of COUNTRY.



Consequently, the evidence does not favor the hypothesis of declining standard of living among families with young adults : the contrary is true. Nevertheless, the french situation lies apart, with very slight increases.

IV. Conclusion.

In sum, the tentative evidence is that, within the stable part (demographically speaking) of the population of households with young adults, the role played by family benefits as an income component varies to a large extent across countries and along age (of the youth). The relatively minor share³¹ taken by family benefits (and the like) into the total household income low (less than 5% in every country above age 20) weakens, paradoxically, the negative impact of their decrease as the children become young adult still leaving at parental home. Moreover, the increasing earnings of the youth as he ages, overcompensate, on average, the decrease in family benefits, thus alleviating the financial net child cost the parents bear (if one assume that this new money is shared by the youth with his/her family).

What we cannot firmly assess is whether the household standard of living increases or decreases as the young adult becomes older while still staying at parental home. The tentative evidence is that it increases, either slightly as in France, or more rapidly as in Germany or Luxembourg; but we are not sure that our data fully take into account the possible financial burden the parents have to face in order to feed their children living apart (students for example); we know that, in the Lorraine Panel case, these expenses are at least partially taken into account through the inclusion, among the members of the household, of most of the students returning to their parents' home every week-end; but we are not aware if the other panels proceed this way.

Further research should try to push back the bounds of a too global approach. The hypothesis to be tested is that, while some families with young adults working are better and better off as the youth becomes older, some other families have to cope with high child costs (e.g. paying for high education or feeding and housing their unemployed children) but cannot afford easily because, at the same time, family benefits collapse and youth have not yet any firm income. The research question is : who are these families ? What are the numbers ? What is, for those families, the role played by family benefits and welfare ? How things could be changed ? A close look at the family composition (is there young children ? is the youth the youngest son/daughter ? how many children are still at school ?) may give useful insights and lead to subdivide the population according to these criteria, for separate analyses ; at least if the resulting numbers will be high enough to support robust analyses. Another research avenue, in this spirit, will be to subdivide the population of each country according to income deciles (or quartiles, to keep enough cases), to merge by income decile and then to contrast the patterns (of family benefits, earnings, standard of living) obtained for each quantile.

But some important limitations of our analysis would not be got over, due to data limitations : as we stressed above, variables like private transfers to children living apart are not available for all countries and each panel wave ; as we lack, in PACO, of reliable variables for income tax, allowing to take into account tax rebates mechanisms (like the french 'quotient familial') which may play an important role in helping some families with young adults living at home.

The policy implications of the paper might be as follows : given that one may assume that in every country the parents are prepared to help, as far as they can, their aging children without any rigid age threshold (corresponding to radical cuts in financial help), a national policy sustaining firmly young adults instead of cutting benefits dramatically at some age, is debatable : should one try to achieve, other things being equal, more equity among families with/without children, smoother life-cycle income flows among parents, and, perhaps, more schooling years at academic level for the young adults ? In that perspective, documenting the role of family benefits in standard of living variations is useful. Or should one consider, with many economists, that parents are rational and, hence, that they have fully anticipated, at the beginning, the happiness due to as well as the costs of children ; for DM/FL/£/FF of public spending has, obviously, alternative uses.

ANNEX A : SAMPLES SIZES

We describe below the sizes of the samples we obtained through the application of our definition of « young adults » to pairs of consecutive panel waves. At this stage, people aged 14 or 26 are included. After each table, we indicate how many people will be dropped due to further restrictions : extreme values for some variables, weights equal to zero, too limited numbers founded in some age classes (14 and 26).

FRANCE (1985-90) :

Panel wave t	Youths in wave t	Youths in waves t & t+1
1985	569	421
1986	1391	1092
1987	1353	1120
1988	1292	1105
1989	1285	1084
1990	1307	
1985 to 1990		4822

Among these 4,822 individuals, none will be dropped due to extreme values for some variables, none due to null weights, 39 individuals aged 14 (too few as compared with their elders), 81 individuals aged 26. After restriction to the « stable cases » (see text for definition), 4,544 individuals are finally selected for inclusion in analysis.

GERMANY (1984-90) :

Panel wave t	Youths in wave t	Youths in waves t & t+1
1984	2464	1974
1985	2289	1919
1986	2192	1859
1987	2136	1794
1988	1984	1629
1989	1853	1525
1990	1733	
1984 to 1990		10700

Among these 10,700 individuals, 11 will be dropped due to extreme values for some variables, none due to null weights, none because they are 14 years old (the file prepared for use in SAS contained no such individual), 283 individuals aged 26. After restriction to the « stable cases » (see

text for definition), 9,932 individuals are finally selected for inclusion in analysis.

LUXEMBOURG (1985-92) :

Panel wave t	Youths in wave t	Youths in waves t & t+1
1985	1263	986
1986	1067	841
1987	917	730
1988	814	682
1989	763	621
1990	726	592
1991	795	644
1992	715	
1985 to 1992		5096

Among these 5,096 individuals, none will be dropped due to extreme values for some variables, 123 due to null weights, none because they are 14 years old (the file prepared for use in SAS contained no such individual), 285 individuals aged 26. After restriction to the « stable cases » (see text for definition), 4,522 individuals are finally selected for inclusion in analysis.

UK (1991-92) :

Panel wave t	Youths in wave t	Youths in waves t & t+1
1991	1408	1056
1992	1349	1032
1993	1334	
1991 to 1993		2088

Among these 2,088 individuals, 7 will be dropped due to extreme values for some variables, 56 due to null weights, 22 individuals aged 14 (because they are too few as compared with their elders, 313 at age 15, for example), 36 individuals aged 26. After restriction to the « stable cases » (see text for definition), 1,750 individuals are finally selected for inclusion in analysis.

All in all, for the four countries, 20,748 cases will be used in the analyses (all being 15-25 years old).

ANNEX B : CONSTRUCTION of VARIABLES

The « Family benefits » variable (_xx033 in the PACO database) includes child allowances, benefits for motherless and fatherless child and, finally, education allowances. We have added « Orphan pensions » (from the old age pension system : _xx025), « Maternity benefits » (_xx034, including prenatal, child birth and post-natal allowances, but benefits for assistance -like baby sitters- too), « Government cash transfers for education » (_xx035, including allocation at reopening of the school year, scholarships, state grants for higher education and retraining grants from labour office) and « Other transfers » (_xx047, including, according to PACO documentation -op.cit. page B.3-25- « transfers which are unqualified or cannot be allocated to the previous listed transfer income sources, e.g. benefits for parents when they stay at home because of ill children, marriage grants, death grants »). The sum of these components accruing to the household is called HH_TRANS in our analyses (standing for HouseHold family TRANSfers).

Because poor people can get substantial additional payments from Social assistance schemes if they have dependent children, we have built the HH_WELFA variable (for HouseHold Welfare benefits) by summing three income sources : firstly, « Social assistance » ; this PACO variable (_xx037) covers fixed monthly payments to guarantee sufficient income sources ; all payments are means-tested ; it includes also special assistance for one parent families (if means-tested), assistance to cover individual needs in difficult situations through grant of allowances (e.g. illness, care or particular social difficulties) ; second, « Additional social assistance » (_xx038), means-tested benefits but aperiodic and single payments for heating, clothes, household and urgent needs (e.g. foodstamps, heating allowances, single grants from welfare associations) ; thirdly, « Unemployment assistance » (_xx039, a variable including only means-tested unemployment benefits). The HH_WELFA variable is used as a component of an alternative definition of public child support, HH_FAMI (this variable will play the role of a variant).

The other component of HH_FAMI is HH_PRITF (standing for HouseHold PRiVate TransFers). In terms of PACO variables, HH_PRITF (= _xx042) includes « Cash alimony or Child Support » (_xx043) and « Received private cash inter-household transfers » (_xx044). The first variable includes support from a divorced partner who has to pay for his former spouse and his children, support from father for illegitimate children and support from state system for those awaiting alimony or child support for spouse. The latter variable includes those private cash transfers received from parents in law and children, from friends and neighbours and from other individuals, as well as one-time support from divorced spouses.

Of course, some child supplements can be founded in other PACO variables, but, because we were unable to pick up these elements among others (due to composite PACO variables) we do not use the additional alternative to HH_TRANS and HH_FAMI we create, called HH_OTHTF (standing for HouseHold OTHer Transfers). It would have include many PACO variables in which some items are child related : « Unemployment benefits from insurance » (_xx028), « Sickness cash benefits » (_xx029), « Employment

injuries/occupational diseases benefits » (_xx030, including benefits for injured workers, but also benefits for surviving spouses and orphans), « Invalidity benefits » (_xx031), « War related benefits » (_xx032, including also benefits for survivors), « Other income dependant benefits » (_xx040, benefits paid to low-income households, e.g. housing benefits), « Transfers for handicapped » (_xx046, including supplementary allowances for handicapped children and adults - transfers for persons receiving care or care-givers), and « Annuities from insurance » (_xx048).

Finally, as far as earnings are concerned, we use three variables : at the individual level, we pay attention only to the youth's earnings (I_EARNIN, sum of total wages and salaries, plus in kind salary plus self-employment income (PACO variables _xx001, _xx007 and _xx008) ; at the household level, adding the same components results in HH_EARNI ; our third variable is HH_EXCLU, i.e. the earnings of all HouseHold members, EXCLUDING the youth's earnings (hence $HH_EXCLU = HH_EARNI - I_EARNIN$).

ANNEX C : Descriptive statistics.

These descriptive statistics concern mainly either demographic variables or financial amounts expressed in 1995 ECUS. The four countries are included in this pooled file (built on the basis of all pairs of successive waves).

The population concerned here is the so-called « population without changes » (see text for definition), as opposed to the whole population.

All data are weighted.

Variable	N	Mean	Std Dev	Minimum	Maximum
N_HMEMB	20748	4.1692768	1.2601413	2.0000000	15.0000000
HH_TRANS	20748	114.7351316	181.4938696	0	2228.50
HH_WELFA	20748	11.8333960	78.2805984	0	1911.05
HH_PENSI	20748	82.8243307	314.3252753	0	10835.86
HH_OTHTF	20748	75.4260983	264.0883051	0	14371.78
HH_PRITF	20748	12.5777257	109.6950099	0	4391.27
HH_CAPIT	20748	94.2108134	465.0093644	0	15425.14
HH_EARNI	20748	2797.26	2012.54	0	20939.82
I_EARNIN	20748	368.1609786	554.8303964	0	4581.29
HH_EXCLU	20748	2429.09	1897.88	0	20601.37
HH_FAMIL	20748	139.1462533	230.7163359	0	4987.05
RTOT	20748	3188.86	2068.06	0	25772.27
NDV	20748	1162.30	756.0651795	0	14048.75
RPERCAP	20748	796.3824106	534.7933248	0	11941.43
VHH_WHOU	18716	3.5426518	35.6409409	-215.0000000	225.0000000
WHH_EXCL	20748	-38.2036212	1279.94	-24047.69	12154.54
WNET	20748	57.8499225	385.7419368	-4609.80	4579.79
I_ESHARE	20203	0.1226904	0.1864633	0	1.0000000
HH_ESHAR	20203	0.8230742	0.2556762	0	1.0000000
TRASHARE	20203	0.0604430	0.1267568	0	1.0000000
WELSHARE	20203	0.0097343	0.0692982	0	1.0000000
PRISHARE	20203	0.0060596	0.0474929	0	1.0000000
FAMSHARE	20203	0.0762369	0.1556867	0	1.0000000
PENSHARE	20203	0.0341537	0.1278430	0	1.0000000
CAPSHARE	20203	0.0268379	0.0908423	0	1.0000000
OTHSARE	20203	0.0396973	0.1256961	0	1.0000000
EXCSHARE	20203	0.7003838	0.2976099	0	1.0000000

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NOTES :

¹ The author acknowledges Bruno JEANDIDIER for helpful advice in defining the population to be studied and in selecting the right variables in the PACO database; he is also grateful to Jean-Luc KOP and Thierry FIERVILLE for careful data preparation with SPSS (extraction from PACO files, multiple checks and documented corrections, conversion in ASCII format easily readable by SAS). Finally, the author expresses thanks to Béatrice WANERT MAGNON-PUJO for some help in english terminology. Nevertheless, the usual disclaimer applies : the author remains responsible of any error, especially in manipulating the raw data with SAS, in order to build the transitions files and the pooled file.

² For references, see J.BRADSHAW, J.DITCH, H.HOLMES, P.WHITEFORD (1993), pp. 2-4 and pp. 97-101, and J.C. BARBIER (1995), page 102.

³ As far as young adults are concerned, one should not concentrate, as we do here, only on people still leaving at home : the analysis should be extended to young adults living apart (and, thus, considered by the statistician as heading their own household or belonging to some kind of collective household) while sustained by a substantial financial aid from their parents (students, young couples unemployed). Namely, there is no clear frontier, in terms of economic dependency, between these two situations. In the later case, the administrative records are useful to get an idea about some social benefits paid to young adults (as the housing benefits in the french case) but these records are not a reliable source of information to measure the real financial and in-kind private transfers between the families and their children away from home.

⁴ For instance, the french Social Indicators book (« Données Sociales », published by INSEE) indicates that, in France, among young adults (20-24 years old), about 50% of the female and 60% of the male do live with their parents (as contrasted with, respectively, 38% and 51% in 1982). As far as people aged 25-29 are concerned, these percentages are still high : 13% and 26% nowadays, as compared with 8% and 18% in 1982.

⁵ As far as we know, the evidence does not come, at least in the french case, from panels but relies mainly on cross-sectional surveys (some of them, like the 1993 INED-CNAF Survey « Passage à l'âge adulte », collecting cross sectional but also retrospective information about the youth period).

⁶ I.AMROUNI (1995) exhibits (p.13) a plot of age versus the percentage of young people receiving some family (or housing) benefits ('taux de couverture des jeunes par les prestations familiales') ; and she presents the evolution, along the age of the child (from 16 to 24), of the average contribution of family benefits to the standard of living of his/her family (table 9, ibidem, p.17) ; but the calculations include both categories of young people : those living with their parents -as we do- and those living apart ; this results in a maximum at 20, because, at this age, the young adult frequently lives alone, and, hence, the amount of allowances is divided by 1, while it is divided, for instance, by 2.7 if he/she is still living with his/her parents and one brother/sister).

⁷ In fact, we are not able to measure labour *supply*, but only hours worked and earnings.

⁸ Gaston SCHABER , Günther SCHMAUS. The PACO Project. User Manual. First Version. CEPS/INSTEAD. Dec. 1995.

⁹ The list of problems (and documented solutions) established by Jean-Luc KOP and Thierry FIERVILLE in preparing the SPSS files for this analysis is impressive. And some additional source of worries may be added : why, for example, do we find 117 observations « not concerned » (coded -2) for the variable WEIGHT in the Luxembourg 1991 wave, and no such value for the 7 other years (except 1988 : 1 such value) ? Careful checks of the distributions of each variable, country by country, year by year, shows curious things like a maximum value for WEIGHT equal to 14.13 (Luxembourg, 1991), followed by 4.88, 3.8, 2.77, and so on), or like youth's earnings equal, on a monthly basis, to 99,999 DM/month in 1986 (that guy founded a very good job!), or even to 25,167 DM/month (1985) while the following values are 8033, 5758, 5328, etc. And, similarly, some young British appear to earn a lot : some of them look like earning (in 1992) 3750 £/month. It is unclear if these figures are true errors or just reliable outliers. But these extreme figures (which, it should be noticed, contaminate other variables by inflating, e.g., household total earnings, a variable obtained through aggregation of earnings of all household members) bias considerably some correlations and regressions, as we verify. In the absence of reliable information allowing to correct these likely exaggerated figures, the only possible solution was to delete the (few) corresponding observations.

¹⁰ Strictly speaking, we should not refer to the french data as « France », because the household panel was a pilot one, implemented in only one of the 22 french administrative regions.

¹¹ Hungary, though planned for inclusion in this study, was not included, mainly because of the lack, in the PACO macroeconomic database (associated to the microdata panel database), of relevant information about the forint exchange rate in ECUS and about the consumer price index. Unfortunately, these figures were also unavailable in the OECD documentation we used to complete PACO figures.

¹² See SCHABER & SCHMAUS, op.cit., page B.3-12. Note that worked hours are expressed as annual average of hours worked per week, not per month as all financial amounts are.

¹³ We have used the m25 series of the macro-economic indicators PACO database (consumer price index, source : OECD) to convert nominal amounts into deflated ones. Unfortunately, that database does not include the 1992 and

1993 values of the m25 series, whilst the Luxembourg panel waves included in the PACO database cover the 1992 wave and the UK panel waves available in PACO include the 1992 wave and, moreover, the 1993 wave.

Using the January 1996 issue of the OECD Main Economic Indicators series, we have tried to supplement the PACO data and, in addition, we have collected information allowing us to transpose the financial amounts from the 1985 base of the PACO index m25 to 1995 values.

¹⁴ We use the m31 series of the macro-economic indicators PACO database : exchange rate, average value of period, source EUROSTAT. See SCHABER & SCHMAUS, op.cit., page E.2-4.. The missing value for the UK, year 1993, was supplemented by a value derived from the average annual exchange rates displayed by the January 1996 issue of the OECD Main Economic Indicators series. Note that, unfortunately, the PACO series does not include Hungarian currency (forint) ; for that reason, we were constrained to exclude Hungary, although we initially build the files for it (waves 1992, 1993, 1994).

It would be great if the series of the macro-economic indicators PACO database were updated in line with the inclusion of new panel waves in the main PACO database !

¹⁵ As input for weighting, we use, for Luxembourg, Germany and UK, the variable WEIGHT given by the PACO database. For Lorraine, because this information is not provided at the moment, we decided to correct for sampling (by using the inverse of the household's size), not for attrition. For the four countries, we choose arbitrarily the value of the weight for the second year of each couple of years. But what is more important is the question of the need for some weights'harmonization : namely, the values for the WEIGHT variable are characterized by very different ranges across countries : for Germany, the average is 3,853.76 (minimum=70.75, maximum=38,366), while weights are much lower in other countries (from 0.077 to .5 in Lorraine with an average of .226 ; from 0 to 14.13 in Luxembourg, averaging to .888 ; and from 0 to 2.5 in the UK, with a mean value equal to 1.0215). Were these national weights not harmonized, the results for the four countries would not very far for results for Germany alone ! Consequently we decided to make some adjustment : we just divide each national set of weights by the national mean (as calculated on the sample used in further statistical analysis, i.e. excluding a limited number of observations - due to outliers and to errors- and observations with null or non available weights). On the other hand, we did not make any attempt to standardize the dispersions of the national weights.

From a different point of view, one would be tempted to under-weight considerably, in the four-countries file, the Luxembourg cases, in order to allow for the large difference in the respective sizes of the various countries. But one should remember that the aim of the study is not to build a sample representative of (a large part of) Europe : the focus is on a comparison of various national family policies, whatever the size of the countries : hence, each national system should be studied on an egalitarian basis.

It should be noted, finally, that, for Luxembourg and UK, there are a lot of zeroes in the weights (for Luxembourg, just a few from 1985 to 1991 but, surprisingly, 114 in 1992, while only 14 in 1991 ; for UK, 77 in 1991, 67 in 1992 and none in 1993). The existence of these zeroes is not, per se, worrying (each panel has its own rules for interviewing and weighting non-panel members ; but why do these figures vary so much ?). Anyway, these zeroes imposed us a choice between calculating the mean with or without these null values ; arbitrarily we choose to exclude them, but, as we verify, the mean is not very sensitive to this choice.

In addition to these problems, detected wave by wave, we founded some longitudinal (i.e. from one wave to the next) inconsistencies : the Luxembourg files exhibit 14 individual cases which obviously need some checks for possible demographic inconsistencies : birth year or birth month varying across waves for the same individual (as defined by its personal identification number), sex varying in quite large proportions (19 year-to-year changes, concerning 13 different youths). This last kind of change is less frequent in the UK (just one case) but the former happens in 10 cases, mainly for birth months. The observations corresponding to these possible anomalies were not deleted because the corresponding variables do not enter, in difference form, our calculations ; but a reliable use of the PACO data clearly requires additional longitudinal checks.

¹⁶ If « babies » (i.e. children from 0 up to 12 months), « toddlers » (they start walking : they are 1 or 2 years old), and « young children » (3 up to 12 or 13 years old) are clearly excluded from our study, it is not easy, on the other hand, to find adequate termes to cover the 14-26 range we choose to analyse. Should we prefer « Teenagers » (from 12 or 13 years old up to 17-18), or « Grown-up sons/daughters » (e.g. students still living with their parents) or « The youth » or « the youths » or « the youngsters » (younger than the youths) ? Finally, we choose to use the « young adults » expression, whilst it rather designates people entering the labor force. At least, as far as we know...

¹⁷ At least in France, it is common to use these age brackets (e.g. in calculations of the unemployment rate by age class). Integrating 14 years old children in the study will give a starting point, for children who are obviously not « young adults », but the files we obtained for our SAS calculations do not include normal numbers of children aged 14 (none for Germany and Luxembourg, and a disproportionnately low number of cases for France and UK). Thus, we dropped individuals aged 14.

¹⁸ In the SPSSX files for Germany and Luxembourg created from the original PACO files, we did not founded any case of individual aged 14.

¹⁹ While for most cases « child » means biological child of the head of household (named RP, for Reference Person) and/or his/her spouse, some other categories are included under this term : son or daughter of cohabitee (variable

Pxx205=4, a value corresponding to the main case too), foster child of RP or spouse or cohabitee (code=5), son-in-law or daughter-in-law of RP or spouse or cohabitee (code=6). If Pxx205 was missing, the observation was excluded.

²⁰ In fact, we probably do not exclude all the cases corresponding to young adults living apart but highly financially dependent of their parents - a good news because it allows not to over-estimate the standard of living of these families. The reason for such a likely inclusion is the following : when they are surveyed, mothers of these young adults are frequently willing, at least according to Lorraine panel interviewers, to declare them as family members because they frequently come back home (every weekend and for holidays). But this practice is unfortunately not documented at all, as far as we know.

²¹ Note that the household size may be constant from one wave to the next while the family composition has changed in a way affecting family benefits : for instance, a young adult (different from the one we are following) may have leave parental home while a birth to the family happens.

²² One should take notice that we keep in our sample individuals belonging to household whose identification number has changed as well as cases for which the marital status of either the young adult or the household head or his/her spouse has changed.

²³ The « retired » status - a funny situation for people aged 15-25 - concerns one hundred cases, arising questions about data quality or about the data selection process prior to SAS treatments. Note that we tried another set of nested sub-populations, characterized by their assumed increasing degree of financial dependency : instead of relying only on the youth's individual status variable, we combined it with the earnings variable. This combination allowed us to exclude first individuals whose *ZI_STATU* in wave *t*, or *I_STATUS* in wave *t+1*, was « Working » and whose earnings (in wave *t* or in wave *t+1*) exceed 1000 ECUS/month ; thus, we get a smaller sub-population, corresponding to a more restrictive acception of youth dependency. If we go further and exclude all youths (about 40% of the whole sample) whose status in wave *t* or wave *t+1* is « Working »²³, whatever their earnings, we obtain an even more limited sample. After that, we restricted again our population, limiting it to the truly dependent, defined as in the text. But, due to space limitations, we choose to present here only some results, those corresponding to the sub-populations as defined in the text.

²⁴ As indicated in SCHABER and SCHMAUS (op.cit. page B.3-38), the Pxx316 PACO variable (« Employment Status by Year ») is created for Germany and UK by using biographical information collected with retrospective questions, while, for other countries, this variable is created by using all available waves with data .

²⁵ op.cit. p.47.

²⁶ The averaged shares are calculated over all households, not at aggregate level (as it would be if one have made, for instance, the sum of pensions divided by the sum of household incomes). It explains why the summed averaged shares do not equal 0.

²⁷ A close look to the share of each income component, country by country, reveals that some income components are, on average, much more important there than elsewhere. For instance, pensions in Luxembourg take a so large part in household income, as compared with France, Germany or UK, that we may wonder if this gap does reflect a real difference in economic structures (a specific pensions system) or should be attributed to problems in the correspondance between the international nomenclature used in PACO and the income items in Luxembourg.

²⁸ A negative correlation between child benefits and earnings will be interpreted either in terms of means-tested mechanism or in terms of reaction of family members' labour supply to decreasing child benefits.

²⁹ Have we had the opportunity to follow, in each country a cohort of numerous youths, from 15 to 25, without a too large attrition effect, we had been still unable to separate life cycle effects from the historical determinants. To isolate age effects, historical (=cohort) effects, country effects and the effects of personal characteristics, one would need to follow, in each country, on 11 annual waves times *C* cohorts, large numbers of individuals - a quite costly and lengthy data collection, beyond our current possibilities, especially if the European household panel stops after three waves.

³⁰ The UK curve displays, between 18 and 22, a curious U shape, difficult to interpret.

³¹ We have calculated the share taken, in household total income, by child transfers (TRANSHAR) as by, respectively, youth's earnings, earnings of other household members and various other income components (private transfers received, capital income, welfare, pensions). These calculations have been done at each age, country by country. We cannot reproduce here the 6 corresponding plots, due to space limitations. Let us indicate that these plots especially show :

- * the growing importance of pensions in Luxembourg, faster and far above the other countries shares
- * the special « roof profile » of the « Other transfers » category share in France, with a peak at 21 years, while, for the other countries, the curves are quite flat (and at a lower level)
- * the steeply decreasing but high-located british curve of the Welfare share
- * as far as the share of the youth's earnings is concerned, this plot shows four quasi-straight lines (one for each country) starting from about 0 at 16 years and reaching between 25% and 30% around 25 years.

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