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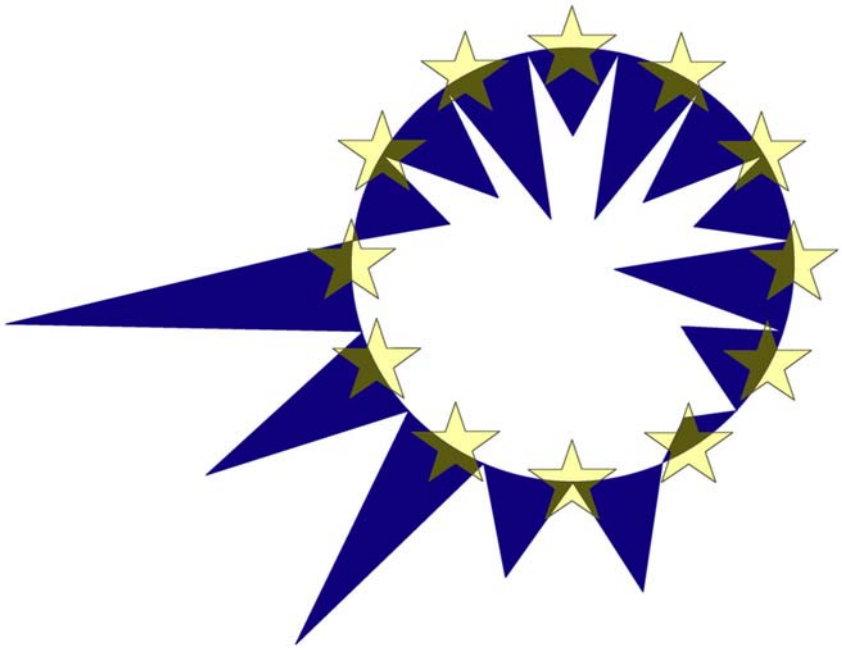

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CHILD-TARGETED TAX-BENEFIT REFORM IN SPAIN IN A EUROPEAN CONTEXT: A MICROSIMULATION ANALYSIS USING EUROMOD

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Child-targeted tax-benefit reform in Spain in a European context: a microsimulation analysis using EUROMOD

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Abstract

Spain has one of the lowest expenditures on family social protection, the third highest child poverty and the second lowest fertility rate in the EU. The objective of this paper is to identify and assess tax-benefit reforms that could improve this situation. Using the European microsimulation model EUROMOD, this paper compares the child-targeted policies of four EU countries to those recently reformed in Spain. It also analyses the effect that the policies of these countries would have if applied in Spain. Results show that recent reforms have increased considerably the expenditure on child-targeted policies. However, in contrast to the other analysed countries the new Spanish system mainly benefits higher income families and has a low poverty reduction effect.

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Keywords: Child benefits; Child poverty; Microsimulation; Spain; European Union

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1 INTRODUCTION

Higher unemployment and labour market instability, new household forms, decline of fertility rates and increasing female labour participation are changing the types of social needs and the groups at risk of falling into poverty and social exclusion. Among new social needs, social protection for families with children is one of the most evident (Esping-Andersen and Sarassa, 2002).

This situation is particularly relevant in Spain, where social expenditure on family benefits is very modest. Two recent studies (Abramovici, 2003 and Bradshaw and Finch, 2002) show that Spain is one of the countries that spends least on family benefits in the EU. Developing child-targeted policies in Spain, following the ones used in other EU countries, could be an important strategy in order to reach two important objectives: reducing child poverty and easing young couples' costs of having children.

The objective of this paper is to analyse how reforming child-related benefits would affect public expenditure, income redistribution and child poverty in Spain. Throughout this paper, the term "child-related benefits" includes cash social benefits but also related fiscal benefits (such as child tax allowances, tax credits or other tax alleviating elements) as well as complements to other benefits that are conditional on the existence of children in the household. In-kind benefits are not analysed here. After comparing the child-related benefits in five EU countries (Denmark, France, Germany, Spain and the UK), this paper analyses two types of reforms. Firstly, we examine the recent reforms of child-related benefits implemented in Spain in recent years. Secondly, we study what would happen if, instead of these reforms, Spain had adopted the benefits that are used in the other countries analysed here. These exercises allow us to learn more about alternative ways of reforming Spanish tax-benefit system, as well as to examine what could be the effect of an eventual "harmonisation" of child oriented policies in the European Union.

In order to carry out this analysis, we make use of the European tax-benefit model EUROMOD. This model, which covers all 15 EU countries, is based on household samples that are representative at the national level for each analysed country. See Immervoll et al. (1999) for a general description on EUROMOD.

The paper is divided into six sections. After this introduction, section 2 briefly compares the situation of Spanish children vis-à-vis other EU countries. Section 3 presents some methodological issues related to the use of the microsimulation model EUROMOD; how simulations were carried out, as well as some definitions. Section 4 describes child-targeted policies for each country and compares their outcomes. Section 5 assesses the impact of recent reforms implemented in Spain, and simulates replacing these policies by the ones used in other EU countries. Conclusions are drawn up in Section 6.

2 THE SITUATION OF SPANISH CHILDREN IN A EUROPEAN CONTEXT

Spain is one of the countries with higher child poverty rates in Europe. According to a EUROSTAT study, child poverty in Spain is 3 percentage points higher than the average in the European Union (Mejer and Siermann, 2000). Moreover, Cantó et al (2002) find that in recent years (1990 to 1995) poverty rates among households with children has risen from 20 to 23 percent. The situation is very different among households without children. During the same period, poverty rate in this group fell from 12 to 10 percent.

There is some general evidence that children have a higher risk of being in poverty. Analysing 25 industrialised countries, Bradbury and Jäntii (1999) find that child poverty rates are higher than the overall poverty rate in 23 countries. Using an equivalence scale that gives less weight to children, Mejer and Siermann (2000) find that child poverty is higher than the overall in all the EU countries, except Denmark and Greece. This contrasts with the other group that has been traditionally thought to be at high poverty risk: the elderly. According to Bradbury and Jäntii (1999), in most countries poverty rates among elderly people is lower than the overall poverty rate. This is particularly clear in Spain. Ordering thirteen[1] EU countries by overall poverty rates, Spain has the fifth highest poverty. Ordered by child poverty, Spain climbs up to the third place in the ranking (only UK and Ireland have higher child poverty rates). However, among the elderly, Spain falls to the eleventh place. Only the Netherlands and Luxembourg have lower elderly poverty rates.

Many issues are behind the higher poverty risk of children. The most obvious and relevant one is the labour force status of their parents. In the past, the "male breadwinner model" assumed that the working man was able to earn enough to maintain his family. Therefore,

child poverty was associated to the father's unemployment. Today, higher labour insecurity, job change, unemployment spells and precarious work have removed the labour market foundations of this model (Esping-Andersen, 1999). Hence, the presence of second earner in the household has become decisive in fully covering the family economic needs. Table 1 shows that children living in families with no earner face the highest poverty risk in all selected countries. However, the table also demonstrates that the poverty risk of children living in one-earner families is not lower than the overall risk. This is especially relevant in Spain, since 55 percent of the children live in one-earner families and the child poverty rate across the group is 21 percent.

A second issue that is often related to child poverty is "family change". Lone-parenthood is the most clear and often-mentioned example of new family arrangements that face high poverty risk. Their incapacity to combine full-time work and childcare leads children in this type of family to face very high poverty rates (see Table 7). Although child poverty rates in lone-parent households are similar to those in other European countries, in Spain (as well as in other southern European countries) the number of children living in this type of family is still relatively small. According to Table 2, less than 3 percent of Spanish children live in lone-parent households. This is in contrast to countries such as Germany or the UK, where the proportion is around 20 percent.

At the same time, unemployment and labour market instability are especially concentrated among young adults in Spain. The unemployment rate among those aged under 30 is 2/3 higher than for the overall population. Moreover, this group faces high job instability. Almost 60 percent of individuals aged 16 to 29 works under temporary contracts (MTAS, 2000). In order to avoid falling into poverty, a large proportion of Spanish young people live with their parents. According to Fernández Cordón (1997), 72 percent of Spanish individuals aged 20 to 29 were living with their parents in 1994. Cantó-Sánchez and Mercader-Prats (1998) show that the effects of the presence of young adults in their parents' households vary drastically with their employment status. The presence of employed young adults may protect the family from falling into poverty when the head of the household is not working. On the other hand, the presence of non employed young adults substantially increases the child poverty risk. According to Table 2, while in Spain 30 percent of the children live in households with "other

[1] Sweden and Finland were not included in this analysis.

adults" besides their parent(s) (in most cases elder siblings), in the other analysed countries this proportion ranges between 10 and 16 percent. At the same time, Table 7 shows that the child poverty risk is significantly high in this group in Spain. This indicates that, in average, the presence of young adults in the household increases the poverty risk of children.

Delaying independence also gives the young an opportunity to save income to face the future costs of having a family. Most Spanish youngsters leave the parental home when they are ready to face these costs. Martínez and Ruiz-Castillo (2002) find that the decisions to leave home and to get married are simultaneous among Spanish youth. Furthermore, Ahn and Mira (2001) show that, besides marriage, the decision to have the first child is also conditional on leaving the parental home. Therefore, the delay in young people's independence is reducing the fertility period of young couples and is one of the causes of the fall in fertility in Spain. According to EUROSTAT (2002), the fertility rate in Spain, in 2001, was 1.25 children per woman of fertile age, while the average in the EU was 1.47. Almost 50 percent of Spanish adults think that they have fewer children than they would like to. More than 80 percent of these adults point to economic reasons to explain why they do not have more children (CIS, 1998).

On the other hand, Spain is one of the countries that spends least on family and child protection in the EU. According to Abramovici (2003), only 2.7 percent of total social benefits were spent on family or children benefit in Spain in 2000. This contrast with 8.2 percent spent in average in the EU[2]. Besides the small expenditure, the design of child protection in Spain is also unsatisfactory. Sutherland (2001c) simulates the effects of increasing the amount of child benefits by a same proportion in four EU countries. Results show that a similar proportional increase in aggregate expenditure (as percentage of aggregate household disposable income) would reduce child poverty by 11 percent in Denmark and France, 13 percent in the UK and only 2 percent in Spain.

Therefore, reforming child-targeted policies in Spain could be an effective means to achieve two objectives that are of increasing importance in the Spanish political agenda. First, better child-oriented policies could reduce child poverty considerably. Second, policies that reduce the costs of having children could also provide an incentive for earlier leaving of the parental home and higher fertility.

3 METHODOLOGICAL ISSUES

This paper makes use of the static microsimulation model EUROMOD. This model calculates taxes and benefits for each individual of a micro-data sample that is representative of the population at the national level. This allows us to assess the effect of tax-benefit reforms on individual's disposable income. Tax-benefit microsimulation models provide many advantages in comparison to other empirical methods of tax-benefit analysis. First, the use of representative micro-data not only ensures that the analysis takes into account the diversity of individual and household circumstances but also the frequency in which these circumstances occur in the population. Comparing to other methods that provide *illustrative* evidence (such as "model families", comparison of policy rules or aggregate statistics), microsimulation is a step forward, since results obtained are *representative*. Furthermore, instead of taking the tax-benefit system as a black box (getting the amount of taxes and benefits exogenously), microsimulation allow us to understand the system from inside it. Finally, these models can simulate tax-benefit reforms, anticipating effects of future policies or alternative reform scenarios.

3.1 Model and Data

EUROMOD is a tax-benefit microsimulation model for the 15 European Union countries. Using micro-data that is representative at the national level and comparable across countries, this model is a powerful instrument for research on tax-benefit reform in a comparative perspective[3]. Currently, EUROMOD simulates great part of personal taxes and social benefits of the 1998 tax-benefit system[4]. For a description of the assumptions behind the calculations and a discussion of issues affecting the quality and comparability of results see Sutherland (2001a).

EUROMOD is a static model based upon purely arithmetical calculations. Individual behaviour or reactions to tax-benefit reforms are not considered in the simulations. The underlying assumption is that individuals do not change their behaviour after the reform.

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[2] It should also be stressed that Spain has one of the lowest expenditures on social protection in EU.
[3] Immervoll et al (2000) and Sutherland (2001c) are examples of previous studies that have used EUROMOD for comparative child policy analysis.
[4] A new version with 2001 tax-benefit systems will be ready by the end of 2003.

Although this hypothesis is not realistic to analyse effects in the long-run, it is accepted that they are valid for short-run (first degree) analysis.

3.2 Simulations

The objective of the simulations is to assess the effect of "child-targeted policies". In our simulations, child-targeted policies include not only those formally oriented to children, such as child benefits. Elements of policies that are conditional or related to the existence of children (such as day care, housing and social assistance benefits) are also analysed here. Identifying which part of these policies is for children is not always clear-cut. In order to assure a consistent comparison across countries we need to establish a common criterion. The criterion used in this paper is that the policy must relate to "strict childhood". This means that only policies with eligibility or amount conditional on the existence of an individual who is defined as "a dependent child under 18" are taken as child-targeted policies. The term strict is associated to the age limit. If, for instance, a benefit is given to all children under age 21, then the part of the benefit given to children under 18 is considered in the analysis. The benefit paid for individuals aged 18 to 21 is not considered a "child-targeted policy". Moreover, in the case of policies not exclusively targeted to children (such as social assistance or housing benefits), only the part conditional to the existence of children is computed[5].

It should be noticed that due to lack of data in EUROMOD, this paper neither includes nor simulates in-kind benefits or public provided services. This is an important limitation in the analysis. Non-cash benefits have an important effect on family and child welfare and play a major role on the policy debate in most countries. Bradbury and Jäntii (1999) suggest that comparisons of child poverty rates across countries may not change much including or not including non-cash benefits[6]. In addition, Smeeding and Rainwater (2002) note, "while non-cash benefits as a percent of GDP are far more equal across nations than are cash benefits, (…) the nations that spend the most in cash incomes (…) also spend the most on health and education combined". The same tendency is found when analysing family benefits in continental Europe, Ireland and the UK. However, this trend does not hold when Scandinavian countries are included. In contrast to other EU countries, where in-kind benefits

[5] For example, the British *Income Support* is paid to low-income family units with or without children. However, the amount of the benefit increases if the individual or couple has a child. This "complement" for having children is computed as a child-targeted policy.

represent about one quarter of total family/child benefits, in EU Scandinavian countries the share is close to half (Abramovici, 2002). Therefore, all results, but particularly those for Denmark, should be interpreted with caution[7].

Nonetheless, cash benefits are relevant policy tools for child-oriented tax-benefit reforms. In many cases, cash benefits are able to offer similar protection to non-cash benefits (for instance, childcare benefits could have an effect similar to public-provided or subsidised crèches). Moreover, given that they do not induce or restrict consumption to a particular pattern determined by the government, cash benefits are less paternalistic and have a clearer incidence (at least at the household level).

Table 3 lists each country's child-targeted policies that are assessed in this paper. In order to have a better understanding of the structure implemented in each country, child-targeted policies are classified into six policy types: (1) tax reliefs, (2) income-related child benefits, (3) non-income-related child benefits, (4) childcare benefits, (5) housing benefits and (6) social assistance. Tax reliefs include all child-targeted elements of the income tax or social insurance contributions that may alter the tax liability. This category includes tax allowances and tax credits, as well as other child-related tax instruments such as the French family ratio (*quotient familial*). Income-related child benefits comprise all child benefits that are income-tested, while non-income-related child benefits are those not conditional on current income. Childcare benefits are those cash benefits paid for day-care expenditure on children. Housing and social assistance benefits are designed to protect other social needs. However, in many countries these benefits are more generous for families with children. We assess these extra levels of generosity as child-related policies.

The expenditure on child-targeted policies is assessed as the difference in household disposable income before and after excluding these policies from the tax-benefit system. This is carried out by running two simulations: one with the whole tax-benefit system and another, defined as the "baseline", which excludes the child-targeted policies from the system.

In section 5.2, we simulate the child-targeted policies from the countries apart from Spain. It is relatively easy to simulate one country's policy into another using EUROMOD. The

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[6] Whiteford et al (1994) find that, despite differences in level, child poverty rates including and not including education and health benefits are strongly correlated.

countries' databases use common names and definitions for most relevant variables (such as sources of income or demographic and labour characteristics). Therefore, the database from country "A" can be used to run the tax-benefit system in country "B". Likewise, the model structures most tax-benefit policies using functions that are suitable for all countries. Hence, a certain policy from country "A" can be promptly transferred and simulated in country "B". However, some policies require very complicated operations or unusual variables that are not available in all countries. For this reason, some policies use country specific functions that cannot be directly transferred to other countries.

All policies that use common or country specific functions that require variables available in the Spanish data were simulated as they are in the original country. However, some policies use functions that need variables that are not available for Spain. In these cases, similar functions that do not require the "unusual" variable replaced those ones[8]. All monetary parameters were exchanged to 1998 Spanish pesetas using Purchasing Power Parities published by the OECD (2003).

Finally, all simulations assume that all units (individuals, families or households) entitled to a benefit or tax relief claim and correctly receive it. In short, we assume full take-up in all countries and simulations. The only exception is Germany. There is a high discrepancy between the number of simulated entitlements in EUROMOD and the number of recipients of social assistance and housing benefits in the German database (GSOEP). According to Mantovani and Sutherland (2003), EUROMOD simulations assuming full take-up would underestimate the headcount ratio for children aged under 15 by 5 percentage points, in comparison to the number published by Eurostat (based on the ECHP 1998). For this reason, the German social assistance and housing benefits are only simulated for those people who report to receive them in the original data[9].

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[7] According to Abramovici (2002), Denmark is the country with highest proportion of family/child social protection spent on in-kind benefits (60 percent of total family/children protection).

[8] For instance, the UK Income Support is means-tested for capital assets. The Spanish data does not have information on capital assets. As a result, the Income Support simulated in Spain does not include this means test. Nevertheless, other income-test conditions that require data available for Spain were kept in the simulation. This change is expected to produce hardly any effect because few low-income families with children have much capital.

[9] For more details about the quality of the simulations see Grabka (2001) and Mantovani and Sutherland (2003).

3.3 Definitions

This paper adopts the measures most frequently used in the literature on income inequality and poverty. Differences in household size and composition are dealt with applying the modified OECD equivalence scale suggested by EUROSTAT.[10] Throughout the analysis, we assume that household income is equally shared among all household members. Therefore, individual well-being is directly linked to the household disposable income. Nevertheless, the unit of analysis is the individual.

Following UNICEF's recommendation, children are defined as all household members less than 18 years of age. Finally, the poverty line is set to 60 percent of the median of equivalent disposable income in the "baseline scenario"[11]. The poverty line is fixed and used in all reform scenarios. Poverty incidence, intensity and severity are measured using FGT indexes α=0 to 2 (Foster et al, 1984).[12]

4 CHILD-RELATED BENEFITS IN EU COUNTRIES IN 1998

4.1 Policy Description

This section briefly describes child-related benefits in each country in 1998. The Appendix 1 presents each policy simulated by EUROMOD in further detail.[13] It should be noticed that in some countries family policies have been significantly reformed in recent years. Therefore, some policies described here are quite different from the ones that are in use presently[14].

4.1.1 Denmark

The most relevant policy in Denmark is the family allowance, which is paid to all families with children under 18. This benefit is complemented with other non-income-related benefits

[10] The modified OCDE equivalence scale gives weight 1 for the first adult, 0.5 for remaining adults and 0.3 for children under 14 years of age.
[11] Recall that the "baseline scenario" is each country's 1998 tax-benefit system excluding all child-targeted policies.
[12] See Lambert (2001, chapter 6) for a recent survey on poverty measurement.
[13] National tax-benefit systems and the ways they are modelled in EUROMOD are documented in EUROMOD Country Reports: Hansen (2001) for Denmark, Bargain and Terraz (2001) for France, Grabka (2001) for Germany, Levy and Mercader-Prats (2001) for Spain and Sutherland (2001b) for the UK.
[14] Description of recent changes in the British system can be found at Sutherland and Pichaud (2001) and Brewer et al (2001). An excellent description of family benefits in all EU countries can be found at website of the European Observatory of National Family Polices Recent changes in Spain are presented in the next section.

that are paid to lone and disabled parents as well as families with twins. Lower income families may also be eligible for further benefits. Childcare expenses are subsidised for families with income below a certain limit. The amount of income-tested housing and social assistance benefits also increase with the presence of children in the household.

Most child benefits in Denmark are aimed at dependent children under 18. They are paid per child and do not vary with special circumstances. The main exception is the Family Benefit, whose amount per child decreases with the age of the child. These benefits are not included in the income test of any benefit and only social assistance is taxable.

4.1.2 France

The most important child-targeted policy in France is the Family Benefit (FB). This benefit has been always non-income related. However, in 1998 it was exceptionally conditional on income. Following a clear pro-natal objective, FB is granted only to families with two or more children and the amount increases more than proportionally with every additional child.

Other income-related benefits target small children (Young Children Allowance, YCA), families with three or more children (Family Complement, FC), and children in education (Education Related Family Benefit, ERFB). Low-income families are also protected by the Housing Benefit (HB), Minimum Income Guarantee (MIG) and Lone Parent Benefit (LPB).

The tax system benefits families with children through the Quotient Familial (QF) in the income tax and in the special contributions on pensions and unemployment benefits. This instrument divides the tax base by an amount that increases with the number of children. The same amount multiplies the computed tax (after applying the tax rate) to obtain the total tax liability.

There is not a universal definition of a child in the French system. The QF has the broadest child definition (24 year-old individuals in education and with low income are considered children). Most policies increase the amount of the benefit more than proportionally with every additional child. Finally, all child benefits (except ERFB) are included in the MIG's

income test. Therefore, for low-income families, the MIG's rules prevail completely over the ones of the various child benefit instruments[15].

4.1.3 Germany

The most important child-targeted policy in Germany is the Child Benefit (CB). This is a universal benefit that is paid to all families with children. However, some high-income individuals find more profitable to replace the CB with the Child Tax Allowance.

Other child-targeted policies are restricted to lone parents (Lone Parent Tax Allowance), and to mothers of very young children who work less than 19 hours a week (Child raising allowance, CRA), or who do not work at all (Postnatal Benefit, PB). On the other hand, the amount of the German housing and social assistance benefits also increase with the presence of children in the household.

The definition of a child is quite generous in most German benefits. Low-income, unemployed individuals are considered children until 27 years of age in the Child Tax Allowance and Child Benefit. Most policies pay the same amount per each additional child; the main exception is the CB, whose amount increases more than proportionally with every extra child. Finally, the amounts of the social assistance benefits and child raising allowances increase with the age of the child.

4.1.4 United Kingdom

In line with the countries described above, the British system is also based on a universal benefit complemented with income-related-benefits. However, the amount of the universal child benefit (CB) in the UK is around half the amount in the other countries; in PPP euros (see Appendix 1). Moreover, this benefit is counted in the income test of the Income Support, Housing Benefit and Council Tax Benefit. Since Income Support has a 100 percent withdrawal rate, recipients of this benefit have their child benefit "effectively taxed" at 100 percent tax rate[16].

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[15] I thank Olivier Bargain for this comment.

[16] This view about the relation between CB and IS differs from the standard one in the UK. The practice in Britain is that the child benefit is automatically paid to all children and the Income Support amounts are set as a complement. I thank Holly Sutherland for this comment.

Children living in low-income families with at least one working parent may also benefit from Family Credit. The amount of this income-related benefit increases with the number and age of children, and the number of hours worked by the parents. The existence of children in the household also increases the amount of the housing (HB) and council tax benefit (CTB).

At the same time, lone parents, disabled people, pensioners and unemployed who do not work more than 16 hours per week may be eligible to Income Support. The maximum amount of this income-tested benefit increases with every additional child, although that less than proportionally. IS's maximum amount also increases with child age and in lone parent households.

The UK is the only analysed country with a standard definition of dependent children. All child-targeted polices in the UK in 1998 are focused on individuals under 16 years of age or under 19 if in full-time non-advanced education. The British system also implicitly assumes a decreasing "marginal cost of children", since all benefits pay higher individual amounts for the first child. Finally, the system also implicitly considers older children and lone parent households to have higher needs.

4.1.5 Spain

Spain is widely known for its underdeveloped system of child protection (Bradshaw and Finch, 2002). In 1998, there were only two national child-targeted policies in Spain: an income tax Child Tax Credit and an income-tested Child Benefit (*Prestación por hijo a cargo*). The Child Tax Credit was available for children less than 30 years of age, was not refundable and increased more than proportionally with the number of children in the household. The child benefit pays the same amount to all children less than 18 years of age that live in low-income families.

4.2 Policy Outcomes

4.2.1 Expenditure and coverage

Table 4 shows the aggregate expenditure on child-targeted policies (including tax reliefs) as a percentage of aggregate household disposable income in 1998. France is the analysed country that spent most on child-targeted policies, with an aggregate expenditure that is equivalent to 4.4 percent of the aggregate household disposable income. On the other hand, in 1998, Spain

spent less than 0.7 percent of its aggregate household disposable income on child-targeted policies. Aggregate expenditure in Denmark, Germany and the UK was around 3 percent of disposable income.

Non-income-related child benefits are the greatest source of expenditure in all countries except Spain. However, the share of these benefits on the overall expenditure ranges from around 90 percent in Denmark to 40 percent in France. On the other hand, Denmark is the only country without income-related child benefits. In the other countries these benefits represent between 10 and 20 percent of the overall expenditure. Tax benefits are important in France, but especially in Spain where they represent almost 80 percent of the total expenditure. Supplements for the existence of dependent children are considerable in British and Danish social assistance benefits and in the French and Danish housing benefit.

Given the existence of universal benefits, the Danish and German child systems cover all children under 18. The UK has also a universal benefit (Child Benefit). However, since its definition of a dependent child does not include people aged 16 or 17 who are not in full-time non-advanced education, 2 percent of British children under 18 do not receive any benefit. In France, the non-income-related benefit (Family Benefit) is paid only to families with at least two children. Moreover, in 1998 this benefit was income tested. As a result, in 1998 the French system did not cover 3.6 percent of children under 18. In Spain, almost 96 percent of the children under 18 were protected by some child-targeted policy. The great majority (79 percent) gained from the Child Tax Credit, while the income-tested Child Benefit covered only 19 percent.

4.2.2 The distribution of child-related benefits per income decile

Table 5 shows the average expenditure per child and deciles, normalised by overall average expenditure per child[17]. The expenditure is negatively correlated with income in all countries. This negative correlation is clear in Denmark and the UK throughout the income distribution. In France, Germany and Spain expenditure increases in the top.

Figure 1 shows that very different policy combinations achieve this somewhat similar pattern of distribution. In all countries the higher expenditure on low-income children is due to the

[17] Deciles were calculated using equivalent household disposable income as described in section 3.3.

use of income-related child benefits and supplements for children in other income-related benefits, such as social assistance and housing benefit. However, in Denmark this is also due to the fact that non-income related child benefits are higher for lone parents and for households with younger children[18]. Denmark, Germany and the UK level the expenditure per child in the middle of the income distribution using non-income-related child benefits. France and Spain achieve the same result by balancing out the progressivity of the income-related benefits with the regressivity of the tax reliefs. Finally, the relatively high expenditure on rich children in France, Germany and Spain is due to the existence of tax reliefs.

4.2.3 Child poverty

Child-targeted policies are effective reducing child poverty in all analysed countries, except in Spain. Table 6 shows that, in relative terms, the reduction in child poverty headcount ranges from 29 percent in the UK to 63 percent in France. In contrast, child-related policies reduce the child poverty headcount by less than 8 percent in Spain. As a result, before including child-targeted policies, child poverty incidence in Spain is about 4 percentage points lower than in Germany and France. After child-targeted policies are included, child poverty incidence in Spain is 7 and 11 percentage points higher than these countries, respectively.

Regarding poverty intensity and severity, Table 6 shows that the French and the British policies are the most effective at reducing these indexes of child poverty. The reduction in child poverty intensity and severity is much lower in Spain. As a consequence, Spain has the highest poverty intensity level (FGT, α=1) among the analysed countries. Due to non-take-up of income related and social assistance benefits[19], child poverty severity (FGT, α=2) in Germany is higher than any other analysed country.

4.2.4 The distribution of child-related benefits by household types and number of children in the household

Child-targeted policies are particularly generous to lone-parent families. Table 7 shows that the expenditure per child in lone-parent households is greater than the overall average in all

[18] In France and Germany non-income-related benefits also decrease with income. However, this is because the French *Family Benefit* was income tested in 1998, and German better-off households replace the *Child Benefit* with the *Child Tax Allowance*.
[19] In Germany the take-up of housing benefit and social assistance is taken from the data (see section 3.2).

countries, with Denmark being by far the most generous case. In contrast, there is not a common pattern of distribution of expenditure per number of children in the household. Table 8 reveals that while France, Spain and Germany spend relatively more on children living in large families, Denmark and the UK are more generous to children without siblings.

The poverty reducing effect of child policies by household types is significantly different across countries. Table 7 reveals that the French and Danish lone parent policies are particularly effective reducing child poverty in lone parent households. Policies in Germany and France are also very effective reducing child poverty in households with three children or more. On the other hand, child policies in the UK and Denmark are more effective at reducing poverty among children living in households with one or two children. Finally, Spanish policies are relatively more effective at reducing child poverty among lone parents and couples and in households with two or more children.

5 REFORMING SPANISH CHILD-RELATED BENEFITS

5.1 Recent Reforms

In recent years, family-oriented policies became a crucial element in the Spanish policy debate. The Spanish National Action Plan for Inclusion (NAPIncl), submitted to the EU in 2001, includes the "Plan for Family Support" (*Plan Integral de Apoyo a la Familia 2001-2004*) as one of its cornerstones. The objectives of this Plan are to reconcile work and family life, to improve the families' life standards and to allow the principle of demographic continuity through generational replacement. Regarding in-cash child policies, the main measures proposed deal with increasing the expenditure on tax reliefs, increasing the income threshold and compensating the work of mothers with young children.

Many of plan's proposals were implemented in the 2003 tax-benefit system. This presents three notable changes with respect to the system analysed in the previous section. First, the child tax credit was replaced by a more generous tax allowance. Second, the amount and the income-test of the child benefit were increased. Third, a refundable tax credit for working mothers with children aged under three was introduced. Although formally it is a tax relief, in practice the working mother refundable tax credit can be interpreted as a non-income-related benefit, since the mother does not have to be a taxpayer to receive it. Therefore, this new policy actually represents the introduction of the first non-income-related benefit in Spain.

In this section, we simulate the child-targeted policies for Spain in 2003, using the 1998 tax-benefit system as baseline. All policies, except those related to children, are taken from the 1998 system. However, since the effective impact of a tax allowance on disposable income depends on the tax rate, most elements of the 2003 income tax are also included in this simulation[20].

5.1.1 Expenditure and coverage

Recent reforms have increased significantly the expenditure on child-related benefits in Spain. According to Table 9, if 2003 policies have been implemented in 1998, aggregate tax-benefit expenditure on children would represent 1.3 percent of overall household disposable income (90 percent increase with respect to the 1998 system).

Most of the increase was due to the more generous child tax allowances, which represent 0.9 percent of aggregate household disposable income. The new working mother refundable tax credit costs 0.2 percent of aggregate income, exceeding the expenditure on the income-tested Child Benefit.

The system of 2003 reduces the percentage of children who receive some benefit. The percentage of children covered by the system falls from 96 percent, using the 1998 system, to 93.3 percent. The reason for this apparent contradiction is found in the tax cut and the nature of the tax allowances. The tax cut has reduced the number of taxpayers in 2003 with respect to 1998[21]. Since the child tax allowance is not refundable, individuals who do not pay enough income tax do not benefit from it. On the other hand, the new working mother tax credit is refundable. However, since it is targeted to working mothers with infants it only benefits 635,000 children (8 percent of the Spanish population under 18).

5.1.2 The distribution of child-related benefits per income decile

As already observed in other studies[22], high-income households are the ones who gain most from replacing tax credits with tax allowances. Therefore, it is not surprising that the expenditure per child under the 2003 system increases with household income (see Table 10).

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[20] The monetary variables of all 2003 policies were deflated to 1998 levels using Consumer prince index.
[21] See Levy and Mercader (2003) for details on the Spanish income tax reform.
[22] See for example Parker and Sutherland (1991).

Furthermore, in Spain most working mothers live in middle and high-income households. Consequently, the new working mother tax credit reinforces this regressive effect (see 0). On the other hand, the level of expenditure is especially low among children in the second decile. This is due to a discontinuity in the new Spanish system. In one hand, the child benefit is targeted on households with very low income; hence many children in the second decile are not eligible for this benefit. In the other, their household income is not large enough to pay income tax, thus they do not benefit from child tax allowances either.

5.1.3 Child poverty

Given that most of the rise in the expenditure benefits children living in better-off households, the recent reforms have little impact on child poverty. Table 11 shows that the child poverty incidence under the 2003 system is just 0.2 percentage points lower than under the 1998 system. The small reduction, in comparison to the 1998 system, of the poverty intensity index and the maintenance of the poverty severity also demonstrate that the reform fails to improve the targeting to the more vulnerable among the poor.

It should be noticed that the simulations use a sample that is representative of the Spanish population in 1998. Therefore, results are not necessarily accurately representing the situation of Spanish children in 2003. Nevertheless, these can be interpreted as the effect that the 2003 child-related benefits would have had if it had been implemented in 1998 tax-benefit system.

5.1.4 The distribution of child-related benefits by household types and number of children in the household

The recent reforms have considerably changed the distribution of the expenditure per household type in Spain. Following Table 12, only children living in households formed by "traditional families" (couple plus children under 18) receive more protection than the average. Moreover, Table 13 shows that children living in one-child households are the main beneficiaries after the reform. These results are somewhat unexpected. The child tax allowance in the 2003 system is particularly generous to families with three or more children. Hence, it would be expected that children living in such households would be the main beneficiaries. Again, the reason for this unexpected result is the fact that the effective amount of the child tax allowance depends on the amount of the tax base (see section 5.1.1). The

results obtained suggest that households with one dependent child have a greater probability of making effective use of higher child tax allowances

The reform has also reduced the income tax exemption limit for lone parent families using the joint scheme of taxation[23]. As a result, children in lone parent families are no longer receiving more benefits than the average. Moreover, the poverty incidence for children living in large lone-parent families (which is the group with highest poverty risk) increases 9.5 percentage points under the 2003 system.

5.2 Introducing EU child-targeted policies in Spain

This section assesses what would have happened if the child-targeted policies from the other countries analysed in section 4 ("other countries" hereafter) had been implemented in Spain in 1998. Due to lack of data, housing and childcare benefits were not simulated in Spain. This is omission especially relevant in the case of the French and Danish systems since these benefits have a considerable share of the overall expenditure and are very important for low-income households. The German child tax allowance was also not simulated because of the complicated interaction it produces between the income tax and the child benefit. Since, this tax allowance only benefits high-income taxpayers the simulation of the German system in Spain is less generous than expected to better off children. Finally, all simulations assume full take-up. This is consistent with the assumption used in the simulations in section 4, except for German social assistance and housing benefits[24]. Therefore, these benefits are probably overestimated in the Spanish simulations.

5.2.1 Expenditure and coverage

The results presented in section 4.2.1 suggest that the French system is the most expensive of those examined. However, Table 9 shows that the German system would be the most costly if implemented in Spain. Two reasons explain this result. First, the simulations with Spanish data do not include housing benefit, which are a relatively expensive policy in France. Second, Germany is the analysed country with least share of population under 18[25]. Hence,

[23] Under the 1998 system, the joint scheme exemption limit for lone-parent families and for couples was the same. In 2003, the exemption limit for lone-parents is 20 percent lower than for couples.
[24] Recall section 3.2.
[25] According to the datasets used by EUROMOD, the percentage of population under 18 is 19% in Germany, 20% in Spain, 23% in Denmark and 24% in France and the UK.

the lower cost of child-related benefits in Germany, as percentage of aggregate household disposable income, is not related to a higher generosity of the French system but to a lower proportion of children in Germany.

The non-inclusion of housing and day care benefits in the simulations also reduces the potential cost of the Danish system simulated in Spain. As a result, the Danish system would be the least expensive of the analysed systems to implement in Spain.

The simulation of the British system in Spain also provides very interesting results. While in the UK the expenditure on Income Support's supplement for children is appreciably higher than the Family Credit, in Spain results are reversed. This difference is explained by the fact that the percentage of children living in families with no working parents in the UK is double the percentage in Spain[26]. As a result, there are considerably more families eligible for FC in Spain than in the UK. In addition, the Family Credit is considerably more generous to the first child and to older children. Spanish children are in average older than British children and a higher percentage of them live in one-child households. These factors explain part of the higher cost of FC in Spain[27].

Regarding the coverage, the German and the Danish systems assure some protection to all children under 18. Meanwhile, the exclusion of people aged 16 or 17 who are not in full-time non-advanced education, would leave 1.5 percent of Spanish children unprotected by the British system. In the case of the French system, 4.5 percent of the children would not be protected because the Family Benefit is not paid to children living in one-child households.

5.2.2 The distribution of child-related benefits

The distribution of overall child-related benefits would generally maintain in Spain the same pattern they have in their original countries. However, the non-inclusion of some of the policies causes some variations. Therefore, the Danish and the French systems are less progressive than originally because the housing and day care benefits are not included in the

[26] See Table 1. This difference is considerably higher among low-income households. In the UK, only 39% of children in the first decile live in households with at least one employed member. In Spain, 67% of children in the first decile live in this type of households.

[27] The family credit pays higher supplements for children aged 11 or more and is particularly generous to those aged 16 or more. According to the datasets used by EUROMOD, 28 percent of British children are aged 11-15 and 10 percent are age 16+. In Spain these proportions are 30 and 14 percent, respectively.

simulations. On the other hand, the non-inclusion of the child tax allowance makes the German system slightly less generous to children in the top of the income distribution.

Nevertheless, the most remarkable difference takes place with the British system. 0 shows that the Family Credit would be extremely generous for children in the bottom part of the income distribution in Spain. As a result, the British system would be the most generous to children living in low-income households.

5.2.3 Child poverty

The systems of all analysed countries would significantly reduce child poverty in Spain. Of course, the extent of this reduction is related to the aggregate expenditure and the efficiency targeting on the poor. Therefore, it is not surprising that the British system would be the most effective reducing child poverty in Spain. According to Table 11, if the British system had been implemented in Spain in 1998 only 8 percent of Spanish children would have been left poor. Great part of this reduction is due to the British family credit. This benefit alone would be able to reduce child poverty incidence by 10 percentage points. The Danish and the German non-income-related benefits achieve similar levels of poverty reductions, however these benefits would cost substantially more than the FC (see Table 9).

5.2.4 The distribution of child-related benefits by household types and number of children in the household

In contrast to the Spanish 2003 system, the child-targeted policies from other countries would be relatively more generous to non-traditional families. According to Table 12, children in lone parent households would receive benefits well above the overall average. As a result, a substantial proportion of children in this household type would escape poverty. The most impressive example is the Danish system that would bring poverty incidence among children in lone parent households down to one digit. These systems would also be quite generous to children in households with "other adults". However, in many cases the benefits are not enough to compensate the fact children in this group face high poverty gaps[28]. As a result, the poverty reduction effect on this group is lower than on the overall population.

[28] Results on poverty intensity and severity by household types are not presented in the paper but are available by request.

These systems (except the Danish) also diverge from the Spanish by being relatively more generous to large families. As a result, these policies would substantially reduce child poverty in households with 3 or more children. The German and the British systems would especially effective reducing poverty across this group. More than 60 percent of the children in large families would leave poverty if those systems were implemented in Spain.

6 CONCLUSION

This paper has analysed the recent tax-benefit reforms of policies oriented to children in Spain, in a European context. The analysis was carried out using the microsimulation model EUROMOD. Tax-benefit microsimulation models provide many advantages in comparison with other empirical methods of tax-benefit analysis: *representative* results, possibility of assessing interactions or parts of policies separately, and potential to simulate tax-benefit reforms.

Results obtained in this paper show that the tax-benefit expenditure on children in Spain is much lower than in the other EU countries analysed here. Furthermore, Spain is the only analysed country that uses tax reliefs as the main child-targeted policy. Since this type of policies benefit principally better-off households, the Spanish system is particularly deficient at protecting poor children. In contrast, child-related policies play an important role redistributing income and reducing child poverty in the other analysed countries.

Despite the substantial increase after the recent reform, the expenditure on child-related policies in Spain (under the 2003 system) is well below other EU countries. Moreover, this increase was mainly due to higher tax reliefs. The reform has also introduced for the first time a non-income-related benefit in Spain. However, since this new benefit is targeted on working mothers with children aged under 3, its coverage is limited and reinforces the apparently regressive distribution of child protection. As a result, after the reform the Spanish child-related policies are less efficient at reducing child poverty and redistribute income towards the better-off children.

Reforms using the policies from the other countries analysed in this paper would dramatically reshape the child-related benefits in Spain. On the one hand they would cost considerably more than the present system. Therefore, the cost of the simulated reforms presented here makes them hardly feasible for the Spanish government in the short term. However, the recent

reforms indicate that there may be resources - and the political and public will - to further increase the expenditure on child-related policies in the medium-term and long-term. These policies would be very effective redistributing income towards poorer children and reducing child poverty.

In a static and narrow analysis, income-related benefits, such as the British Family Credit, are the most attractive and efficient policies to redistribute income and reduce child poverty. However, the literature shows that this type of policies is not exempt from criticism when analysed from a wider perspective. Atkinson (1993) identifies three major problems in targeting family benefits according to income. First, there is the problem of "imperfect targeting" of income-related-benefits. Eligible families may not be awarded due to administrative errors or non-take-up. Conversely, non eligible families could be awarded due to control failure or fraud. There is substantial evidence about non-take-up problems with income-related-benefits in the UK. According to DWP (2001), in 1999 the Family Credit was the British income-tested benefit with lowest take-up rate (66 percent of entitled caseloads). In fact, one of the objectives of its replacement by the Working Family Tax Credit (WFTC) was the reduction of 'stigma associated with claiming in-work support, and encourages higher take-up' (HM Treasury, 2000). The elimination or, at least, minimisation of this first difficulty causes a second problem: administrative costs. In a world of imperfect and asymmetric information, targeting derives to a "principal-agent problem": government aims to induce all eligible to claim and ensure that all claimants are in fact eligible. Expenditure on advertisement and income-test verification may result in considerable deadweight costs and significant inefficiency. This would be especially important in Spain where there is little tradition in administering income-related-benefits, persistent tax evasion and a considerable informal economy (Laparra and Aguilar, 1997). This lack of know-how can put at risk a reliable assessment of income at a reasonable administrative cost. Regarding the British Family Credit, the administrative cost is especially high because it does not only require controlling the household income but also the number of each parents' working hours per week[29]. The third problem, work incentives, has been in the centre of economic analysis in the last decades. With effective marginal tax rates close to a 100 percent, income-tested benefits maintain disposable income virtually unchanged for a wide range of gross earnings, reducing the incentive to work. In-work benefits, such as the Family Credit, try to avoid this poverty

[29] For more on the administrative characteristics of British in-work benefits see Brewer et al (2001).

trap by conditioning the income-related-benefit to work. However, the existence of an income test suppresses the work incentive in two ways. First, the reduction or elimination of the benefit beyond a given threshold provides few financial incentives to the beneficiaries to search for a better-paid job. While successfully preventing full dependency on social protection (claiming social assistance or unemployment benefit), it is less clear that in-work benefits provide incentives for beneficiaries to achieve full independence in the medium or long-term (Evans, 1996; Brewer, 2000). Second, in-work benefits tend to be jointly assessed on the couple's income[30]. As a result, the second earner (usually the woman) faces higher marginal tax rates and lower work incentives[31]. This problem is particularly relevant in Spain. Section 2 shows that, in contrast to the UK, child poverty in Spain is mainly related to one-earner families. Therefore, increasing work incentives for the second-earner is crucial to reduce child poverty and long-term welfare dependence in Spain.

Non-income-related benefits (such as the Danish family allowance and the German and British child benefit) are less likely to have these problems, however these policies cost noticeably more to reach a similar reduction on child poverty.

Regarding policy recommendations, further analysis would be needed in order to draw firm conclusions about which type of child-related policies would be the most appropriate to Spain. However, the evidence presented here represents an important step in this direction. On the one hand, it shows that microsimulation is a valuable tool for future research in this area. On the other hand, it demonstrates that the recent reforms implemented in Spain reinforce a model of child protection that produces outcomes that could be much improved and that has no similarity with the systems of other EU countries that have more experience in family policy.

[30] This is the case in the UK Family Credit (now WFTC) and the US EITC.
[31] Immervoll (2002) shows that British working women face higher marginal effective tax rates than working men in the bottom of the household income distribution.

REFERENCES

Abramovici, G. (2002) "Social protection: expenditure on cash benefits and on benefits in kind", Population and Social Conditions, Statistics in focus, Theme 3, 16/2002, Eurostat, Luxembourg.

Abramovici, G. (2003) "The social protection in Europe". Population and Social Conditions, Statistics in focus, Theme 3, 3/2003, Eurostat, Luxembourg.

Ahn, N. and Mira, P. (2001), "Job bust, baby bust?: Evidence from Spain", *Journal of Population Economics*, 14(3), pp. 491-504.

Atkinson, A.B. (1995) "On targeting social security", in D van de Walle and K Nead (eds.) Public Spending and the Poor. Baltimore: The Johns Hopkins University Press.

Bargain O and Terraz, I. (2001) "EUROMOD Country Report: France", available at www.econ.cam.ac.uk/dae/mu/emod.htm

Bradbury, B. and Jäntti, M. (1999) "Child poverty across industrialised nations", Innocenti Occasional Papers, Economic and Social Policy Series, no. 71,UNICEF, Florence.

Bradshaw, J. and Finch, N. (2002) A Comparison of Child Benefit Packages in 22 Countries, Department for Work and Pensions, Research Report No 174, London.

Brewer, M. (2001) "Comparing in-work benefits and reward to work for families with children in the US and the UK", *Fiscal Studies*, 22(1), 41-77.

Brewer, M., Clark, T. and Myck, M. (2001) "Credit where it's due? An assessment of the new tax credits", The Institute for Fiscal Studies, Commentary 86, London.

Cantó, O, Del Río, C. y Gradín, C. (2002) La evolución de la pobreza estática y dinámica en España en el período 1985-1995, Papeles de Trabajo del Instituto de Estudios Fiscales, nº 24.

Cantó-Sánchez, O. and Mercader-Prats, M (1999), "Young people leaving home: the impact on poverty in Spain", In: B. Bradbury, S. Jenkins and J. Micklewright (eds) The Dynamics of Child Poverty in Industrialised Countries, Cambridge University Press: Cambridge.

CIS (1998) Estudio CIS 2.283. Barómetro de marzo de 1998, Centro de Investigaciones Sociológicas

Department for Work and Pensions (2001) Income-related benefits estimates of take-up in 1999/00, Government Statiscial Service: London.

Esping-Andersen, G. (1999) Social foundations of post-industrial economies. Oxford: Oxford University Press.

Esping-Andersen, G. and Sarassa, S. (2002) "The generational conflict reconsidered", *Journal of European Social Policy*, Vol. 12(1), pp. 5-21.

Eurostat (2002) First results of the demographic data collection for 2001 in Europe, Luxemburgo.

Evans, M. (1996) "Credit where it's due? The success of Family Credit reassessed", Working Paper WSP/121, LSE, London.

Fernández Cordón, J.A. (1997) "Youth residential independence and autonomy: A comparative study", *Journal of Family Issues,* Vol. 18, pp. 576-607

Foster, J., Greer, J and Thorbecke, E. (1984) "A class of decomposable poverty measures", *Econometrica*, 52, pp.761-766.

Grabka, M. (2001) "EUROMOD Country Report: Germany", available at www.econ.cam.ac.uk/dae/mu/emod.htm

Hansen H (2001) "EUROMOD Country Report: Denmark", available at www.econ.cam.ac.uk/dae/mu/emod.htm

HM Treasury (2000) Tackling poverty and Making Work Pay: Tax credits for the 21st century, The modernisation of Britain's Tax and Benefit System, no. 6, London.

Immervoll H, Sutherland, H. and de Vos, K. (2000) "Child Poverty and Child Benefits in the European Union", EUROMOD Working Paper EM1/00, Microsimulation Unit, Department of Applied Economics, University of Cambridge.

Immervoll, H. O'Donoghue, C. and Sutherland, H (1999) "An Introduction To EUROMOD", EUROMOD Working Paper Series No. EM0/99. Cambridge.

Lambert (2001) The distribution and redistribution of income, Third Edition, Manchester University Press, Manchester.

Laparra, M. and Aguilar Hindrickson, M. (1997), "Social exclusion and minimum income programs in Spain", Comparing social welfare systems in Southern Europe, MIRE Florence Conference, vol.3;

Levy, H. y Mercader-Prats, M. (2001) "EUROMOD Country Report: Spain", available at www.econ.cam.ac.uk/dae/mu/emod.htm

Levy, H. y Mercader-Prats, M. (2003) "Retenciones, número de declarantes y simplicidad en el nuevo IRPF", Revista del ICE, forthcoming

Mantovani, D. and Sutherland, H. (2003) "Social indicators and other income statistics using EUROMOD Baseline: A comparison with Eurostat and National Statistics", EUROMOD Working Paper Series No. EM1/03. Cambridge.

Martínez, M. and Ruiz-Castillo, J. (2002), "The Decisions by Spanish Youth", Journal of Population Economics, 15(3), pp. 305-330.

Mejer, L and Siermann, C. (2000) "Income poverty in the European Union: Children, gender and poverty gaps", Statistics in focus – Population and social conditions, Eurostat, Luxembourg.

MTAS (2000) Anuario de Estadísticas Laborales 1999, Subdirección General de Publicaciones, Ministerio de Trabajo y Asuntos Sociales, Madrid.

Parker H. and H. Sutherland, (1991) "Child Tax Allowances? A comparison of child benefit, child tax reliefs and basic incomes as instruments of family policy", STICERD Occasional Paper 16, LSE.

Smeeding, T. and Rainwater, L (2002) "Comparing Living Standards across Nations: Real Incomes at the Top, the Bottom, and the Middle", mimeo, available at: http://www-cpr.maxwell.syr.edu/faculty/smeeding/selectedpapers/livingstandards.pdf

Sutherland, H. (2001a), "EUROMOD: an integrated European Benefit-tax model, Final Report", EUROMOD Working Paper EM9/01, Department of Applied Economics, University of Cambridge.

Sutherland, H. (2001b) "EUROMOD Country Report: United Kingdom", available at www.econ.cam.ac.uk/dae/mu/emod.htm

Sutherland, H. (2001c) Reducing Child Poverty in Europe: what can static microsimulation models tell us?, EUROMOD Working Paper No. EM5/01.

Sutherland, H. and Piachaud, D. (2001) "Reducing child poverty in Britain: An assessment of government policy 1997-2001", The Economic Journal, vol. 111, pp. F85-F101.

Table 1. Children and Child Poverty Rates By Number of Household Earners

	Spain	Denmark	France	Germany	UK
Proportion of children living in households with :					
0 earner	11.2%	9.0%	9.7%	13.1%	21.4%
1 earner	55.5%	27.7%	40.8%	46.9%	31.3%
2+ earners	33.3%	63.2%	49.5%	40.1%	47.3%
Child Poverty (headcount ratio)					
0 earner	58.4%	17.5%	40.7%	50.0%	69.8%
1 earner	21.0%	8.5%	12.4%	11.7%	25.4%
2+ earners	9.1%	2.2%	2.7%	5.1%	9.1%
All	**21.2%**	**5.4%**	**10.4%**	**14.0%**	**27.1%**
Poverty line (equivalent household disposable income per month in 1998 euros)					
z	**359**	**818**	**666**	**665**	**624**

Notes: The poverty line is computed as 60% of median equivalent household income before child-targeted benefits (see section 3), per month. The equivalence scale used is the modified OECD. The poverty rates include child-targeted benefits, even though the poverty line is drawn without them. Euro exchange rates in December 31st 1998 were: Spain: 166.386; Denmark: 7.46; France: 6.56; Germany: 1.96; UK: 0.70. Earners are defined as all household members that receive employment or self-employment income.
Source: EUROMOD

Table 2. Children By Household Type

	Spain	Denmark	France	Germany	UK
Proportion of children living in households formed by:					
Lone-parents	2.6%	12.8%	7.7%	20.0%	19.1%
Couples with children	68.1%	75.2%	76.6%	62.6%	69.2%
"Other adults" and children	29.3%	12.0%	15.8%	17.0%	11.4%

Notes: Lone-parent families are one-adult households. Households that include a one-parent family and other adults are defined as "Other adults" households. "Other adults" households also include couples with children who share the household with other adults (including sons and daughters aged 18 or more).
Source: EUROMOD

Table 3. Child-targeted policies simulated in EUROMOD 1998

	Tax-reliefs	Income related benefits	Non income related benefits	Housing benefits	Childcare	Social assistance
Spain	o Income Tax - Child Tax credit	o Income-tested Child benefit				
Denmark			o Family Allowances o Ordinary Child Benefit o Extra Child Benefit o Special Child Benefit o Multi Child Benefit	o Housing benefit o Housing allowance	o Day-care subsidy	o Social Assistance
Germany	o Income Tax - Child Tax Allowance o Lone Parent Allowance	o Child Raising Allowance o Post Natal Benefit for Non-Earning Mothers	o Child Benefit	o Housing benefit		o Social Assistance
France	o Income Tax (Family Ratio) o Special Contribution on Pensions (Family Ratio) o Special Contribution on Unemployment (Family Ratio)	o Young Children Allowance o Family Complement o Education Related Family Benefit	o Family Allowance	o Housing benefit		o Minimum Income Guarantee o Lone Parents Benefit
United Kingdom	o Lone Parent Allowance	o Family Credit	o Child Benefit	o Housing benefit o Council tax benefit		o Income Support
Spain 2003	o Income Tax - Child Tax allowance	o Income-tested Child benefit	o Working mother tax credit			

Note: For detailed descriptions of each country's tax-benefit systems see the C*ountry Reports*, available at www.econ.cam.ac.uk/dae/mu/emod.htm

Table 4. Child-related benefits: expenditure and coverage in EU countries 1998

	Overall	Tax Reliefs	Income-related benefits	Non-income-related benefits	Housing benefits	Childcare benefits	Social assistance benefits
Aggregate expenditure as percentage of household disposable income							
Spain	0.67%	0.52%	0.14%	-	-	-	-
Denmark	3.23%	-	-	2.81%	0.19%	0.13%	0.22%
France	4.36%	1.20%	0.84%	1.69%	0.55%	-	0.09%
Germany	3.08%	0.26%	0.33%	2.40%	0.01%	-	0.08%
UK	2.98%	0.03%	0.41%	1.85%	0.08%	-	0.66%
Percentage of children living in households that receive some benefit							
Spain	95.5%	78.7%	19.2%	-	-	-	-
Denmark	100.0%	-	-	100.0%	8.4%	5.8%	2.7%
France	96.4%	69.3%	57.0%	70.8%	38.8%	-	3.4%
Germany	100.0%	15.8%	10.5%	96.0%	1.4%	-	3.9%
UK	97.8%	5.1%	11.1%	97.8%	4.6%	-	26.1%

Source: EUROMOD.

Table 5. Distribution of expenditure per child per decile in EU countries [% of average expenditure per child]

	Spain	Denmark	France	Germany	UK
1	114.90%	181.78%	128.72%	117.21%	160.22%
2	93.55%	169.79%	115.32%	115.63%	145.28%
3	96.15%	104.64%	103.89%	101.58%	101.02%
4	94.74%	87.35%	96.95%	98.11%	75.82%
5	96.27%	83.51%	89.09%	87.52%	68.38%
6	97.46%	76.26%	83.85%	90.37%	63.40%
7	94.45%	73.13%	80.76%	85.95%	60.61%
8	101.46%	72.57%	76.15%	86.24%	61.44%
9	101.69%	73.25%	77.14%	92.24%	61.46%
10	100.45%	71.27%	101.57%	98.66%	62.32%

Note: Average expenditure per child per decile normalised by overall mean. Deciles were calculated using equivalent household disposable income without child-targeted benefits. Equivalence scale used: modified OECD.
Source: EUROMOD.

Table 6. Child poverty in EU countries

	No child policy	All child policies	Tax Reliefs	Income-related benefits	Non-income-related benefits	Housing benefits	Childcare benefits	Social assistance benefits
Poverty Incidence (FGT, α = 0)								
Spain	23.0%	21.2%	21.6%	22.8%	23.0%	23.0%	23.0%	23.0%
Denmark	13.1%	5.4%	13.1%	13.1%	7.7%	12.3%	12.4%	12.3%
France	27.9%	10.4%	27.1%	24.0%	21.1%	24.6%	27.9%	27.6%
Germany	26.8%	14.0%	26.3%	24.8%	16.1%	26.5%	26.8%	25.6%
UK	38.1%	27.1%	38.0%	36.4%	34.0%	37.6%	38.1%	35.7%
Poverty Intensity (FGT, α = 1)								
Spain	7.9%	7.1%	7.7%	7.3%	7.9%	7.9%	7.9%	7.9%
Denmark	3.7%	1.2%	3.7%	3.7%	1.7%	3.1%	3.3%	3.5%
France	8.1%	1.6%	8.0%	5.9%	4.5%	5.9%	8.1%	7.7%
Germany	10.7%	5.8%	10.6%	9.7%	6.6%	10.6%	10.7%	10.2%
UK	14.4%	4.6%	14.4%	12.4%	9.8%	14.0%	14.4%	10.6%
Poverty Severity (FGT, α = 2)								
Spain	4.2%	3.6%	4.2%	3.7%	4.2%	4.2%	4.2%	4.2%
Denmark	1.8%	0.5%	1.8%	1.8%	0.8%	1.4%	1.4%	1.7%
France	3.3%	0.4%	3.2%	2.0%	1.3%	2.1%	3.3%	3.0%
Germany	7.6%	3.8%	7.5%	6.6%	4.4%	7.6%	7.6%	7.4%
UK	6.8%	1.2%	6.8%	5.6%	3.7%	6.6%	6.8%	4.2%

Notes: The poverty line is computed as 60% of median equivalent household income before child-targeted benefits per month (see section 3 and Table 1 for details). Equivalence scale used: modified OECD.
Source: EUROMOD.

Table 7. Child-related benefits and child poverty incidence per household type in EU countries

	Spain	Denmark	France	Germany	UK
Expenditure on child-related benefits per child per household type (as % of overall average expenditure per child)					
Lone-parents	109.9%	234.8%	135.5%	123.0%	168.8%
Couples with children	95.1%	79.6%	93.1%	95.0%	82.9%
"Other adults" and children	109.3%	85.5%	115.0%	94.5%	91.8%
Child poverty incidence (FGT, a = 0) excluding all child-related policies					
Lone-parents	49.4%	37.4%	46.5%	50.5%	76.0%
Couples with children	19.5%	9.0%	24.7%	20.4%	29.3%
"Other adults" and children	28.6%	13.3%	34.4%	22.8%	29.2%
Child poverty incidence (FGT, a = 0) including all child-related policies					
Lone-parents	44.7%	5.8%	9.0%	32.3%	49.5%
Couples with children	17.9%	4.9%	8.8%	8.7%	22.3%
"Other adults" and children	27.0%	8.0%	18.3%	12.3%	19.4%

Notes: Measured as average expenditure per child and per household type as a percentage of the average expenditure per child of the overall population. Poverty incidence measured as the headcount ratio (FGT, α=0). The poverty line is computed as 60% of median equivalent household income before child-targeted benefits per month (see section 3 and Table 1 for details). Equivalence scale used: modified OECD. Lone-parent families are one-adult households. Households that include a one-parent family and other adults are defined as "Other adults" households. "Other adults" households also include couples with children who share the household with other adults (including sons and daughters aged 18 or more).
Source: EUROMOD.

Table 8. Child-related benefits and child poverty incidence per number of children in the household in EU countries

	Spain	Denmark	France	Germany	UK
Expenditure on child-related benefits per child per household type (as % of overall average expenditure per child)					
One child	91.4%	126.4%	73.9%	102.4%	119.5%
Two children	98.6%	92.0%	93.5%	95.5%	91.2%
Three or more children	118.3%	82.3%	127.1%	106.7%	100.2%
Child poverty incidence (FGT, a = 0) excluding all child-related policies					
One child	18.5%	11.1%	14.4%	18.6%	29.5%
Two children	20.3%	9.6%	19.7%	23.5%	28.5%
Three or more children	38.4%	22.9%	48.1%	46.2%	57.0%
Child poverty incidence (FGT, a = 0) including all child-related policies					
One child	17.8%	4.2%	7.5%	14.1%	18.7%
Two children	18.6%	2.2%	8.2%	12.2%	19.5%
Three or more children	35.0%	13.4%	15.1%	17.6%	43.0%

Notes: Measured as average expenditure per child and per household type as a percentage of the average expenditure per child of the overall population. Poverty incidence measured as the headcount ratio (FGT, α=0). The poverty line is computed as 60% of median equivalent household income before child-targeted benefits per month (see section 3 and Table 1 for details). Equivalence scale used: modified OECD.
Source: EUROMOD.

Table 9. Child-related benefits: expenditure and coverage in Spain

	Overall	Tax Reliefs	Income-related benefits	Non-income-related benefits	Housing benefits	Childcare benefits	Social assistance benefits
Aggregate expenditure as percentage of household disposable income							
Spain 2003 system	1.3%	0.9%	0.2%	0.2%	0.0%	0.0%	0.0%
Danish system	3.9%	0.0%	0.0%	3.2%	0.0%	0.0%	0.6%
French system	4.4%	2.2%	0.5%	1.4%	0.0%	0.0%	0.3%
German system	4.8%	0.0%	0.2%	4.2%	0.0%	0.0%	0.4%
British system	4.4%	0.0%	1.7%	2.4%	0.0%	0.0%	0.4%
Percentage of children living in household that receive some benefit							
Spain 2003 system	93.3%	74.9%	18.5%	8.1%	0.0%	0.0%	0.0%
Danish system	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	7.8%
French system	95.4%	75.5%	29.9%	54.7%	0.0%	0.0%	4.1%
German system	100.0%	0.0%	5.6%	100.0%	0.0%	0.0%	8.9%
British system	98.5%	0.0%	29.1%	98.5%	0.0%	0.0%	7.2%

Source: EUROMOD.

Table 10. Distribution of child-related benefits per child and decile in Spain [% of average expenditure per child]

	Spain 2003 system	Danish system	French system	German system	British system
1	69.4%	149.8%	106.8%	143.8%	221.7%
2	48.0%	115.7%	94.8%	100.6%	153.6%
3	61.2%	104.5%	96.9%	100.1%	123.5%
4	81.6%	96.8%	98.1%	101.0%	75.4%
5	87.6%	91.3%	91.5%	97.0%	71.6%
6	91.6%	85.6%	90.0%	90.6%	67.2%
7	99.9%	81.6%	91.1%	87.8%	54.8%
8	134.9%	84.9%	101.3%	88.3%	57.7%
9	151.9%	85.5%	92.6%	85.9%	54.8%
10	183.6%	80.6%	127.7%	84.7%	53.8%

Note: Average expenditure per child per decile normalised by overall mean. Deciles were calculated using equivalent household disposable income without child-targeted benefits. Equivalence scale used: modified OECD.
Source: EUROMOD.

Table 11. Child poverty in Spain

	No child policy	All child policies	Tax Reliefs	Income-related benefits	Non-income-related benefits	Housing benefits	Childcare benefits	Social assistance benefits
Poverty Incidence (FGT, α = 0)								
Spain 2003 system	23.0%	21.0%	21.7%	22.2%	22.0%	22.5%	22.5%	22.5%
Danish system	23.0%	13.4%	23.0%	23.0%	15.1%	23.0%	23.0%	21.5%
French system	23.0%	12.9%	21.1%	19.8%	17.8%	23.0%	23.0%	21.9%
German system	23.0%	11.8%	23.0%	22.1%	13.9%	23.0%	23.0%	22.6%
British system	23.0%	7.7%	23.0%	13.2%	17.4%	23.0%	23.0%	22.2%
Poverty Intensity (FGT, α = 1)								
Spain 2003 system	7.9%	7.0%	7.9%	7.2%	7.9%	8.0%	8.0%	8.0%
Danish system	7.9%	3.6%	7.9%	7.9%	4.5%	7.9%	7.9%	6.7%
French system	7.9%	3.9%	7.7%	6.4%	5.5%	7.9%	7.9%	7.2%
German system	7.9%	2.5%	7.9%	7.5%	3.9%	7.9%	7.9%	6.4%
British system	7.9%	1.4%	7.9%	3.7%	5.5%	7.9%	7.9%	6.8%
Poverty Severity (FGT, α = 2)								
Spain 2003 system	4.2%	3.6%	4.3%	3.6%	4.3%	4.3%	4.3%	4.3%
Danish system	4.2%	1.6%	4.2%	4.2%	2.1%	4.2%	4.2%	3.4%
French system	4.2%	1.8%	4.2%	3.2%	2.6%	4.2%	4.2%	3.8%
German system	4.2%	0.8%	4.2%	3.9%	1.7%	4.2%	4.2%	2.7%
British system	4.2%	0.4%	4.2%	1.7%	2.6%	4.2%	4.2%	3.3%

Notes: The poverty line is computed as 60% of median equivalent household income before child-targeted benefits per month (see section 3 and Table 1 for details). Equivalence scale used: modified OECD.
Source: EUROMOD.

Table 12. Child-related benefits and child poverty incidence per household type in Spain

	Spain 2003 system	Danish system	French system	German system	British system
Expenditure on child-related benefits per child per household type (as % of overall average expenditure per child)					
Lone-parents	66.8%	201.1%	144.8%	113.3%	150.3%
Couples with children	107.8%	86.5%	96.5%	90.9%	87.7%
"Other adults" and children	84.2%	106.7%	103.2%	109.6%	123.6%
Child poverty incidence (FGT, a = 0) including all child-related policies					
Lone-parents	46.9%	9.9%	18.9%	23.8%	19.6%
Couples with children	17.5%	11.1%	10.9%	9.8%	5.3%
"Other adults" and children	26.8%	19.0%	17.1%	15.4%	12.1%

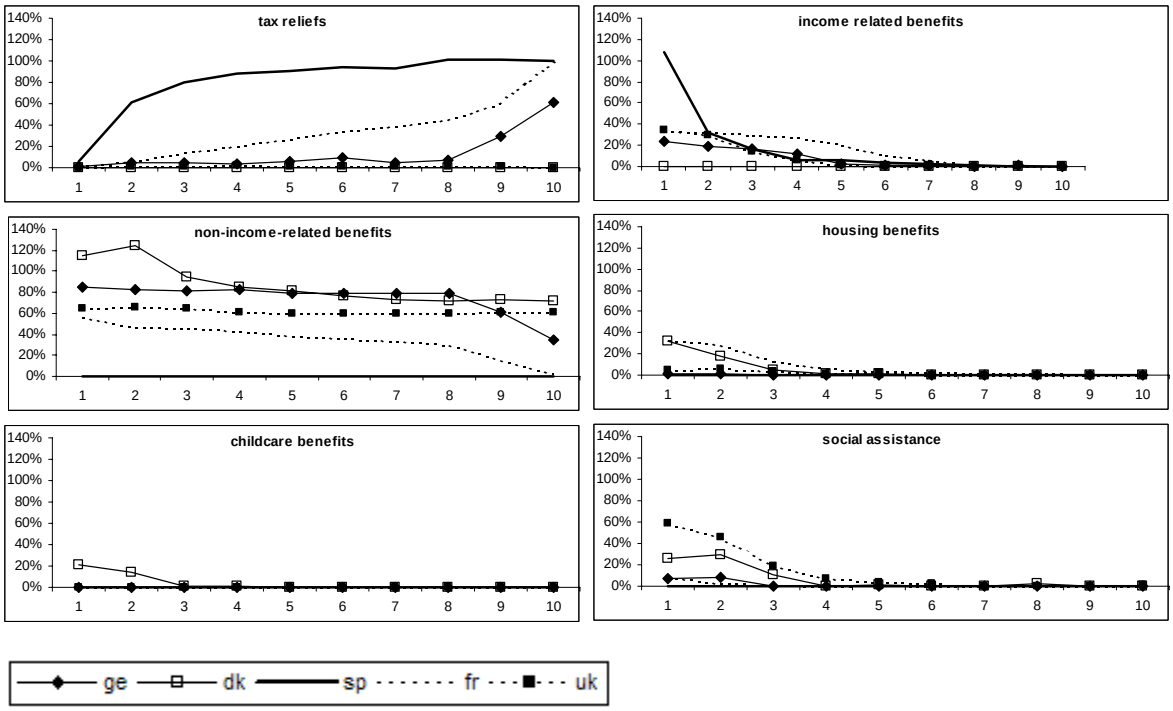
Notes: Measured as average expenditure per child and per household type as a percentage of the average expenditure per child of the overall population. Poverty incidence measured as the headcount ratio (FGT, α=0). The poverty line is computed as 60% of median equivalent household income before child-targeted benefits per month (see section 3 and Table 1 for details). Equivalence scale used: modified OECD. Lone-parent families are one-adult households. Households that include a one-parent family and other adults is defined as "Other adults" households. "Other adults" households also include couples with children who share the household with other adults (including sons and daughters aged 18 or more).Source: EUROMOD.

Table 13. Child-related benefits and child poverty incidence per number of children in the household in Spain

	Spain 2003 system	Danish system	French system	German system	British system
Expenditure on child-related benefits per child per household type (as % of overall average expenditure per child)					
One child	104.1%	109.7%	67.6%	98.2%	115.3%
Two children	97.0%	88.7%	102.5%	91.5%	91.3%
Three or more children	102.3%	91.5%	145.2%	111.4%	100.2%
Child poverty incidence (FGT, a = 0) including all child-related policies					
One child	18.0%	11.8%	14.9%	13.5%	8.9%
Two children	18.2%	11.9%	11.1%	11.1%	6.3%
Three or more children	34.4%	20.4%	15.0%	11.1%	9.7%

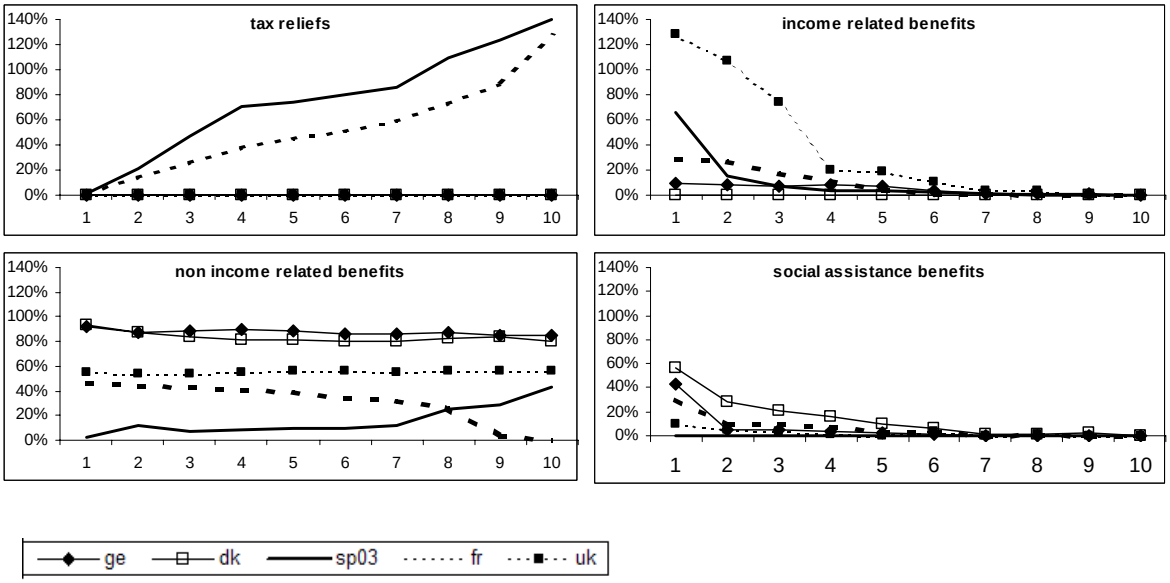
Notes: Measured as average expenditure per child and per household type as a percentage of the average expenditure per child of the overall population. Poverty incidence measured as the headcount ratio (FGT, α=0). The poverty line is computed as 60% of median equivalent household income before child-targeted benefits per month (see section 3 and Table 1 for details). Equivalence scale used: modified OECD.
Source: EUROMOD.

Figure 1. Distribution of expenditure per child per decile in EU countries [% of average expenditure per child]



Source: EUROMOD

Figure 2. Distribution of expenditure per child per decile in Spain [% of average expenditure per child]



Source: EUROMOD

Appendix 1. Child-related benefits in 1998

	Name	Type	Target	Child definition[1]	Eligibility depends on			Amount per child[5]	Amount varies with					Taxed
					Emp[2]	Hrs[3]	Ch[4]		Ch[4]	Age [6]	LP[7]	Emp[2]	Hrs[3]	
DK	*Family allowance*	Non-income-related benefit	All children	<18	No	No	>0	1,475 €	Yes, Prop	Yes ↓	No	No	No	No
	Ordinary child benefit	Non-income-related benefit	Lone and disable parents	<18	No	No	>0	622 €	Yes, Prop	No	No	No	No	No
	Extra child benefit	Non-income-related benefit	Lone parents	<18	No	No	>0	475 €	No	No	No	No	No	No
	Special child benefit	Non-income-related benefit	Lone or disable parents without alimony pay	<18	No	No	>0	1,193 €	Yes, Prop	No	No	No	No	No
	Multi child benefit	Non-income-related benefit	Lone or disable parents with twins	<7	No	No	>1	770 €	Yes, Prop	No	No	No	No	No
	Housing benefit	House benefit	Families with rented accommodation	<23	No	No	No	- [dk2]	-	No	No	No	No	No
	Housing allowance	House benefit	Low income families	<18	No	No	No	- [dk2]	-	No	No	No	No	IT
	Day care subsidy	Childcare	Low income families	<6	No	No	>0	3,629 € [dk1]	Yes, Prop	Yes ↓	No	No	No	No
	Social assistance	Social assistance	Low income families	<18	No	No	No	310 € [dk3]	No	No	No	No	No	IT
FR	*Income tax*	Tax relief	Quotient familial	<18; <21 inc; <25 edu, inc	-	-	No	1/2 part [fr1]	Yes, MP	No	No	No	No	-
	"Csg" special contribution on unemployment benefit	Tax relief	Quotient familial	<18; <21 inc; <25 edu, inc	-	-	No	1/2 part [fr1]	Yes, MP	No	No	No	No	-
	"Csg" special contribution on pensions	Tax relief	Quotient familial	<18; <21 inc; <25 edu, inc	-	-	No	1/2 part [fr1]	Yes, MP	No	No	No	No	-
	Family benefit	Non-income-related benefit	Child benefit	<16; <19 inc; <20 edu, inc	No [c]	No	>1	1,250 € [fr2]	Yes, MP [a]	Yes ↑	Yes [b]	No [c]	No	CRDS, RMI[d]
	Young children allowance	Income-related benefit	Young child benefit	<3	No [c]	No	>0	1,791 €	No [a]	No	No [b]	No [c]	No	CRDS, RMI[d]
	Family complement	Income-related benefit	Families with 3 or more children	>2 and <16; <19 inc; <20 edu, inc	No [c]	No	>2	1,625 €	No [a]	No	No [b]	No [c]	No	CRDS, RMI[d]
	Education related family benefit	Income-related benefit	Children in education	>5 & <18 edu, in soc assist	No	No	>0	633 €	Yes, Prop [a]	No	No	No	No	CRDS, RMI[d]
	Education related family benefit	Income-related benefit	Children in education	>5 & <18 edu	No	No	>0	243 €	Yes, Prop [a]	No	No	No	No	CRDS, RMI[d]
	Housing benefit	Housing benefit	Families with rent or mortgage	<20 inc	No	No	No	- [fr3]	-	No	No	No	No	No
	Minimum income guarantee (rmi)	Social assistance	Low income families	<15; <20 edu	No	No	No	1,333 €	Yes, MP	No	Yes ↑	No	No	No
	Lone parent benefit	Social assistance	Lone parent families	<17; <19 edu	No	No	>0	7,800 €	Yes, Prop	No	-	No	No	AS, RMI, IB

continues…

	Name	Type	Target	Child definition[1]	Eligibility depends on			Amount per child[5]		Amount varies with					Taxed
					Emp[2]	Hrs[3]	Ch[4]			Ch[4]	Age [6]	LP[7]	Emp[2]	Hrs[3]	
D	*Lone parent tax allowance*	Tax relief (tax allowance)	Lone parent families	<17; <22 edu	No	No	>0	2,871 €		No	No	-	No	No	-
	Child tax allowance	Tax relief	Children of medium-high income taxpayers	<19; <22 edu, inc; <28, unemp, inc	No	No	>0	3,533 €		Yes, Prop	No	-	No	No	-
	Child benefit	Non-income-related benefit	All children	<19; <22 edu, inc; <28, unemp, inc	No	No	>0	1,350 €		Yes, MP	No	-	No	No	No
	Post natal benefit	Non-income-related benefit	Non working mothers	<1	Yes [g]	No	>0	76 €		Yes, Prop	No	No	No	No	SAB
	Child raising allowance (federal and per länder)	Income-related benefit	Young children	<3	No	Yes [e]	>0	3,067 €	ge1	Yes, Prop	Yes ↑	No	No	No	SAB
	Housing benefit	Housing benefit	Families with rent or mortgage	<24	No	No	No	-	ge2	-	No	No	No	No	No
	Social assistance (federal and per länder)	Social assistance	Low income families	<17	No	No	>0	1,920 €	ge3	Yes, Prop	Yes ↑	Yes ↑	No	No	No
UK	*Lone parent tax credit*	Tax relief (Tax credit)	Lone parents	<16; <19 edu	No	No	>0	405 €		No	No	-	No	No	-
	Child benefit	Non-income-related benefit	Children	<16; <19 edu	No	No	>0	690 €		Yes, LP	No	Yes ↑	No	No	Income support; housing and council tax benefit
	Family credit	Income-related benefit	Children in working families	<16; <19 edu	Yes	>16	>0	4,522 €		Yes, LP	Yes ↑	No	No	Yes ↑	Housing benefit; council tax benefit
	Council tax benefit	Housing benefit	Low income families	<16; <19 edu	No	No	No	-	uk1	Yes, LP [a]	Yes ↑ [a]	Yes ↑ [b]	No	No	No
	Housing benefit	Housing benefit	Low income families with rent	<16; <19 edu	No	No	No	-	uk2	Yes, LP [a]	Yes ↑	Yes ↑	No	No	No
	Income support	Social assistance	LP, unemp, pens & disable parents	<16; <19 edu	No	<17	No	1,280 €		Yes, LP	Yes ↑	Yes ↑	No	No	No

continues…

	Name	Type	Target	Child definition[1]	Eligibility depends on			Amount per child[5]	Amount varies with					Taxed
					Emp[2]	Hrs[3]	Ch[4]		Ch[4]	Age[6]	LP[7]	Emp[2]	Hrs[3]	
E	*Child tax credit 1998*	Tax relief (Tax credit)	Children	<30 inc	No	No	>0	150 €	Yes, MP	No	No [h]	No	No	-
	Child benefit 1998 [i]	Income-related benefit	Children in low income families	<18 inc	No	No	>0	245 €	Yes, Prop	No	No [h]	No	No	No
	Child tax allowance 2003	Tax relief (Tax allowance)	Children	<25 inc	No	No	>0	1,211 €	Yes, MP	Yes ↓	No [h]	No	No	-
	Working mother refundable tax credit 2003	Tax relief (Ref tax credit)	Working mothers w/ young children	<3	Yes	No	>0	1,400 €	Yes, MP	No	No	No	No	-
	Child benefit 2003 [i]	Income-related benefit	Children in low income families	<18 inc	No	No	>0	252 €	Yes, Prop	No	No [h]	No	No	No

Notes:

[1] Age limit (<*30*), income limit (*inc*), must be in education (*edu*), must be unemployed (*unemp*). [2] Employment statuses of parents. [3] Number of hours worked by parents. [4] Number of children . [5] Annual amount for a household with one new-born child and with no income. [6] Age of children. [7] Lone parent.

[dk1] Average annual cost of a nursery in 1998 [dk2] The amount depends on rent payments [dk3] Difference between maximum social assistance benefit for an eligible person with and without children. [fr1] One part if first child of a lone parent. [fr2] For second child in the household. [fr3] The amount depends on rent or mortgage payments [ge1] Amount for the Federal child raising allowance. [ge2] The amount depends on rent or mortgage payments. [ge3] Amount for west Germany and east Berlin. [it1] Difference between family benefit for a couple with very low income and no children and the same income and 1 child. [uk1] The amount depends on council tax payments [uk2] The amount depends on rent payments

[a] Income-test disregard changes with the number or age of children. [b] Income-test disregard changes if it is a single or lone parent family. [c] Income-test disregard changes with the number of employed parents . [d] CRDS – Special social contribution on family benefits. [e] Not eligible if mother works more than 19 hours per week. [f] Income-test disregard increases with age of children. [g] Not eligible if mother has employment income. [h] Lone parents are allowed to choose the joint scheme of taxation. [i] There are two child benefits, one for social security contributors and other those who do not contribute. However, eligibility conditions and amount of the benefit is the same in both policies. EUROMOD take them as one benefit. These benefits have special rules (no age or income limit and higher amount of benefit) for disable children. Due to lack of data these special rules are not simulated in EUROMOD.

For detailed descriptions of each country's tax-benefit systems see the C*ountry Reports*, available at www.econ.cam.ac.uk/dae/mu/emod.htm