

Child benefit packages in 22 countries

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SUMMARY

This paper compares the structure and level of the “package” of tax benefits, cash benefits, exemptions from charges, subsidies and services in kind which assist parents with the costs of raising children - in 22 industrialised countries as at July 2001. It is based on the model family method using national informants. The level of the package varies within and between countries by the number of children, type of family and by earnings. Austria, Luxembourg and Finland have the most generous package. After charges for services and housing costs a number of countries provide no support for children. Among the explanations for the variation in the packages are that there is a trade-off between spending on children and spending on the elderly. Those countries with more generous packages have lower child poverty rates and higher fertility rates.

1 INTRODUCTION

Every welfare state has a package of tax benefits, cash benefits, exemptions from charges, subsidies and services in kind which assist parents with the costs of raising children. We recently completed a comparative study of this package in 22 countries, using the model family method (Bradshaw and Finch, 2002). In the Social Policy Research Unit at the University of York we have undertaken a number of comparative studies of the structure and value of this package. The first was carried out by Bradshaw and Piachaud (1980) comparing the UK with the then nine countries of the European Community. This study was replicated and extended to 15 countries for the Department of Social Security in 1992 and published by them (Bradshaw et al., 1993). Then more recent data up to 1996 was collected for the European Union as part of the work of the European Observatory on National Family Policies (Ditch et al., 1995, 1996, 1998). There has been no comparison of these policies since 1996.

This paper seeks to compare the child benefit package in 22 countries, as of July 2001. We will first compare the structure of the package and explore how this varies by number of children, earnings and family type. We will then construct an overall measure of the package and from this a country ranking will be obtained that relates to the overall child benefit package. Finally, we shall try to explain these differences and explore the affect the child benefit package has upon child poverty and fertility levels. But first, we shall explain our methodology.

2 METHOD

There are broadly five ways in which to compare tax/benefit packages for families with children:

- International data bases.
- Micro-simulation models.
- Outcome studies.
- Analysis of National Accounts.
- Model family methods.

International databases

There are a number of international databases that can be used to make comparisons. These sources are useful for comparisons of single individual benefits – for example The European Union (EU) funded Mutual Information System on Social Protection (MISSOC) can be used to make comparisons of the level of child benefit payable in

each country and how it has changed over time. However the main weakness of these sources is that they do not deal with *packages*. To compare one element of the package, say child cash benefits, is likely to misrepresent the overall value of the package.

Micro-simulation models

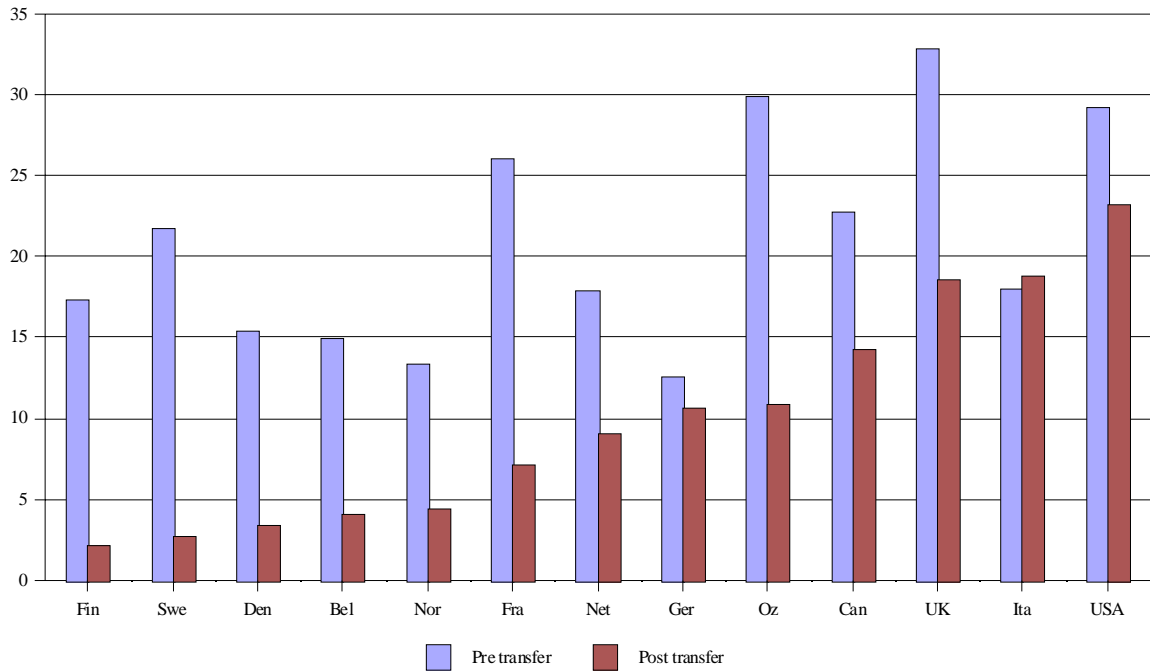
The Cambridge Micro-simulation Unit has developed EUROMOD which consists of programmes containing the rules governing taxes and benefits and linked to an income survey for each country included. The programme for each country's survey contains all the details necessary to compare tax and benefit systems, including those for families with children. Whilst EUROMOD has tremendous potential in comparative research, it only covers EU countries, it is still in experimental phases and as yet, EUROMOD has not been used to compare tax/benefits packages for families with children (but see Immervoll et al 2001 and O'Donoghue and Sutherland 1999). At the moment the model family method remains a quicker and more up-to-date method for making comparisons.

Outcome studies

It is possible to study the impact of the tax/benefit package indirectly by observing outcomes. The most common way of doing this is to use micro social data sets such as the Luxembourg Income Study, the European Community Household Panel Survey, the European Budget Survey or the data accumulated from national micro social data sets by OECD. Then to estimate poverty rates or degrees of inequality as an indicator of the success of the tax/benefit package. Commonly researchers seek to observe the impact of policy by comparing poverty rates before and after taxes and benefits. Chart A1.1 shows the results of such an analysis by OECD (Oxley *et al.*, 2001) designed to show the relative effectiveness of the tax/benefit package. The before transfer figures give an indication of market-derived child poverty – poverty determined by earnings, rents, dividends and interest and private transfers such as child support. The after transfer figures take account of the impact of tax and benefit package on these incomes. The extent to which pre-transfer poverty is reduced is a measure of the success of the package. It can be seen that the Nordic countries and France have packages that reduce pre-transfer poverty by about 80 per cent. In contrast the package in the UK reduces child poverty by 40 per cent and the Italian package actually results in an increase in child poverty.

Chart A1.1: Impact of transfers on child poverty rates mid 1990s

Source: Oxley et al (2001)



The advantage of this type of analysis is that it focuses on outcomes, which is, after all, what policy is about. Another advantage is that we obtain a picture of what the pre-transfer challenge is. However there are a number of disadvantages.

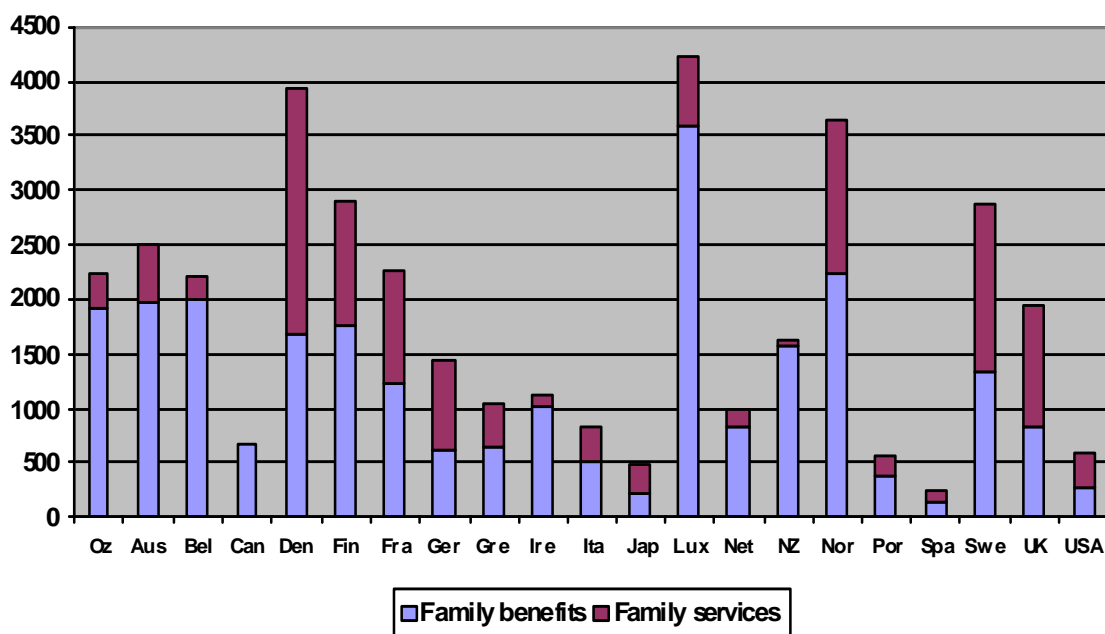
- The data for these comparisons takes a long time to emerge.
- Then there are arguments about what is and should be included in pre-transfer, market-generated income.
- Then there is the argument that pre-transfer income is not actually market income because it is, for some households, in most countries, in part, the result of minimum and equal wage legislation, job creation and other employment subsidies – all of which might be considered elements of the child tax/benefit package.
- Then the pre-transfer distribution is a function of demographic and labour market circumstances which are different in different countries – In comparing the tax/benefit package we are not comparing like with like.
- Because these comparisons are based on micro data sets they generally make no attempt to incorporate the costs or value of services, only taxes and benefits.
- Finally this kind of analysis treats the tax and benefit system rather as a black box – it cannot show which element is making the difference, how it is structured, or what might be improved.

National accounts

Another way to compare the value of the tax/benefit package for families with children is to employ national accounts, to make comparisons of the amount spent on families with children. Both the EU and OECD produce comparisons of national accounts which enable comparisons between countries. The OECD identifies expenditure on family benefits and family services. Previous studies of the child tax/benefit package have attempted comparisons using these data (Kammerman and

Kahn, 1997; Bradshaw *et al.*, 1993). Chart A1.2 shows the amount per child that countries in this study spent on family benefits and services in 1997.

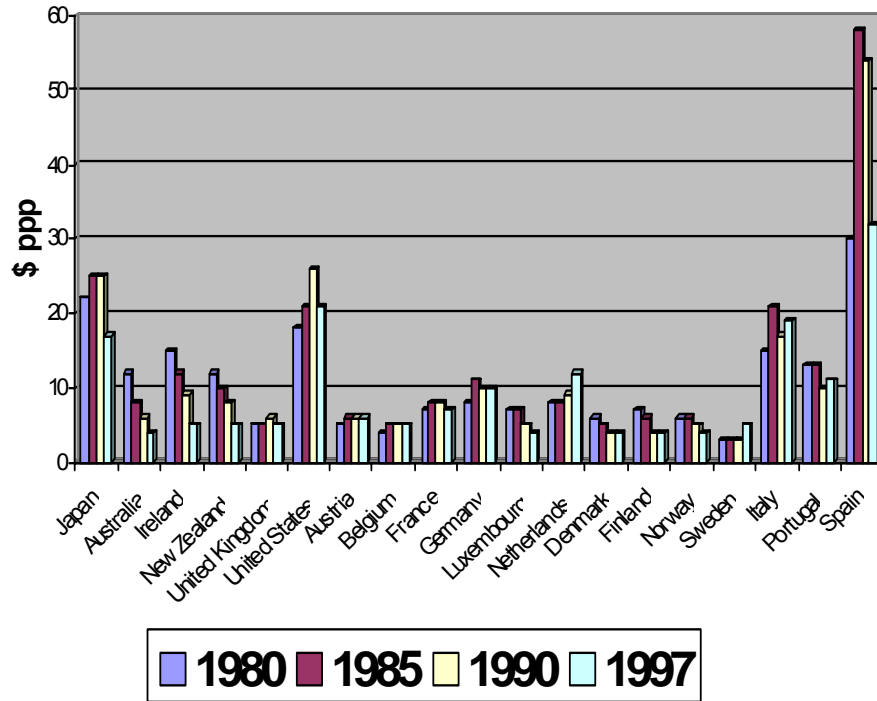
**Chart A1.2 Expenditure on family benefits and family services:
US \$ ppp per child 1997**



The OECD Health database also enables comparison between expenditure on different groups, which makes it possible to explore whether welfare claims of the elderly (even more numerous and electorally powerful) are met at the expense of children (less numerous and not electorally powerful). Chart A1.3 shows that all OECD countries spend more on benefits and services for the elderly per person over 65 than they spend per child under 20, especially Spain, Japan the US and Italy. Since 1980 only the Netherlands has consistently shifted expenditure in favour of the elderly. The relative expenditure on the elderly has decreased in Japan, Australia, New Zealand, Luxembourg, Denmark, Finland, Norway and Portugal.

Chart A1.3:

\$ Public expenditure on benefits and services for the elderly per person over 65 for every \$ spent on benefits and services for families per child under 20. Source: OECD Health Database



However there are problems with this analysis:

- The OECD classification of expenditure on family benefits and services does not include all the elements that make up the child benefit package.
- Some expenditures classified under family benefits and services are of benefit to adults and only possibly indirectly to children. They are not part of the child tax/benefit package.
- There are reasons to be anxious about the consistency of the classification of expenditure heads between countries – especially perhaps childcare which may be a cash benefit expenditure, a tax benefit expenditure or an educational expenditure in different countries, but not always an expenditure on family benefits and services.
- There are also reasons to be anxious about the consistency of the classification over time.
- Finally national account data takes time to be processed and this means that at the time of writing the latest OECD data is for 1997.

Model Family methods

In our study, we used the model family methods. This method is an attempt to make comparisons of the tax/benefit package controlling for some of the variation that exists. It has, as a premium, the aspiration to compare like with like. A number of studies using this method have been carried out at the University of York (Bradshaw

et al.,1993; Eardley et al., 1996; Bradshaw et al., 1996; Kilkey, 2001; Ditch et al., 1995, 1996, 1998; Kemp,1997) but we do not claim to have pioneered this method in comparative research. The OECD has been using the method for many years in its series now called Taxing Wages (OECD 2001a). The latest edition covers the situation in 1999. This collects information on the treatment of standard families by the tax/benefit system. Data is also collected by OECD on short-term unemployment benefits and on social assistance and used to derive replacement rates (see OECD, 1998). Although this paper uses similar methods to OECD, it is more up-to-date and covers a wider range of family types, income levels and elements of the child benefit package.

In an effort to make comparisons between countries' benefit systems and to ensure that as far as possible like is being compared with like, national informants complete a set of matrices.

Income cases

There are eight sheets for each country representing different **INCOME CASES** as follows:

- Case 1: One earner working 16 hours per week (64 hours per month) for the minimum wage in each country¹.
- Case 2: One earner half national average male earnings or the minimum wage (for a 35 hour week) if higher.
- Case 3: One earner half national average female earnings or the minimum wage (for a 35 hour week) if higher.
- Case 4: One earner average male earnings.
- Case 5: One earner average female earnings.
- Case 6: Two earners average male earnings and half average female earnings (or the minimum wage for a 35 hour week if higher).
- Case 7: Two earners one on average male earnings and one on average female earnings.
- Case 8: No earners - receiving social assistance.

These choices are designed to cover a range of earning types and levels in each country. The cases cover average (and proportions of average) male and female earnings. It was decided not to take a 'rich' case in this study because the child benefit package is arguably of less importance at such a level of earnings. Case 7 represents the top end of the earnings distribution in this study.

Family types

On each sheet there are columns for different **FAMILY TYPES** as follows:

- Single (all adults assumed 35 years old).
- Couple (assume married).
- Lone parent (assume divorced) plus one child (aged 2 years and 11 months) receiving full-time, formal, not in school childcare of the most common form in

¹ In the UK tax/benefit system those working 16 hours or more are deemed to be in employment and covered by in-work tax/benefits. Those working less than 16 hours are entitled to out-of-work benefits. Therefore 16 hours was chosen for Case 1. Also, some countries do not have a minimum wage and therefore 14 per cent of the national wage was assumed.

the country. No childcare in the social assistance case.

- Lone parent plus one child (aged 7) at school no childcare.
- Lone parent plus two children (aged 7 and 14) at school.
- Couple plus one child (aged 2 years and 11 months) receiving full-time, formal, not in school childcare of the most common form in the country. No childcare if there is a non-working spouse or in the social assistance case.
- Couple plus one child (aged 7) at school, no childcare.
- Couple plus two children (aged 7 and 14) at school.
- Couple plus three children (aged 7, 14 and 17) all at school.

The data is collected on childless singles and couples so that we can calculate how much more (and in some countries less) lone parents and couples with children receive as a result of the tax benefit package. Data is collected on school age and preschool age children to assess the costs of preschool childcare. The 17 year old represents a child staying on at school after school leaving age. The number of children ranges from 1 child to 3 children. This represents the most common family types in most countries.

Child benefit package

There are 14 rows to each matrix with a row to record:

- gross earnings
- income tax payable
- employee social security contributions
- income related child benefit
- non means-tested child benefit
- gross housing costs
- net housing costs
- gross local taxes
- net local taxes
- net childcare costs
- health charges/benefits
- education charges/benefits
- guaranteed child support, and
- other.

The national informants completed the matrix according to a set of instructions, which included specification of the earnings levels, the size and type of dwellings, location in each country, type of child care, standard packages of health and education and other instructions.

There are criticisms that can be made of the model family matrix method. Some of these include (for more see Eardley, 1996):

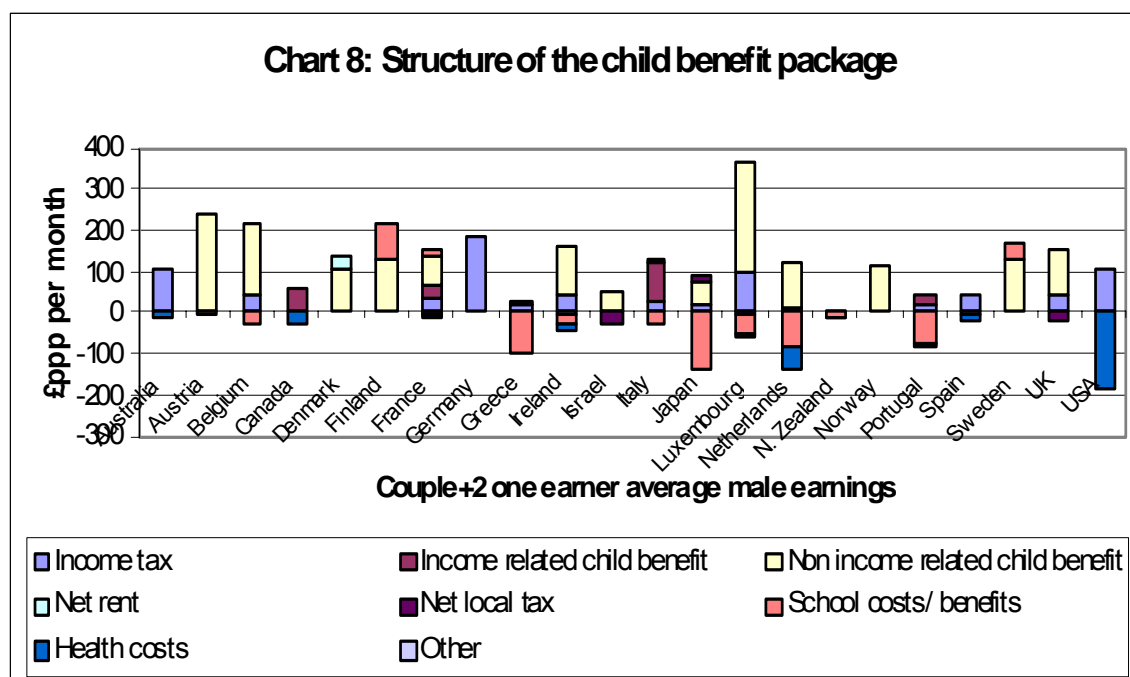
- The choice of model families are designed to ensure that like is being compared with like but they inevitably mean that the families are *illustrative* rather than *representative*.
- In each country the child benefit package has unique features but a decision has to be made for all countries and the type of decision made is inevitably driven by the interest of the funding country – in this case the UK. For other countries, especially Japan (Tokoro, 2000), the assumptions do present problems.

In the end it is a technique for making comparisons of social policies easier - for comparing like with like. The model family method seeks to show how the tax benefit system *should* work given the national arrangements that exist, rather than necessarily *does* it does work. The remainder of the paper compares the child benefit package using this method.

3 THE STRUCTURE OF THE CHILD BENEFIT PACKAGE

We start by examining how different countries structure their child benefit package. The elements covered are income tax benefits, social security contributions, non income-tested child cash benefits, income tested child cash benefit, rent benefits, local taxes, childcare costs, school costs/benefits, guaranteed child support (alimony) and other, which varies from country to country.

For families with school age children non income related child benefits and the income tax system are the main vehicles for delivering the child benefit package. There has been a shift, particularly in the Anglophone countries from income related child benefit to using the tax system instead. A few countries – Canada, Italy and New Zealand have abandoned their non-income related child benefits in favour of tax (and social assistance based benefits). Housing benefits are an important component of the package at low-income levels in some countries. Education costs and health costs in most countries reduce the value of the package but only by modest amounts. As long as childcare costs are not involved the child benefit package is a positive contribution to family incomes in most countries. The structure varies from case to case and so a standard case has been selected. Chart 8 presents a summary of the structure of the package for a couple with two school age children with one earner on average male earnings.



The most important observation to be made about comparisons of the *levels* of the child benefit package is that they vary within and between countries by family size and type, by earnings and by whether the comparison is made of the tax and cash benefit system only or after housing and service costs and benefits. This is illustrated for selective cases in Charts 9 to 11.

Variation by family size

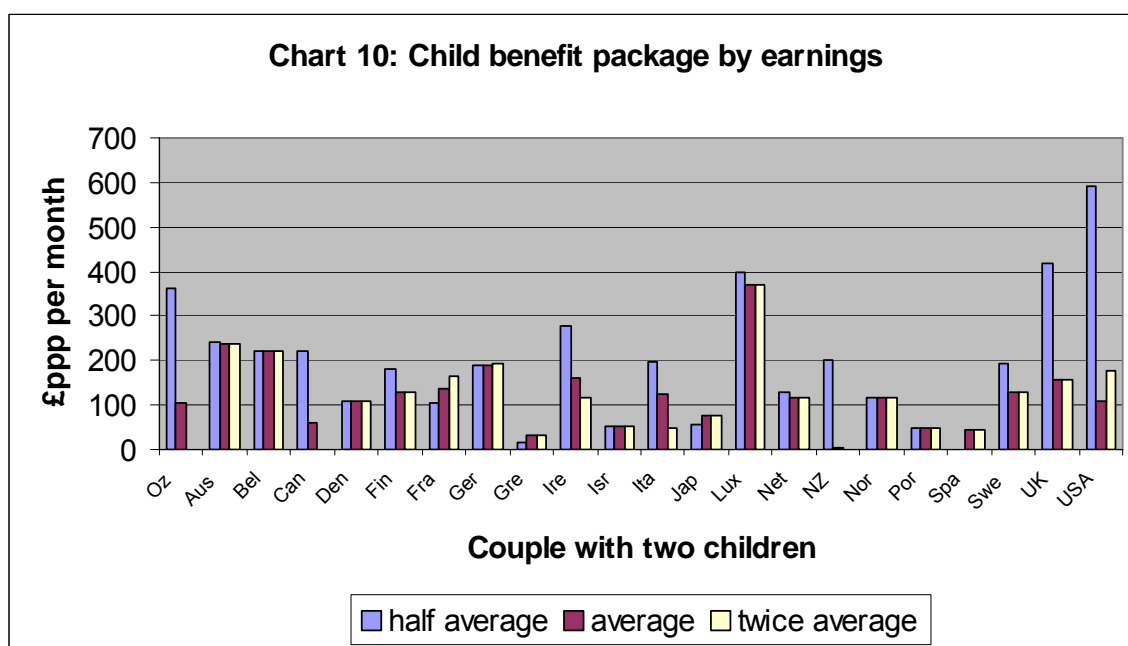
Chart 9 explores how the value of the child benefit package varies with the number (and ages)² of children. France for example comes well down the league table in its child benefit for small families but is much more generous to families with three or more children. The UK in contrast is unusual in having a package that benefits one child families relatively more generously. There is clearly very little international agreement about parity equivalence in these patterns of variation but they reveal the problems inherent in comparing child benefit packages using a single model family.



² Some of the variation by the number of children may be due to variation by age – the age assumptions of children in the model families were 2 years and 11 months, 7, 14 and 17. We did not collect data systematically on variations in the package by age though where (rarely) such variation exists we note it.

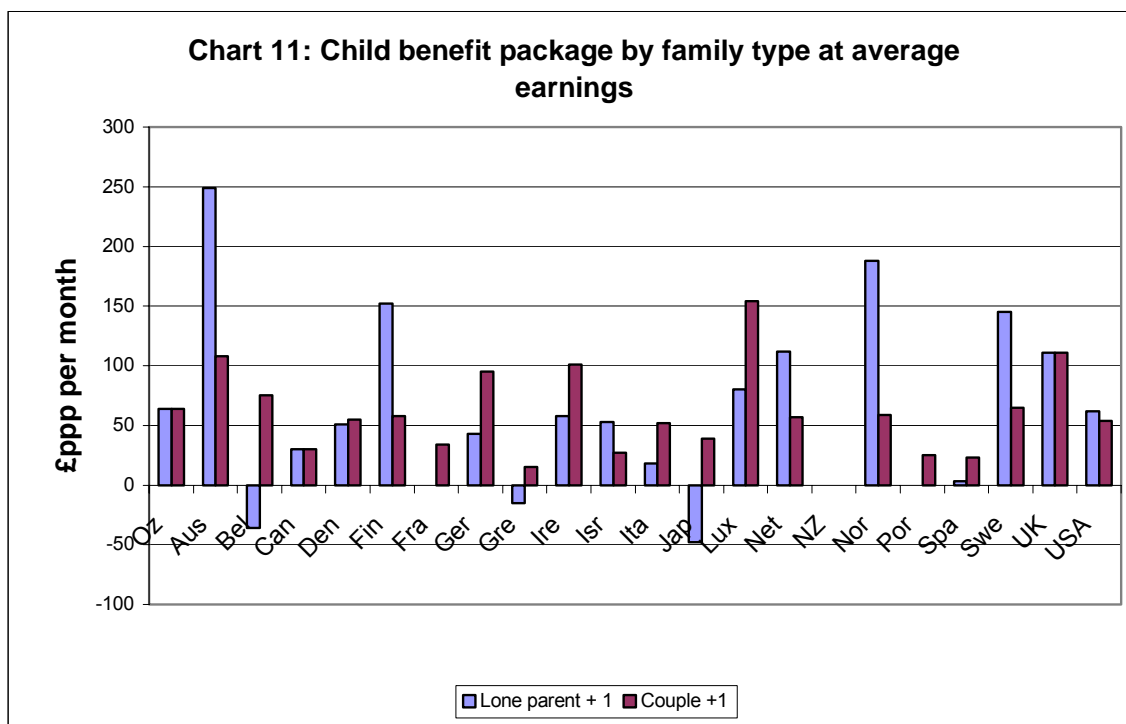
Child benefit package by earnings

So the child benefit package varies by family size. Chart 10 takes a standard family and shows how the child benefit package varies by earnings. Anglophone countries having considerable larger packages for low earnings families, but so does Sweden where social assistance is available to the low paid. A number of countries having a standard amount regardless of earnings and France, Greece and Japan having packages that increase with earnings. In Spain there is no benefit for the family with the lowest earnings as they do not benefit from the child tax allowance.



Child benefit package by family type

Finally, in Chart 11, we explore variation in the child benefit package which is due to family type – whether the family with children is a lone parent or a couple. This is done for a lone parent with one school age child at three earnings levels. In this case the value of the child benefit package is established in comparison with the net income of a single person. Luxembourg for example has the most generous child benefit package for couples with children at all family sizes and regardless of earnings but it does not have the most generous package for lone parents. Some countries are neutral to lone parents including the UK, others favour lone parents over couples - Austria is most generous to lone parents and most of the Nordic countries are also. Others favour couples over lone parents including the continental EU countries except the Netherlands.



The UK does comparatively well for small, low earning families, lone parents not requiring child care and families on social assistance. The implications of these variations is that it is unsafe to take one or a few standard families to represent a country's child benefit package. It also represents something of a challenge to produce an overall summary measure of the child benefit package in each country.

4 CONSTRUCTING A SUMMARY MEASURE OF THE CHILD BENEFIT PACKAGE

To be able to compare the whole child benefit package between countries across the family models population, a summary measure needs to be constructed. A simple accumulation of the child benefit package paid to all our illustrative cases is not a good representation of any country's actual mix of families. Among the 50 families there are 18 lone parent cases, which is too high a proportion for any country. Also four of the cases – 28 families are earning half average earnings or less. This bias towards the bottom end of the earnings distribution was deliberate for illustrative purposes, but it results in the cumulative average over-representing low-income families, thus favouring those countries with child benefit packages, which are most generous to low-income families. It was therefore decided to adjust the selection of cases so that it better represented the overall distribution of family types/earnings levels. To do this properly would require data on the earnings distribution by family type and size for each country. That data is not available, and anyway there is a limit to the extent that 50 illustrative families can be adjusted to represent the population, even if the data was available. All that we are able to do is to make stab at producing a more representative selection of family types/earnings levels. The 34 cases selected are detailed in the box:

Case 2: half average male earnings*Couple + 1<3**Couple + 1 aged 7**Couple + 2 aged 7 and 14**Couple + 3 aged 7, 14 and 17***Case 3: half average female earnings***Lone parent + 1<3**Lone Parent + 1 aged 7**Lone parent + 2 aged 7 and 14***Case 4: average male earnings***Couple + 1<3**Couple + 1 aged 7 *2**Couple + 2 aged 7 and 14 *3**Couple + 3 aged 7, 14 and 17*2***Case 5: average female earnings***Lone parent + 1<3**Lone Parent + 1 aged 7**Lone parent + 2 aged 7 and 14***Case 6: average male and half average female earnings***Couple + 1<3**Couple + 1 aged 7 *2**Couple + 2 aged 7 and 14 *3**Couple + 3 aged 7, 14 and 17*2***Case 7: average male and average female earnings***Couple + 1<3**Couple + 1 aged 7**Couple + 2 aged 7 and 14**Couple + 3 aged 7, 14 and 17***Case 8: social assistance***Lone Parent + 1 aged 7**Lone parent + 2 aged 7 and 14**Couple + 1 aged 7**Couple + 2 aged 7 and 14*

There are now only eight out of 34 lone parent cases and the couple cases at one earner average and two earners at average and half average are weighted. Of course this selection is still not representative of any country's actual population but it is arguably less biased towards the bottom of the income distribution and to lone parent families. There may still be grounds to criticise the choice of family type/earnings levels chosen to represent the overall picture. However a variety of other permutations were tried and it was found that the rankings changed rather little whatever permutation was tried.

The child benefit package in purchasing power parities is added for each of the families and the total is divided by the number of families to obtain an overall mean. The results of this analysis are presented in Table 1 in purchasing power parities. The ranking obtained varies to some extent with the stage of the distributional process. Luxembourg comes top after taxes and cash benefits but Austria comes top after housing costs and services have been taken into account. Overall there is very considerable variation in the level of the package between countries - Austria has by far the most generous package, followed by Luxembourg and Finland. Six countries have negative packages – that is housing costs and charges for services cancel out the value of tax and cash benefits for children. The position of the UK, third after taxes and benefits is a significant improvement over previous studies and must be the result of the substantial increases that have been made in the real level of the child benefit package since the Labour Government came to power in 1997. However this position in the ranking is not sustained after the impact of housing costs and averages for services.

The rankings alter if the child benefit package is expressed as a proportion of average earnings (see Table 2) with the UK and Canada moving down the rankings and Finland, Ireland, Israel and Portugal moving up the rankings.

Table 1 Ranking of the value of the child support package. ‘Representative’ cases. ppps

	Afte r tax and bens		After housing costs		After services		After all
Luxembourg	277	Austria	283	Austria	234	Austria	266
Austria	252	Luxembourg	268	Luxembourg	208	Luxembourg	199
UK	218	UK	205	Finland	180	Finland	191
Ireland	201	Belgium	190	UK	155	France	162
Belgium	191	USA	187	Belgium	143	Sweden	153
USA	181	Ireland	186	Germany	138	Germany	152
Germany	164	France	183	France	133	Belgium	142
France	154	Germany	178	Sweden	115	UK	142
Australia	138	Australia	167	Norway	109	Denmark	140
Norway	134	Norway	161	Ireland	106	Norway	136
Finland	119	Denmark	157	Denmark	95	Australia	123
Canada	114	Sweden	138	Australia	95	Ireland	91
Denmark	113	Finland	130	Israel	43	Israel	43
Sweden	100	Canada	114	Canada	40	Canada	40
Netherlands	97	Japan	100	USA	30	USA	35
Japan	88	Netherlands	89	Italy	27	Italy	28
Israel	82	Israel	81	New Zealand	3	New Zealand	-5
New Zealand	69	Italy	69	Portugal	-15	Portugal	-15
Italy	68	New Zealand	60	Spain	-15	Spain	-15
Portugal	50	Portugal	50	Netherlands	-27	Japan	-26
Spain	30	Spain	30	Japan	-38	Netherlands	-34
Greece	20	Greece	22	Greece	-61	Greece	-59

Table 2 Ranking of the value of the child support package. ‘Representative’ cases, as percentage of average earnings

	After tax and bens		After housing costs		After services		After all
Austria	16.3	Austria	18.3	Austria	15.2	Austria	17.2
Ireland	15.2	Ireland	14.0	Finland	13.1	Finland	13.9
Luxembourg	14.2	Luxembourg	13.8	Luxembourg	10.7	France	10.9
Belgium	12.1	France	12.3	Belgium	9.1	Luxembourg	10.2
UK	11.6	Belgium	12.1	France	8.9	Sweden	10.2
France	10.4	Norway	11.5	UK	8.2	Norway	9.7
Norway	9.6	UK	10.9	Ireland	8.0	Belgium	9.0
Germany	9.0	Germany	9.8	Norway	7.8	Germany	8.3
Finland	8.7	Finland	9.5	Sweden	7.7	Denmark	7.7
USA	8.5	Sweden	9.2	Germany	7.6	UK	7.5
Australia	7.6	Australia	9.1	Denmark	5.3	Ireland	6.9
Israel	7.3	USA	8.7	Australia	5.2	Australia	6.7
Sweden	6.7	Denmark	8.7	Israel	3.9	Israel	3.9
Portugal	6.6	Israel	7.3	Canada	2.0	Canada	2.0
Denmark	6.2	Portugal	6.6	Italy	1.9	Italy	2.0
Canada	5.8	Canada	5.8	USA	1.4	USA	1.6
Netherlands	5.3	Japan	5.7	New Zealand	0.2	New Zealand	-0.4
New Zealand	5.2	Netherlands	4.9	Spain	-1.1	Spain	-1.1
Japan	4.9	Italy	4.8	Netherlands	-1.5	Japan	-1.5
Italy	4.8	New Zealand	4.5	Portugal	-2.0	Netherlands	-1.9
Spain	2.3	Spain	2.3	Japan	-2.2	Portugal	-2.0
Greece	1.9	Greece	2.1	Greece	-5.8	Greece	-5.6

Chart 11.14 presents the average ranking of countries that we obtained for the ‘representative’ selection of families in £PPPs per month after all elements of the child benefit package have been taken into account.

The ranking gives these country groupings:

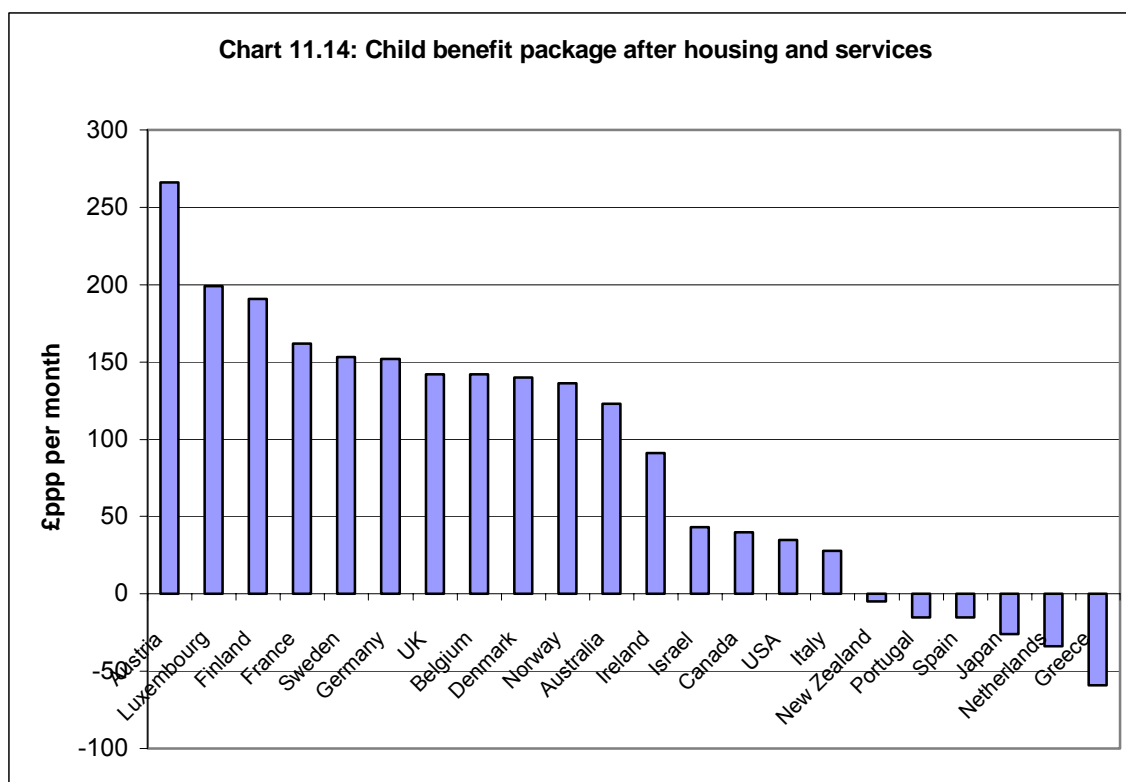
Leaders: Austria, Luxembourg, Finland.

Second rank: France, Sweden, Germany, UK, Belgium, Denmark, Norway, Australia.

Third rank: Ireland, Israel, Canada, the USA and Italy.

Laggards: New Zealand, Portugal, Spain, Japan, the Netherlands, and Greece.

So what factors do determine the generosity of child benefit packages?



5 Explanations for variations in the level of the Child benefit package

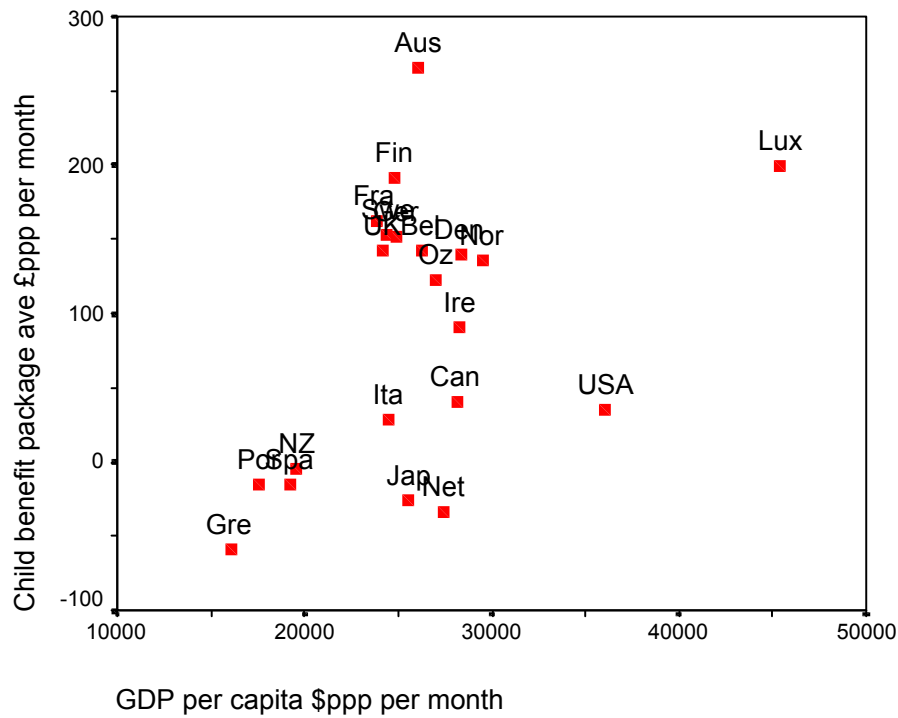
We know from the work of Wennemo (1992) that cash benefits for children have their own national histories. Their origins are rooted in culture, politics, demography, religion, the labour market and even in defence manpower considerations. They have adapted over time as policy aspirations have changed. In this study we have not only been concerned with cash benefits but also other elements of the package and, given this, it would be unlikely to find a common factor that would determine the level of the child benefit package across countries. So in search of explanations we engage in exploratory data analysis designed to test hypotheses about the relationship between the child benefit package and a variety of factors that might contribute to an explanation of their variation.

Level of national wealth (Gross Domestic Product per capita)

Is the child benefit package (merely) a function of GDP with the richer countries able to afford a more generous child benefit package? Judging from Chart 1 the answer is not entirely. Luxembourg with the highest GDP per capita³ has relatively generous child benefit package but the USA, the Netherlands and Canada have high GDP per capita and a low child benefit package. However the group of countries with the lowest GDP per capita – Greece, Spain, Portugal and New Zealand are also those with the lowest child benefit package. So the level of the development of the economy might be a factor in explaining the level of the package, but beyond that, it is other factors that determine the package.

³ Unless stated otherwise all the data in this section comes from the OECD Health Database 2001b.

Chart 1 Child benefit package by GDP per capita \$ ppp



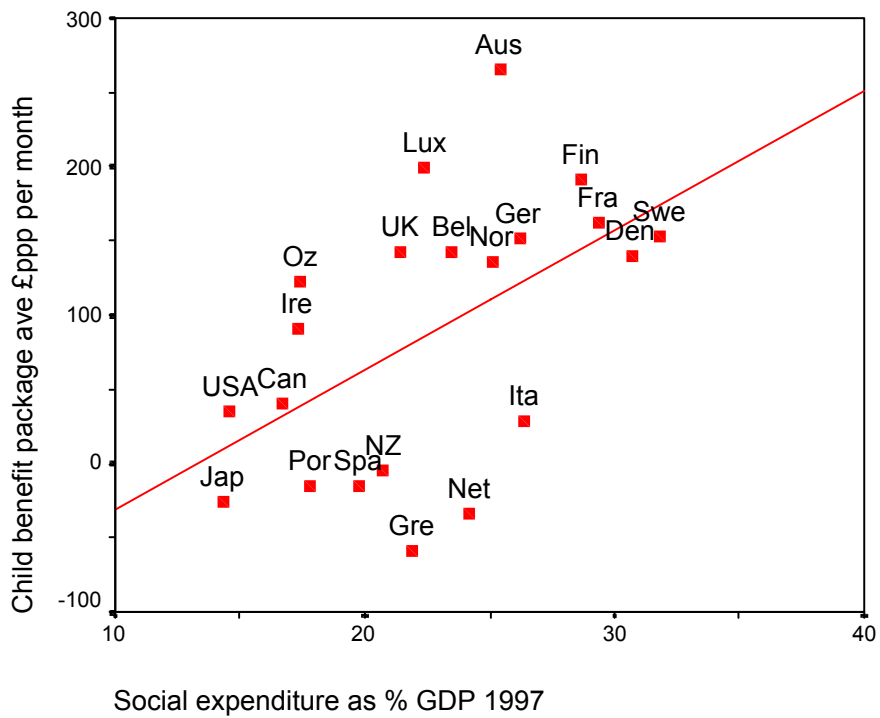
$r = 0.43^3$

Social expenditure

Chart 2 and 3 show the relationship between the child benefit expenditure and social expenditure as percentage GDP and social expenditure per capita. There is a significant⁴ positive relationship in both cases. Those countries that spend more on their welfare states tend to have more generous child benefit with Austria being a high outlier and the Netherlands a low outlier.

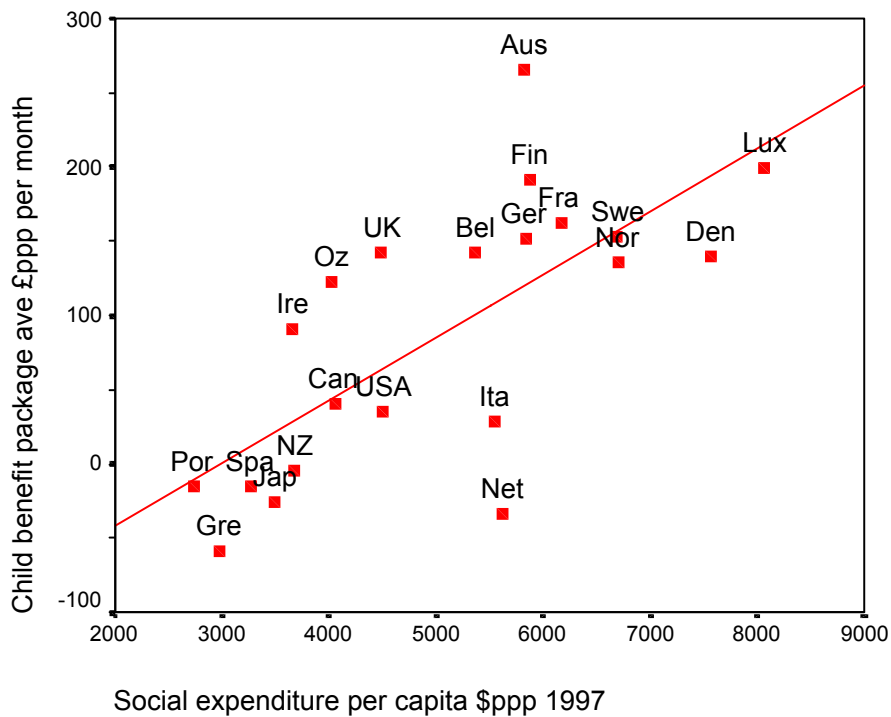
⁴ The strength of the probability that there is a correlation between two factors is indicated by the number of asterisks following the *r* value (i.e. the *Pearson's correlation coefficient*):
 zero asterisks = no significant probability of correlation
 * = $p \leq 0.05$ (fair probability of correlation)
 ** = $p \leq 0.01$ (strong probability of correlation)
 *** = $P \leq 0.001$ (very strong probability of correlation)

Chart 2 Child benefit package by social expenditure as % GDP



$r = 0.53^{**}$

Chart 3 Child benefit package by social expenditure, 1997

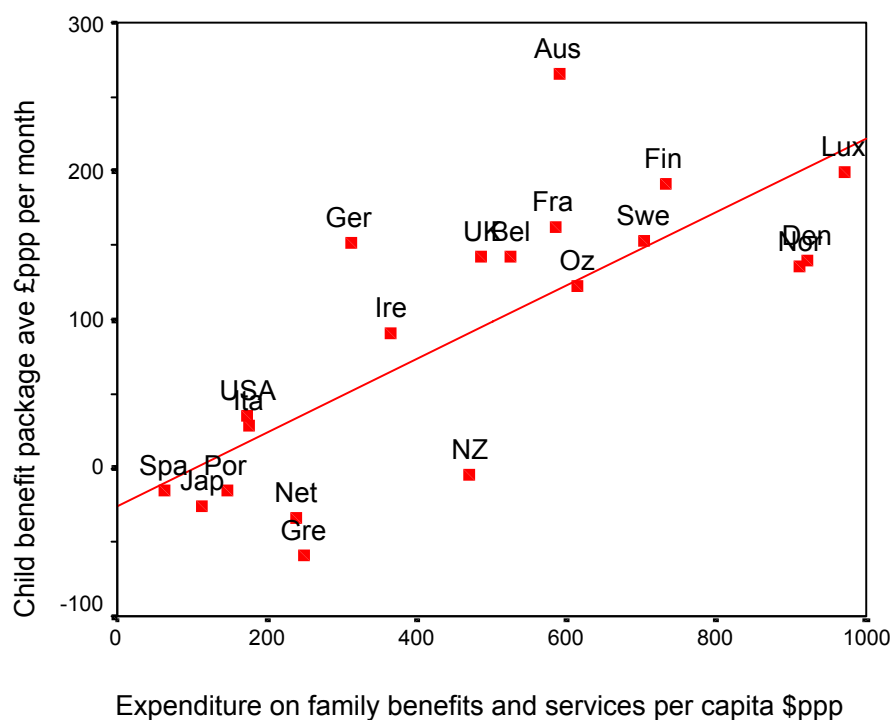


$r = 0.70^{**}$

Expenditure on family benefits and services

In Chart 4 the child benefit package is related to the level of expenditure on family benefits and services. There is clearly a positive relationship. Generally the child benefit package is more generous in countries spending more on family benefits and services. This statement is not a tautology. As we argued above – not all the elements of the child benefit package are included in OECD expenditure on family benefits and services.

Chart 4 benefit package by expenditure on family benefits and services



$r = 0.75^{**}$

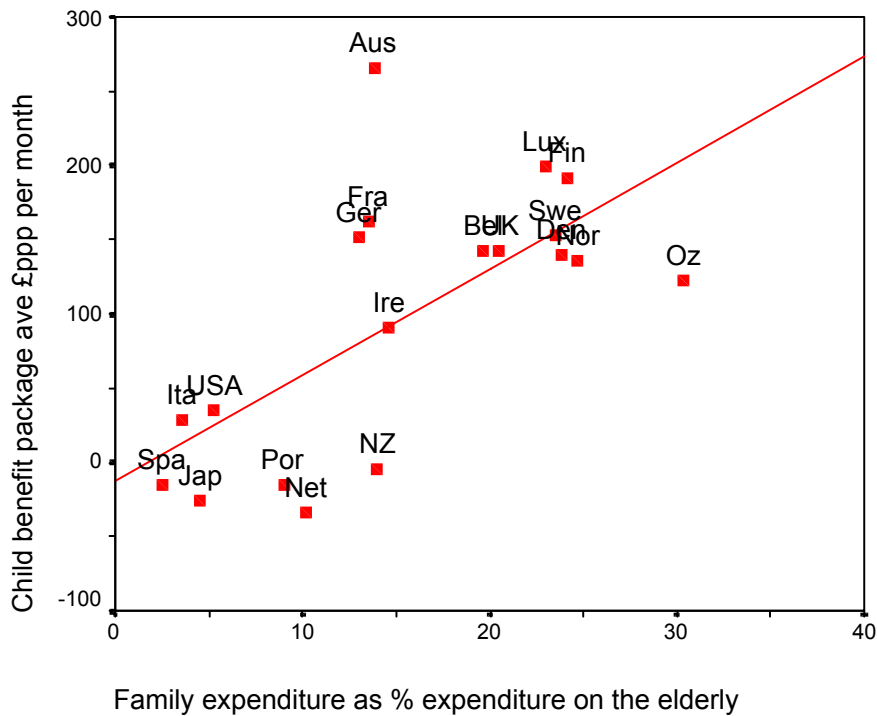
Priority for the elderly?

One possible explanation for the rankings of the child benefit package is that some countries are giving priority to their elderly population over their children, and that countries with low child benefit packages are low because of this. We test this hypothesis in Chart 5.

The x-axis is expenditure on family benefits and services per child as a proportion of expenditure services and benefits per pensioner in \$ ppp in. There are two very clear groups of countries. To the lower left are a group who spend low proportions on children compared with the elderly and who are all also countries with low child benefit packages. To the upper right are countries with higher expenditure on children compared to the elderly and high child benefit packages. New Zealand is an outlier for the former group and Ireland, Germany and France for the latter group. Austria is an outlier for both groups. However there does appear to be evidence here of a trade off between expenditure on the elderly and expenditure on children.

We turn now to test some hypotheses about the relationship between the child benefit package and the market.

Chart 5 Child benefit package by family benefits + services as % elderly benefits and services



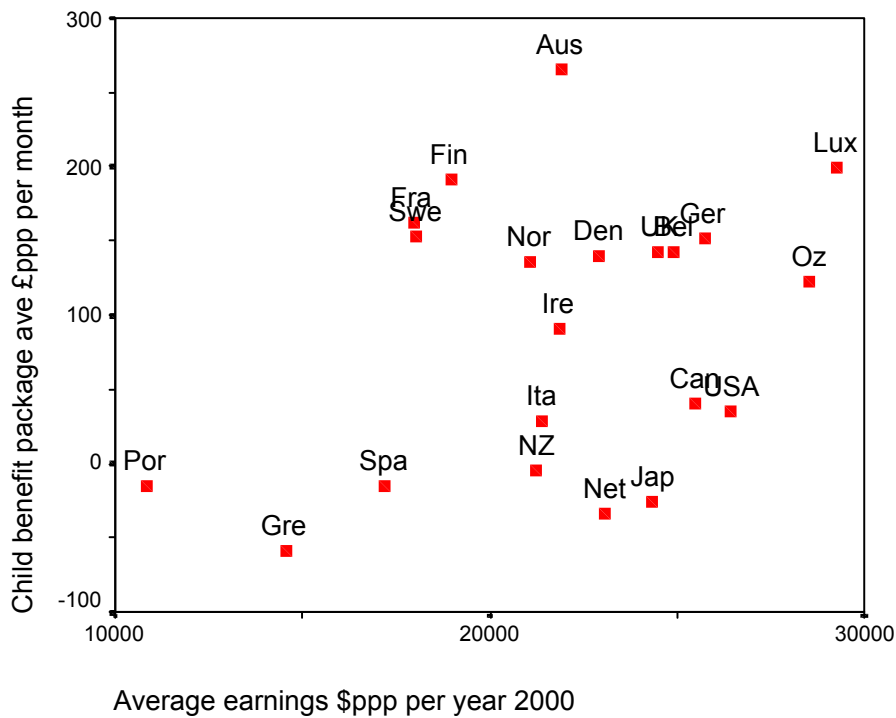
$r = 0.67^{**}$

Do earnings matter?

It is possible that in countries with low earnings there is a greater need for the incomes of families with children to be boosted by social transfers. Employees may trade off higher earnings in favour of improvements in the social wage. Indeed we know that this is the case in Australia and France for example. If this were the case then one would expect to find that the child benefit package was more generous in countries with lower earnings levels. Chart 6 explores this relationship⁵. It is difficult to discern a general relationship between the earnings and the child benefit package. Japan and the Netherlands are countries with high earnings and low child benefit packages and Finland, France and Sweden have low earnings and much more generous child benefit packages. Luxembourg has high earnings and high child benefit packages. Portugal and Greece are low on both. So while there may be a relationship between earnings and the package in some countries, there is no general relationship.

⁵ This is not our data on earnings, but OECD data on the average earnings of production workers.

Chart 6 Child benefit package by average earnings

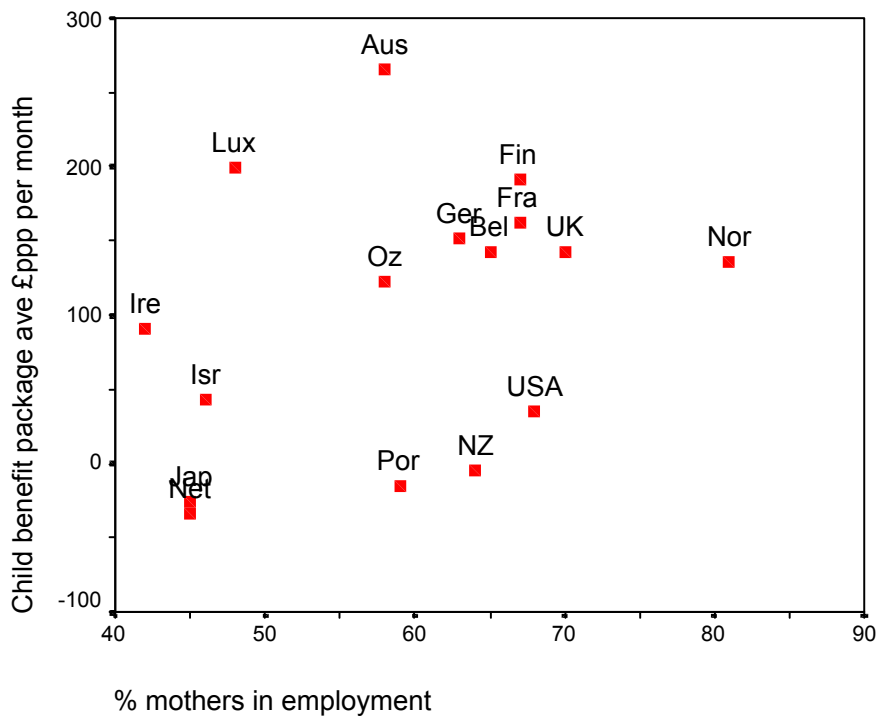


$r = 0.33$

Mothers' employment rates

One possible explanation for this lack of association is because what matters is not average earnings but family earnings and these are determined by the proportion of two earner families. Chart 7 looks at the relationship between the child benefit package and the proportion of married /cohabiting mothers in employment (data from national informants). Canada, Denmark, Italy, Greece, Spain and Sweden are not included in this chart because the national informants could not provide data for the proportion of mothers in employment. There does not appear to be a relationship and certainly no evidence that the child benefit package is in some way compensating for low married women's labour supply.

Chart 7 Child benefit package by mothers' employment rates

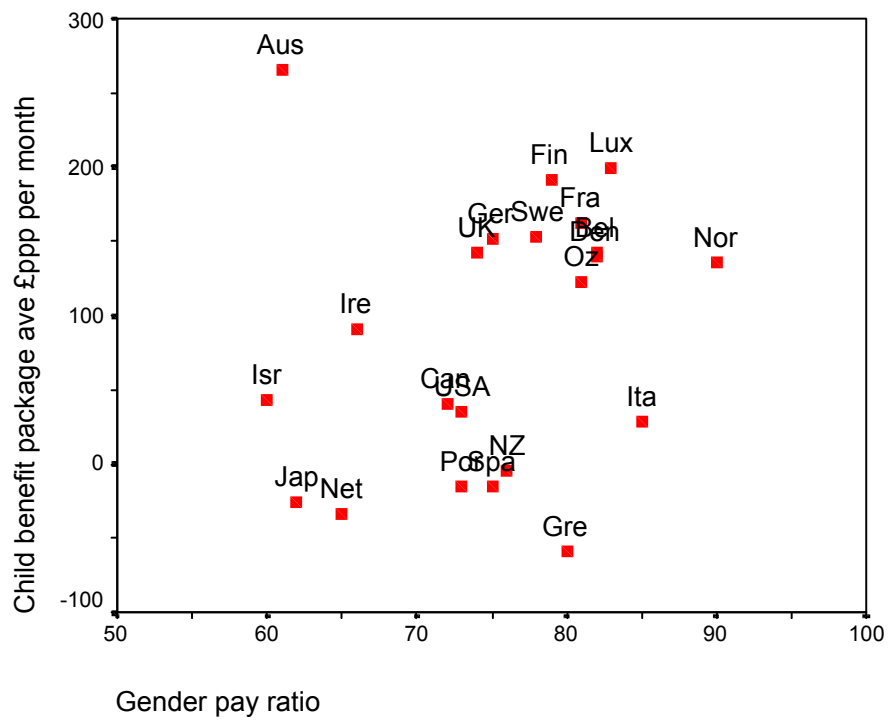


$r = 0.39$

Women's pay

Similarly Chart 8 summarises the relationship between the gender pay ratio (data from national informants), and the child benefit package. The hypothesis is that where women's wages are low there is a case for the child benefit package to be higher. If anything the opposite appears to be the case. Countries with a more egalitarian pay structure also have higher child benefit packages.

Chart 8 Child benefit package by gender pay ratio

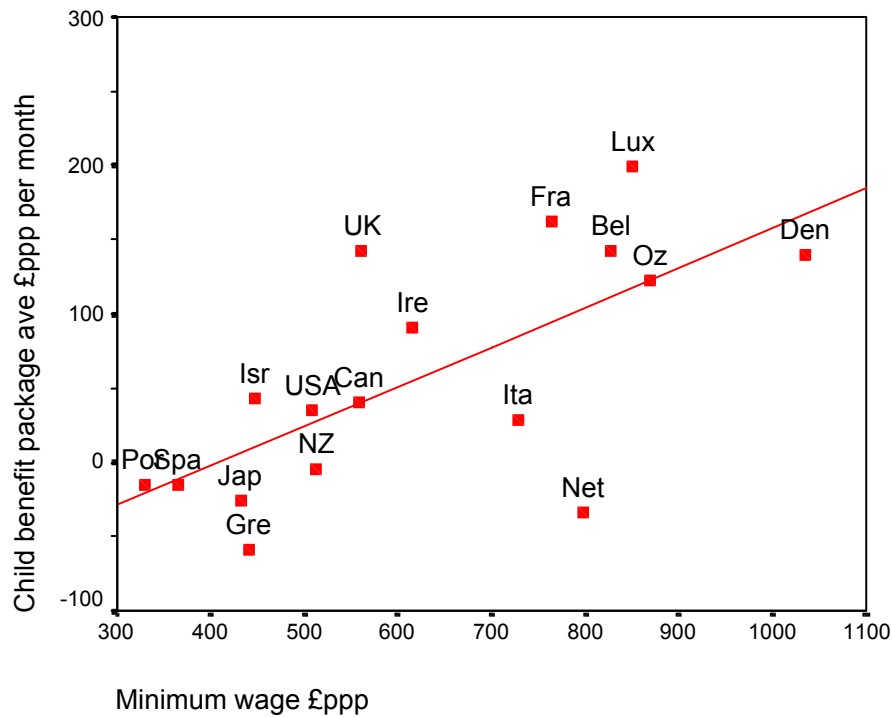


$r = 0.22$

Minimum wage

Also the child benefit package could be used to compensate for the level of the minimum wage (data from national informants). We find again in Chart 9 that there is a positive relationship with the level of the minimum wage. The higher the wage the higher the child benefit package. The Netherlands is an outlier.

Chart 9 Child benefit package by minimum wage

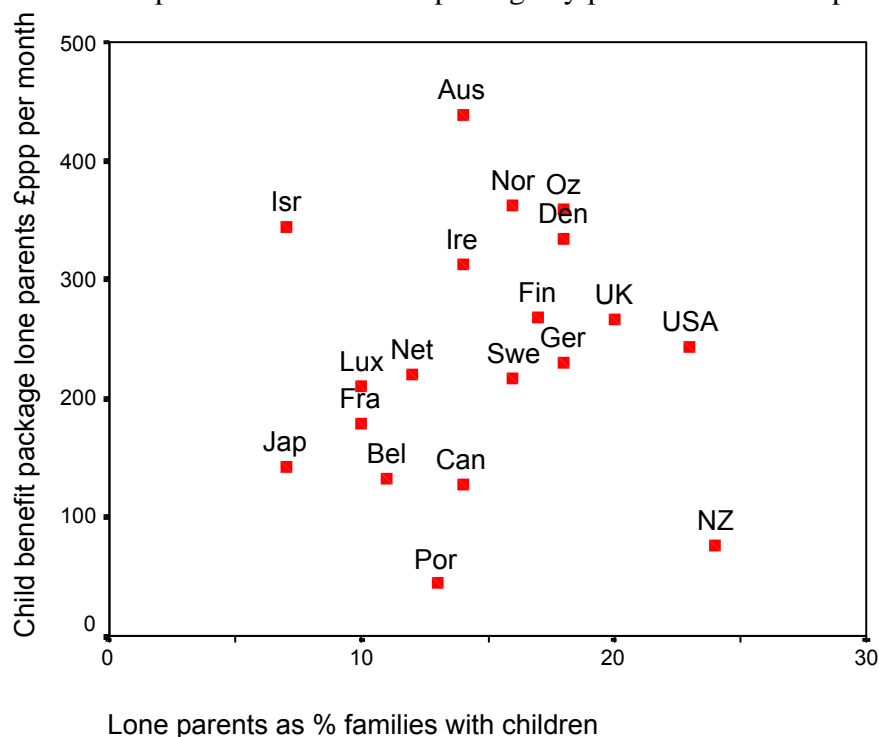


$r = 0.69^{**}$

Prevalence of lone parents

Finally in Chart 10 we compare the relationship between the prevalence of lone parents (data from national informants) and the level of the child benefit package paid to lone parents (data from national informants). It can be seen that there is a slight tendency for countries with higher proportions of lone parents to have higher child benefits. However the relationship is not very close, there are exceptions (Israel, New Zealand and the USA) and it is in fact difficult to interpret what, if anything, is going on here. Do countries with large proportions of lone parents care more about them? Or does a generous child package generate them?

Chart 10 Lone parents' child benefit package by prevalence of lone parents



$r = 0.06$

6 OUTCOMES

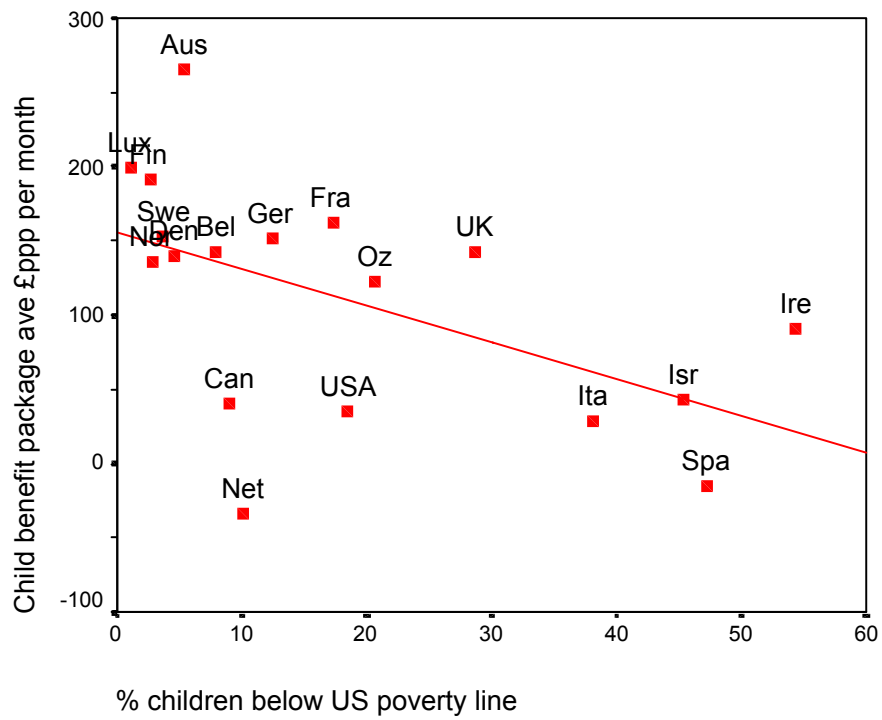
We turn now to consider the relationship between the child benefit package and outcomes.

Child poverty

Charts 11 and 12 explore the relationship between the child poverty and the child benefit package. Both these poverty rates are based on income and derived from the Luxembourg Income Study by Bradbury and Jantti (UNICEF 2001) and relate to the mid 1990s (1996 for the UK). This is a serious problem because it means that they do not coincide in time with the child benefit package which was assessed at July 2001. The latest EUROSTAT data on child poverty is only for 1998 and does not include as many countries as the LIS data. In Table 11 there appears to be a negative relationship between the child benefit packages and 'absolute'⁶ measures of child poverty. The more generous the child benefit package the lower the child poverty rate. The Netherlands, Canada and the USA are outliers with lower poverty rates than their child benefit packages would suggest and Ireland with higher poverty than would be expected (this is likely to be because of the time gap in the data - Ireland has been improving its child benefit data since 1987 which is the date for its child poverty data). The relationship is rather closer between relative child poverty and the child benefit package (see Chart 12). Now Spain, the Netherlands and Austria are the only outliers and Canada and the USA follow the pattern. For most countries the higher the child benefit packages the lower the child poverty.

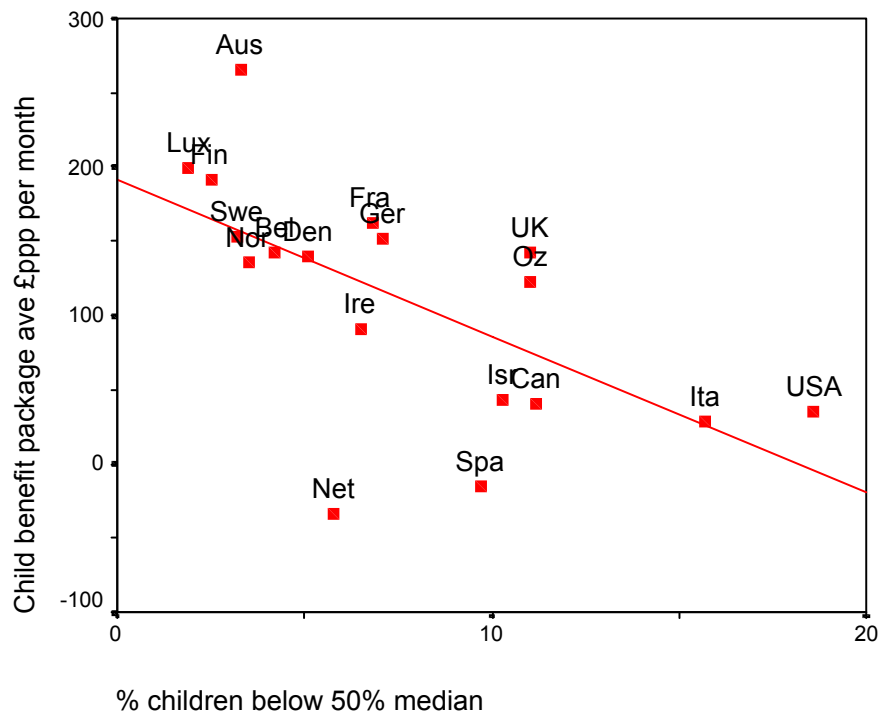
⁶ The US poverty line was originally derived from budget standards (3*the food budget) in the early 1960s and has been updated since then in line with prices.

Chart 11 Child benefit package by 'absolute' child poverty



$r = -0.54^*$

Chart 12 Child benefit package by relative child poverty rate



$r = -0.62^{**}$

Fertility

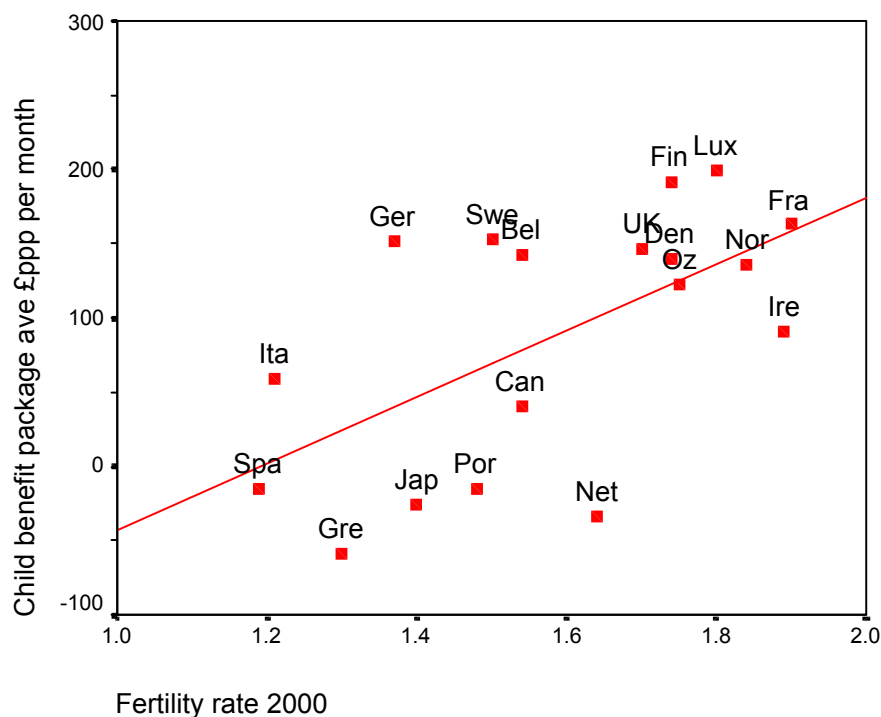
The generosity of the child benefit package is certainly not the only factor that could influence fertility, nor perhaps the most important. But on theoretical grounds it is likely to be a factor (McDonald, 2000).

In Chart 13 we see a strong positive relationship between fertility rates and the strength of the child benefit package. It has to be noted though that the main outliers, - i.e. Austria (fertility rate = 1.30), New Zealand (fertility rate = 2.00) and the USA (fertility rate = 2.05) – have been excluded from the chart because their fertility patterns seemed to contradict the main trend exhibited by the other countries. Greece and Austria have the same fertility rates with hugely different child benefit packages. The USA has replacement fertility with a very low child benefit package – the same is true of New Zealand (in both these cases their fertility rates are driven upwards by high fertility in ethnic minority communities).

France and the UK have similar fertility rates but different levels of generosity of their child benefit packages. However in UK fertility is sustained by an extremely high rate of teenage births (and is falling) and in France the fertility rate has risen above the UK recently. Ireland, has experienced the most rapid decline in fertility of any industrialised country at a time when it has been improving its child benefit package – indeed it has been able to afford to improve it because of the decline in fertility (along with the Celtic Tiger economy).

However it is generally the case that countries with the more generous child benefit packages have higher fertility and those with little or no support for child-rearing costs have the lowest. It might be argued that the latter are also the poorest countries - Greece, Italy, Portugal, Spain. Certainly in our earlier studies of child benefit packages we found a closer relationship between the level of the child benefit package and GDP per capita than with fertility. But the same is not true of Japan (or the Netherlands or Canada). Japan has the resources to pay for a generous child benefit package and chooses not to. Not only is Japan's expenditure on family benefits and services very low as a proportion of GDP, it is also very low as a proportion of social expenditure. So even given the small size of their welfare state Japan is making rather little effort in support of families with children compared to other countries. Of course this weak association between the child benefit package and fertility tells us nothing about causal direction of the relationship. Countries may have more generous child benefit packages because they have a higher fertility rate.

Chart 13 Child benefit package by fertility rate, 2000



$r = 0.60^{**}$

Countries excluded: Austria, New Zealand, US

7 CONCLUSION

This paper has sought to compare the level and structure of the child benefit packages paid to families in 22 countries. National informants completed a matrix specifying the help that a selection of model families would receive from the system of taxes, cash benefits and services in their country.

We started with the assertion that all countries have a package of measures that help parents with the costs of rearing children. In the light of the analysis this is still true but subject to some qualifications. Some countries provide very little support in the form of tax benefits and cash benefits and after the impact of housing costs and charges for childcare, education and health, some families with children in some countries are worse off than childless couples on the same gross earnings and the same gross housing costs. Effectively in these countries the state is making no net contribution to the costs of child rearing. Whatever benefit they provide for families with children is effectively wiped out by the charges they are expected to pay (often for state provided services). The countries with negative average child benefit packages are New Zealand, Portugal, Spain, Japan, the Netherlands and Greece. There are other countries where the average child benefit is very low – the USA, Canada and Israel. Finally there are countries where the package is so concentrated on low income families that there is effectively very little horizontal redistribution in favour of middle and upper income families – the package exists for some families but not for others. This is the case in the USA, Canada, Australia and New Zealand.

In this paper, countries were ranked in relation to the level of the child benefit package. The rankings obtained bear little relationship to the rankings that would be inferred using Esping-Anderson's (1991) regime types⁷. The social democratic (Nordic) welfare states tend to come in the top half of the table but they are not the leaders and Denmark is well down the rankings. The liberal (Anglophone) welfare states are distributed throughout the rankings with Ireland, the UK and the USA in the top half on some of the ranking. New Zealand is consistently towards the bottom of the rankings. The conservative (corporatist) countries tend to be found in the upper half of the table but the Netherlands is a big exception. Austria is something of an outlier with considerably more generous child benefit package than any other country after housing costs and services. The southern EU countries are in the bottom half of the table but spread, with Italy somewhat above the others. Japan, our only representative of the Pacific Rim/Confucian model, is found towards the bottom.

An attempt was made to explain these variations in the level of the child benefit package. The main conclusion of this was that it is not the level of a nation's wealth, nor the structure of its demography or labour market that explains the level of child benefit package. What appears to be important (apart from its structure) is the overall level of social expenditure and the proportion of it going to families with children, rather than the elderly. So, for example, the Netherlands has a level of social expenditure not much different from its northern EU partners, but it spends less of it on families with children and more of it on pensioners. For this reason it is a laggard.

Those countries that make most effort to transfer resources horizontally have the more generous child benefit packages. They are also the countries with lower relative child poverty rates and most of them have higher levels of fertility. Policy matters.

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⁷ This study is not the first to point out that Esping-Anderson's regime types do not fit family policies (see for example Kilkey, 2000) and he has acknowledged as much himself (Esping-Anderson, 2001).

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