

Luxembourg Income Study Working Paper No. 225

**Children in Large Families:
Disadvantaged or Just Different?**

Gerry Redmond

February 2000

Children in Large Families: Disadvantaged or Just Different?

*Gerry Redmond
Social Policy Research Centre
The University of New South Wales
Kensington
NSW 2052
Australia*

*Ph: +61-2-9385 3833
Fax: +61-2-9385 1049
E-mail: G.Redmond@unsw.edu.au*

Acknowledgments

An earlier version of this paper was presented at the National Social Policy Conference, The University of New South Wales, July 1999; and at the LIS Conference on Child Well-Being in Rich and Transition Countries, Luxembourg, September 1999. I am grateful for comments received at these two conferences, as well as advice from Michael Bittman, Jenny Chalmers and Stephen Jenkins. All errors are mine.

Abstract

In an age when there is considerable focus on the needs and rights of children, it is perhaps a little surprising that parental income still mostly determines the standard of living that children enjoy. This has important implications, not just in terms of overall levels of welfare for children, but also in terms of equity between children. This paper looks at the issue of equity between children in Western industrial societies in just one of its many dimensions: to what extent are children in large families more likely to be in poverty than children in smaller families?

Aggregate and survey microdata from around 1990 are used to examine welfare state provisions and outcomes for children in families of different size in seven Western countries. The analysis finds, not surprisingly, that children in large families are more likely to be in poverty than children in small families. However, the analysis also finds that in those countries which give higher per-child family allowances to larger families, the probability of children being in poverty does not increase with family size once parents' employment status is taken into account. The paper concludes by suggesting that there is a difference between help for *families* and help for *children* that has been largely overlooked in policy debates, and a focus on policies for children is required if greater equity between children is to be realised.

Large Families: disadvantaged or just different?

1. Introduction

In an age when there is considerable focus on the needs of children and the rights of children, and a greater willingness on the part of the State to intervene within the community and indeed within families to ensure that children attend school, receive health care, have safe play areas, are properly cared for in the event of marital breakdown and are not subject to abuse or neglect, it is perhaps a little surprising that authorities in developed countries have mostly chosen to allow parental income to determine the standard of living that children might be able to enjoy. This policy choice of minimal interference with parents' rights and obligations to materially provide for their children can perhaps be seen as sitting uncomfortably with the willingness to massively intervene in other areas. But of course, it has a logic of its own. Direct material provision for children by the State can influence parents' incentives to take up paid employment, and work is a prime obligation placed on most adults in modern industrial society.

The failure of states to provide anything more than minimal direct financial support for children is most strongly felt among large families: while a family's needs will increase with the number of children, there is no guarantee that parents' market incomes will similarly increase. Therefore, without adequate state intervention, it is almost inevitable that large families will be poorer, on average, than small ones. To my mind this raises an important question: in societies that increasingly focus on the rights of children, should children in large families be materially disadvantaged compared with children in smaller families simply because they have more brothers and sisters?

The purpose of this paper is to propose an argument for policies that support the promotion of equity between children. In order to elaborate this argument, I examine the relationship

between policy, poverty and household size among households headed by a working-age couple¹ across seven industrialised countries: Canada, Australia, the USA, Norway, Sweden, Finland and France. The analysis shows that in all countries, poverty increases with the number of children in the family. However, once parents' employment position is taken into account, welfare regimes in Finland and France are more effective than the others in promoting equity between children in households of different size.² I conclude by arguing for a new typology of welfare states that differentiates regimes according to their focus on *children*, as opposed to *families*.

The remainder of this paper is divided into 3 sections. In Section 2, theories of justice and distribution as they relate to children are discussed. Section 3 contains the main empirical analysis of aggregate and micro data. Section 4 concludes.

2. Children's Rights and Parent's Responsibilities

The Treaty on the Convention of the Rights of the Child recognises children's rights to an adequate standard of living (Article 27) and to benefit from social security (Article 26). However, it also recognises that parents 'have the primary responsibility to secure, within their abilities and financial capacities, the conditions of living necessary for the child's development' (United Nations, 1991). The State's role is to ensure that this duty is fulfilled by providing, among other things, material assistance to parents and children. The Treaty therefore provides a baseline in terms of children's rights, but one which does not adequately allow for a discussion of equity between children. Yet issues of equity and distribution are

¹ This includes legally married and de-facto couples where the man is aged between 20 and 59. It is important to note that single parents are excluded from this analysis. The issue of equity between children in single parent and couple households is clearly important, and raises issues that could perhaps be best examined separately. For example, see Land and Lewis (1997).

² Clearly, issues of equity between children are important in terms of more than just family size; for example, issues of region, ethnicity, disability and parental love are all of considerable consequence not just to children's well being and happiness *as children*, but also to their future life-chances *as adults* (an issue also not explicitly addressed here). The purpose of this paper is to focus on one of many issues of equity between children.

central to debates about welfare, and the role of the welfare state in industrial society. Bojer (forthcoming) attempts to develop these issues through extending Rawls' (1971) *Theory of Justice* to children.

Rawls (1971) proposes a social contract based on an 'original position' where all members of society are generally well-informed, but know nothing of their own age, sex, ethnicity, socio-economic position, psychological or moral attitudes, etc (the 'veil of ignorance'). The social contract would be based on two principles: first, the greatest amount of liberty possible that does not interfere with others' liberty; and second, social and economic inequalities are arranged in such a way that they benefit the least advantaged in society (Reiman, 1990).³ Rawls calls this second principle the 'difference principle'. Bojer (forthcoming) uses this as her main plank in applying Rawls' theory to children: children have a strong claim to being regarded as least advantaged members of society, to the extent that they cannot fend for themselves, and are (at least for a time) totally dependent on others.

While the difference principle is an egalitarian concept, it also embodies an implicit recognition that the way the pie is distributed may influence how much of it there is to distribute (the equity-efficiency trade-off). Therefore, some inequality is acceptable. Children may be dependent on others and therefore deserving of distributional justice, but the resources transferred to support them could conceivably influence their parents' incentives to work. There is a potential contradiction here which Bojer (forthcoming) appears prepared to overlook (except as a life-cycle issue) by treating children as *individuals* rather than as dependent *family members*. To my mind, her argument has considerable merit and deserves wider debate. But I will withdraw from that viewpoint a little and instead make a proposition which may be more easily accepted within the current paradigm to which Western industrial welfare states adhere.

³ This second principle also includes an 'equal opportunity' clause (Rawls, 1971, p.83). Like Reiman (1990), we will assume that this is implicit in Rawls' theory.

I will take as my starting point the Convention in the Rights of the Child discussed above. First, parents have primary responsibility for the maintenance of their children. Second, employment obligations for parents must be maintained, as Rawls' difference principle allows. Third, however, as Bojer (forthcoming) argues, it is hard to justify inequalities between the least advantaged, ie., children. Therefore, I propose that western industrial welfare regimes can promote equity between children in two ways: (1) overall; and (2) between children whose parents have similar attachments to the labour market. For the purposes of this research, 'equity' is minimally defined as 'similar probability of being in poverty'; 'between children' is narrowed down to 'between children in households of different size'; and 'similar attachments to the labour market' means dividing families headed by a couple into the following four categories: (1) both are in paid work (2) he is in paid work, she is not (3) she is in paid work, he is not⁴ (4) neither is in paid work.⁵

I have outlined Bojer's (forthcoming) more radical argument to highlight the extreme modesty of my own endeavours to research equity between children. But as I shall show, the modesty of these goals does not suggest their easy achievement by western industrial welfare regimes.

3. Welfare regimes and child poverty in seven industrialised countries

The main empirical part of this paper consists of an analysis of welfare regimes in seven countries, and how estimates of poverty vary across countries with the number of dependent children in households headed by a couple. In other words, can the presence of an extra child be associated with an increase in the probability of a household being poor? The seven countries were chosen for two reasons. First, it can be argued that they represent three

⁴ In practice, few working age families fit into this category, and it is not discussed in the analysis.

⁵ Clearly, categorising parents into 'employed/not employed' does not adequately deal with the incentives issue, since incentives also govern hours worked, types of work sought, wages etc. However, I hope to show that these finer distinctions do not actually matter too much within the context of the broader picture.

different models of welfare in the tradition of Esping-Andersen (1990): liberal (Canada, Australia and the USA), social-democratic (Norway, Sweden and perhaps Finland) and conservative (France). Second, survey microdata containing details of household incomes and characteristics are available for these countries in the database of the Luxembourg Income Study (LIS). LIS has gathered together household survey microdata for over 20 industrialised countries, partially documented them in English and put them in a form that makes it easier for analysts to compare them.⁶ Third, of the twenty or so countries for whom data are available (in Wave III of the LIS – that is, surveys from about 1990) these seven had sufficiently large sample sizes that allowed examination of large families, defined here as those with four or more children. As noted in the introduction, only households headed by a working-age couple are included in the analysis.

3.1 *Models of welfare*

The primary responsibility of parents for the maintenance of their children is widely accepted in industrialised countries. However, the state clearly does see a significant role for itself in ensuring children's well-being. In effect, both parents and the state combine to provide for children. But the State, as Folbre (1994) argues, does not always intervene to support all children equally, and the labour market participation of parents does not always ensure that their children enjoy a reasonable standard of living. Moreover, the State may assume that in helping parents participate fully in the labour market, it will also ensure the well-being of dependent children. This is not necessarily the case. Support for *families* cannot automatically be equated with support for *children*. This argument has not often been made in the social policy literature, but there is a clear conceptual difference between the two types of support. Obviously, education and health care services for children are clearly aimed at children, but the target of financial support is less certain. In particular, support that encourages parents to take up employment may not necessarily benefit (in relative terms) a family with four

⁶ But note that LIS cannot make the datasets comparable. Differences in sampling methods, periods over which data are collected, definitions and customs across countries mean that any international comparison should be seen as tentative. More complete details on LIS are available at <http://lissy.ceps.lu>.

children any more than it will benefit a family with two children. It is important, therefore, to elaborate a framework that might allow us to examine the relationship between policy and child poverty where a distinction is made between policies which focus on encouraging both parents (in effect, the mother) to maintain a relationship with the labour market, and policies which attempt to provide direct compensation to cover the costs of children.

[Figure 1 about here]

Figure 1 shows three policy dimensions within which financial support that may be of benefit to children can be realised. The underlying assumption here is that there is a dissonance between economy and fertility: parents with different numbers of children cannot by themselves produce even broad statistical equality between all children; if families are left to rely on the market, then children in large families will generally be worse off. Therefore, while individual policies may be important, the size of the social pie is to my mind paramount. This is why the first dimension matters. The comparison of welfare states in terms of total expenditure has a long history (see Wilensky, 1975); while more recently the analytical focus has switched to policy provision, volume is still likely to be important in delivering distributional justice.

The second dimension attempts to describe welfare state effort to encourage both parents to participate in the labour market. Since male participation is almost universally assumed, this dimension is actually very similar to that proposed by Lewis (1992). She argues that welfare regimes in industrialised countries have all subscribed to some degree to the idea of a society populated by male breadwinners who support dependent wives and children through employment. However, the breadwinner model has been modified to varying degrees in different countries: in its pure form, married women would be totally excluded from the labour market. Its polar opposite, as suggested by Sainsbury (1994), would assume that each spouse is responsible for their own maintenance, responsibility for children is shared, and the tax-benefit unit is the individual rather than the family.

The third dimension is new, and heavily draws its inspiration from Bojer's (forthcoming) interpretation of Rawls (1971), as elaborated in Section 2. There is room for considerable research on how welfare regimes concentrate resources specifically on children (rather than on families). For the purposes of this analysis, I propose to measure welfare regimes' efforts using a single indicator: direct cash transfers paid in respect of children. Two factors are important: the size of the transfers (in terms of average earnings in a country), and their distribution among children in a family – for example, how generous is support for a second child in comparison with support for a first child? In other words, to what extent does the welfare state assume equality between children in families of different size?

In terms of the analysis in this paper, there are two desirable outcomes: low child poverty overall (suggesting that society is oriented towards helping the least advantaged), and similar poverty probabilities for children in families of different size. (suggesting a high degree of equity between children). But as discussed in Section 2, these outcomes are examined in the context of parents' labour market activity. A welfare regime which valued highly both work incentives and equity between children might ensure that poverty probabilities for families varied according to parents' labour market status, but not according to number of children in the family.

[Table 1 about here]

The operationalisation of the schema outlined on Figure 1 that follows is relatively crude, and is perhaps best seen as illustrative. Table 1 shows total expenditure on family benefits as a percentage of GDP in the seven industrialised countries in our analysis. Sweden and France are the most generous, with 2.23 and 2.13 per cent of GDP, respectively, devoted to family benefits. Norway and Finland are next in terms of expenditure, and the USA is the least generous. There is a clear dichotomy between absolute provisions made by liberal welfare regimes, as defined by Esping-Andersen (1990), and social democratic and conservative regimes. However, it is interesting to note that Australia devotes rather more as a proportion

of GDP to family benefits than either the USA or Canada.⁷

[Table 2 about here]

Table 2 compares the seven countries in terms of efforts made to encourage mothers to participate in the labour market. Here, data are taken from Gornick *et al* (1996). They have included a wide range of policies in their model: child care expenditure and coverage, percentages of children in child care and length of the school day and year; and from this they devise an index of mother-friendly policies in industrialised countries. This index suggests that France, Sweden and Finland have policies which most encourage the mothers of young children into the labour market, while policies in the USA and Australia are the least mother-friendly. Although Gornick *et al*'s (1996) analysis only deals comprehensively with policies that affect the mothers of pre-school age children, their partial analysis of policies that influence the employment of mothers with school age children suggests greater equality of provision between countries than is suggested in Table 2.

[Table 3 about here.]

In terms of taxes and benefits, the policies that might indicate welfare state effort towards equity between children, data on Table 3 show that income tax allowances for children in Australia and Sweden are the least generous. In terms of cash family allowances, the USA and Canada provide the least. France and then Norway, followed by Finland and Sweden, are the most generous towards large families. However, while in Sweden and Norway family allowances are more or less directly proportional to the number of children in the family (that is, a family with four children gets about double what a family with two children gets); allowance scales in Finland and France (and in Australia, but at a much lower level)

⁷ Since the bulk of direct social policy provision for families with children in the USA comes in the form of tax reliefs, the figure for the USA is probably artificially low compared with the other countries, but not so artificially low that the rankings on Table 1 are skewed.

overcompensate large families for the extra children. Welfare regimes in these countries do not treat all children as equal, but increase the amount of benefit per child with the number of children in the family. As Bradshaw (1993) and Forssen (1998) argue, these are essentially pro-natalist (rather than overtly pro-child) policies. However, as this analysis will show, they appear to have positive consequences in terms of equity between children in families of different size.

3.2 *Poverty rates*

Children's well-being in the seven countries is measured from the LIS Wave III surveys according to the net (after tax) income of the households in which they live.⁸ Within the household itself I assume that income is shared equally between members. When comparing the incomes of households of different size, it is usually necessary to equivalise them. This is a potentially contentious issue in an analysis such as this, where number of children in the household is one of the key variables of interest. However, it is not the purpose of this paper to discuss equivalisation. Therefore, a scale of the square root of the number of people in the household is used throughout the analysis; an examination of the impact of alternative equivalence scales by the author suggested that results reported in this paper are unlikely to be overly sensitive to the choice of equivalence scale.

The choice of poverty line can also determine both the number of people defined as poor in a country, and the characteristics of the poor population. In this study, a poverty line of 60 per cent of median equivalised household income in each country is used. Again, a separate analysis by the author (not reported here) found that the poverty line chosen is fairly insensitive to the results in this analysis.

⁸ This is not strictly the case with Sweden, where information is only available at the level of the tax unit, or nuclear family of parents and any dependent children. However, this is not necessarily a very serious problem, as the number of people in Sweden who do not live in nuclear family units is believed to be small.

[Table 4 about here]

Table 4 shows that in every country, poverty increases with the number of children in the household.⁹ The increase is monotonic in every country except Finland, where people living in households with no children have a higher poverty rate than people living in households with one or two children. In Canada, Australia, the USA and Norway, the increase in poverty rates as the number of children in the household increases is particularly marked. For example, in Australia, 7.3 per cent of people living in households with no children fall below the poverty line, compared with 13.2 per cent of people in households with one or two children, 23.8 per cent of people in households with three children and 33.5 per cent of people in households with four or more children. Overall, 14.9 per cent of people in the Australian sample are defined as poor. Only 5.8 per cent of people in the Norwegian sample are defined as poor, but the poverty rate increases even more steeply as the number of children in the household increases: from 1.6 per cent for people in households with no children, to 26.8 per cent for people in households with four or more children. The increase in poverty rates as the number of children increases is lowest in Sweden and Finland. In France, on the other hand, people in households with three children have similar poverty rates to people in households with one or two children, but people in households with four or more children have very high poverty rates compared with people in all other household types. The overall picture does not change greatly for any country if the focus is on children only, rather than people living in households that contain children (last column, Table 4).

Two general conclusions can be drawn from Table 4. First, in terms of overall equity between children in households of different size, no country can be said to perform particularly well.

In every country, poverty rates for people living in households with four or more children are

⁹ People living in households containing a couple and three dependent children comprise between 8 and 11 per cent of the total population in the seven countries in this analysis. People living in households containing two parents and four or more children comprise between 2 and 5 per cent of the total population. In the case of both households with 3 children and households with 4 or more children, the highest proportions of the seven countries are in Australia.

at least twice those for people living in households with one or two children. In terms of protecting all children from poverty, however, the countries fall into two groups. The first group contains Canada, Australia, the USA and France: all these countries exhibit relatively high rates of child poverty, ranging from 15.8 per cent to 27.1 per cent of all children. The second group, containing Norway, Sweden and Finland, has lower average child poverty rates, ranging from 6.2 per cent to 8.5 per cent. These two groupings of countries are mostly consistent with the information presented on Tables 1 to 3. Canada, Australia and The USA have generally lower expenditures on family benefits and provide less in the way of support for working mothers. Norway, Sweden and Finland tend to provide rather more. But France is something of an anomaly: it scores well on the indices on Tables 1 to 3, but still has high rates of child poverty.

The data on Table 4 answer one of the main research questions set out in Section 2. It appears that there may be an association between welfare state provision and overall levels of child poverty, although this relationship is unclear in the case of France. It also appears that in all seven countries, there is little equity between children in households of different size. This is particularly obvious if people living in households containing four or more children are compared with all others. In this case, the relationship between number of children in the household and poverty is clearly very strong. These results are neither terribly new nor terribly surprising (see Halladay, 1972; Townsend, 1979). However, they have been largely ignored in recent years as average family sizes have declined. Moreover, these results highlight a problem of inequity *between* children that has mostly been overlooked until now. It is worth exploring this problem further.

3.3 *Decomposing inequity between children*

In extending Rawls' (1971) Theory of Justice to children, one might be shocked at the inequity between children that the above analysis suggests. However, if account is taken of the equity-efficiency trade-off in Rawls' difference principle, could these inequities between

children be justified by consideration of incentives for parents? Here I attempt to analyse the probability of households falling into poverty by controlling for number of children and for certain characteristics related to parents' labour force attachments. These characteristics include age of youngest child; the man's age, education and ethnicity or migrant status; whether there is a third adult in the household; and the man's and woman's labour market activity. In particular, I am interested in the association between parents' employment and children's poverty. A simple application (that is, ignoring type of employment, hours of work, etc., as noted above) of Rawls' difference principle would suggest that if both parents are in employment, then there should be no economic incentive issues, and therefore no inequity between children whose parents are both employed.¹⁰ Equally, if both parents are not employed, it might be expected that the incentive issues for parents of four or more children would be much the same as for parents of one child: certainly, outcomes for their children, in terms of poverty probabilities, should be similar.

[Table 5 about here]

Table 5 shows results for each country from the logistic regression analysis. The 'base household' contains only a couple and no other adults or children; the man is not a migrant; is of average age for married men between the age of 20 and 59; has completed at least secondary education; is an employee; and the woman is not employed. The parameter estimates on Table 5 represent the impact that each variable has on the probability of a household with the characteristic in question being in poverty, controlling for the value of all other variables in the model. Of themselves, these parameter estimates are not easy to interpret. It is therefore useful to transform them into poverty probabilities.

[Figures 2, 3 and 4 about here]

¹⁰ This very crude interpretation of incentives is, I believe, justifiable because the hypothetical policy goal of 'equity between children' investigated here, interpreted as 'a similar probability of falling into poverty', is minimalist.

Figures 2, 3 and 4 show the derived poverty probabilities for three household types: where both the man and the woman are employees (Figure 2); where the man is an employee and the woman is not employed (Figure 3) and where neither the man nor the woman is employed (Figure 4).¹¹ If incentive issues are important in determining the level of support given to families with different numbers of children, but otherwise children should be more-or-less equal, then distributional justice between children is clearly not on the agenda in Canada, Australia, the USA, Norway and Sweden. In all these countries, particularly in Norway and Sweden, the poverty probabilities in Figures 3 and 4 increase steadily with the number of children in the household. Incentive issues for parents of one child should be similar to those of parents of four or more children. If both parents are employees, or both parents are unemployed, there is no reason why children with greater numbers of siblings should have a greater probability of poverty than children with fewer siblings.

The case of Finland and France would tend to emphasise this point. In these countries there does appear to be greater equity between children from families of different size. The reason for this would appear to be the nature of state support that is directly aimed at children. This is clear from the data in Tables 1 to 3; both countries devote relatively high proportions of GDP (1.9 and 2.1 per cent of GDP, respectively) to family benefits. The family benefits themselves are generous: a family with four children receives 19 per cent of average gross earnings in family allowances in Finland, and about 25 per cent in France. And these benefits overcompensate large families for the number of children that they have: the level of transfers per child increases with the number of children.

But the fit between welfare state regimes and outcomes is not wholly consistent. Norway and Sweden also spend a high proportion of their GDP on family benefits, but in these countries there is little equity, in terms of poverty probabilities, between children in households of

¹¹ In the derivation of all poverty probabilities, the following characteristics remain constant: age of youngest child is 0-4 years, there are only 2 adults in the household, the man is not a migrant, man's log age is mean for country, man has more than primary education.

different size. This is because a considerable proportion of welfare effort is concentrated on encouraging mothers to participate in the labour market, and because family allowances increase more or less proportionately with the number of children in the household; there is little overcompensation, as is the case in Finland and France. Moreover, while Norway does have a generous family allowance regime (as a proportion of average earnings) and tax rebates for families with children, there is no extra system of means-tested help for poor families with children. If market earnings are not sufficient, there are not extra per-child means-tested benefits available for couples with children (Bradshaw *et al*, 1993). Therefore, while institutional arrangements in Sweden and Norway are successful in minimising overall levels of child poverty (as Table 4 shows) they appear to be less successful in ensuring equitable outcomes between children in families of different size. Institutional arrangements in France, on the other hand, are not terribly successful in terms of minimising child poverty, but once parental labour force activity is taken into account, it does ensure a degree of equity between children in families of different size. Arrangements in Finland appear to work reasonably well under both criteria. Arrangements in Canada, Australia and the USA are the least satisfactory.

5. Conclusion: A New Welfare State Typology?

This analysis has attempted to show first, that countries with large State expenditure on family benefits do appear to have significantly lower rates of overall child poverty (although France is an exception to this rule); second, that in terms of absolute poverty rates, there is little equity between children in families of different size (no exceptions here); but third, that countries with generous per-child allowances which overcompensate large families do appear to produce greater equity between children in families of different size if parental labour market participation is taken into account.

These three conclusions can be strongly linked to the discussion in this paper of distributional justice between children. Low overall rates of child poverty suggest a welfare regime that

may be concerned with issues of family income, but not necessarily with equity between children *per se*. In Norway and Sweden, welfare is focused on parental attachments to the labour market: this produces low overall child poverty rates, but does not produce equity between children in families of different size. In Finland, on the other hand, welfare is focused on both parental attachments and on equity between children, resulting in low overall poverty rates and equity between children in families of different size, so long as parental labour market attachments are taken into account. In Canada, Australia and the USA, low levels of welfare state intervention produce both high levels of child poverty and high levels of inequity between children. In France, the signals are mixed: welfare state effort does not appear to produce such clear results as are evident in the other countries. However, the French system, like the Finnish system, does appear to produce a degree of equity between children in families of different size once parental employment is controlled for.

In terms of equity between children, the findings for Finland and France are important because they show that state intervention can produce results that fit with a minimalist Rawlsian notion of distributional justice (modified by the incentives argument implicit in the difference principle) discussed here. This minimalist approach seems to me to be eminently achievable, even in incentive-oriented capitalist societies. Even though the policies introduced in Finland and France had a pro-natalist political purpose, their impact appears to have been to transform the association between number of children in the household and poverty that is found in other countries. In terms of social policy and distributional justice, this outcome has perhaps been overlooked to date. More comprehensive welfare regime analysis that focuses on policies specifically aimed at *children* might help contextualise findings such as this, and more generally, highlight the issue of equity between children.

Bibliography

- Bojer, H (1999, forthcoming) 'Children and Theories of Social Justice', *Journal of Feminist Economics*.
- Bradshaw, J, J Ditch, H Holmes and P Whiteford (1993) *Support for Children: A comparison of Arrangements in Fifteen Countries*, HMSO, London.
- Eardley, T, J Bradshaw, J Ditch, I gough and P Whiteford (1996) *Social Assistance in OECD Countries*, HMSO, London.
- Esping-Andersen, G (1990) *The Three Worlds of Welfare Capitalism*, Polity Press, Cambridge.
- Folbre, N (1994) 'The Economic Support of Child-Raising', *American Economic Review*, 84(2):86-90.
- Forssen, K (1998) *Children, Families and the Welfare State: Studies on the Outcomes of Finnish Family Policy*, STAKES Research Report No.92, Department of Social Policy, University of Turku, Finland.
- Gornick, J, M Meyers and K Ross (1996) 'Supporting the Employment of Mothers: Policy Variation Across Fourteen Industrialized Countries', Luxembourg Income Study Working Paper No. 139.
- Halladay, A (1972) 'The Extent of Poverty Among Large Families Living in the Heart of Sydney', *Economic Record* 48 (December 1972): 483-499.
- Land, H and J Lewis (1997) 'The Emergence of Lone Motherhood as a Problem in the Late Twentieth Century', Working Paper No.134, The Welfare State Programme, STICERD, London School of Economics.
- Lewis, J (1992) 'Gender and the Development of Welfare Regimes', *Journal of European Social Policy*, 2(3):159-173.
- OECD (1992) *The Tax/Benefit Position of Production Workers 1988-1991*, OECD, Paris.
- Rawls, J (1971) *A Theory of Justice*, The Belknap Press of Harvard University Press, Cambridge, Mass.
- Reiman, J (1990) *Justice and Modern Moral Philosophy*, Yale University Press, New Haven and London.
- Sainsbury, D (1994) *Women's and Men's Social Rights*, in D Sainsbury, (ed.) 'Gendering Welfare States', London: Sage.
- Townsend, P (1979) *Poverty in the UK*, Penguin, Harmondsworth.

United Nations (1991) *Convention on the Rights of the Child*, United Nations, New York.

Wilensky, H (1975) *The Welfare State and Equality*, Berkeley: University of California Press

Figure 1: Welfare State Typologies

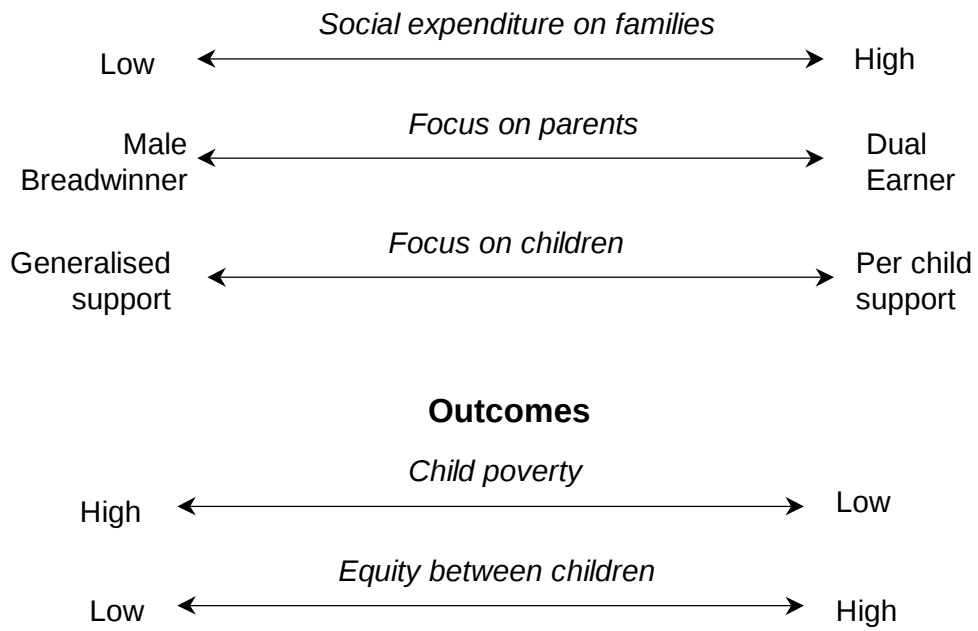


Table 1: Social expenditure in seven industrialised countries

	Social expenditure on family benefits as a proportion of GDP ^a	Rank
Canada	0.51	6
Australia	1.36	5
USA	0.22	7
Norway	1.91	3
Sweden	2.23	1
Finland	1.90	4
France	2.13	2

Source: OECD Social Expenditure Database (1998)

Table 2: Policies that support the employment of mothers in seven industrialised countries

	Policies that support employment for mothers with children aged under 3 ^b	Rank	Policies that support employment for mothers with pre-school-aged children ^b	Rank
Canada	34.7	5	30.1	4
Australia	21.6	6	16.8	7
USA	13.6	7	20.7	6
Norway	41.4	4	20.9	5
Sweden	62.3	2	61.6	2
Finland	65.8	1	55.9	3
France	53.2	3	76.6	1

Note: Index scores for each country are drawn up on the basis of eleven measures of policies that support the employment of mothers: (1) whether there is legislated job protection for women on maternity leave (2) number of weeks paid maternity leave (3) wage replacement rate for women on paid maternity leave (4) coverage of paid maternity leave (5) number of weeks extended maternity leave available (6) whether paternity leave is available (7) government expenditure of child care (8) amount of tax relief for child care (9) ages of children covered by child care (10) per cent children less than school age in publicly funded child care (11) per cent five year olds in school.

Source: Gornick *et al* (1996), Table 5.

Table 3: Tax-benefit policies (circa 1990) that provide financial support for children

	Tax Allowances	Family Allowances as per cent of average industrial earnings	
		2 children	4 children
Canada	First 2 children	3.1	6.2
Australia	None	3.5	14.5
USA	First child only	0.0	0.0
Norway	Per child	10.4	22.8
Sweden	None	8.7	17.4
Finland	First child only	7.5	19.0
France	Per child	6.9	24.6

Sources: OECD (1992); Eardley *et al* (1996).

Table 4: Poverty^a among people living in households with working-age couples^b, by number of children

	Number of children in household				All households	All children ^c
	No children	One or two	Three	Four or more		
Canada	7.4	13.3	20.9	36.4	13.8	17.9
Australia	7.3	13.2	23.8	33.5	14.9	19.4
USA	9.9	19.7	30.6	48.7	21.0	27.1
Norway	1.6	4.5	11.4	26.8	5.8	8.1
Sweden	5.0	6.3	11.0	12.7	7.0	8.5
Finland	6.7	4.7	9.0	10.2	6.1	6.2
France	11.4	13.3	14.5	27.9	13.9	15.8

Notes: a. Households with less than 60 per cent of national median equivalised income are defined as poor; equivalence scale = $\sqrt{N}$, where N = number of people in household.

b. ie., where man is aged 20-59.

c. Proportion of all children who live in households with equivalised incomes below the poverty line.

Source: LIS Wave III, author's calculations.

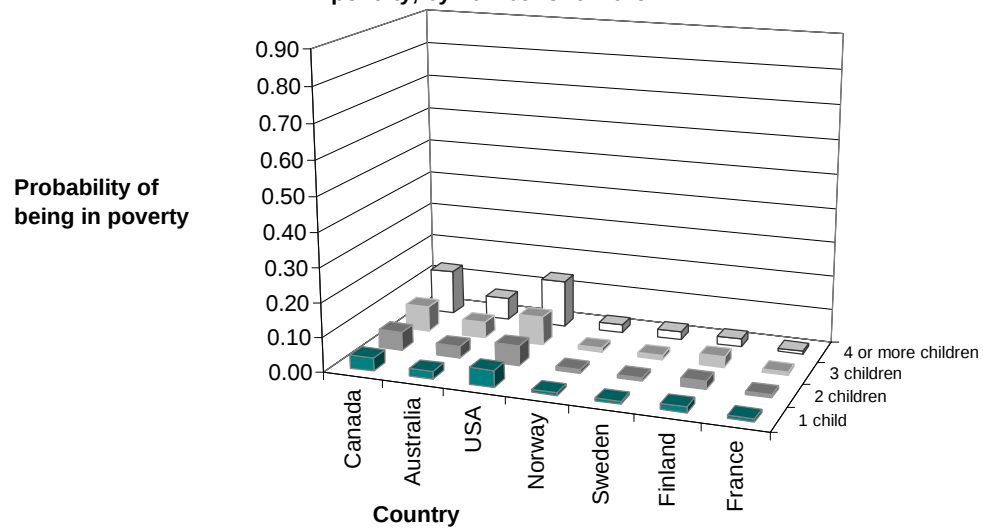
Table 5: Logistic regression of household characteristics on poverty

	Country						
	Canada	Australia	USA	Norway	Sweden	Finland	France
Intercept	-2.3542	-2.8739	-2.0656	-3.2999	-2.9225	-3.2930	-2.4815
1 child	0.3942	0.5695	0.3989	0.7514	0.4657	-0.4836	-0.1022**
2 children	0.7182	1.1005	0.5553	0.9651	1.0316	-0.3920	0.2400**
3 children	1.0490	1.4479	0.9460	1.1760	1.3231	0.0422**	-0.2041**
4+ children	1.6679	1.7740	1.5031	1.8711	1.0059	-0.0134**	0.0152**
Youngest child aged 5-9	-0.0149**	-0.4162	0.1127**	-0.0824**	-0.5954	0.4300	0.5239
Youngest child aged 10-14	-0.0991**	-0.3758	0.1246**	0.0074**	-0.2700**	0.4322	0.6440
Youngest child aged 15+	-0.2150**	-0.0422**	-0.0599**	-0.3744**	-0.0573**	0.5185	0.2873**
3+ adults in household	-0.4938	-0.8017	-0.3324	-0.7601	‡	-0.5170	-0.3915
Man is migrant (black in the USA)	0.1514**	0.4732	0.6526	‡	0.8371	‡	0.4824
Log age of man	-1.1210	-0.4563	-2.2308	-1.0028	-0.7029	-2.0151	-0.7787
Man has primary education only	0.8146	0.4794	1.2528	0.5689	0.5589	0.3959	0.8791
Man is self-employed	1.3553	1.3457	1.0170	1.0606	2.9355	2.3499	2.2472
Man is not employed	1.4012	2.5426	1.5172	2.8904	1.7674**	2.4407**	1.9991
Woman is employee	-1.2756	-1.5366	-1.2849	-2.3726	-1.7711	-1.7199	-2.318
Woman is self-employed	-0.2163*	-0.6148	-0.4688	-2.1465	-0.2083	0.0178	-0.3720
Pseudo R ²	0.20	0.26	0.22	0.28	0.34	0.26	0.28

Note: ‡ parameter is not available for country in question.
 * parameter estimate not significant at 5%.
 ** parameter estimate not significant at 10%.

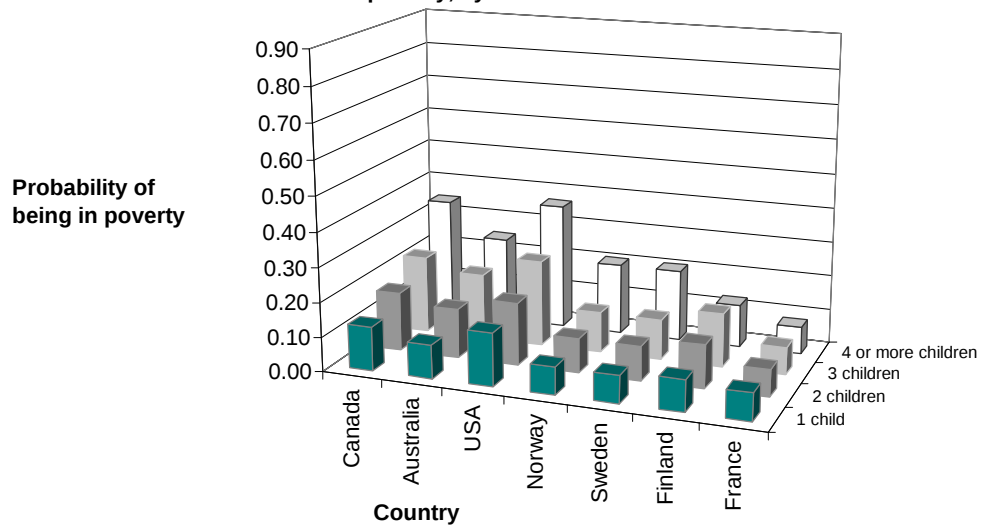
Source: LIS Wave III, author's calculations.

Figure 2: Man is an employee, woman is an employee: probability of household being in poverty, by number of children



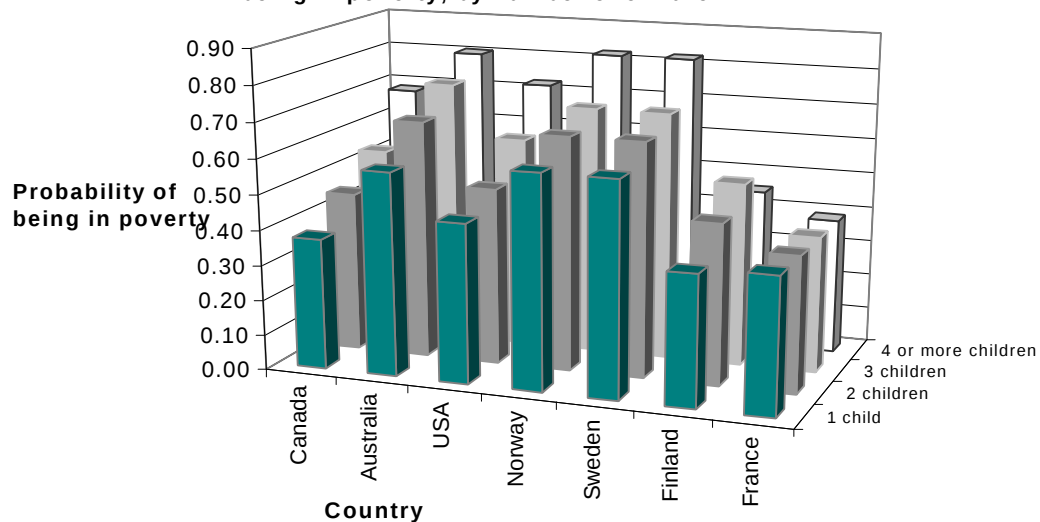
Source: LIS Wave III, author's calculations.

Figure 3: Man is an employee, woman is not employed: probability of household being in poverty, by number of children



Source: LIS Wave III, author's calculations.

Figure 4: Neither man nor woman is employed: probability of household being in poverty, by number of children



Source: LIS Wave III, author's calculations.

Appendix

Varying equivalence scales and poverty lines: what is the impact on results?

Tables A1, A2 and A3 contain poverty headcounts for people living in households with different numbers of children, where the equivalence scale is varied as follows: N^1 , $N^{0.75}$, $N^{0.5}$, $N^{0.25}$, and N^0 ; where N is the number of persons in the household. Therefore, at one extreme the scale N^1 assumes no economies of scale as extra people are added to the household – a household with six members needs twice as much income as a household with three members in order to achieve the same standard of living. At the other extreme, the scale N^0 assumes that all households, whatever their size, require the same absolute amount of income if they are to achieve the same standard of living.

Each table shows poverty headcounts according to a different poverty line: 60 per cent of national median household income (Table A1, the definition of poverty used in the main analysis); the 25th percentile (Table A2) and the 10th percentile (Table A3). As might be expected, under all three definitions poverty headcounts for households with four or more children decrease as the equivalence scale moves from N^1 to N^0 . However, in all countries except Finland and France, and in the case of Tables A2 and A3, Sweden, poverty headcounts among households with four or more children are higher than overall headcounts, even under the N^0 scale. This suggests that while varying the poverty line or equivalence scale might alter estimated percentages of children in poverty, it is unlikely to alter the finding that there is considerable inequity between children in households of different size.

Table A1 Sensitivity of poverty estimates to choice of equivalence scale, poverty line is 60 per cent of median national household income

	Per cent in poverty				Total
	No children	One or two children	Three children	Four or more children	
<i>Equivalence scale = N^1</i>					
Australia	3.9	13.7	36.9	63.9	18.7
Canada	5.1	13.5	32.3	59.2	15.9
USA	6.6	19.9	43.1	69.1	23.5
Finland	2.8	5.8	23.1	61.8	9.7
Norway	0.8	4.9	21.5	44.3	8.1
Sweden	1.8	6.8	24.0	55.2	10.5
France	7.4	13.9	28.4	63.1	17.5
<i>Equivalence scale = $N^{0.75}$</i>					
Australia	5.7	13.5	29.1	51	16.8
Canada	6.5	13.2	24.2	48.5	14.6
USA	8.0	19.7	38.1	60.0	22.4
Finland	4.6	5.2	14.5	35.3	7.6
Norway	1.1	4.6	15.7	35.7	6.8
Sweden	3.2	6.5	14.2	27.3	7.87
France	9.2	13.6	20.8	48.1	15.7
<i>Equivalence scale = $N^{0.5}$</i>					
Australia	7.3	13.2	23.8	33.5	14.9
Canada	7.4	13.3	20.9	36.4	13.8
USA	9.9	19.7	30.6	48.7	21.0
Finland	6.7	4.7	9.0	10.2	6.1
Norway	1.6	4.5	11.4	26.8	5.8
Sweden	5.0	6.3	11.0	12.7	7.0
France	11.4	13.3	14.5	27.9	13.9
<i>Equivalence scale = $N^{0.25}$</i>					
Australia	9.6	13.1	19.0	24.3	14.0
Canada	10.2	12.9	17.2	28.7	13.6
USA	12.6	19.4	24.8	34.4	19.6
Finland	10.4	4.7	6.1	3.0	6.4
Norway	2.8	4.2	6.8	17.8	4.8
Sweden	7.2	6.0	6.8	6.5	6.4
France	14.5	13.2	10.6	8.3	12.8
<i>Equivalence scale = N^0</i>					
Australia	12.9	13.0	14.2	18.2	13.6
Canada	14.3	12.9	14.3	16.8	13.7
USA	17.2	19.5	22.2	29.5	20.0
Finland	16.0	5.0	4.3	2.8	8.0
Norway	5.2	4.3	3.5	10.5	4.6
Sweden	10.1	5.6	3.6	3.3	6.4
France	19.0	12.7	6.6	6.1	13.1

Source: LIS Wave III, author's calculations.

Table A2 Sensitivity of poverty estimates to choice of equivalence scale, poverty line is 25th percentile of national household income distribution

	Per cent in poverty				Total
	No children	One or two children	Three children	Four or more children	
<i>Equivalence scale = N^1</i>					
Australia	5.5	19.9	48.7	75.0	25.0
Canada	8.1	23.4	47.9	74.8	25.0
USA	7.1	21.3	46.2	70.9	25.0
Finland	7.3	21.3	58.9	85.3	25.0
Norway	3.17	20.39	61.68	80.36	25.0
Sweden	4.12	19.7	61.7	80.2	25.0
France	10.6	20.9	43.8	76.1	25.0
<i>Equivalence scale = $N^{0.75}$</i>					
Australia	7.7	21.3	45.6	64.5	25.0
Canada	10.0	24.2	44.0	64.8	25.0
USA	8.9	22.1	42.1	67.1`	25.0
Finland	11.7	22.0	49.0	76.0	25.0
Norway	5.6	22.7	53.1	67.0	25.0
Sweden	7.2	21.1	54.5	69.6	25.0
France	14.7	22.2	37.1	62.7	25.0
<i>Equivalence scale = $N^{0.5}$</i>					
Australia	10.4	23.1	40.2	55.0	25.0
Canada	13.3	24.9	38.0	56.4	25.0
USA	12.3	23.1	38.3	55.9	25.0
Finland	18.7	22.7	38.3	54.0	25.0
Norway	8.2	25.3	43.3	52.0	25.0
Sweden	12.0	23.1	43.4	57.5	25.0
France	18.6	22.8	33.1	51.0	25.0
<i>Equivalence scale = $N^{0.25}$</i>					
Australia	15.2	24.4	34.5	41.6	25.0
Canada	17.4	25.6	32.1	41.7	25.0
USA	16.5	24.1	33.6	43.1	25.0
Finland	27.4	22.5	27.6	32.1	25.0
Norway	13.1	25.7	36.3	41.7	25.0
Sweden	20.6	24.2	32.9	32.6	25.0
France	23.7	23.5	26.2	39.9	25.0
<i>Equivalence scale = N^0</i>					
Australia	20.7	25.5	28.5	28.4	25.0
Canada	22.7	25.5	24.8	32.2	25.0
USA	21.5	24.6	28.4	32.8	25.0
Finland	37.6	21.5	16.9	9.6	25.0
Norway	20.3	25.9	28.8	26.2	25.0
Sweden	34.6	22.6	19.9	15.3	25.0
France	31.5	24.1	20.0	16.2	25.0

Source: LIS Wave III, author's calculations.

Table A3 Sensitivity of poverty estimates to choice of equivalence scale, poverty line is 10th percentile of national household income distribution

	Per cent in poverty				Total
	No children	One or two children	Three children	Four or more children	
<i>Equivalence scale = N^1</i>					
Australia	2.3	7.2	17.8	39.0	10.0
Canada	3.6	8.2	19.3	41.2	10.0
USA	3.3	7.2	17.5	38.3	10.0
Finland	2.9	6.1	23.5	62.1	10.0
Norway	1.2	5.9	27.4	50.7	10.0
Sweden	1.7	6.4	22.3	53.2	10.0
France	5.6	7.9	13.6	37.1	10.0
<i>Equivalence scale = $N^{0.75}$</i>					
Australia	3.5	8.1	17.0	30.3	10.0
Canada	3.9	9.0	17.3	35.0	10.0
USA	4.3	7.9	16.8	30.9	10.0
Finland	5.4	7.2	19.5	45.4	10.0
Norway	1.5	7.2	24.8	41.9	10.0
Sweden	3.7	7.7	20.1	36.8	10.0
France	6.9	8.6	12.1	29.3	10.0
<i>Equivalence scale = $N^{0.5}$</i>					
Australia	5.4	8.8	14.7	23.8	10.0
Canada	5.5	9.3	15.2	28.3	10.0
USA	5.4	8.6	14.4	26.8	10.0
Finland	9.3	8.0	15.2	22.5	10.0
Norway	3.2	8.5	18.7	35.6	10.0
Sweden	6.5	8.8	15.4	24.7	10.0
France	9.7	9.4	10.1	15.5	10.0
<i>Equivalence scale = $N^{0.25}$</i>					
Australia	7.6	9.2	12.4	18.7	10.0
Canada	7.9	9.6	13.2	17.8	10.0
USA	7.0	9.3	12.4	20.0	10.0
Finland	14.5	7.8	9.9	7.3	10.0
Norway	5.3	9.4	15.2	25.6	10.0
Sweden	10.3	9.1	11.9	12.3	10.0
France	12.0	9.9	7.2	8.3	10.0
<i>Equivalence scale = N^0</i>					
Australia	10.0	9.3	10.0	15.1	10.0
Canada	10.6	9.4	11.2	10.4	10.0
USA	9.1	10.0	10.4	12.5	10.0
Finland	19.4	6.6	5.9	3.0	10.0
Norway	9.2	9.5	10.0	20.2	10.0
Sweden	15.1	9.0	6.8	5.7	10.0
France	15.3	9.5	4.6	3.6	10.0

Source: LIS Wave III, author's calculations.