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Trends in Child Poverty and Social Transfers in the Czech Republic, Hungary and Poland: Experiences from the Years after Transition

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TRENDS IN CHILD POVERTY AND SOCIAL TRANSFERS IN THE CZECH REPUBLIC, HUNGARY AND POLAND: EXPERIENCES FROM THE YEARS AFTER TRANSITION[1]

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1. INTRODUCTION: QUESTIONS AND METHODS

In our paper we present a comparative analysis of the effects of family policy measures on poverty patterns in the Czech Republic, Hungary and Poland. A special attention is devoted to changes in the extent, depth and composition of poverty, in particular that of the youngest generation.

Economic well-being of families is a result of a whole complex of social and economic policies and economic developments. The primary source of family incomes is generated on the labour markets in general. The actual constellation of education, labour market, housing and health policies does have an important effect on the economic well-being of families. Importance and effects of policies directly designed for families, therefore, always depend heavily on a number of other factors. Nevertheless, in this paper we focus on family policy changes and their effects, accompanied by a most necessary short mention of other policies and developments.

After discussing some methodological issues, we turn to a brief overview of the main trends of the economy in the Czech Republic, Hungary and Poland, followed by a short description of poverty in the observed countries. In these parts of the paper we draw on our earlier work concerning overall poverty, inequality and the incidence of transfers in the Visegrad countries[2]. The third section provides policy descriptions. Types of benefits are compared and described across countries and different reform attempts are highlighted. The fourth part of the paper analyses possible effects of family policies on alleviating poverty. Section five concludes.

1.1 Basic questions

In an earlier paper (Förster and Tóth, 1998) we presented an overview of the development of poverty and inequalities in the Visegrad countries at the beginning of the 1990s and then moved to an analysis of the effects of cash welfare benefits in alleviating poverty in Hungary (Förster, Szivós and Tóth, 1998). In the present paper, we extend the country coverage and time span for more recent data, looking at changes over recent years and focussing on poverty of children and families with children.

The basic questions in this paper are the following:

- How did poverty develop in Visegrad countries, through the difficult years of the transition?
- What policy changes were introduced in the individual countries?
- What effects these policies may have had on poverty patterns?

In order to formulate some answers to these questions, first a number of methodological issues should be clarified. This follows in the next section.

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[2] The association of Visegrad countries, named after a town on the river Danube, was founded in 1991 and comprised at that time Czechoslovakia, Hungary and Poland. With the split of Czechoslovakia and the establishment of a more economically oriented Central European Free Trade Association (CEFTA), the Visegrad association somewhat ceased most of its activities in the early 1990s. There was however renewed interest in co-operation within this frame recently, as the government chiefs of the Czech Republic, Hungary and Poland met on a Visegrad summit in October 1998. The Slovak Republic joined in 1999.

1.2 Data and methods

In our analysis, we use household surveys from the individual countries. For the Czech Republic, the data source is the Microcensus for the years 1992 (16234 observations) and 1996 (28148 observations)[3]. As for Hungary, the Hungarian Household Panel (HHP) 1991 and the TARKI household survey 1997 are analysed. Both of these are small sample household datasets, containing some 2000 households and all the members in them. The source of the Polish data originates from the household budget surveys 1992 (6602 observations) and 1995 (32009 observations). While the analyses of the Polish micro data has been obtained via the micro data stored at the Luxembourg Income Study (LIS), the micro data from the Hungarian and Czech surveys have been analysed directly. Great care has been taken in this process to standardise the country specific information available into a common framework of demographic and income concepts.

It is common to all of these datasets that they provide information on incomes, rather than consumption. This choice is deliberate. Earlier tests for the ability to capture the full range of income inequalities proved household budget surveys less reliable for these countries. As it was found, for example, for Hungary, the household budget survey is able to capture the middle income categories, providing rich data for all sorts of household consumption, but it was also found that the lower and upper brackets of the income distribution may not be properly represented there (Andorka, Ferge and Tóth, 1997).

The basic unit of analysis in this paper is the household. The theoretical background behind is that people live in households, sharing their incomes and consumption in one way or another. Individual well-being can therefore only be assessed in the frame of a household. The results shown, however, refer to persons. When showing statistics on persons, we achieve individual data through weighting household data with the number of persons in the household.

To take into account economies of scale in households, equivalence scales are used for adjustments. For the analysis, an equivalence elasticity of e=0.5 is used throughout the paper. This makes international comparisons with other OECD countries possible. However, since for social policy purposes in most of the eligibility requirements in these countries a per capita account of household incomes is taken, our results may show lower poverty figures for large families than the ones based on per capita incomes in administrative or other types of statistics. Detailed tests when using alternative equivalence elasticities are provided in Annex 1 to this paper.

In an ideal case, all datasets would have reflected the same time periods. This, however, could not be achieved. We compare two data points for all the three countries. The first years may be characterised as those which reflect the deepest periods of the recession (1992 in Poland and Czech Republic, 1991 for Hungary). The other elements of the year-pairs are from the middle to later nineties: 1995 for Poland, 1996 for the Czech Republic and 1997 for Hungary. Data availability did not allow to chose exactly the same years. Nevertheless, it can be said that the first investigated datasets reflect an interim period between family policy extensions and later reforms, while the second round reflects a post-reform phase, since in 1994-1995 there were important family policy reforms implemented in all three countries.

We use total household incomes and various elements of household incomes for the assessment of poverty situations. The income definitions follow international conventions (see, for instance, OECD

[3] The data computations on the micro data of the Czech Microcensus have been performed during Summer 1999 at the Institute for Sociology, Prague.

1998a): total disposable household income is the sum of market income (gross earnings, capital and self-employment income) plus public and private transfers less income taxes and social security contributions. Here we shall mention a shortcoming of the analysis: in three of the surveys (Czech Republic 1992, and the two Hungarian data sets), no tax information was available but all income components were available net of taxes. We therefore restricted our analysis to total disposable income (DPI) which could be constructed for all surveys, and different components of public transfers, specifically family transfers. This means that a separate assessment of the effects of direct taxation was not possible with the data at hand[4].

When we speak about family transfer policies, we concentrate on cash incomes in two broad groups: maternity and family allowances. No attempts have been made to take into account in-kind benefits and services (kindergarten, schools, counselling, etc.), though we think these also play a very important role as parts of family policies. This may introduce biases into our results: in a period when there was a shift of importance from in kind benefits to cash social transfers, relying on cash transfer data only may lead to an underestimation of difficulties experienced by families with children. This should be born in mind when interpreting the results below.

2. GENERAL OVERVIEW OF MAIN TRENDS: COMPARISON OF THE THREE COUNTRIES

When comparing the background circumstances, we start by concentrating on the economic context. Then we move to an overview of poverty and inequalities in general. This will be followed by an analysis of relative poverty measures for children and families with children.

2.1 Similarities and dissimilarities in the economic context

When comparing Czech, Hungarian and Polish developments of family policies in the last ten years, some important similarities and dissimilarities in the economic development should be mentioned right at the outset. The first important similarity is that each of these countries had to face the challenge of structural adjustment in the first half of the nineties. It was the very nature of the economic transition that the underlying mechanisms of labour markets fundamentally changed, a legal framework for markets had to be developed, economic ownership was changed[5]. These major changes in the social fabric had rearranged the life chances of families and produced fundamentally different circumstances for family survival strategies.

Another similarity is that each of these countries experienced a significant drop in economic output, faced never experienced levels of inflation and an increase of visible economic inequalities. Within this "transformational recession" (Kornai, 1994), the deepness -- and to some extent -- the causes of the recession were slightly different, but still, in the beginning of the nineties each of the observed countries experienced a large decline in output. The most dramatic fall in GDP occurred in 1990 (Poland) and in 1991 (Hungary and Czech Republic). The earlier Polish economic backdrop was followed by an equally relatively earlier recovery. At least around 1994 all countries showed signs of recovery.

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[4] This would, however, lead to a serious shortcoming for comparative analysis only in cases where the transfers considered were taxed in some countries, and not taxed in others, off-setting a high transfer share in disposable income by a high tax rate. In the case of the Visegrad countries studied here, the transfers studied are tax-free.

[5] For a comprehensive account of the challenges of systemic change in all the transition region, see Barr (ed, 1994).

Each country experienced relatively high levels of inflation. In Poland it was in a different range than the others, since an enormous hyperinflation was gradually decreasing to "normal" levels only during the second half of the period. In the Czech Republic there was a major price shock in 1991, but since then, despite the fact that a second increase occurred in 1992, inflation remained on a relatively low level during our period observed. In Hungary, the peak was also in 1991. However, after some decrease in the election year, inflation turned back in 1995 and 1996 again (due, most importantly, to the shock-like stabilisation policies implemented in 1995).[6]

As a result of a number of factors, real wages tended to decline in each of the countries in the starting phase of transition, between 1989 and 1991. The increase started in 1991 in the Czech Republic. In Poland, real wages tended to stagnate between 1990 and 1995, while the Hungarian figures declined again, after a moderate increase in 1994. By 1995, real wages were around 90% of their 1989 level in the Czech Republic, and around three-quarters of their 1989 level in the other two countries. (UNICEF, 1997)

Also, there have been striking similarities in the sequences of institutional reforms. The timing and extent somewhat differed, but a number of similarities in institution building could be listed. Besides the creation of the general legal framework and privatisation practices, each country went through a procedure of restructuring public expenditures, reducing subsidy programmes, followed by attempts to cut social expenditures and implement institutional reforms in unemployment, health, pension and family policies. (EBRD, 1996) A short mention of some of the reforms follows in the next sections.

The most important dissimilarities should be sought primarily in the initial conditions of the transition. In Poland, for example, the high share of the agricultural population is an important distinctive feature for the economic developments and, also, for the social policy institutions. Not the least, this was reflected also in welfare system design: a large number of special provisions could be found for special occupational groups. (Phare, 1996c, Topinska, 1992) Both Poland and Hungary had at least some private activities to build upon, while this could not be attributed to the Czech economy. Political rights were also more liberal in Poland and Hungary than in Czechoslovakia during the eighties.

Another dissimilarity is the pace of reforms in the three countries. Poland had chosen a shock therapy approach (when most of the core economic system variables were planned to be changed all at once), while Hungary relied on a gradualist approach. In the (then) Czechoslovakia, the strategy of "delayed" adjustment was chosen (in anticipation that the transition can develop smoother, should some major hard decisions be delayed in the anticipation of better outside and internal circumstances).

From the view point of the relative position of families and of the shape of poverty and income distribution, it is very important how labour markets operate and provide jobs and earning possibilities for the active and inactive population. In this respect, very significant differences could be found between the observed countries. Poland and Hungary had shown a fast increase of unemployment through 1990/1991, while (at least for the observed period) unemployment remained very low in the Czech Republic. (Kux 1996, Soltys 1996, OECD 1995b, 1998b). The drop of employment was drastic in all three countries. However, both the absolute decline and the employment rate in the first years of transition were clearly an outlier in Hungary. The employment rate has stabilised by 1994/1995 in the other three countries, whereas it continued to decline in Hungary until 1997, when signs of stagnation and gradual turn in economic activity first appeared.

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[6] This trend seemed to turn back in the next three years between 1997-1999: in these years a slowing down of the inflation can be observed again in Hungary.

Each country experienced an expansion of social expenditures in the first years of the decade. Part of this may be attributed to increased demand for social policies independent of the economic transition: e.g., demographic challenges like the ageing of the society, the increase of dependency burden, and the change in family patterns. Other factors like the fall of household disposable incomes and the increase of poverty, were endogenous. Health, education, pension, family, unemployment and social assistance expenditures in 1992 altogether accounted for some 28 percent of GDP in Poland and in Hungary, while the Czech figure was somewhat lower, at around 24 percent of GDP (UNICEF, 1997).

Among these expenditure items, however, the Hungarian share of family policy expenditures in GDP was the highest in 1992 (around 4%) followed by the Czech figure (3,8%) leaving Poland lagging behind (2%). This was primarily due to the relative preferences for family policies in the individual countries. A comparison of the relative shares of expenditures on the elderly, on child rearing families and on the poor/unemployed across these countries showed that pensions received the largest share in Poland: they made up over three-quarters of social expenditures in 1992. Family and maternity benefits (among cash social benefits) seemed to be the highest relative share in the Czech Republic, while the package of unemployment benefits and social assistance received the biggest share in Hungary out of the total cash social expenditures. (Förster and Tóth, 1998)

2.2 General trends in poverty and inequalities in Visegrad countries

Comparative analyses of the extent and changes of poverty and inequalities through the transition in Central Eastern European countries were subject to a number of studies most recently (see, among others, World Bank, 1996, Milanovic, 1998, Förster and Tóth, 1998, Andorka, Ferge and Tóth, 1997, Spéder and Habich, 1998).

Most of these studies agreed that inequalities increased significantly in the transition economies. It is also widely accepted that there has been a dramatic increase in some of the countries, while others produced much smaller widening in income inequalities. From these studies it can be concluded that incomes in Hungary and Poland proved to be much more unequally distributed than in Czechoslovakia at the start of transition. This is shown on the basis of different datasets (LIS and SOCO[7]) for the first half of the nineties in table 2.2.1.

Table 2.2.1.

Indicators for income inequality for three Visegrad countries in 1992 and 1994:
Decile values in percent of median incomes, decile ratios and Gini coefficients

	P10	P90	P90/P10	GINI
		LIS data, 1992		
Czech Republic	65	155	2,36	0,207
Hungary,	54	182	3,36	0,281
Poland	51	191	3,73	0,291
		SOCO Survey, 1994		
Czech Republic	60	185	3,10	0,249
Hungary	57	175	3,05	0,279
Poland	39	189	4,90	0,352

Source: Andorka- Ferge- Tóth 1996, Sprout 1995, Table 1. Figure 1, and authors computations.
Note: P10 and P90 are the upper cut points for the first and the ninth decile, in percent of the median. Incomes refer to person equivalent incomes, adjusted with elasticity=0.5.

[7] Social Costs of Transformation, a project of the Institute for Human Sciences, Vienna.

However, it was found that there appears to be a number of inconsistencies in some of the presented data, may be due to methodological differences between the studies, and may be due to some unknown or not fully explained sociological or other country differences. Also, it may be suspected that inequalities started growing in the Czech Republic more sharply in the period of 1992-1996 (Andorka, Ferge and Tóth, 1997).

Estimating poverty may turn out to be even more difficult than inequality assessments. In an earlier survey of available studies we found that, in the beginning of the 1990s, *relative* poverty was reported to concern roughly one out of fifteen persons in the Czech Republic, and between a fifth and a sixth of the population in Hungary and Poland. On the other hand, the results for *absolute* income poverty showed no clear picture: the numbers were shown to be either lower than relative estimates (in particular in the Czech Republic), or else substantially higher (in particular in Poland), depending which absolute poverty threshold has been applied[8]. (Förster-Tóth, 1998, table 17)

When we compared overall measures for relative poverty, we investigated simple and composite indices, including the Sen-index: this comprehensive poverty measure includes three dimensions of overall poverty in one indicator: incidence (expressed in the poverty rate), intensity (expressed in the poverty gap) and inequality (expressed in the Gini coefficient of the poor)[9]. It was found that not only the incidence of poverty was higher in Hungary and Poland than in the Czech Republic, but also its intensity. The average income of the poor was found to lie about one fourth below the poverty line in the first pair of countries, but less than one sixth in the latter country. In addition, the incomes were found to be distributed more unequally in Hungary and Poland than in the Czech Republic; this is true for both the total population and the poor population. Taken together, this means that the situation of the poor population could be described as more severe in Hungary and Poland than in the Czech Republic at the beginning of the 1990s.

Table 2.2.2.
Poverty indicators for Visegrad countries

	Poverty rate	poverty gap	poverty indicator	Gini	$Gini_q$	Sen-index
Czech Republic 1992	6.0	15.0	0.90	0.2047	0.1081	1.45
Hungary 1991/92	14.7	26.7	3.93	0.2812	0.1674	5.73
Poland 1992	16.3	26.0	4.24	0.2914	0.1496	6.05

Source: Förster-Tóth, 1998, Table 18., on the basis of calculations on LIS micro data

8 Relative poverty is defined as having incomes below a percentage of average or median income (60% in the results quoted above); absolute poverty refers to a fixed poverty threshold such as the subsistence minimum.

9 For a methodological discussion of the Sen index and an empirical application to a range of traditional OECD countries, see Förster 1994b. A time series of Sen poverty indices for the Hungarian population and several sub-populations has been analysed in Szivós and Tóth, 1998.

Poverty rate (*P*): number of persons in households with incomes below 60% of median income; all incomes adjusted for household size (e=0.55). Poverty gap defined as $\Pi = (z - y)/z$, where y=average income of the poor and z=poverty line. Poverty indicator: $P * \Pi * 100$. Sen poverty index defined as $S = P * \{\Pi + (1-\Pi) * G_q\}$, where *P*=poverty rate, and G_q=Gini coefficient of the poor.

2.3 An overall picture of income poverty of children and families in the early to later 1990s

This section considers developments in low incomes during the period 1991/92 to 1995/97, for two different populations:

i. Children: the focus here is on children *per se*, i.e. persons aged under 18 years living in the household. When speaking of "children's incomes", this approach simply attaches the adjusted household income to each child of this household, and disregards adults from the analysis[10]. This perspective allows us to analyse the financial well-being of children on its own;

ii. Families with children: the focus here is related to family poverty, and the analysis includes all persons living in families with children. This additional perspective has been chosen because policy instruments such as family cash benefits are allocated to families rather than to children, and in general they are at the disposal of the parents and other adult household members. Two specific family types with children[11] are analysed below: large families (i.e. families with three or more children), and single parent families. In many countries, these two family types are considered to be particularly economically vulnerable, and some institutional regulations such as discretionary cash benefits take this into account.

A first question refers to the trend in average incomes of children and families with children. Recent evidence for the traditional OECD region[12] suggests a worsening in relative incomes of the younger generation with regard to the entire population in the 1980s to 1990s (Oxley *et al.*, 1999). How do the Visegrad countries fare in this overall picture? We look at a period -- early to mid-1990s -- for which the starting date marked in all three countries the deepest point of recession, and during which household incomes started to move up again. Table 2.3.1 shows mean incomes for children and specific family types with children in percent of the mean income of the entire population, and percentage point changes over that period.

Relative incomes of both children and families with children decreased during the 1990s in all three countries. At the start of the period, income levels of children were not significantly different from those of the entire population. However, within a few years, they decreased in all three countries by five to six percentage points. Juxtaposing these results to the overall trend in the traditional OECD region over ten years reveals that relative losses in children's incomes occurred much faster in the three Visegrad countries. At the same time, the relative levels still seem to be higher -- some 90%, as compared with some 85% in the traditional OECD region.

Families with children as a whole experienced, *grosso modo*, the same trends: a significant loss of relative incomes in the Czech Republic, followed by Poland and Hungary. Trends for families at risk were,

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10 Technically, all income estimates are weighted by the number of children in the household.

11 It should be kept in mind that the unit of analysis remains the person. Estimates therefore refer to persons living in families with children, including adults and children.

12 The "traditional" OECD region includes the 24 OECD countries before 1996, i.e. before the three Visegrad countries, Mexico and Korea joined this organisation.

however, quite different across the three countries: relative income levels of large families decreased by far the most in Hungary -- for almost one fifth -- where they were, however, at the highest level across the three countries at the beginning of the 1990s. They also decreased by one tenth in the Czech Republic, and by 6 % in Poland. Overall, there was a convergence of relative incomes of large families to a level of some three-quarters of the entire population across the three countries. Relative income levels of single parents, on the other hand, decreased most in Poland -- for 18% -- but also by 7% in the Czech Republic, whilst they actually increased in Hungary. Income levels of single parents are some two thirds to three-quarters of the entire population in the mid-1990s.

Table 2.3.1
Relative disposable mean incomes of children and families with children,
the three Visegrad countries, early and later 1990s

	children		families with children		families with three or more children		single parents	
	mean income	population share	mean income	population share	mean income	population share	mean income	population share
Czech Republic 1992	99.0	24.0	101.7	54.3	89.1	7.7	72.1	2.7
Czech Republic 1996	92.6	21.7	95.5	49.0	76.6	6.6	64.6	2.8
change 1992-96	-6.5	-2.3	-6.2	-5.3	-12.5	-1.0	-7.5	0.2
Hungary 1991	99.4	25.8	101.8	58.9	94.3	11.0	66.8	3.8
Hungary 1997	93.6	20.0	98.2	48.3	76.6	8.2	71.8	2.9
change 1991-97	-5.7	-5.7	-3.6	-10.6	-17.6	-2.8	5.0	-0.9
Poland 1992	96.6	32.7	99.4	69.1	83.0	22.4	95.9	2.8
Poland 1995	91.5	28.4	95.3	65.5	77.3	18.4	77.9	2.9
change 1992-95	-5.1	-4.3	-4.1	-3.6	-5.7	-4.0	-18.0	0.1
OECD average mid-80s	85.8	25.6						
OECD average mid-80s	84.9	23.8						
change 80s to 90s	-1.0	-1.8						

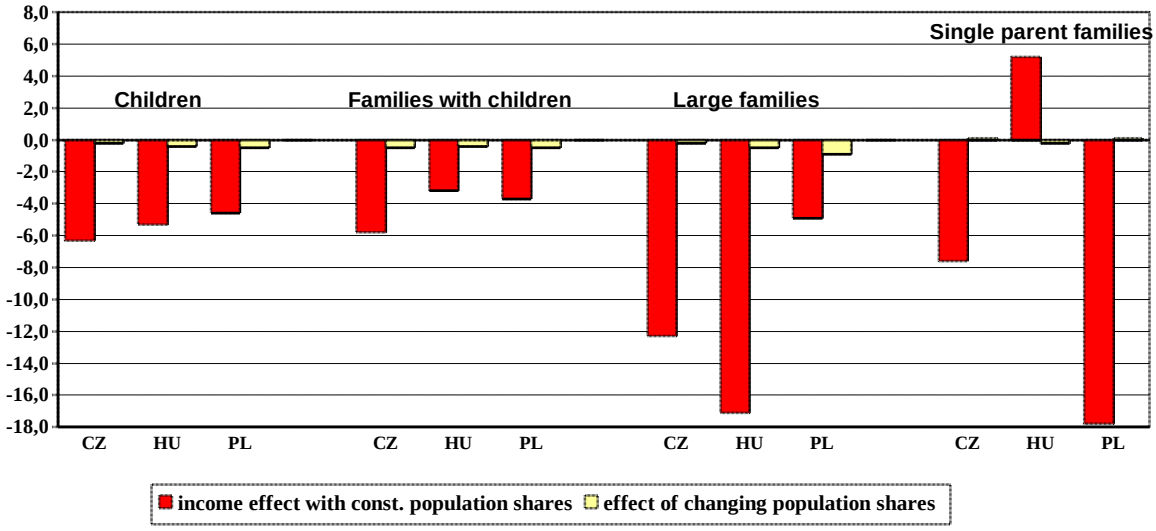
Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary), LIS (for Poland) and Burnieaux *et al.* (for OECD average)

Notes: Mean incomes for children and specific family types with children are expressed in percent of the mean income of the entire population; population shares are the proportions of children, and of persons living in the specific household types in the entire population. OECD average is an unweighted average of 15 OECD countries: Northern America, Australia and 12 European countries. Incomes refer to disposable household income, adjusted with elasticity e=0.5

Overall changes in relative income levels are, however, influenced by shifts in the demography of the population. If, for example, the share of a low-income group such as single parents in the population increases, the aggregate relative income level for this group will decrease without a real change in average income. Figure 2.3.1 looks at these two effects: a "corrected income effect" is estimated by holding the population structure for the starting year constant; the "demographic effect" then is the difference between

the actual change in relative income levels and the income effect holding population structures constant. In general, correcting relative income changes for demographic changes does not change the picture, i.e. holding the population structure constant did not influence the overall changes in relative incomes. The picture for both children and families with children is similar: a huge income effect is reinforced by a small demographic effect in all three Visegrad countries. As for families with three or more children, the considerable loss in relative incomes in Hungary and the Czech Republic was already described above. For the somewhat lower decrease of relative incomes of large families in Poland, the demographic effect seems to be at the margin more important. As for single parent families, the demographic effect is negligible, and the big differences between countries' trends remain: a considerable decrease of relative incomes in Poland and the Czech Republic, and an increase in Hungary; this increase would have even be slightly stronger in the absence of demographic shifts.

Figure 2.3.1
Changes in relative mean incomes early to later 1990s: income and demographic effects



Sources: Computations from Czech Microcensus (Czech Republic), Hungarian Household Panel and TARKI Household Monitor (Hungary) and LIS (Poland)

Has this deterioration in relative average incomes been translated into increases in poverty risks for children and families with children? For a number of traditional OECD countries, rises in child poverty -- sometimes very significant ones -- have been reported in recent studies, e.g. Harding and Szukalska (1999) for Australia; Smeeding *et al.* (1999) for the United States; Phipps (1999) for Canada; Gregg *et al.* (1999) for the United Kingdom; Solera (1998) for Italy; and Forssén (1998) for Germany. Given that the relative decrease in average incomes of children and families with children in the Visegrad countries over some four to five years was sharper than the decrease over one decade in the OECD countries quoted above, one can suspect increased levels of poverty for children, too.

Table 2.3.2 examines three different indicators for the *incidence* of poverty -- i.e. numbers of poor -- among children and families with children, as well as for the entire population. The first panel presents poverty rates, i.e. numbers of poor persons of a specific population group as percentages of all persons in that group. This shows the poverty risk of these population groups. First, the levels of poverty rates for children and families with children differ considerably across the three Visegrad countries and no

convergence to a common level can be depicted: in 1995/97, the rate was around 5% in the Czech Republic, almost twice that level in Hungary and three times in Poland.

In all three Visegrad countries, poverty rates for children as well as families with children increased over the early to later 1990s, by about 3 percentage points in the Czech Republic and Hungary, but by 6percentage points in Poland. Overall relative poverty rates increased, too -- but at a slower path, about 1 percentage point in the Czech Republic and Hungary, and 4 percentage points in Poland. In the Czech Republic and in Hungary, the level of child poverty was below that of the entire population in 1991/92, but above that level in 1996/97. Poland's level of child poverty already slightly exceeded that of the entire population at the beginning of the 1990s.

The increase in poverty rates was much steeper than the one recorded on average in the traditional OECD area where both overall and child poverty increased by half a percentage point between the mid-1980s and mid-1990s.

Among families with children, those with three or more children and, in particular, single parents face the highest poverty risks. In all three Visegrad countries, poverty rates for large families are twice those of the entire population. Higher increases over the period studied were, however, recorded in the Czech Republic and Poland, although from a much lower level in the first of the two countries. In Hungary, the poverty rate for large families largely remained at its (high) level of the beginning of the 1990s.

Poverty rates for single parents show the most dramatic development: they doubled in the Czech Republic and in Hungary, and almost tripled in Poland. In 1995/97, one fifth of single parents are estimated to be poor in Poland, one quarter in the Czech Republic and almost one third in Hungary; a level which comes close to the average across traditional OECD countries. It is noteworthy that in the Czech Republic which in general shows the lowest poverty rates across the three countries overall and for most population groups, the rate for single parents exceeds the one recorded in Poland.

For policy considerations, however, the sole information on poverty rates is not sufficient. Poverty alleviation budgets and strategies also need to take into account information on the actual number of the population exposed to poverty risks. The same high poverty rate, e.g. for single parents in two countries might have different consequences according to whether they constitute 5 or 20% of the whole poor population. The second panel in table 2.3.2 therefore shows the shares of children and families with children in the poor population. In addition, a 'relative poverty risk index' (sometimes referred to as "representation index") is presented for the different groups. The relative risk index is defined as the poverty share of a specific population group divided by its population share. For example, if children comprise 40% of the poor population but only 20% of the entire population, children would be represented twice as often in the poor population -- their representation index thus would be 2. This allows to evaluate whether there is a trend towards an overrepresentation of specific groups in the poor population.

The share of children in the poor population increased significantly in the Czech Republic, but stayed largely stable in Hungary and Poland. Nevertheless, this share remains highest in Poland and is broadly comparable to the OECD average in the Czech Republic and Hungary: about every fourth poor person is a child. Similarly, the poverty share of all families with children increased more in the Czech Republic than in Hungary and Poland. Families with children now form a greater part of the poor than childless families in all three Visegrad countries. The share of families with three or more children in the poor population tripled in the Czech Republic (from 5 to 15%), but it decreased in Hungary and in Poland. Since, at the same time, the share of all families with children did not decrease in those two countries, this means that more traditional family types (with one or two children) increased their share in the poor

population. Although the share of single parent families is relatively low in the Visegrad countries (some 3%) compared to some OECD countries, their proportion of the poor population is significant, especially in the Czech Republic: already 10% in 1992, it amounted to almost 16% in 1996, and constituted the highest share across the three countries in both years.

Table 2.3.2
Indicators for poverty incidence of children and families with children, early and later 1990s

	entire population		children		families with children		families with 3+ children		single parents	
1. Poverty rates										
Czech Republic 1992	3.3		2.3		2.0		2.3		12.6	
Czech Republic 1996	4.5		5.6		4.7		9.6		24.6	
change 1992-96	1.2		3.3		2.7		7.3		12.0	
Hungary 1991	6.7		6.0		4.9		13.0		14.8	
Hungary 1997	7.3		9.4		8.6		14.1		30.4	
change 1991-97	0.6		3.4		3.7		1.1		15.6	
Poland 1992	8,1		8,9		7,9		13,5		7,6	
Poland 1995	11,9		15,8		14,1		23,3		21,0	
change 1992-95	3,8		6,9		6,2		9,8		13,4	
OECD average mid-80s	9.6		10.5						31.0	
OECD average mid-80s	10.0		11.0						31.1	
change 80s to 90s	0.5		0.6						0.1	
2. Poverty shares and relative poverty risk	*share*	*risk index*	*share*	*risk index*	*share*	*risk index*	*share*	*risk index*	*share*	*risk index*
Czech Republic 1992	100	1	16.4	0.68	33.2	0.61	5.4	0.71	10.2	3.81
Czech Republic 1996	100	1	27.5	1.27	52.0	1.06	14.3	2.16	15.7	5.52
change 1992-96	100	1	11.1	0.58	18.8	0.45	8.9	1.45	5.5	1.71
Hungary 1991	100	1	23.1	0.90	43.4	0.74	21.4	1.95	8.4	2.22
Hungary 1997	100	1	26.0	1.30	56.9	1.18	15.9	1.95	12.1	4.18
change 1991-97	100	1	2.9	0.40	13.5	0.44	-5.4	0.00	3.7	1.97
Poland 1992	100	1	36.1	1.10	67.8	0.98	37.4	1.67	2.6	0.94
Poland 1995	100	1	37.6	1.32	77.1	1.18	35.9	1.95	5.0	1.76
change 1992-95	100	1	1.5	0.22	9.3	0.20	-1.5	0.28	2.4	0.81
OECD average mid-80s	100	1	24.2	0.97						1.39
OECD average mid-80s	100	1	23.6	0.99						1.92
change 80s to 90s	100	1	-0.6	0.02						0.50

Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary), LIS (for Poland) and Burnieaux *et al.* (for OECD average)

Notes: OECD average is an unweighted average of 15 OECD countries: Northern America, Australia and 12 European countries. Poverty rate defined as percentage of persons living in households below 50% of median disposable income. Relative risk index defined as poverty share divided by population share. Incomes adjusted with elasticity e=0.5. Share means the proportion of certain social groups within poverty. Differences in values of poverty rates with those shown in table 2.2.2. are due to a different poverty threshold applied.

The relative risk indices in the second panel of table 2.3.2 clearly show that by 1995/97, children are over-represented in the poor population in all three Visegrad countries by about the same level, 1.3, whereas they were under-represented in the Czech Republic and in Hungary at the beginning of the 1990s. This also contrasts with the experience of the traditional OECD region, where children where neither over- nor under-represented in the poor population in the 1980s as well as in the 1990s[13]. The results for families with children as a whole are similar. As for large families, they are represented twice as often in the poor population than they are in the entire population in all three countries. A significant increase in this indicator occurred, however, only in the Czech Republic.

As already indicated by poverty rate trends, single parent families experienced the most dramatic, and most differentiated developments during the period 1991/92 to 1995/97. Their poverty relative risk index increased in all three Visegrad countries, although by much less in Poland. In this country, the index is still under 2 and broadly comparable with the OECD average level. On the other hand, single parents are represented four times as often in the poor population than they are in the total population in Hungary, and 5.5 times as often in the Czech Republic.

The above findings hold for trends in the *incidence* of poverty, i.e. the number of poor persons. These estimates are, however, insensitive to trends in the *intensity* of poverty, i.e. whether average incomes of the poor have been increasing, or decreasing, with regard to the poverty threshold. The first panel of table 2.3.3 reveals some additional findings to this respect, showing average poverty gaps for children and families with children. The second panel of that table presents Sen poverty indices for the same population groups (this index is described in section 2.2).

Overall poverty gaps are lower in the Czech Republic (16%) than in Hungary and Poland where they also increased in the 1990s: by 1995/97, the average income of the poor is about one quarter below the poverty line in those two countries. Poverty gaps for children, and families with children as a whole, are slightly but in most cases not significantly higher than for the entire population. In addition, the development is more favourable for children than for the total population, as poverty intensity decreased in the Czech Republic and in Hungary and increased by less then average in Poland. Similarly, poverty gaps for large families are slightly above average. The trend in Hungary is noteworthy, where poverty gaps for large families were reduced between 1991 and 1997, from 36% to 30% of the poverty line. Poverty gaps for single parents show quite different paths across the three Visegrad countries: the average income of poor single parents in the Czech Republic was about one fifth below the poverty line in both years, and not very different from that of all poor families with children. In Hungary, on the other hand, the poverty gap for single parents was clearly below that of all poor families with children in 1991 (22%) but increased substantially to 33%[14] -- an experience which contrasts that of Poland: in this country, the poverty gap for single parents was reduced from 35% to 23% in the early 1990s.

An analysis of the comprehensive poverty measure (Sen index in the second panel of table 2.3.3) accentuates the above findings. Overall poverty increased in all three countries, but by much more for children than for the entire population. A rough estimate of the severity of poverty can be obtained by

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[13] This overall average for 15 OECD countries naturally masks some considerable differences among those countries. Higher relative poverty risk indices (1.3 and above) were found in the Anglo-Saxon countries, lower ones (0.5 to 0.7) in the Nordic countries.

[14] This is also part of the explanation why the poverty rate of single parents increased significantly despite the rise of relative mean incomes of this group in Hungary.

juxtaposing the values for the Send index with the poverty rates in table 2.3.2[15]. This shows that the situation of poor children and poor families with children is more severe that of the entire poor population in the Czech Republic and Hungary but not in Poland, although there was no trend that this severity increased.

Again, there were big differences in trends for the two population groups at risk -- large families and single parents -- across the three countries. The Sen index for families with three or more children almost quadrupled in the Czech Republic but still remains at a relatively low level in 1996 (2.7). It also increased in Poland where it showed by far the highest value across the three countries, approaching 10. And overall poverty for large families actually decreased in Hungary to a value of 5.4, a result which would not have been depicted by the sole analysis of poverty rates, i.e. number of poor. It means that a slight increase in the number of poor large families in Hungary has been more than offset by an increase in their mean incomes and a more equal distribution of incomes among this group.

The Sen index for single parents was roughly similar in all three Visegrad countries at the start of the period, with a value around 4. It increased in all three countries, but most dramatically in Hungary. The value recorded of 15 is the highest value across the sample.

[15] The closer the Sen index gets to the poverty rate for a particular population group, the more severe is the situation of the poor of this particular group (see Pattanaik and Sengupta 1995).

Table 2.3.3
Indicators for poverty intensity and overall poverty of children and families with children, early and later 1990s

	entire population	children	families with children	families with 3+ children	single parents
1. Poverty gaps					
Czech Republic 1992	16.1	22.7	22.5	23.1	21.1
Czech Republic 1996	16.0	19.6	19.4	19.5	21.6
change 1992-96	-0.1	-3.1	-3.1	-3.6	0.5
Hungary 1991	23.4	31.2	30.1	36.5	22.0
Hungary 1997	26.6	29.9	29.1	30.2	32.6
change 1991-97	3.3	-1.3	-1.0	-6.3	10.6
Poland 1992	22.2	23.6	23.4	25.0	35.0
Poland 1995	28.7	28.6	29.0	29.2	23.5
change 1992-95	6.5	5.0	5.6	4.2	-11.5
2. Sen poverty indices					
Czech Republic 1992	0.79	0.73	0.64	0.69	3.71
Czech Republic 1996	1.05	1.58	1.33	2.69	7.55
change 1992-96	0.26	0.85	0.69	2.00	3.84
Hungary 1991	2.31	2.68	2.13	6.53	4.47
Hungary 1997	2.77	3.92	3.52	5.40	15.02
change 1991-97	0.45	1.24	1.39	-1.13	10.55
Poland 1992	2.66	3.07	2.72	4.85	4.11
Poland 1995	4.95	6.52	5.89	9.71	7.24
change 1992-95	2.29	3.45	3.17	4.86	3.13

Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary), LIS (for Poland) and Burnieaux *et al.* (for OECD average)

Notes: Poverty gap defined as $\Pi = (z - y)/z$, where y=average income of the poor and z=poverty line.
Sen poverty index defined as $S = P * \{\Pi + (1-\Pi) * G_q\}$, where P=poverty rate, and G_q=Gini coefficient of the poor. Poverty line set at 50% of median disposable income. Incomes adjusted with elasticity e=0.5
Differences in values of poverty gaps and Sen indices with those shown in table 2.2.2. are due to a different poverty threshold applied.

3. AN ACCOUNT FOR POLICY CHANGES

3.1.General policy overview

There is a growing literature on the social policy systems in Visegrad countries[16], pointing to a certain agreement among the various papers that welfare reform lagged behind economic reforms in each of the countries. Some countries may have implemented some measures to tackle the challenges of marginalisation and impoverishment. However, most of the welfare systems remained to a big part untouched. At the beginning of transition, universal rights to services, relatively generous social policies were going hand in hand with inadequate targeting. Lack of eligibility cuts in a period of growing needs has resulted in erosion of benefits in most of the cases.

Family policies constituted a very important part of public policies in each of the observed countries. They were implemented and developed in order to serve multiple goals. On the one hand, there was a pro-natalist concern behind: an important aim of family cash benefits was to encourage the increase of birth in these countries. On the other hand, poverty alleviation was also an important aim. Since the number of children was found to be an important proxy of family poverty, family policy measures were also intended to relieve poverty situations arising for larger families. In addition, since labour force participation in these countries was exceptionally high, family policies were designed in a way to help/encourage female labour force participation.

The variety and extent of family policies in effect at the beginning of transition in the three observed countries is illustrated in table 3.1.1. As it is presented, the overwhelming majority of state social support for families was spent in the form of direct cash transfers to families. There was a wide range of in kind provisions also available for families for small children in each country. However, cash benefits accounted for almost 60 percent of the family support budget in Czech Republic, almost 70 percent in Hungary and over 75 percent in Poland.

The most important developments in family policies were determined by economic necessities (like increasing inequalities, decreasing real incomes and increased unemployment) and economic constraints (that is, the increasing pressure on the state budgets). In the first years of the transition, family support measures were used to smooth the negative impacts of the economic downturn. Under the circumstances of the falling GDP, mounting inflation and stagnating real wages, family allowances played an increasing role in maintaining some income security for the most hard hit population groups. (UNICEF, 1995)

From being linked to employment record, the coverage of family allowances was extended to universal in Hungary in 1990. Though eligibility for family support remained employment related in Czech Republic, universal allowances for compensating price reduction subsidies were introduced in 1991. (Nevertheless, there was an erosion of coverage, despite the fact that unemployment remained low in the first half of the nineties in the Czech Republic).

[16] For comparative attempts, see, for example, Cichon 1995, EBRD 1996, OECD 1993, 1995a, 1995b, 1998, PHARE 1996a, 1996b, 1996c, World Bank 1995, 1996a, Milanovic, 1998, Förster and Tóth, 1998, Förster, Szivós and Tóth, 1998

Table 3.1.1.
Composition of Family Support Transfers and In-Kind Benefits as a Percentage of GDP in Visegrad Countries, 1989, in percent of GDP

	Czechoslovakia	Hungary	Poland
Family Support Measures			
Cash transfers	*3.1*	*4.4*	*2.3*
Family allowance	2.2	3.0	2.0
Maternity leave	0.3	0.2	0.1
Parental leave	0.2	0.6	0.1
Sick-child leave	0.2	0.1	0.0
Grants and other	0.2	0.5	0.1
Indirect transfers	*1.1*	*0.9*	*0.0*
Transport, etc.[a]	0.2	0.2	0.0
Housing investment "bonuses"	-	0.7	-
Income tax relief[b]	0.9	0.0	-
Benefits in kind[c]	*1.1*	*1.1*	*0.7*
Nurseries	0.1	0.2	0.1
Pre-schools	0.4	0.6	0.6
School meals	0.3	-	-
Other	0.5	0.2	-
Total	*5.3*	*6.4*	*3.0*
Memorandum items: Total Health and Education Benefits			
Health-care benefits	4.4	3.5	3.4
Education benefits	4.2	4.7	3.7

Source: UNICEF, 1995, p. 94.
Notes: a.) Includes only those child-related subsidies that can be separately identified and evaluated; b.) Estimated; c.) For Czechoslovakia and Poland, only public expenditures; for Hungary, also the "social" expenditure of enterprises.

Appearing and increasing budget deficits put constraints on the amounts that could be spent on family policies. While there was an increase in coverage and while expenditures stagnated or decreased, inadequate indexation of benefits under the circumstances of inflation naturally lead to an erosion of provisions. Family allowances as compared to average wages suffered some 25-35 per cent relative losses. The decrease in real terms was even sharper, amounting to 40-50 percents between 1990 and 1995. (UNICEF, 1995, pp. 67.)

For some reasons (and this would merit a detailed political economy analysis in the future), the observed three countries arrived to a reform period in, by and large, the same time: in or around 1995 reform attempts could be witnessed in all three countries. The general direction of reforms was a shift away from universalistic access to family policies, with introduction of a means test. More precisely, the introduction of an upper cap on benefits aimed to exclude the richest incomes rather than to focus on the poorest income (as would be the case in "traditional" means testing). (Sipos and Tóth 1998, Cichon, 1996, Phare, 1996a, 1996b, 1996c, Tóth, 1997)

3.2. Institutional reforms: Country experiences

The following pages provide a summary of policy changes introduced in the area of maternity and parental leave and family allowances during the 1990s. Annex 2 summarises the institutional regulations in form of an overview table.

Czech Republic

The two periods we observe represent two different social policy eras in the Czech Republic. Between 1989 and 1992 universalistic features of the system were maintained. Former privileges for the previous nomenclature were removed from the benefit eligibility and coverage. The universalistic systems were also characterised with relatively generous benefits. Minimum Living Standard and minimum wage provisions were introduced, together with an unemployment benefit system.

From 1992 onwards, as in the other countries, there was a shift towards a more conservative-type social policy. A three-pillar system was introduced in the general social policy arrangements, income and means tests were introduced in the 2nd and 3rd pillars, minimum wage frozen and entitlements were tightened. Some restrictions in the pension system were also introduced: most notably, retirement age was raised gradually.[17]

In the Czech Republic, social security based family allowances were converted into a means tested scheme. Only families with incomes no higher than three times the poverty line remained to be eligible for family allowances. Also, for those remaining in the scheme, a three level benefit was introduced, depending on their incomes, in order to avoid appearance of poverty traps. Also, a new type of benefit („social premium") was introduced for those families children having less than 1.6 times the poverty line. Higher rates applied for large families, single parent families and for families with disabled children. (Tóth, 1997, Phare, 1996a, UNICEF, 1995, UNICEF, 1997)

One of the main objectives for integrating child and family benefits into a system of income-tested state social subsidies in the mid-1990s was the targeting of resources to the poor population. In reality, the withdrawal line was set relatively high, and just 5% of families with children were excluded from these benefits at the beginning, and another 5% in 1997, when a stricter line was adopted. In that sense, the system can be described as "excluding the rich" rather than "targeting the poor", and the question arose whether the relatively high costs of administering the system can be justified.

Family and child benefits in 1995 included means tested and universal benefits (PHARE, 1996a, Tóth, 1997). Among means tested benefits we can list family allowances. This is the single largest item in family support budget. It is paid to children living together with their parents until they reach 26. The amount also depends on family income situation. In addition to that, a supplementary assistance is paid for those single parents having household incomes below 1.6 times the subsistence minimum. This latter benefit is also subject to means test. For those children commuting to school, a travel allowance is available. It is

[17] Since 1998, the declared aim of the new social-democratic government is to remove some, but not all, of the restrictive measures. Some of the restrictive measures in the field of unemployment were actually removed and the minimum wage was raised. The plan of the present government was to return much of the child and family related benefits back to their universal base, but did not take active steps to do so yet (in part due to financial constraints of the state budget). Related reform considerations concern the calculation of the minimum living standard (MLS) which determines the levels of all benefits in the second and third pillar of the social security system.

also income tested for secondary and higher education students. No income test applies for primary school commuter pupils.

Universalistic benefits include primarily the child raising support paid for those parents having a child below four years of age. There is no means test applied to this benefit. However, a work test applies: no working mothers qualify for the benefit. Another universalistic type benefit is the birth grant, which is a one-time payment to a mother delivering a child. Its amount is around four times the subsistence amount. In addition, a maternity allowance is paid to mothers delivering a baby, until the baby reaches 18 weeks of age.

Hungary

Family benefits in 1990 in Hungary included the universal child allowance (which has been extended from an employment related scheme just before the first free elections, in April 1990), social insurance-based maternity and child-rearing benefits, and employment guarantees and special parenting rights, granted by the Labour Code and laws and by-laws introduced prior to the systemic change.

Child allowances were provided, as a citizenship right, to all children below 16 and students below 20. The amount of the benefit was fixed by regulation, and varied according to the number of children and family composition. Children with disabilities received supplements above their regular allowances. Maternity benefits included six moths fully paid maternity leave for mothers with full insurance coverage or the same period of leave with 65 percent of previous average wage for those with at least a minimum coverage. Insured mothers who visited doctors at least four times during their pregnancy, also received fixed amount, one-time child birth grants. Child rearing benefits were provided for the same broad circle of insured persons and included legally protected unpaid leave for three years for each child (10 years for disabled children). During the first two years, they could choose between a wage-related cash benefit (GYED) under rules similar to those for paid maternity leave, and between a flat and fixed amount benefit (GYES). GYES could be continued until a child reached 3 years of age (or 10 for disabled children). (Andorka, Tóth, 1992)

There were no eligibility cuts in the family support systems between 1990-95. Instead, with the introduction of some new measures like with the introduction of a new child rearing provision in 1993 the potential clientele of family benefits was increased. The new benefit was given to families with at least one child between 3 and 8 years old. This benefit — GYET — although insurance based, had a means test: only families whose per capita net incomes did not exceed three times the minimum old-age pension qualified. (OECD, 1995a)

The strategy of gradual extensions, under the circumstances of severe budgetary constraints led to gradual but dramatic erosion of family benefits. Child allowances lost half of their real value between 1990 and 1994. There were no eligibility cuts for GYES and GYED, but both benefits were eroded. In the case of GYED, introduction of a benefit ceiling in 1992 accelerated this erosion.

Following the gradualist policy of the first half of the nineties, a more radical approach, a series of reforms was launched in early 1995. To cope with worsening deepening fiscal and current account deficit crisis a package of austerity measures was announced in March 1995, including devaluation of the national currency, strengthening the tax base, and cutting public-sector wages, employment and social expenditures. (Sipos and Tóth, 1998)

As a result of the reform of child allowances, employment-related maternity benefits and universal family allowances were converted into a means-tested scheme. The per capita income threshold for entitlement for families was set at a level which left only less then ten percent of families excluded in the first year. Families with more than three children and families with handicapped children remained exempt from the means test. The amount of family allowance was tied to the number of children and per capita income. Pregnancy allowance was terminated and replaced by a delivery allowance, a one-time allowance equal to 150 percent of the old age pension minimum. The maternity allowance was lengthened to 24 weeks (from 20 weeks), but its benefit level decreased to 70 (from 100) percent of previous income with full insurance record, and 60 (from 65) percent for those with at least the minimum required insurance records. The child-care fee (GYED) was terminated for new applicants on 15 April 1996. The child-care allowance (GYES), which can be claimed until a child turns 3, remained a fixed-amount benefit. From April 15, 1996, it was set at the level of the minimum old age pension and the previous insurance requirement was removed. An income limit was also introduced, and mothers (and some fathers) became entitled to the benefit if family per capita income does not exceed the income threshold equivalent to that of the family allowances.

Poland

The Polish system of family and maternity provisions in 1990 fit into the fragmented social insurance schemes (Topinska, 1992, Phare, 1996c). Coverage for maternity benefits applied to all insured women. Rates and length of provisions, however, depended on economic branches: the eligibility for those in agricultural employment was somewhat more restricted. While non-farmers received their earlier full compensation, farmers received a part of it, equivalent to sickness benefits. Also, the eligibility period was shorter for the latter social groups.

Family and child benefits in Poland included family allowances, nursing allowances, child raising benefits and caring benefits. Eligibility for these benefits was tied to earlier employment. For those full time employed, family allowances and caring benefits (maximum 60 days a year, in case of sickness of the child) were to be paid if they had a child with an age lower than 16. Child raising benefits were means tested, on the basis of the per capita incomes of the households. The means test threshold was defined on the basis of the average monthly average wage in the previous year, at a level of 25 percent.

The operation of this system was under permanent debates between 1992 and 1995. Arguments for reform emphasised cost implications and inadequate targeting of the benefits. Reform suggestions included extension of the means test to family allowances, basis for means test to be linked to per capita household incomes, level of threshold set as percentage of previous average wage. Also, benefit differentiation by the number of dependent children in the family, introduction of a universal family allowance supplement and cost shifting from social insurance to state budget was among the suggestions.

In Poland, a targeted family allowance system was introduced in March, 1995. Within that, financing of family allowances was shifted away from the social insurance system. A means test was introduced, where the eligibility threshold was set at 50 percent of the average wage. There was a significant drop in the number of families receiving the benefits: some one quarter of earlier recipients lost their eligibility (UNICEF, 1997).

Benefits in 1995 included the followings. Family allowances were paid to all families with children below the age of 16 (or 20 while still studying), provided that their per capita income did not exceed 50 percent of the national average earnings (for farmers, threshold is linked to assumed revenues from a small agricultural plot). The level of the benefit is set at around 7 percent of the minimum wage and tax-free.

Assistance benefit is provided to a person having a child who need permanent care but otherwise eligible for family allowance. The amount is equivalent to ten percent of the average national wage. In addition, families in need may be eligible to social assistance payments, granted on discretionary basis, should the per capita incomes of the families be below the minimum pension.

4. THE EFFECTS OF FAMILY CASH TRANSFERS ON ALLEVIATING CHILD POVERTY

This chapter analyses the effectiveness of public cash transfers in alleviating child poverty, and changes in effectiveness that took place over the period 1991/92 to 1995/97. Total public cash transfers are examined, as well as two particular types of transfers specifically designed for cushioning financial risks for children: i) child allowances, and ii) maternity allowances. Both benefits together form total family cash benefits. For the interpretation of the results it should be noted right from the beginning that effects of neither direct nor indirect taxes were examined[18]. In addition, in-kind benefits (such as free education and health care, kindergartens etc.) are equally important means for protecting children from poverty risks. These interactions neither could be examined and the analysis below refers to the sole effects of monetary transfers.

The first section considers the relative importance of family transfers in the disposable income of children. The second section looks at distributional patterns of these transfers. Section three examines in detail the poverty alleviation effects of transfers directed to children.

4.1 The changing importance of family transfers for children's incomes

To which extent do public transfers in general, and family benefits and their components in particular, constitute an important and increasing source of children's incomes in the Visegrad countries? Table 4.1.1 shows three quite different patterns and paths for the countries under review. Total public transfers constitute one seventh of children's disposable income in the Czech Republic, but almost one quarter in Hungary and Poland. In line with the development of the transfer share in incomes of the entire population (except for Hungary), children's transfer shares decreased in the Czech Republic, remained at the same level in Hungary, and increased considerably in Poland. Total family cash benefits constitute roughly half of all transfers in children's incomes in the Czech Republic and Hungary but less than one fourth in Poland. This means that, in turn, transfers which are primarily non-family related also played an important role within children's transfer incomes[19]. The share of family cash benefits in total children's income decreased in all three countries, partly as a consequence of social policy reforms in those countries, described in the preceding chapter. Despite this decrease, the proportion of family cash benefits still remains

[18] Changes in tax rates or the installation of tax allowances and deductions for families with children represent additional means for redistributing resources in favour of the younger generation, and might reinforce or counteract the effects of cash transfers.

[19] This remaining part stems from transfers of other household members that the child or the children are living with: unemployment benefits, housing benefits, social assistance but it can also be pensions in the case of a multi-generational household.

by far the highest in Hungary. This is important when looking below at poverty withdrawal effects as those have to be evaluated against the background of the absolute level of payments in the different countries.

An interesting common feature for all three countries is that the two components of family cash benefits moved in inverse directions: the share of maternity allowances in children's incomes slightly increased while child allowances decreased or remained at the same level (Poland). Maternity allowances are only of marginal importance in Poland, but their importance in total family cash benefits increased, especially in Hungary.

Table 4.1.1
Family transfers in percent of disposable income, children and entire population, Visegrad countries, early and later 1990s

	Children				Entire population			
	Total transfers	Total family cash benefits	Child allowances	Maternity allowances	Total transfers	Total family cash benefits	Child allowances	Maternity allowances
Czech Republic 1992	18.3	8.5	6.3	2.2	25.4	4.5	3.4	1.2
Czech Republic 1996	14.5	7.2	4.4	2.7	21.5	3.4	2.2	1.2
change 1992-96	-3.7	-1.4	-1.9	0.5	-3.9	-1.1	-1.2	0.1
Hungary 1991	23.8	15.5	12.1	3.4	27.1	8.3	6.3	2.0
Hungary 1997	24.0	12.1	7.8	4.2	32.6	4.8	3.1	1.7
change 1991-97	0.3	-3.5	-4.3	0.8	5.5	-3.5	-3.3	-0.3
Poland 1992	15,9	8,3	8,1	0,2	23,2	5,2	5,1	0,1
Poland 1995	22,9	4,7	4,6	0,1	34,4	2,8	2,7	0,1
change 1992-95	7,0	-3,6	-3,6	-0,1	11,2	-2,5	-2,4	0,0

Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary), LIS (for Poland)
Notes: Incomes refer to disposable household income, adjusted with elasticity e=0.5

The results above referred to average incomes and transfer shares of all children. In order to shed some first light on poverty alleviating effects, table 4.1.2 goes on to examine the importance of family transfers in the incomes of the poor part of the population: poor children, poor large families and poor single parents. Total transfers constitute a much higher part in the incomes of those groups, roughly two to three times higher: between 57% and 70% in 1995/97. Family cash benefits (the second and third columns taken together in each panel) are not more or less important in the budget of poor children and families with children than the remaining public transfers: as it is the case for children as a whole, they account for roughly half of all the transfers in poor children's incomes in the Czech Republic and Hungary, and one fourth in Poland. The level of child allowances for all three population groups in 1995/97 is roughly the same for the three countries, between 15 and 18%, whereas the level of maternity allowances greatly differ across the countries.

Country-specific trends for the income composition of poor children emerge: first, the share of both family benefits and non-family benefits[20] in poor children's incomes decreased in the Czech Republic. In Hungary, the shares of non-family benefits and of maternity allowances increased, more than off-setting a considerable fall in the share of child allowances. And in Poland, only the share of family benefits decreased, while the share of non-family benefits increased. Second, the share of maternity benefits within family cash benefits is more important in the incomes of poor children than for all children in Hungary and particularly in the Czech Republic but again not in Poland. In the Czech Republic, child allowances and maternity allowances now account for the same part in the incomes of poor children: some 14% each.

As for the specific family types, poor large families tend to rely more on family benefits than poor single parents do, in all three countries. In the Czech Republic, the share of child allowances in the income of poor large families decreased considerably, but the share of maternity allowances increased; at the inverse, the share of child allowances somewhat increased for single parents and maternity allowances fell. The biggest loss across the population groups and the three countries considered occurred in the share of child allowances for large families in Hungary: from one third to one fifth of their income. At the same time, the share of maternity allowances increased from 5 to 27%. This was not the case for single parents in Hungary, for which the share of both child and maternity allowances fell. The large effect described above (increasing non-family benefits and maternity benefits off-setting a considerable fall in child allowances) therefore seems to have worked primarily for families with three or more children.

[20] I.e., the difference between total transfers and total family cash benefits.

Table 4.1.2
Family transfer shares in incomes of poor children, large families and single parents, Visegrad countries, early and later 1990s

	Poor children			Poor families with three or more children			Poor single parents		
	Total transfers	child allow.	maternity allow.	Total transfers	child allow.	maternity allow.	Total transfers	child allow.	maternity allow.
Czech Republic 1992	62.8	16.7	14.0	72.4	32.5	9.2	63.3	13.5	15.0
Czech Republic 1996	59.3	14.5	13.5	70.0	19.9	15.2	57.4	14.9	12.0
change 1992-96	-3.5	-2.2	-0.5	-2.4	-12.5	6.1	-5.9	1.4	-2.9
Hungary 1991	56.4	29.2	5.6	57.8	36.3	5.3	63.5	32.9	10.2
Hungary 1997	64.8	18.0	12.3	65.3	20.0	27.2	61.0	21.4	6.2
change 1991-97	8.4	-11.2	6.7	7.4	-16.4	22.0	-2.5	-11.5	-4.0
Poland 1992	45,8	20,0	0,0	43,8	23,9	0,0	63,5	17,5	0,0
Poland 1995	57,0	15,0	0,1	57,4	18,8	0,1	63,6	15,2	0,0
change 1992-95	11,2	-5,0	0,1	13,5	-5,1	0,1	0,1	-2,3	0,0

Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary), LIS (for Poland)
Notes: Incomes refer to disposable household income, adjusted with elasticity e=0.5

4.2 The distributive patterns of family cash benefits

How are total family cash benefits (child allowances and maternity allowances taken together) distributed in the three Visegrad countries? And did their distributive patterns change so to protect children in low income groups? Figure 4.2.1 plots Lorenz curves[21] for both total disposable incomes of children and family cash benefits for children, for both years. We concentrate our considerations here on the low income groups, i.e. children in the lower decile groups.

As can be seen, total disposable incomes for children are unequally distributed, but to slightly different degrees: children in the bottom 20% received some 10% of disposable income in the Czech Republic, and some 8% in Hungary and Poland. In the Czech Republic and in Poland, the overall distribution for children became somewhat more unequal while it became slightly more equal in Hungary. Family cash benefits are in all three countries distributed more equally than total incomes and therefore play a re-distributive role.

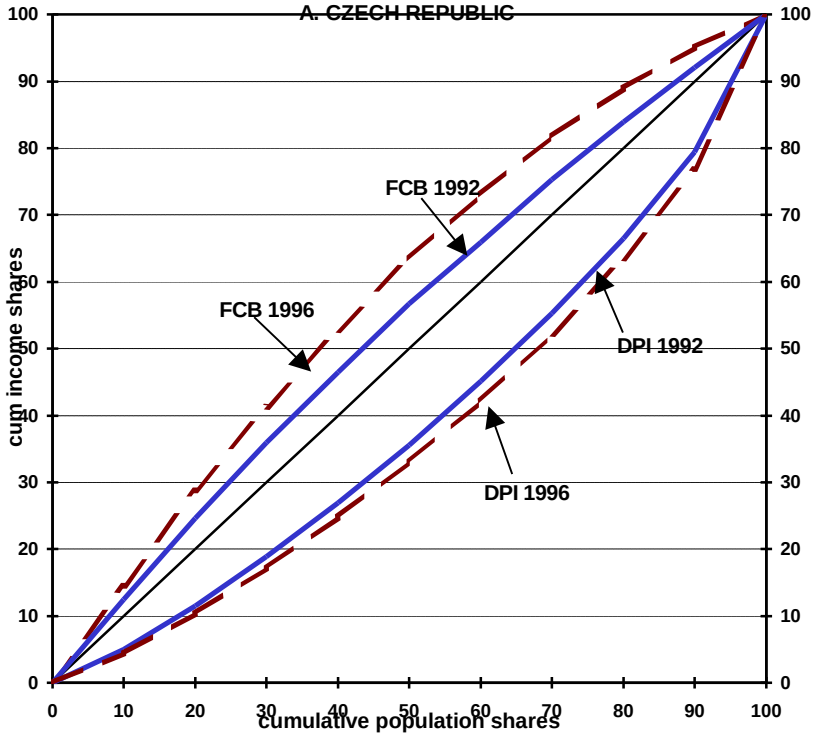
The main finding from figure 4.2.1 is that this pattern strengthened over the years: family cash benefits became in all three countries more re-distributive between 1991/92 and 1995/97. In the Czech

[21] A Lorenz curve plots cumulative percentages of the population (children in this case) against cumulative percentages of incomes, and illustrates the degree of inequality. The additional 45 degree line represents the "line of perfect equality" where each population share receives the same income share.

Republic, these transfers were already more targeted to poorer than to richer groups in 1992, and this pattern strengthened in 1996: almost 30% of family cash benefits were received by children in the bottom 20%, and over 40% by children in the bottom 30%. In Poland, at the beginning of the period, children in the second to fifth decile benefited more from family benefits than children in the upper deciles but also in the lowest decile. At the end of the period, family benefits became slightly bust significantly more redistributive. To some extent, the case most striking for Hungary: in 1991 the distribution of family cash benefits favoured the (lower) middle classes, children in the third to sixth deciles[22]. By 1997, Hungary moved to a somewhat more re-distributive system: children in the bottom quintile now received some 25% of family cash benefits (some 16% before). Part of this change in patterns may be explained by the policy changes that took place in the three countries and which are described in chapter 3.

[22] For Hungary, this has been described at length in Förster and Tóth (1998).

Figure 4.2.1
Lorenz curves for children's disposable income and family cash benefits



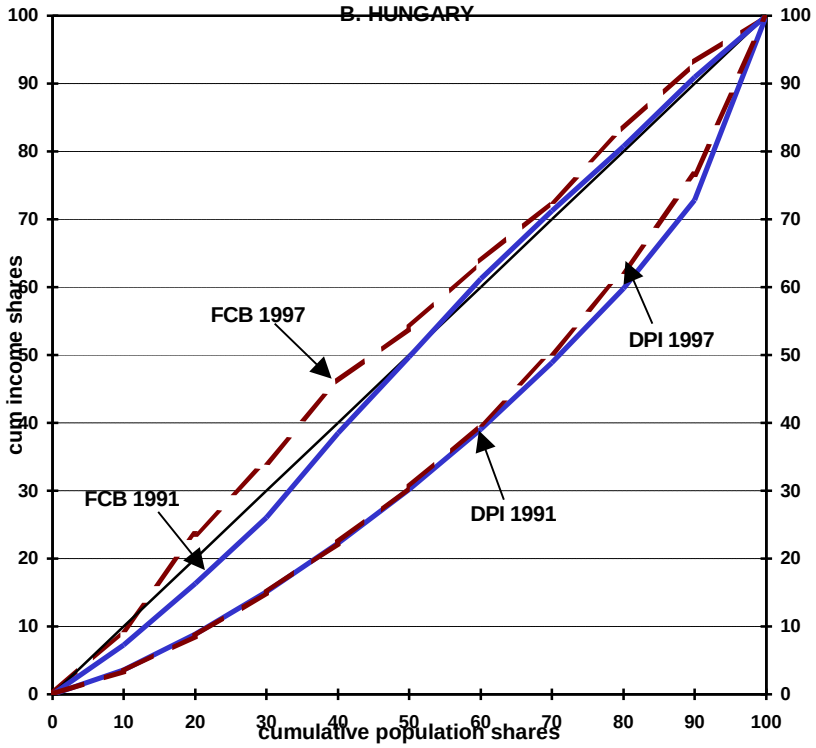
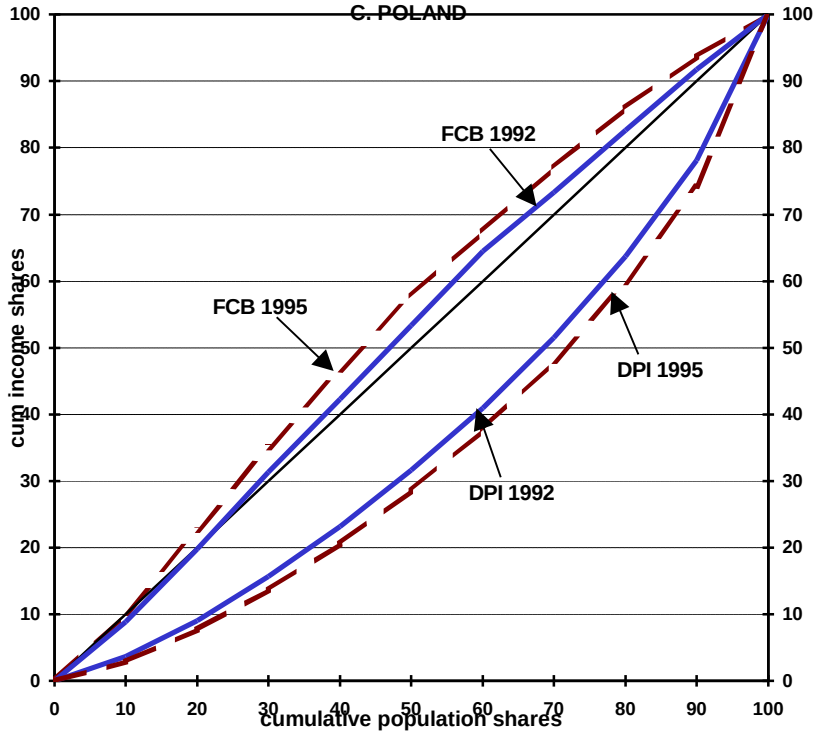


Figure 4.2.1 (cont.)
Lorenz curves for children's disposable income and family cash benefits



Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary), LIS (for Poland)

Notes: Incomes refer to disposable household income, adjusted with elasticity e=0.5. Persons and incomes are ranked according to children's disposable incomes.

4.3 Poverty withdrawal effects due to family transfers

What were the effects of total public transfers in general, and family cash benefits in particular, on overall child poverty? To study this question, some counterfactual experiences are presented below: several indices of poverty are shown, withdrawing total transfers to children and family cash benefits and compared to poverty indices on the basis of disposable income (discussed in section 2.2). For presenting withdrawal effects, we compute poverty thresholds on the basis of total household incomes, then having these thresholds fixed, we compute new poverty rates after deducting income elements from total household incomes. This illustrates the potential extent of poverty in the absence of those income elements[23].

A first question refers to the overall effect of transfers. Figure 4.3.1 presents Sen poverty indices for children on the basis of total income and total income less transfers. Looking at total public transfers (panel A), it can be seen that child poverty would be considerably higher in the absence of those transfers: the values for the Sen index are between 8 and 26, and very different across countries and years. The indices for Hungary and Poland in 1995/97, for instance, were three times the value for the Czech Republic

[23] These illustrations are first-order approximations as any behavioural responses are excluded from the considerations.

in 1992. Polish pre-transfer child poverty was much lower in 1992 than it was in Hungary at that time, but by 1995/97, both countries showed similar values. After receiving total public transfers, values for the Sen index are much lower -- roughly between 1 and 6 -- and there is less absolute difference between countries and years. This indicates a high effectiveness of the public transfer system towards children in all three countries.

Poverty in the absence of family cash benefits alone (panel B) would be less, roughly half the level of panel A. The effectiveness of poverty reduction differs between the three countries: the Czech Republic which had the lowest level of pre-family benefit poverty achieved to lower this level further. Hungary had in both years the highest level before family cash benefits, and in both years the effectiveness of those benefits seemed to be particularly strong. The Polish system of family cash benefits reduced to lesser degree than the other countries in both years.

Table 4.3.1 looks at additional indicators -- poverty rates and poverty gaps -- in addition to the overall Sen index. As can be seen, other than for post-transfer estimates (section 2.2), all pre-transfer indicators for child poverty were increasing between 1991/92 and 1995/97, in all three countries. This is linked to the development of market incomes (growing unemployment; growing earnings differentials). Pre-transfer poverty rates and poverty gaps were increasing at about the same path in the Czech Republic and Poland, whereas in Hungary the poverty gap increased faster, indicating a higher intensity of poverty among poor children. By 1995/97, pre-transfer poverty rates are as high as 22% in the Czech Republic, and between 35 and 40% in Hungary and Poland; and poverty gaps are between 40 and 55%.

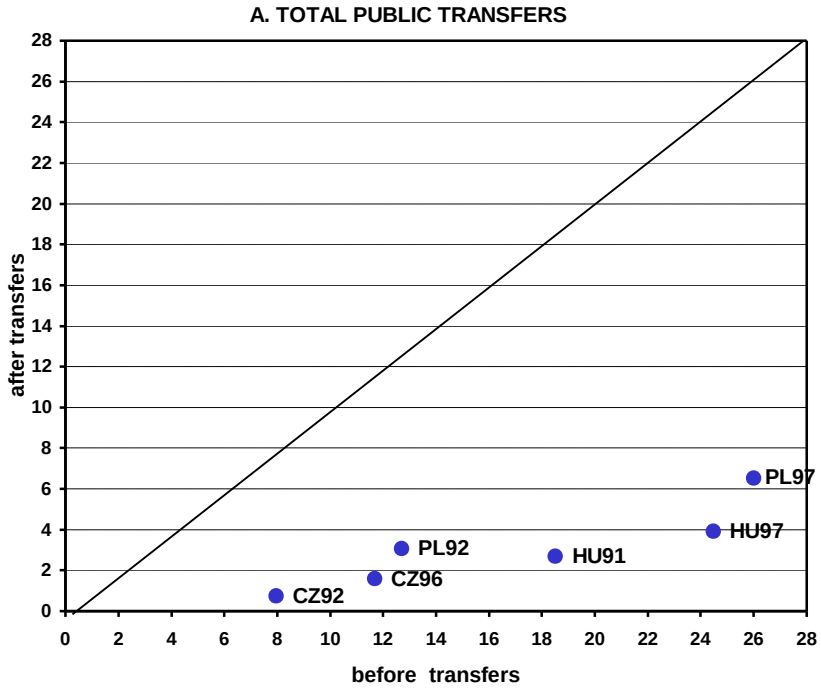
The results in the second panel refer to pre-family benefit poverty, and are less pronounced. They still indicate an increase in all estimates. Overall Sen indices increased by most in Poland.

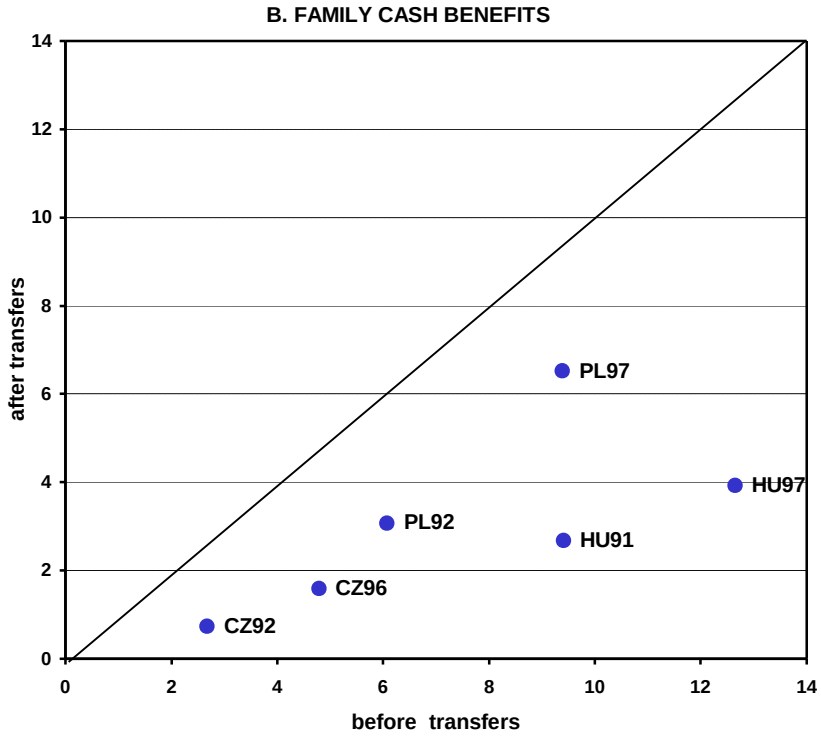
The fourth to sixths columns in table 4.3.1 show reduction rates in child poverty due to total transfers (panel 1) and family cash benefits (panel 2). Overall reduction rates due to total transfers are very high and amount to 75% in Poland and some 85% in the Czech Republic and Hungary for the latest year. They were higher for the overall Sen index than for the rates and gaps. Family cash benefits reduced poverty by less, between one third (Poland) and two thirds (Czech Republic and Hungary).

There were, however, some changes in effectiveness of transfers and family cash benefits in reducing child poverty[24]. In all three countries, and for both transfer types, reduction rates of the Sen index in 1995/97 were lower than in 1991/92, although this decrease is nowhere significant yet, except in the case of family cash benefits in Poland. The reduced effectiveness is mainly due to a lesser effect on the poverty rate (numbers of poor), whereas poverty gaps (intensity) could be reduced further in all countries, again with the exception of Polish family benefits. However, for future reform discussions of public transfers and family cash benefits, this beginning reduction in effectiveness should be taken in to account.

[24] A positive sign in the third line for each country indicates reduced effectiveness.

Figure 4.3.1
Reduction in child poverty: Sen indices before and after total transfers and family cash benefits





Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary) and LIS (for Poland)
Notes: Incomes refer to disposable household income, adjusted with elasticity e=0.5

Table 4.3.1
Child poverty rates, poverty gaps and Sen indices before family transfers, and withdrawal rates: Visegrad countries, early and later 1990s

	Before transfers			Withdrawal rates due to transfers		
	Poverty rate	Poverty gap	Sen index	Poverty rate	Poverty gap	Sen index
1.Total public transfers						
Czech Republic 1992	17.5	34.0	7.96	-86.9%	-33.3%	-90.8%
Czech Republic 1996	22.5	39.2	11.68	-75.1%	-50.0%	-86.4%
change 1992-96	5.0	5.2	3.72	11.7%	-16.7%	4.4%
Hungary 1991	30.2	45.1	18.52	-80.1%	-30.7%	-85.5%
Hungary 1997	34.7	53.8	24.48	-72.9%	-44.4%	-84.0%
change 1991-97	4.5	8.8	5.96	7.2%	-13.7%	1.5%
Poland 1992	24.8	40.3	12.70	-64.1%	-41.4%	-75.8%
Poland 1995	39.4	54.8	26.01	-59.9%	-47.8%	-74.9%
change 1992-95	14.6	14.5	2.93	4.2%	-6.4%	0.9%
2. Family cash benefits						
Czech Republic 1992	7.9	22.9	2.68	-70.9%	-0.6%	-72.8%
Czech Republic 1996	13.0	25.4	4.79	-56.9%	-22.8%	-66.9%
change 1992-96	5.1	2.5	2.11	14.0%	-22.1%	5.8%
Hungary 1991	21.7	30.9	9.41	-72.4%	1.2%	-71.5%
Hungary 1997	22.4	41.2	12.65	-58.0%	-27.5%	-69.0%
change 1991-97	0.7	10.4	3.24	14.3%	-28.7%	2.5%
Poland 1992	15.7	27.9	6.08	-43.3%	-15.5%	-49.5%
Poland 1995	21.0	31.9	9.39	-24.8%	-10.3%	-30.6%
change 1992-95	5.3	4.0	0.40	18.6%	5.1%	19.0%

Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary), LIS (for Poland) and Burnieaux *et al.* (for OECD average)
Notes: Incomes refer to disposable household income, adjusted with elasticity e=0.5

A final question refers to the changes in contributions of the different elements of overall poverty, expressed in the Sen index. This overall poverty index comprises three elements of poverty: incidence, intensity, and inequality among the poor. An overall reduction in poverty then is achieved by focusing on one or the other of these three elements. Past analysis (see Förster 1994a) has shown that in Continental European countries the focus of poverty reduction through tax/transfer systems is on incidence rather than intensity or inequality (some 75 to 90% of overall poverty reduction were achieved through lowering the

poverty rate). In Anglo-Saxon countries, there is more of a focus on the reduction of intensity and inequality among the poor. This is linked to targeting features and lower administrative poverty thresholds in the latter countries.

To explore the different contributions to reduction in child poverty, table 4.3.2 presents a decomposition analysis[25], which shows percentage contributions of the three elements. If, for instance, overall child poverty reduction is increasingly achieved through a lowering of intensity and inequality of the poor, at the cost of a decreased reduction in incidence, this might be interpreted as an increased targeting to the lowest income segments of poor children. In fact, this trend seemed to have happened in all three countries for both total public transfers and family cash benefits. This might indicate that the family transfer systems of the Visegrad countries are moving from a Continental European to a more Anglo-Saxon pattern[26], although the absolute levels of the contributions above still underline the high importance of reducing child poverty incidence.

Table 4.3.2
Percentage contributions of poverty elements to reduction in overall child poverty:
Visegrad countries, early and later 1990s

	Total public transfers			Family cash benefits		
	Poverty rate *incidence*	Poverty gap *intensity*	Gini (poor) *inequality*	Poverty rate *incidence*	Poverty gap *intensity*	Gini (poor) *inequality*
Czech Republic 1992	94%	4%	2%	97%	0%	3%
Czech Republic 1996	77%	16%	7%	81%	11%	8%
change 1992-96	-17%	11%	5%	-16%	11%	5%
Hungary 1991	91%	6%	3%	101%	0%	-1%
Hungary 1997	77%	14%	9%	79%	13%	9%
change 1991-97	-14%	8%	6%	-23%	13%	10%
Poland 1992	78%	18%	4%	86%	12%	2%
Poland 1995	70%	24%	6%	80%	16%	5%
change 1992-95	-8%	6%	2%	-6%	4%	3%

Sources: Computations from Czech Microcensus (for Czech Republic), Hungarian Household Panel and TARKI Household Monitor (for Hungary) and LIS (for Poland)
Notes: Incomes refer to disposable household income, adjusted with elasticity e=0.5

25 In order to estimate the relative contributions of the elements to the overall reduction in poverty, a linear approximation of the Sen index has been applied. This method is described in Förster (1994a) and follows a similar approach used by Achdut and Kristal (1993).

26 Similar findings were suggested by Jarvis and Redmond (19xx), who compared Hungarian and U.K. family policy practices.

5. SUMMARY AND CONCLUSIONS

In this paper we made an attempt to describe trends in poverty and social transfers in three transition countries of Central and Eastern Europe: the Czech Republic, Hungary and Poland. A special attention was paid to the developments in the relative position of children and families with children, in light of institutional changes in family policies.

First we provided a short overview of main economic changes and poverty developments in the three observed countries. Then we shortly presented a stylised account of policy changes, followed by the analysis of poverty trends. The core part of the paper dealt with the effects of family policies in alleviating child poverty, prior to the reforms and shortly after them.

Our data is drawn from LIS data and national income datasets. The time period we could observe spans over the most crucial years of the transition. The first data point 1991-92 corresponds to the deepest point in the transformational recession. The second data point (1995-1997) is also very important for each of the countries in question. These are the years that immediately follow the family policy reform attempts (implemented roughly at the same time in the Czech Republic, Hungary and Poland). The direction of these reforms was a shift from universalistic provisions to an introduction of means testing. More precisely, the aim was to exclude the richest segments rather than to focus on the poorest segments in the provision of family cash allowances.

There are a number of factors making us cautious in formulating our summary statements. To start with, making international comparisons is always a risky exercise, especially if the datasets themselves were not explicitly designed for comparative studies. Also, the fact that we were unable to collect datasets for the same years, poses two additional problems for us. First, the time span between the two Polish datasets is three years, the period we cover for the Czech Republic is four years, while the period for Hungary is six years. This requires special caution when comparing country time series. The other problem is that although in all three countries the implemented family policy reforms were embedded in the observed periods, different length of time elapsed between the implementation and the data collection in the individual countries. Since in case of any social reforms a period of maturation is necessary to observe the full effects, the different time spans registered here may cause interpretation difficulties.

Nevertheless, it is worth summarising our most important findings in the paper. In general, we found that by 1995/97, the income position of children and families with children is somewhat weaker than for the rest of the population in all three countries. Also, poverty rates and intensity of poverty are higher for children. Moreover, the relative position of children and families with children has worsened through the years of the transition, despite the fact that all governments, at least between 1990 and 1993 made serious attempts to keep family policy systems unchanged and to keep these instruments to smooth the effects of the economic downturn on children and families with children.

The levels of poverty rates for children and families with children differ considerably across the three Visegrad countries and no convergence to a common level can be depicted: in 1995/97, the rate was around 5% in the Czech Republic, almost twice that level in Hungary and three times that level in Poland. Children's poverty increased, by about 3 percentage points (Czech Republic, Hungary) to 7 percentage points (Poland) over the early to later 1990s. Overall relative poverty increased, too -- but at a slower path, by just 1 percentage point (Czech Republic, Hungary) to 4 percentage points (Poland).

Among families with children, those with three or more children and, in particular, single parents face the highest poverty risks. In all three Visegrad countries, poverty rates for large families are twice those of the entire population and rates for single parents are two to five time as high. Nevertheless, poverty rates for single parents show the most dramatic development: they doubled in the Czech Republic and in Hungary, and almost tripled in Poland.

The share of family cash benefits was and remained to be an important part of the income composition of poor families with children, despite the fact that between the two data points family cash benefits lost some of their importance. When comparing the distributional effects of family policies, we found that family cash benefits were in all three countries distributed more equally than total incomes and therefore they played a re-distributive role. This feature was strengthened through the years of transition. In the Czech Republic, these transfers were already more targeted to poorer than to richer groups in 1992, and this pattern strengthened in 1996. In Hungary and -- to a lesser extent -- in Poland, where the distribution of family cash benefits favoured the (lower) middle classes and children in the third to sixth deciles (second to fifth for Poland) in 1991/92, both countries moved to a somewhat more re-distributive system by 1995/97.

For the assessment of the effects of family policies on child poverty, we chose the method of counterfactuals. Setting poverty lines for the total population and total disposable income, "withdrawal effects" were calculated: after deducting some types of family benefits, we estimated what increase could be observes in various poverty measures. On that basis we tried to estimate the relative "strength" of various benefits in relieving poverty.

As a result of the counterfactual experiments, we can conclude that child poverty would be considerably higher in the absence of public social transfers. In that, family benefits play an important, although not exclusive role. Other social cash transfers going to families and individuals in families such as unemployment benefits, housing benefits or social assistance are equally important for poverty alleviation. More general, the relative economic well-being of families is a result of a whole set of policies and economic developments.

When analysing poverty incidence, targeting of family benefits and the withdrawal effects together, we found the following "story" here. Incidence of poverty for families with children increased, and this, in certain cases was accompanied with increased targeting and decreasing withdrawal effects. This can only be explained if we say that due to an increase in family poverty, recipients in general became poorer, what incidentally resulted in "better targeting". This trend was reinforced by the exclusion of the higher income groups from the system coverage. Altogether these changes may have decreased the withdrawal effects for poverty rates (hence the effectiveness of family benefits).

When assessing changes over time, we found that family transfer systems of the Visegrad countries seemed beginning to move from a Continental European to a more Anglo-Saxon pattern, since, with the introduction of means testing in the family allowance system, overall child poverty reduction was increasingly achieved through a lowering of intensity and inequality of the poor, at the cost of a decreased reduction in incidence, and this could be interpreted as an increased targeting to the lowest income segments of poor children. However, this might prove to be only temporary, since after the observation period, there have been attempts to relax income testing and restore at least some of the universalistic features of family policies. Most notably, in Hungary the newly elected government already announced to reconstitute all the previous family policy measures. Whatever the current state of reforms will be, however, family polices do play an important role in poverty alleviation in each of the countries we observed.

ANNEX 1. SENSITIVITY OF RESULTS TO POVERTY LINE AND EQUIVALENCE SCALE ASSUMPTIONS

Estimates of poverty in general and of child poverty in particular are most sensitive to the level of the threshold chosen and the equivalence scale used to account for differences in household size. This annex explores to which extent the general findings derived from the analysis in chapters 2 and 4 have to be interpreted with caution, as alternative thresholds and equivalence scales were used. The exercise does not focus on obvious differences in levels when using, for instance, higher poverty thresholds, but whether the comparative results achieved are robust. This refers to three layers of comparisons: first, comparisons across the three Visegrad countries; second, comparisons over time; finally, comparisons between children and the entire population.

Poverty thresholds

Chapters 2 and 4 use a poverty line of 50 percent of the median disposable income adjusted for household size for most of the analysis, and a line derived by the bottom quintile of the distribution for some additional analysis. This threshold is most commonly used for international comparisons (e.g. by OECD, Eurostat, and LIS). Table A.1 tests the sensitivity of results by adding two additional thresholds, namely 40 percent of the median income -- sometimes referred to as 'extreme poverty' -- and 60 percent of the median income -- sometimes referred to as 'near poverty'[27].

The general cross-country findings are robust, also when using lower and higher poverty thresholds: in both years, both overall and child poverty rates are lowest in the Czech Republic and highest in Poland; Hungary lies in between. Also, the trend over time is confirmed by the alternative thresholds: poverty rates increased in all three countries over the mid-1990s, and they increased much stronger for children than for the entire population. The increase in child poverty was particularly strong when moving to higher thresholds, i.e. for the segment 'near poverty'. Finally, when comparing children with the entire population, alternative poverty lines may lead to slightly different conclusions. The general picture from chapter 2 suggested that in two of the Visegrad countries -- the Czech Republic and Hungary -- child poverty rates were lower than overall poverty rates at the beginning of the 1990s, but higher four to five years later (in Poland, they were higher in both years). This is confirmed by the 50% and 60% threshold, but when moving to the 40% threshold ('extreme poverty'), child poverty rates were already higher in 1992 in those two countries also.

[27] The former threshold -- 40% of the median income -- has been used in recent comparative papers which analyse data from the Luxembourg Income Study (Kenworthy 1998; Smeeding *et al.* 1999). The latter threshold -- 60% of the median income -- has been used for a comparative poverty analysis of the Czech Republic, Hungary, Poland and the Slovak Republic for the year 1992 (Förster 1997). The reasoning behind choosing this latter threshold was that this value came closest to a threshold derived from a social minimum programme in that year, converted to all four countries' currencies with bilateral PPPs.

Table A.1
Overall and child poverty rates for three thresholds, Visegrad countries, early and later 1990s

	entire population			children		
	40 % of median	50 % of median	60 % of median	40 % of median	50 % of median	60 % of median
Czech Republic 1992	0.9	3.3	8.4	1.1	2.3	6.1
Czech Republic 1996	1.3	4.5	10.3	2.2	5.6	11.4
change 1992-96	0.4	1.2	1.9	1.1	3.3	5.3
Hungary 1991	3.0	6.7	13.4	3.9	6.0	11.9
Hungary 1997	3.8	7.3	14.1	6.1	9.4	19.2
change 1991-97	0.8	0.6	0.7	2.2	3.4	7.3
Poland 1992	3.8	8.1	14.2	4.5	8.9	15.6
Poland 1995	7.4	11.9	18.0	9.8	15.8	23.5
change 1992-95	3.6	3.8	3.8	5.3	6.9	7.9

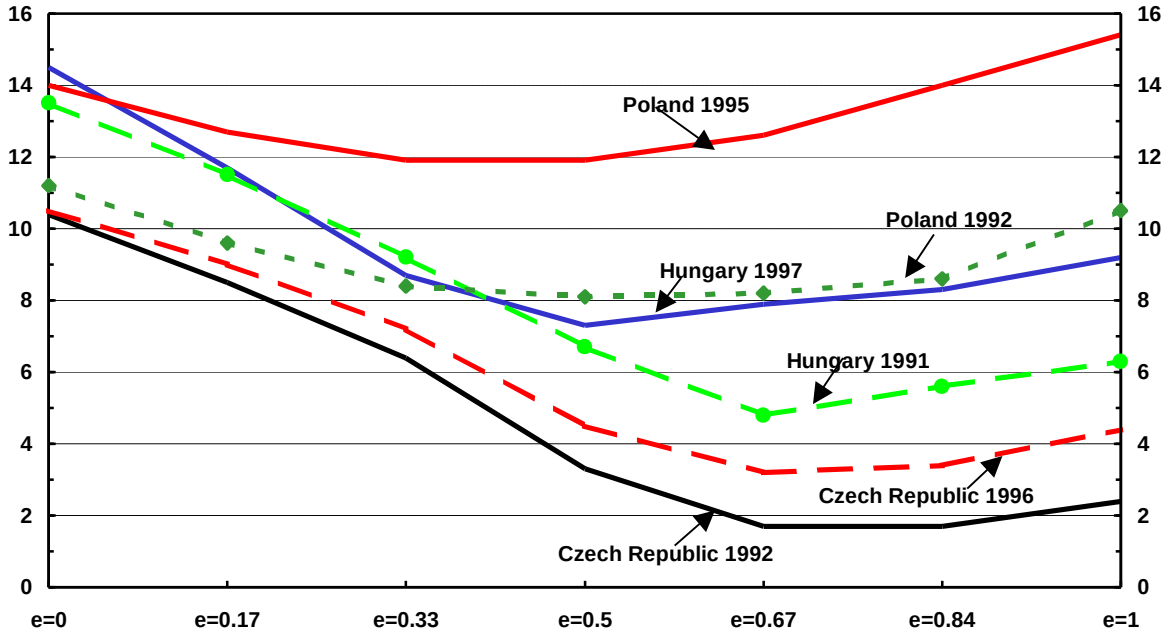
Sources: Computations from Czech Microcensus, Hungarian Household Panel, TARKI Household Monitor and LIS
Note: poverty thresholds refer to disposable household income, adjusted with elasticity e=0.5

Equivalence scales

The preceding chapters used a single equivalence scale to adjust household incomes for different household sizes, namely a scale with an elasticity e=0.5 (see section 1.2). Since recently, this equivalence scale ('revised OECD scale') is commonly used for cross-country comparisons and adjusts household incomes with the square root of the household size. As an example, this equivalence scale assumes that a couple which together had a disposable income of 100.000 Forint would need an income of 122.000 Forint when a child arrives to maintain the same level of financial well-being, and an income of 138.000 Forint when a second child arrives. There are, however, numerous other equivalence scales used in the literature or in policy making (i.e. inherent in social assistance programmes), giving more or less weight to additional household members. For instance, the 'traditional OECD scale', still frequently used, uses an elasticity of e=0.75. This assumes that in our example the couple would need to augment its household income to 130.000 Forint with the first child and to 152.000 Forint with the second. It is obvious that different assumptions of equivalence scales will affect the estimates of poverty and, in particular child poverty. In general, higher values of e which assume lower economies of scale will lead to higher estimates of child poverty, and vice versa.

Figure A.1 considers the sensitivity of poverty rates for the entire population to different equivalence assumptions, ranging from e=0 which assumes 100% economies of scale (household income) to e=1 which assumes no economies of scale at all (per capita household income). Five intermediate equivalence assumptions are shown.

Figure A.1
Overall poverty rates under seven equivalence assumptions, Visegrad countries, early and later 1990s



Sources: Computations from Czech Microcensus, Hungarian household panel and LIS
Note: poverty thresholds refer to 50% of disposable household income

The u-shaped pattern of overall poverty rates observed in the figure has already been described for a range of other OECD countries (see Förster 1994b). Further, it can be seen from Figure A.1 that for all equivalence elasticities greater than e=0.5, the rank ordering remains the same: poverty rates are lowest for the Czech Republic and highest for Poland, and the rates are higher in recent years than they were in 1992. In addition, the rates for the Czech Republic in 1996 was still lower than the ones in Hungary in 1991, and the Hungarian rates in the most recent year was slightly lower than the Polish one in 1992. For Hungary, the differences in levels in both years change somehow, especially when moving from e=0.5 to e=0.67: under the former assumption (the one used in chapters 2 and 4), poverty rates increased by less than one percentage point between 1991/92 and 1995/97, but under the assumption e=0.67, the rates increased by some three percentage points. There are more important differences for elasticities lower than e=0.5, as the rates for Hungary and Poland cross. Under the assumption e=0.33, for example, the Hungarian poverty rate slightly decreased from 1991 to 1997, and the Polish rate is slightly lower than both Hungarian rates. However, equivalence elasticities lower than 0.5 are very seldomly used, and our attention remains with differences within the upper range, i.e. between e=0.5 and e=1[28].

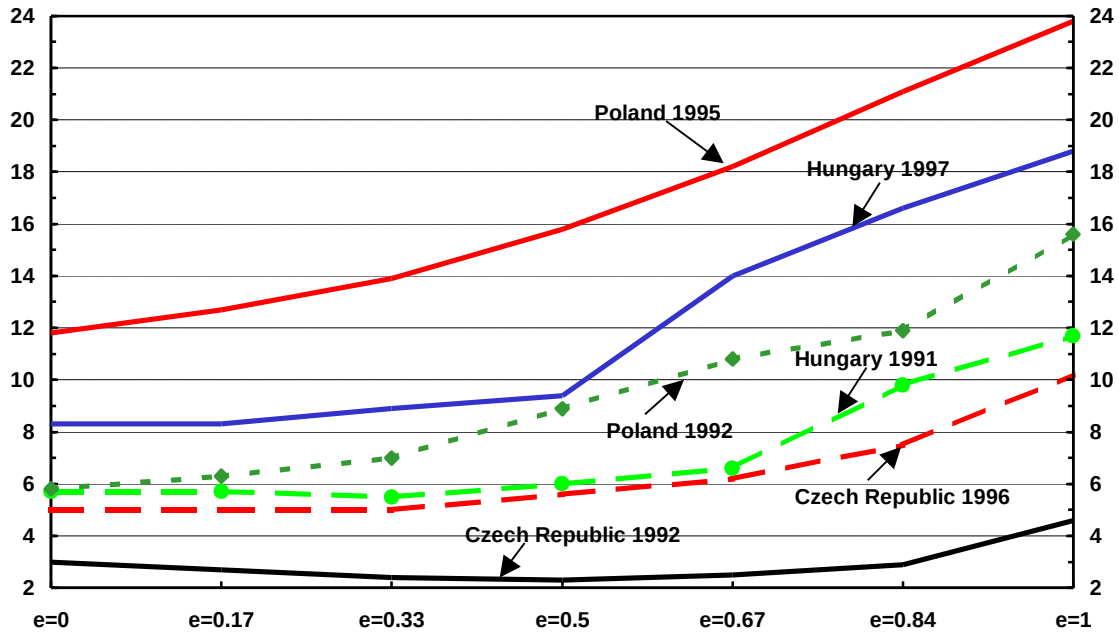
Figure A.2 considers child poverty rates under the same seven equivalence assumptions. First, it can be seen that child poverty estimates are more sensitive to equivalence assumptions than overall poverty

[28] The assumption e=1 (per-capita household income) was commonly used in income analyses in the Visegrad countries prior to the 1990s, and it still has some importance for the debate, especially in the frame of social programme evaluations. Figure A.1shows that poverty estimates on a per-capita income basis are higher than on a basis e=0.5 in Poland and in Hungary 1997, but not in the Czech Republic and in Hungary 1991/92. The general picture, however, remains the same.

estimates, as child poverty roughly doubles when moving from low to high elasticities. Second, child poverty rates are a more linear (and not u-shaped) function of equivalence elasticity, i.e. decreasing assumed economies of scale "automatically" lead to higher poverty rates. An exception to this is the Czech Republic and, to a lesser extent, Hungary, both in 1991/92. By 1996/97, however, a linear function prevails. Third, under all seven equivalence assumptions, a clear rank ordering across countries remains. Fourth, all equivalence assumptions indicate that the increase in child poverty between the early 1990s and later 1990s was higher than the one in overall poverty, in all three Visegrad countries studied.

Figure A.2

Child poverty rates under seven equivalence assumptions, Visegrad countries, early and later 1990s



Sources: Computations from Czech Microcensus, Hungarian household panel and LIS
Note: poverty thresholds refer to 50% of disposable household income

A final question refers to the robustness of results when comparing children with the entire population. Table A.2 shows relative child poverty indicators (child poverty rates as a percentage of overall poverty rates). Not surprisingly, estimates of relative poverty levels for children are very sensitive to the equivalence scale chosen: under assumptions of total economies of scale within a household, child poverty rates are always lower than overall poverty rates, and they are always higher under assumptions of high economies of scale. This difference can range from a relative child poverty level of half the overall level to twice the overall level. It is therefore difficult to generalise the findings on relative levels of child poverty from chapter 2. However, findings with regard to trends are much more robust: all seven equivalence assumptions indicate that the level of child poverty increased relative to the entire population in all three Visegrad countries.

Table A.2
Child poverty rates as a percentage of overall poverty rates for seven equivalence assumptions, Visegrad countries, early and later 1990s

	e = 0	e = 0.17	e = 0.33	e = 0.5	e = 0.67	e = 0.84	e = 1
Czech Republic 1992	28.8	31.8	37.5	69.7	147.1	170.6	191.7
Czech Republic 1996	47.6	55.6	69.4	124.4	193.8	220.6	231.8
Hungary 1991	42.2	49.6	59.8	89.6	137.5	175.0	185.7
Hungary 1997	57.2	70.9	102.3	128.8	177.2	200.0	204.3
Poland 1992	51.8	65.6	83.3	109.9	131.7	142.9	148.6
Poland 1995	84.3	100.0	116.8	150.5	144.4	150.7	154.5

Sources: Computations from Czech Microcensus, Hungarian household panel and LIS
Note: poverty thresholds refer to disposable household income, adjusted with elasticity e=0.5

The main conclusion from the above sensitivity analysis is: the findings from chapter 2 and 4 are robust to alternative poverty thresholds and equivalence scales, for two layers of comparisons: comparisons across countries, and, particularly, comparisons over the period studied, i.e. early to later 1990s. As for the third layer of comparison, children vis-à-vis the entire population, care should be taken when interpreting levels of financial well-being, whereas trends and cross-country differences are robust to alternative methodological assumptions.

ANNEX 2: MAJOR MATERNITY AND CHILD BENEFITS IN CZECH REPUBLIC, HUNGARY AND POLAND IN THE YEARS OF THE SURVEY

Czech Republic	**1992**	**1996**
Maternity leave		
Eligibility	formal employment, 270 days of insured period	no change
Duration:		
- 1st child	28 weeks (37 weeks for twins)	No change
- 2nd child	the same	No change
- 3rd+ child	the same	No change
Benefit: as % of last wage	90% of net daily wage, max. 162 CZK	69% of gross daily wage, max 186 CZK
Parental leave		
Eligibility	citizenship	no change
Duration: paid leave	until 3 years of child	until 4 years of child
Duration: unpaid leave	n.a.	n.a.
Benefit	jan- 900 CSK, April- 1200 CZK	1980 CZK (1,1 times the personal subsistence minimum of adults)
Benefit per avg wage		

Family allowance		
Eligibility	insurance and employment record, dependent children at school	family with income below three times the subsistence minimum, dependent children at school
Age limit: students	26 years	no change
Age limit: no students	15 years	no change
Average benefit per child	635 CZK, benefit for: 1st child 200 CZK 2nd child 450 CZK 3rd child 560 CZK 4th child 510 CZK 5th and subsequent 350 CZK since November benefit according to the age of child until 6: 340,- CZK `6-10: 380,- CZK `10-15: 450,- CZK `15-26: 490,- CZK moreover State compensatory benefit 220 CZK each child (since October only for families with income below double of subsistence minimum) extra supplementary benefit for long-time seriously disable children over 1 year not being cared in an establishment with permanent/weekly stay: 500 CZK, if very serious disable and not cared in any establishment: 700 CZK	average: N/A three levels of benefit according to the income of family: for families with income up to 1.1/1.8/3.0 of the family subsistence minimum: benefit per child: 0.32/0.28/0.14 multiple of its personal subsistence minimum, January: benefits according to the age of child until 6: 423/370/185 CZK, `6-10: 468/409/205 CZK `10-15: 554/485/243 CZK, `15-26: 608/532/266 CZK no supplementary benefit for disable children - transferred to social premium - for families with low income only
Benefit per child/average wage	1st child: 9,1%, 2nd child: 12,5%, 3rd child: 16,9%, 4th child: 15,8%	n.a.

Hungary	1992	1997
Maternity leave		
Eligibility	formal employment, 270 days of insured period	no change
Duration:		
- 1st child	5 months	24 weeks
- 2nd child	the same	the same
- 3rd+ child	the same	the same
Benefit: as % of last wage	100% previous wage of mother	no change
Parental leave		
Eligibility	citizenship	income test: monthly net per capita income less than 23000HUF
Duration (earnings related benefit "gyed")	until 2 years of child (in case of full employment record)	abolished
Duration (fixed amount benefit "gyes")	between 2nd and 3rd birthday of a child (thorse with necessary emp. record) and between 5th month and 3rd birthday (those with shortenedemp. record)	until 3rd birthdayof the child
benefit	75% of mothers previous wage ("gyed)" and a fixed sum ("gyes")	fixed sum, amount set at level of minimum old age pension
benefit per avg wage	for "gyed": 53%, for "gyes": 34%	30%

Family allowance		
eligibility	citizenship	income test: reduced amount for those whose monthly net per capita income is below 23000HUF, full amount for those having income per capita below 21200HUF
age limit: students	20 years	no change
age limit: no students	16 years	no change
average benefit per child	families: 1st child: 2370HUF, 2nd child: 2820HUF, 3rd and next children:3250. Lone parents: 1st child: 2820HUF, 2nd child: 3250HUF, 3rd and next children:3420HUF, increase amounts for the chronically ill	Full amount (net per capita income below 21200HUF), 1st child: 3400HUF, 2nd child: 4200HUF, 3rd and next children: 5200HUF, increased amount for those chronically ill
benefit per child/average wage	21%, per child (calculated for a 2 adult two children family)	n.a.

Poland	**1992**	**1995**
Maternity leave		
Eligibility	formal employment	no change
Duration:		
- 1st child	sixteen weeks	no change
- 2nd child	eighteen weeks	no change
- 3rd+ child	eighteen weeks	no change
	26 weeks in case of multiple childbirth	no change
Benefit: as % of last wage	one hundred % of average	since 1 march 1995-100% of average monthly wage for the last six months
Parental leave		
Eligibility	employment for six months at least, mother, but in case of illness or other reason, father also+ means test: per capita income below 25% of average wage	no change
Duration: paid leave	1st child: 24 months, 2nd child: 36 months	no change
duration: unpaid leave	1st child: max 3 years, 2nd child: max 6 years	no change
benefit	PZL 512000 monthly, 818000 for a lone mother	Quarterly indexed. In second quarter of the year: max: 133 PZL, for lone mother: 211 PZL
benefit per avg wage	approx. 21% of average wage	n.a.

Family allowance		
Eligibility	active employment record	employees, unemployed and students, provided that family income does not exceed 50% of average wage in the economy
Age limit: students	25 years	20 years
Age limit: no students	16 years	no change
Average benefit per child	167000 PZL	21 PZL for every child
Benefit per child/average wage	4,6% of average wage per child	3,7% of average wage per child

Sources to Annex 2: Poland and Czech Republic: UNICEF ICDC MONEE Database (courtesy of Mr.Gaspar Fajth) Hungary: TARKI Social Policy Database

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