

A Service of

ZBU

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Galasi, Peter; Nagy, Gyula

# Working Paper Are children being left behind in the transition in Hungary?

Budapest Working Papers on the Labour Market, No. BWP - 2000/1

**Provided in Cooperation with:** Institute of Economics, Centre for Economic and Regional Studies, Hungarian Academy of Sciences

*Suggested Citation:* Galasi, Peter; Nagy, Gyula (2000) : Are children being left behind in the transition in Hungary?, Budapest Working Papers on the Labour Market, No. BWP - 2000/1, Hungarian Academy of Sciences, Institute of Economics, Labour Research Department, Budapest

This Version is available at: https://hdl.handle.net/10419/108398

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# WWW.ECONSTOR.EU

# Are children being left behind in the transition in Hungary?

PÉTER GALASI and GYULA NAGY

Budapest Working Papers on the Labour Market

BWP. 2000/1

February 2000

Budapest Working Papers No.2000/1 Labour Research Department, Institute of Economics, Hungarian Academy of Sciences Department of Human Resources, Budapest University of Economics

## Are children being left behind in the transition in Hungary?

Authors: Péter GALASI, Department of Human Resources, Budapest University of Economics E-mail: pgalasi@sunshine.bke.hu

Gyula NAGY, Department of Human Resources, Budapest University of Economics E-mail: gynagy@sunshine.bke.hu

Published by the Institute of Economics, Hungarian Academy of Sciences. Budapest, 2000. With financial support from the Foundation for Job Creation and the Foundation Budapest Bank for Budapest

# ARE CHILDREN BEING LEFT BEHIND IN THE TRANSITION IN HUNGARY?<sup>\*</sup>

# PÉTER GALASI and GYULA NAGY

The paper considers child poverty in Hungary, a country at the forefront of the transition process. We investigate how household characteristics are associated with the incidence, persistence and dynamics of poverty among children in Hungary, looking at the years 1992-96. We find that children have moved down the income distribution, moving from a situation of being underrepresented in the poorest fifth of the population in 1992 to being overrepresented in 1996. Poverty is persistent for some children, but is experienced temporarily by many. The poverty rate among children, defined as the proportion of children falling into the bottom fifth of the income distribution, was 10 percent in any year from 1992 to 1996, but 44 percent of children were found poor at least once. Considering the role of the households' position in the labour market we found that the importance of work to avoid being poor rose over the period. The results also show that changes in the number of workers in the household are often associated with a shift in the probability of entering or leaving poverty, but the majority of entries and exits take place with no such changes occurring. This emphasises the importance of explanations other than job loss or gain.

# 1. INTRODUCTION

Before the economic and social transition of the 1990s, children in Hungary, as in other Central and Eastern European countries, benefited both from an absence of open unemployment and from generous family policies that included various child-related cash transfers (see Atkinson and Micklewright, 1992, and Jarvis and Micklewright, 1995). This is not to say that child poverty was entirely absent in the socialist period (see, for example, Szalai, 1989), but it is reasonably true to say that the socialist regime in Hungary, as elsewhere, placed a higher premium on support to families than governments in most Western countries (Ferge, 1991).

<sup>\*</sup> The paper has been prepared for UNICEF International Child Development Centre. We thank Tárki Social Research Institute for providing us with microdata from the Hungarian Household Panel Survey. Jeni Klugman and other seminar participants at the UNICEF ICDC workshop on "Children In and Out of Poverty" in Florence, October 1998 made useful comments. We thank in particular Bruce Bradbury, Stephen Jenkins and John Micklewright for their detailed comments on earlier version of the paper.

How have children fared since 1989? In the early years of the transition, between 1989 and 1993, Hungary faced serious economic hardship affecting the well-being of children as well as other groups in the population; GDP fell by nearly a fifth, employment and real wages declined, and registered unemployment increased from almost zero in 1989 to 14 percent in 1993 – see Figure 1. Although unemployment has fallen back somewhat during the slight recovery in output from 1994, employment continued to decline as did real wages (in 1995-6).

These processes have been coupled with the weakening of the social safety net. From 1992 the unemployment benefit system turned less and less generous both in terms of the coverage of the unemployed and the amounts of benefit paid (Micklewright and Nagy, 1996, 1999). (Hungary was the first country in the region to introduce explicit support for the unemployed.) Family allowance rates were frozen in nominal terms from 1992-97. From 1996 levels of family benefits were reformed in two ways: the earnings-related child-care allowance paid until the second birthday of the child was replaced by a fixed rate scheme paying lower benefits, and means-testing was introduced for the formerly universal family allowance. The real value of overall expenditures both on unemployment-related benefits and family allowance were more than 50 percent lower in 1996 compared to 1992 and the share of both components in the income of households also halved on average (Föster et al, 1998). When coupled with the substantially greater inequality in the labour market, the net result of all these changes was that overall income inequality increased (Milanovic, 1996).<sup>1</sup>

So far no research has focused directly on child poverty in Hungary during the transition, but there is some evidence that children have been at greater risk. Analysis of income inequality based on the Hungarian household panel survey (Andorka and Spéder, 1994, 1996, 1997a, 1997b) and an investigation by the World Bank of poverty in Hungary using the official budget survey (World Bank, 1996) show the incidence of poverty rising with the number of children in a household; these studies also draw attention to the situation of children in lone parent families. Results of Galasi (1998) confirm that the position of children has worsened during the transition due to income losses resulting from joblessness, low pay, or less generous child-related and other benefits.

In this paper we investigate how household characteristics are associated with the incidence, persistence and dynamics of poverty among children in Hungary. The data we use are restricted to 1992-96 and unfortunately do not cover the early transition shock of 1989-91, which as we have seen was a period

<sup>&</sup>lt;sup>1</sup> Flemming and Micklewright (1999) report a rather modest rise in the Gini coefficient of per capita income of 3 percentage points over 1988-97, as recorded by the central statistical office's household budget survey, to a value of 0.25 at the end of the period. They show that the source used in this chapter, the Hungarian household panel survey, shows a notably greater dispersion of per capita income, the Gini coefficient exceeding 0.30 by 1993. Inequality of earnings of full-time workers (measured by the ratio of 90<sup>th</sup> to 10<sup>th</sup> percentiles) rose much more sharply – by a third over 1988-97.

of considerable decline in GDP and employment and rapidly emerging unemployment. From 1993, the second year of our observation window, Figure 1 shows that GDP ceased to fall, the unemployment rate stopped rising, and the decline in employment slowed down. Our analysis is one of the period of 'emergence from the trough' and it is of considerable interest to see how child poverty has changed as a result of this macroeconomic turnaround. Our results give grounds for some pessimism and the answer to the title we have taken for the paper is unfortunately in the affirmative.

In Section 2 we describe our data source, the Hungarian household panel survey, together with the definitions of income and poverty used in the paper. Section 3 presents results on changes in child poverty over time, and on its relationship with household characteristics, treating each year's wave of the panel as a separate cross-section. Here we are examining each frame from the cine film provided by panel data, treating them as a series of snapshots of the situation. Ensuing sections then exploit the panel nature of the data, following the experience of individual children over time. Section 4 is concerned with the persistence of child poverty. Following children in five consecutive waves of the panel survey, we examine the frequency of being poor and analyse how persistence of child poverty is related to various household characteristics. Section 5 deals with the dynamics of poverty by analysing changes in entry and exit rates over time; it also investigates the association between changes in households' position in the labour market – a key feature of transition – and the movements by children in and out of poverty.

All our results refer to the years immediately prior to the reforms mentioned above that reduced the generosity of family benefits, reforms that are characteristic of the trend throughout the former communist countries of Eastern Europe in that they saw an increase in means-testing in the social safety net. What do our findings suggest about how these reforms should be viewed in terms of their impact on child poverty? In concluding, Section 6 both highlights our key results and comments on this key policy issue.

# 2. DATA SOURCE AND DEFINITIONS OF INCOME AND POVERTY

Our analysis uses the first five waves of the Hungarian Household Panel Survey, conducted by the TÁRKI research institute. The survey started in 1992 with a nationally representative sample of Hungarian households.<sup>2</sup> All persons living in first-wave households were followed and re-interviewed at one-year intervals,

<sup>&</sup>lt;sup>2</sup> Household response rates have fluctuated between 85 and 91 percent. More information on the panel is given in Tóth (1995).

even if they quit the original households and found or formed new ones (in this event all members of the new households were interviewed as well).<sup>3</sup>

While the ability to track children over more than just 2-3 years is a distinct advantage, the relatively small sample size of the panel imposes a limitation on the analysis, reducing what can be said with precision for particular sub-groups. As can be seen from Table 1, the number of households is about 2000 in each wave and the number of children ranges from 1100 to 1400. We define children as persons aged less than 18 years.

We use several different samples of children. Section 3 is based on *cross-section* samples for 1992-96, including all children present in the panel in each year irrespective of whether they were present in other years. Section 4 examines persistence of poverty using the balanced sample of *children present in all five waves* (i.e. children that were aged 0-13 in the first wave). Finally, the analysis in Sections 5 and 6 is based on samples of children present in *consecutive pairs* of waves (1992/93, 1993/94, 1994/95, 1995/96).

The panel survey collects detailed information on individual and household incomes (expenditures are not recorded). Each household members aged over 15 is interviewed about his or her personal income, while household-level incomes are recorded using a household questionnaire. The questionnaires include information on net and after-tax earnings and incomes. (In order to obtain more precise information on income, interviewing is conducted in spring and early summer soon after the late-March deadline for personal income tax declarations.)

Our results are based on figures for net *annual* equivalised household income (amounts are converted to 1996 prices using March to March consumer price indexes).<sup>4</sup> The reference period covers April of the previous year to March of the year of interview. The last 12 month period covered by the data therefore ends in March 1996, just *before* the reforms to family benefits referred to in the Introduction.

The equivalence scale used is the square root of household size. Children living in households with zero reported income are excluded from the analysis – the last row of Table 1 shows that their numbers are very small.

We experimented with three different poverty lines: (i) the bottom quintile (the 20<sup>th</sup> percentile) of the distribution of equivalised income (of all individuals and not just children), (ii) 50 percent of the median of the same distribution, and (iii) the official subsistence minimum published by the Hungarian Central Statistical Office (CSO), available only until 1994. Table 2 shows poverty rates for children over 1992-96 using these three lines.

<sup>&</sup>lt;sup>3</sup> In order to account for sample attrition, cross-section statistics for waves 2-5 presented in the chapter are based on weighted data using the individual weights supplied by TÁRKI.

<sup>&</sup>lt;sup>4</sup> For detailed information on the income types included and the method of calculation of annual household income, see Förster and Tóth (1997), Annexe 4.

Based on the half-median line, the child poverty rate is less than half that obtained when using the bottom quintile cut-off: 6 percent in 1994 on the former basis, for example, compared to 19 percent on the latter. The patterns of the year-to-year changes in poverty rates based on these two relative lines do differ, but in both cases the rate is significantly higher in 1996 than that in 1992. The poverty rate applying the subsistence minimum in 1992-94 is very much higher than those based on the two relative lines. In the remainder of the paper we use the *bottom quintile* as our poverty. Our main motivation for this is technical: the lower cut-off of the half-median would provide many fewer observations for the analysis of the poor, which is a consideration given the small sample sizes in the Hungarian panel. The child poverty rates given by the bottom quintile cut-off are still far lower than the incidence of child poverty implied by the CSO subsistence minimum, which, unlike the two relative lines, was specifically calculated for Hungarian conditions.

# 3. POOR CHILDREN AND THE CHARACTERISTICS OF THEIR HOUSEHOLDS 1992-96

Figure 2 shows for 1992-96 the poverty rate for all children, children aged 0-6, working-age adults, and the elderly (defined as 60 years or over for men, and 55 years or over for women, the normal pension ages in Hungary). The all-child rates are those shown in the first column of Table 2. In 1992 children were slightly under-represented in the poorest fifth of the income distribution; just under 18 percent of children were poor in this year whereas by 1996 the figure had risen to nearly 23 percent (the rise is statistically significant). The poverty rate of working-age adults also increases over the period, but to a smaller extent than that of children while young children have slightly higher poverty rates than children as a whole.

It is wrong to see the defense of child well-being as a 'battle for resources' against the elderly – another traditionally vulnerable group, which Figure 2 shows to have had a notably high poverty rate at the start of the period (and a rate still above average in 1996). Nevertheless, the contrasting fortunes of the two groups is striking. While the child poverty rate rose by 5 percentage points over 1992-96, that for the elderly fell by 10 points; children have become more concentrated over time in the bottom fifth of the income distribution and the elderly markedly less so, with the result that the gap between the poverty rates in the two groups almost disappeared by 1996. The poverty rate among young children exactly equalled the rate for the elderly by 1996, the gap having been 15 percent points in 1992.

What household characteristics are associated with child poverty and has the worsening of children's position been accompanied by changes in household characteristics? We chose three demographic indicators and one of labour

market status to describe household characteristics that might affect child poverty. The demographic indicators are: the age of the child, the number of children in the household and whether the child lives in a household headed by a single-headed family, all characteristics typically associated with a greater higher risk of a child being poor (Duncan et al., 1993).

The labour market indicator relates to the status of the household head and his or her spouse. (In most cases these are the parents of the children in the sample.) We distinguish between those heads and spouses in work (including self-employment) and those not in work. The latter includes pensioners, the unemployed, persons on child care allowance, and others not active in the labour market (for example housewives). In general, children living in families with more workers can be expected to have much better chances for avoiding poverty, although of course the impact depends on the level of wages paid and the marked rise in earnings inequality in Hungary during the 1990s needs to be borne in mind.<sup>5</sup> The impact of the lack of work on poverty may well have become stronger during the period under investigation due in part to cuts in unemployment-related benefits and the rise of long-term unemployment uncovered by insurance benefit (Micklewright and Nagy, 1996, 1999).

Table 3 shows child poverty rates broken down by these household characteristics for 1992 and 1996. The figures by age of child confirm that it is young children that are most at risk (see Figure 2) The number of children in the household has a much greater association with child poverty at the beginning than at the end of the period. Indeed, the rise in child poverty appears concentrated among the one and two-child families. Children in lone-parent households are clearly at a higher risk of poverty: about one third are poor in both years but their position did not worsen over time.<sup>6</sup>

Clear results emerge relating to the labour market status of the household head and his or her spouse. It comes as no surprise that children from households where neither the head nor spouse are working have a very high probability of being poor – a half are poor in 1992 and three-quarters in 1996. (Similarly, child poverty rates are very high in households with a single parent not in work.) Children in these types of households represent a small but not insignificant proportion of the total – some 12 percent in both waves. (Despite the small numbers, the rise in the poverty rate over the period is sufficiently large to be statistically significant.)

There is also a notable increase in the poverty rate for children in households where either the head or the spouse – but not both of them – works: from 14 percent to 24 percent. The latter figure means that children in such households are over-represented among the poorest fifth of the income distribution, a result

<sup>&</sup>lt;sup>5</sup> See footnote 1.

<sup>&</sup>lt;sup>6</sup> Our definition of a lone parent household is a household with one or more children, one adult (not necessarily the parent of any of the children) and with no other adults present.

that is worth underlining; despite having one parent in work, children in these households have a greater than average risk of being poor.<sup>7</sup> The need for a second earner in the household in order to reduce the risk of poverty for children to below the average stands in contrast to any argument that a reduction in employment among mothers during the transition is a desirable social goal to further 'family values'. Only the children in two-parent households where both parents work have a poverty rate which is well below that for all children.

#### 4. WHICH CHILDREN ARE IN PERSISTENT POVERTY?

The analysis of the previous section did not exploit the fact that the survey concerned is a panel, tracking the same children over time. In this section we use the sample of children present in all five waves of the panel (aged 0-13 years at wave 1) to examine the relationship between household characteristics and the persistence of poverty. Table 4 shows how many times a child was poor over the five years, breaking down the results by the same demographic and labour market status indicators as were used in the previous section.

A high proportion of Hungarian children experienced poverty (i.e. income in the poorest fifth of the overall distribution) at least once over 1992-96: 44 percent. For many of them, however, poverty is transitory; one in five of all children experienced poverty only once and 13 percent were poor in two or three years. About one-tenth of all children were poor in four years or more.

There are no differences between younger and older children in the proportion ever found in poverty. However, some intriguing differences can be seen in the number of times children are in the poorest fifth of the income distribution given that they are found there at least once. Children aged 0-6 in wave 1 are more likely to be poor 1-3 years, while those aged 7-13 are more likely to be poor 4 or 5 years. The reasons for these differences is unclear.

The number of children in the household has a strong association with poverty persistence, although some aspects of the results are a little puzzling. A child from a household with three or more children was almost twice as likely as the average child to be in the poorest fifth of the distribution in all 5 waves, and over four times as likely as a child from a household with two children. However, children living in a household where there was no other child at wave 1 were also three times more likely to be in poverty in all 5 years than the children from two-child households; and if one defines persistent poverty as being found poor 4 or 5 times, there is no difference in its incidence between the children in one and three or more child households. It may be that the one child households at wave 1 are those where it is most likely that other children are born during the ensuing waves, leading to

<sup>&</sup>lt;sup>7</sup> Strictly speaking the results refer to the head of household and his or her spouse, who in a few

continued withdrawal from the labour market by mothers (we have not investigated this further).

More than one-fifth of children from lone-parent households experience poverty 4 or 5 times and two-thirds are poor at least once, reinforcing the picture of disadvantage obtained from the cross-section analysis in Table 3. Almost onethird are poor just once. Thus children in lone-parent households have relatively high probabilities both of moving in and out of poverty *and* of remaining poor over the period.

The bottom part of the table shows the breakdown by households' labour market characteristics. Over a quarter of children living in households with both head *and* spouse working in wave 1 do experience poverty at least once over the five years. A minority are in poverty at the time of the first wave – see Table 4 (although note that the samples differ). Others fall into poverty in later waves, due, for example, to one or other parent losing their job – a good illustration of how the dynamic perspective differs from snapshot shown in Table 3. However, no children in this group are found to be persistently in poverty. The contrast is stark with children in households where neither head nor spouse worked in wave 1 and those from households with a lone parent not in work; more than 50 percent of these children are poor 4 or 5 times.

These results can be easily summarised. Almost half of the children experience poverty at least once over a five year period, and about one-tenth can be considered as persistently poor. The risk of persistent poverty is notably high in lone-parent households and in households where both the head and the spouse were workless at the start of the period.

# 5. POVERTY DYNAMICS AND LABOUR MARKET CHANGES

In this section we focus on the moves into and out of poverty from one year to the next. We first examine these movements for each consecutive pair of waves in the panel in order to see whether the deterioration of children's position over the period is due to low exit or high entry rates. We then investigate how *changes* in households' labour market status are associated with entry and exit rates. This contrasts with the analysis of persistence in the last section that provided a classification according to the characteristics of households measured at the time of the first wave, without considering whether labour market status changed subsequently.

Figure 3 reports the movements to and from poverty by children for each of the wave pairs. These rates are computed using the *total* number of all children in the sample as the denominator. This contrasts with the conventional calculation

cases are not the child's parents.

of entry and exit rates, which take as the denominator the number of children 'at risk' – that is, rates calculated as the number entering poverty as a percent of all those who are not poor and the number leaving poverty as a percent of all those who are poor.

Calculated in this way, the higher rate of entry than exit reflects the rising poverty rate over the period shown earlier in the paper – poverty rises if more children become poor than manage to escape being poor. The marked rise in poverty in 1996 (see Table 2 and Figure 2) is shown to result from *both* an increase in entries *and* a fall in exits (of broadly similar magnitudes).<sup>8</sup>

The relationship between entry and exit rates and changes in labour market characteristics is given in Table 5, distinguishing between children in households where the numbers of persons (a) in work and (b) unemployed stayed the same, rose, or fell between the two years in question. The entry and exit rates are calculated in the same way as described above, that is with denominators of *all* children. We restrict attention to the first and last wave pairs, 1992-93 and 1995-96.

The third column for each pair of waves shows how often there is a change in labour market status. Some explanation of exactly what the figures imply is required. For example, for one third of children, the number of persons working in their household changed between 1992 and 1993, and for nearly one fifth the number of persons unemployed changed. These are big numbers and they underline the extent of the changes over time in employment that occur in children's households. By 1995-96, the changes were smaller, especially the numbers for whom employment in the household had fallen (this is consistent with the time-path of aggregate employment shown in Figure 1).

*Number working.* Children living in households with an increase in the number of persons working are about twice as likely as the average child to escape from poverty (somewhat more that this in 1992-93 and somewhat less in 1995-96). Where there was a fall in the number working, the entry rate was also the about twice the average in the earlier period and again slightly less than twice in the later period. The exit rate was notably lower in 1995-96 where the number working fell (but not in 1992-93).

*Number unemployed.* There is a sharply higher probability of a child entering poverty when the number of unemployed persons in the household rises, something true of both periods (this increase in the number unemployed could be from zero to one). And there was also a notably lower probability of leaving poverty in 1992-93. In the later period, entry to poverty was less than half the average if the number of unemployed fell. The exit rate shows no statistically significant variation with any changes in the number unemployed in 1995-96,

<sup>&</sup>lt;sup>8</sup> The entry rate between 1995 and 1996 is significantly different from those for 1992-93 and 1993-94 while the 1995/96 exit rate is significantly lower than that for 1992-93 (only).

while in the earlier period children were only half as likely to leave poverty as the average child if the number of unemployed rose.

Of course, most of these results are not surprising in one sense. Loss of work leads to falls in income, and increases in work leads to gains in income – both with consequences for the probability of moving across the poverty line. Nevertheless, Table 5 quantifies the differences in the probabilities associated with these labour market events, helping make clear one important factor pushing children into and out of poverty.

Table 6 presents some of these findings in a different way, showing the percentage of all entries and exits that are accounted for by increases or reductions in the number of persons working in the household. We have seen, for example, that the entry rate to poverty was double the average in 1992-93 when the number of workers in the household fell. But what percentage of all entries into poverty is explained by this phenomenon?

Starting with this example, we can see that when the data are viewed in this way job loss does not appear paramount as an explanation for entry into poverty. Little more than a third of children entering poverty between 1992 and 1993 are in households where the number of workers fell and the figure is only half this for 1995-96. Most entries to poverty take place where the number of workers in the household stays the same (or rises). The same is true when one looks at exits. Over 1995-96, nearly 4 out of every 5 exits from poverty were in households where the number of workers stayed the same. This underlines the importance of explanations other than job loss or gain. These include those variations in earnings and other incomes, especially state benefits, that take place with no change in the overall number of persons working (for example a change of job or the expiry of limited-duration unemployment insurance benefit).

# 6. CONCLUSIONS

The impact of transition on children is a natural cause for concern. In this paper we have considered how the incomes of children have fared in a country at the forefront of the transition process, looking at the years 1992-96 – most of which was a period of (weak) economic recovery. A number of clear findings emerge.

- Taken as a group, children have moved down the income distribution, moving from a situation of being under-represented in the poorest fifth of the population in 1992 to being over-represented in 1996. This movement contrasts with that made by the elderly, whose representation in the poorest fifth of the distribution fell markedly over the period.
- The importance of work to avoid being poor (defined as being in the poorest fifth of the population) rose over the period. This is summarised by the fact

that in 1996, a child with only one parent in work had a greater than average probability of being poor.

- Poverty is both a persistent phenomenon for some children but is experienced occasionally by many. On the one hand 1 in 10 children were in the bottom fifth of the income distribution in every year from 1992 to 1996 while on the other 44 percent of children were found there at least once.
- Changes in the number of workers (or unemployed persons) in a households are often associated with a marked shift in the probability of entering or leaving poverty, but the majority of entries and exits take place with no such changes occurring, emphasising the importance of other explanations.

These results refer to the period before major reforms to family benefits were introduced in April 1996, reforms that saw the introduction of income-testing of family allowance and a reduction for most families in the generosity of benefits paid to mothers with infant children on leave from their employment. Redmond (1999) shows that these reforms had only a modest impact on the incomes of families with children. In particular, income testing removed family allowance entitlement from only about 10 percent of families (those at the top of the income distribution) while the poorest tenth of households with children actually gained slightly – their average income is estimated to have risen by 0.6 percent (due to a consolidation of several maternity related benefits).

Despite this picture of little apparent change, Redmond argues that the reforms represented "an important psychological shift in the orientation of social policy in Hungary, away from universalist and contingent policies and towards means-testing" (1989, p.87). This shift can be thought of as opening the way to much greater means-testing of family benefits. Redmond illustrates what could be the result of going down this road by simulating the impact on family incomes in Hungary of the introduction of a family benefit system of the type found in the UK. Although there is a universal family allowance in the UK, a much greater proportion of total support for families with children is income tested than in Hungary. (The universal UK allowance is worth much less as a proportion of average income than the Hungarian family allowance.)

The impact of the introduction of a UK-style scheme into Hungary is found to be substantial. The incomes of the poorest tenth of households with children is estimated to rise substantially, by 16 percent. This is despite the overall cost of family benefits falling by a tenth in the particular simulation that is implemented. In short, state transfers would become much more firmly targeted on lower income families with UK-style benefits. On first sight this would represent a significant alleviation of child poverty in Hungary.

But the price of achieving better targeting of family benefits is much higher implicit marginal rates of tax at the bottom of the distribution. These 'tax rates' measure the proportion of any additional earnings that a family would gain from more work that would be lost in the form of income tax, social insurance contributions, and reduced receipt of means-tested state transfers. High marginal rates of tax at the bottom of the distribution are one of the disadvantages of increased income-testing. Redmond estimates that the marginal tax rate faced by working households with children in the bottom three decile groups would be about 70 percent, compared to only 35 percent with the benefit system after the 1996 reforms. These much higher marginal tax rates at the bottom of the income distribution clearly raise the issue of incentives to work.

The dynamic perspective we have taken of child poverty in Hungary in this paper underlines just how important it is to take this issue seriously. Our evidence shows that there was already substantial persistence in child poverty before the 1996 reforms. A move to a family benefit system that substantially reduced incentives to work for low income families would threaten to re-inforce this picture.

#### REFERENCES

- Andorka, R. and Zs. Spéder (1994), 'A szegénység alakulása 1992 és 1994 között' (Poverty between 1992 and 1994), in: I. Gy. Tóth (ed.), Társadalmi átalakulás 1992-1994, Jelentés a Magyar Háztartás Panel III. hullámának eredményeiről (Social Changes 1992-1994. Report on the third wave of the Hungarian Household Panel Survey), Budapest: Department of Sociology, Budapest University of Economics, TÁRKI, Central Statistical Office.
- Andorka, R. and Zs. Spéder (1996), 'Szegénység' (Poverty), in: E. Sik and I. Gy. Tóth (eds), Társadalmi páternoszter 1992-1995, Jelentés a Magyar Háztartás Panel 4. hullámának eredményeiről (Social Paternoster 1992-1995. Report on the fourth wave of the Hungarian Household Panel Survey), Budapest: Department of Sociology, Budapest University of Economics, TÁRKI, Central Statistical Office.
- Andorka, R. and Zs. Spéder (1997a), 'Szegénység' (Poverty), in: E. Sik and I. Gy. Tóth (eds), Az ajtók záródnak, Jelentés a Magyar Háztartás Panel 5. hullámának eredményeiről (Mind the doors. Report on the fifth wave of the Hungarian Household Panel Survey), Budapest: Department of Sociology, Budapest University of Economics and TÁRKI.
- Andorka, R. and Zs. Spéder (1997b), 'Poverty in Hungary in 1992-1995'. Paper delivered at the conference "Inequality and Poverty in Transition Economies" of the European Bank for Reconstruction and Development, London, 23-24 May.
- Atkinson, A.B. and J. Micklewright (1992), Economic Transformation in Eastern Europe and the Distribution of Income. Cambridge, UK: Cambridge University Press.
- Duncan, G. J. et al. (1993), 'Poverty Dynamics in Eight Countries', Journal of Population Economics, No 6, pp 215-234
- Ferge, Z. (1991), 'Social Security Systems in the New Democracies of Central and Eastern Europe: Past Legacies and Possible Futures', in G A Cornia and S Sipos, Children and the Transition to the Market Economy, Aldershot: Avebury.
- Flemming, J and Micklewright, J (1999), 'Income Distribution, Economic Systems and Transition', Innocenti Occasional Paper ESP 71, UNICEF International Child Development Centre, Florence (forthcoming in The Handbook of Income Distribution, edited by A B Atkinson and F Bourguignon, Elsevier-Science B V).
- Förster, M. and I. Gy. Tóth (1997), 'Poverty and Inequalities: Hungary and the Visegrad Countries Compared'. Paper delivered at the conference 'Inequality and Poverty in Transition Economies' at the European Bank for Reconstruction and Development, London, 23-24 May.
- Förster, M., P. Szivós and I. Gy. Tóth (1998), "A jóléti támogatások és a szegénység: Magyarország és a visegrádi országok tapasztalatai" (Welfare benefits and poverty. The experiences of Hungary and other Visegrad

countries). In: Kolosi T., I. Gy. Tóth and Gy. Vukovich (eds): Társadalmi riport, Budapest: TÁRKI.

- Galasi, P. (1998), 'Income Inequality and Mobility in Hungary 1992-1996'. Innocenti Occasional Paper ESP 64, UNICEF International Child Development Centre, Florence.
- Jarvis, S. and J. Micklewright (1995), 'The Targeting of Family Allowances in Hungary'. in: D. van de Walle and K. Nead (eds) (1995), Public Spending and the Poor: Theory and Evidence. Baltimore: Johns Hopkins University Press, pp 294-320
- Micklewright, J, Nagy Gy (1996): 'Labour Market Policy and the Unemployed in Hungary', European Economic Review, vol 40, nos 3-5, pp 819-828
- Micklewright, J, Nagy Gy (1999): 'Living Standards and Incentives in Transition:The Implications of UI Exhaustion in Hungary', Journal of Public Economics, vol 73, pp.297-319
- Milanovic, B. (1996), 'Income, Inequality and Poverty During the Transition: A Survey of the Evidence', Most, vol 6, pp. 131-147
- Redmond, G. (1999), 'Incomes, Incentives and the Growth of Means-Testing in Hungary', Fiscal Studies, vol 20, no 1, pp. 77-99
- Szalai, J. (1989), 'Poverty in Hungary During the Period of Economic Crisis', backgound paper prepared for the 1990 Human Development Report of the UNDP.
- Tóth, I. (1995), 'The Hungarian Household Panel: Aims and Methods', Innovation, vol 8, No 1 (March), pp.106-22.
- World Bank (1996), 'Hungary. Poverty and Social Transfers'. A World Bank Country Study. Washington, D.C.

#### TABLES

	1992	1993	1994	1995	1996
Unweighted number of households	2,049	1,922	1,814	1,888	1,642
Weighted number of households	2,049	2,147	2,156	2,154	1,884
Unweighted number of children	1,377	1,227	1,130	1,250	1,080
Weighted number of children	1,377	1,357	1,355	1,399	1,242
Weighted number of children with zero income	7	0	6	14	8

#### Table 1: Households and children in the Hungarian panel

#### Table 2: Child poverty rates with different poverty lines

1

*Notes*: Figures based on cross-section samples (all children aged 0-17 in the wave concerned). The data for 1993-96 are weighted to allow for panel attrition. In calculating the poverty rate based on the Central Statistical Office (CSO) subsistence minimum we used the CSO equivalence scale (1 for the first adult, 0.75 for any other adult, 0.65 for the first, 0.5 for the second, 0.4 for any other child in the household), rather than the square root of household size, and the monthly (rather than annual) net total income of the household (the subsistence minimum is defined for net monthly income). Poor children on this basis are defined as those living in a household with monthly income (adjusted by the CSO equivalence scale) below the subsistence minimum. (Calculations of the subsistence minimum by the CSO were discontinued in 1995.)

	19	92	1996		
	Percentage of poor in group	Percentage of group in sample	Percentage of poor in group	Percentage of group in sample	
Age of children		•			
0-6	19.2	32.3	24.8	38.9	
7-13	17.0	41.8	22.7	36.1	
14-17	16.9	25.9	19.7	25.0	
The number of children					
1	17.5	27.1	21.5	17.1	
2	13.4	49.1	22.7	33.3	
3+	26.6	23.8	23.3	49.6	
Lone-parent household	35.4	14.0	32.0	14.2	
Labour Market Status <i>Couple</i>					
Both working	4.7	39.3	5.6	44.9	
Both not working	51.3	11.6	74.2	11.6	
1 working/1 not working Single-parent	14.0	35.7	24.4	29.4	
Working	21.4	8.2	18.4	9.5	
Not working	60.0	5.1	60.8	4.6	
All children	17.7	100.0	22.9	100.0	
Number of observations	240	1,360	283	1,237	

# Table 3: Children's family characteristics in 1992 and 1996

Notes: Cross-sectional samples. For 1996 percentages are based on weighted data.

	Number of times poor					
Characteristics at wave 1:	Never	Once	2-3 times	4 times	5 times	TOLAI
Age of child						
0-6	56.1	18.2	16.8	3.3	5.6	100.0
7-13	56.2	21.8	9.0	5.2	7.8	100.0
Number of children						
1	47.0	23.4	12.8	7.4	9.5	100.0
2	67.1	15.5	10.5	4.0	2.9	100.0
3+	39.8	27.8	16.2	2.9	13.3	100.0
Lone-parent household	35.8	30.5	12.1	8.6	13.0	100.0
Labour Market Status						
Couple						
, Both working	72.7	21.7	5.4	0.2	_	100.0
Both not working	15.2	19.1	6.9	8.4	50.4	100.0
1 working/1 not working	57.6	14.6	20.7	5.8	1.3	100.0
Single-parent						
Working	49.1	44.5	6.4	_	_	
Not working	13.4	15.9	20.3	20.1	30.4	100.0
All children	56.0	19.5	12.8	4.4	7.3	100.0

# Table 4: Persistence of child poverty over 1992-96 (percentages)

Notes: Sample: children in all waves, N=716. All inter-group differences are significant at the 5 % level.

	1992-1993				1995-1996		
Changes in							
employment status of the child's household:	Percent entering povery	Percent leaving poverty	Distribution of the sample	Percent entering povery	Percent leaving poverty	Distribution of the sample	
Number Working							
Same	4.8 <sup>a</sup>	5.3 <sup>a</sup>	67.3	8.4	6.1	74.7	
Greater	8.5	15.4 <sup>a</sup>	17.5	7.4 <sup>b</sup>	9.3 <sup>a</sup>	14.5	
Less	16.5 <sup>ª</sup>	9.6	15.2	14.0 <sup>a</sup>	1.4 <sup>a, b</sup>	10.8	
Total			100.0			100.0	
Number Unemployed							
Same	6.0	8.5	78.8	8.4	6.3 <sup>b</sup>	81.1	
Greater	17.2 <sup>a</sup>	3.0 <sup>a</sup>	10.8	20.9 <sup>a, t</sup>	4.4	9.3	
Less	8.5	5.4	10.4	4.3 <sup>a</sup>	3.2	9.6	
Total			100.0			100.0	
All Children	7.5	7.5		9.2	5.7		

# Table 5: Poverty dynamics of children and changes in the labour market characteristics of households

*Notes*: Percentages are based on weighted data and are percentages of all children in the the sample in question (poor and not poor). Samples include children in both consecutive waves (1,241 in 1992-93 and 984 in 1995-96).

a: significantly different from average at the 5 % level

b: significantly different from the 1992-1993 value at the 5 % level

	Ent	ries	Exits		
	1992/93	1995/96	1992/93	1995/96	
Number of workers:					
Same	44.5	70.0	46.8	77.9	
Greater	20.4	12.9	34.9	20.5	
Less	35.1	17.1	18.3	1.5	
Total	100.0	100.0	100.0	100.0	

# Table 6: Percentage of poverty entries and exits accounted for by changesin number of workers in the household

# FIGURES



Figure 1: Changes in macroeconomic indicators in Hungary, 1989-1996

Source: Central Statistical Office



Figure 2: Poverty rates for children, adults and pensioners

Notes: Cross-sectional samples. Except for 1992 percentages are based on weighted data.



Figure 3: Children entering and leaving poverty as a percent of all children

Note: The figures are percentages of all children present in each pair of waves.