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ROMANIA: POVERTYAND SOCIAL POLICY

Volume I - Main Report

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This report is based on the work of: Mansoora Rashid (Household Welfare Over the Transition, Task Manager), Benu Bidani ("Poverty Profile"), Amit Dar and Anita Schwarz ("Pensioners and Poverty"), Farid Dhanji ("Macroeconomic Policies"), Branko Milanovic ("Income, Inequality and Poverty During the Transition: A Survey of the Evidence), Per Ronnas and Richard Burcroff ("Poverty and Agriculture"), Emmanuel Skoufias ("The Labor Market and the Poor in Romania"), Kalanidhi Subbarao and Kalpana Mehra ("Social Assistance and Poverty", "Social Sectors in Transition: The Case of Romania"), and Shlomo Yitzhaki ("The Effect of Marginal Changes in Prices on Inequality in Romania"). Richard Florescu and the Resident Mission in Romania coordinated this work in Romania, while the Ministry of Labor and Social Policy and the National Commission of Statistics provided the data required to complete the study. Elizabeth Jacinto provided excellent research assistance. Brandon Cline assisted with data analysis, editing, and is responsible for the graphics and layout of this report. The report has benefited from helpful comments and suggestions provided by participants of a workshop on "Poverty in Romania" held in March, 1995, Martin Ravallion and Paulo Vieira da Cunha (peer reviewers), the National Commission of Statistics of Romania, the Ministry of Education and other Government agencies, and colleagues in EC1/2HR and the ECA Region. Ralph W. Harbison is the managing Division Chief and Kenneth G. Lay the Director.

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EXECUTIVE SUMMARY

Overview

i. Romania embarked on a historic transformation from a socialist system to a market economy in 1990, after a decade of harsh economic conditions and social distress. In the early years of the transition, the country realized a sharp economic contraction as it initiated economic and structural changes necessary for achieving sustainable growth and coped with the dislocation inherent in the break up of a centrally planned system. The structural and economic reforms began to yield results starting in 1994, when the economy registered its first positive rate of growth since 1990. Economic growth has increased since then, from 4 percent in 1994 to 7 percent in 1995.

ii. Not surprisingly, household welfare mirrored the decline in economic activity both in the 1980s and again in the early years of the transformation program. Poverty increased over the transition, with the main reason being the sharp decline in economic output. The distribution of income worsened, but contributed less to the increase in poverty.

iii. Sustained economic growth will be the main instrument for alleviating poverty in Romania. The basic strategy, outlined extensively in other World Bank reports, involves a continuation of Government initiated economic and structural changes that include sound monetary and fiscal policies, a reduced role for Government in financial and product markets, a market based price regime, and the creation of a more conducive environment for private sector growth.

iv. There are two caveats. Unlike some transition economies, poverty in Romania is deep. The average income of the poor is 26 percent below the poverty line. It will therefore take a considerable period of growth to make a significant reduction in poverty. The report estimates that a 5 percent growth per year over a period of 5 years will only reduce poverty by half.[1] Romania is well along the path to meeting this target, but even with the current rate of growth, the country will have to develop strategies to cope with a sizable poor population in the near future.

v. Second, not all poor are likely to benefit directly and immediately from economic growth. The report finds a considerable variation in the characteristics of the poor. Nearly two third of the poor live in rural areas and, at the poverty line, the Northeast has the highest poverty rate of all regions (26%).[2] The Northeast is mainly an agrarian region, but it is mountainous and does not have the most favorable conditions for agriculture. The region has also realized the largest number of layoffs and has the highest unemployment rate in the country.

vi. Nearly half of the poor live with wage earners and the unemployed, while the rest reside in farm and pensioner households. The highest incidence of poverty, however, is among households headed by the unemployed (46%) and by farmers (40%). The poverty rate for pensioners (19%) and salaried workers (17%) households is far less.

vii. Economic growth that increases wages and employment is likely to benefit the more *transient poor*--wage earners and the unemployed. The remainder of the poor, farmers and pensioners, aged and past their most productive years, are less likely to benefit directly from economic growth and represent a *longer enduring* aspect of poverty. The most disadvantaged of these poor are farmers, mainly elderly

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[1] This estimate is predicated on the assumption that there are no changes in the distribution of income.

[2] The incidence of poverty, or poverty rate, is the proportion of poor in the total population of a particular group.

women, who rely solely on agricultural income. This pocket of rural poverty has survived virtually intact over the transition.[3]

viii. These households will need to be protected by effective and efficiently targeted cash transfer schemes, underpinned by a progressive system of taxes. The need for such transfers should decline in the long run as Government efforts to grant titles to land (allowing the poor to obtain credit or sell land), foster the privatization of product markets and marketing channels, and ensure that the poor are not by bypassed by extension services reduce poverty among farmers. Similarly, poverty among elderly pensioners should decline as financial markets deepen and individuals are able to use a wide range of financial instruments to save for old age.

ix. The report finds poor households have low health status and low levels of education. Children of poor households are less likely to be enrolled in school, particularly in secondary and higher education, and have worse nutritional outcomes. Thus, investment in health and education of the poor will also be critical for breaking the *inter-generational cycle of poverty* in Romania. It will be crucial for reducing poverty in rural areas, and in poorer counties where health and education status are low relative to more prosperous regions. Investment in education and training may also be needed for the unemployed who find themselves without the skills needed to re-enter the labor force.

x. Investment in human capital will need to be complemented by investment in physical infrastructure. Improvements in sewerage and water supply facilities in poorer areas, both urban and rural, will be critical in improving health and education outcomes, with positive implications for labor productivity and growth. Investment in human and physical capital will be all the more effective if labor markets are flexible and competitive.

xi. A precise definition of poverty is useful for the analytical purposes of this report. To this end, with the recognition that any poverty threshold is to an extent arbitrary, the report develops a *poverty line* of 35,593 lei per person per month (April 1994 prices), or approximately US$3.30 per day.[4] This level is approximately 50 percent of the mean per capita *expenditure* of the population and is consistent with poverty lines used in poverty studies for Poland and Hungary. It is approximately 44 percent higher than the minimum income guarantee used to target the new means-tested social assistance program.[5]

xii. It is important to stress at the very outset of this report that the precise number of poor and the poverty rate should not themselves be the focus of policy debate. The most important reasons for creating poverty lines are to identify the characteristics of the poor, to trace trends in poverty rates, and to evaluate the degree to which social programs are effective in reaching the poorest groups. The poverty line used in this report is not necessarily the sole determinant of the minimum income guarantee under the new social assistance program. As noted above, the poverty line is to an extent arbitrary, and the appropriate level of expenditures under the new program depends, among other factors, on available fiscal resources.[6]

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[3] These characteristics of the poor are likely to have changed somewhat since 1994 (see paragraph vii), but not significantly enough in the year and a half since the data were collected to change the main conclusions of this report.

[4] The line is based on a daily per capita intake of 2425 calories, considered the minimum daily nutritional requirement for Romanian individuals. For the sake of consistency, the consumption level of the second decile is chosen for tracing the evolution of poverty over the transition (Chapter II). The poverty estimated by this poverty line (21.5%) is very close to the poverty rate estimated by the National Commission of Statistics using the same data (17%). Both estimates are far lower than poverty rates calculated by other Romanian researchers. Economists at the Institute for the Improvement of the Quality of Life estimate adult poverty rates of 46 percent; Studies quoted by the Ministry of Education present a poverty rate of 80 percent of total population.

[5] 45,000 lei per person per month for a single person household (June, 1996 prices) . This is approximately 24,678 lei in April, 1994 prices.

[6] It is also important to evaluate and document any changes in poverty trends or the characteristics of the poor under alternate poverty lines. In Annex 1, we show that poverty rates and trends are not altered whatever the level we use for the poverty line, or how we define consumption,

xiii. The report finds that policy reforms to extend and strengthen the safety net and invest in health and education should help reduce poverty. The new means-tested social assistance program coupled with the institution of a nationally representative household survey should help improve the adequacy and the targeting efficiency of social transfers, which have seriously eroded in real terms over the transition. Increased investment in education and health, reflected in the recent increases in spending on these sectors, should help address problems of crumbling school infrastructure, support curriculum changes and assist the rehabilitation of primary health care units. Investment in water supply quality and infrastructure should help reduce the adverse impact on health of inadequate sanitation in poor areas.

xiv. The objective of this report is to suggest measures to alleviate poverty in the country. To this end, the report recommends that the Government monitor the effectiveness of its new social assistance program, strengthen the delivery of child allowances, improve work incentives in the cash transfer system, and improve the targeting efficiency of spending on health care and education to the poor, particularly in rural areas. To this end, increased cost recovery in tertiary education coupled with need and merit based scholarships to the poor and the rehabilitation of 10 percent of primary health care facilities represent significant gains that should be consolidated in the future. The Government should also ensure that labor market policies do not discriminate against the poor through high minimum wages and by subsidizing the employment of the non-poor. Changes in the tax system should also be monitored to ensure that the tax burden does not fall unduly on the poor.

xv. The main findings and policy recommendations of the report, summarized above, were discussed with the new Government of Romania, research organizations, and international donors in Bucharest in January 1997. These discussions reflect the openness accorded to poverty issues by the new Government and the considerable emphasis it places on tackling poverty problems in the country. As a further indication of its commitment to reducing poverty, the Government is in the process of establishing a National Poverty Commission to foster a national dialogue on poverty and facilitate the development and implementation of a poverty alleviation strategy for the country.

xvi. The objective of this report is to inform the Government's poverty alleviation strategy by suggesting measures to alleviate poverty in the country. The recommendations of the report are based on an analysis of three issues: (i) the evolution of poverty between 1989-93; (ii) an identification of the poor in 1994; and (iii) an assessment of the adequacy and efficiency of the Government's cash transfer and investment programs.[7] The discussion of these issues (presented in the report in the order given above) is preceded by a brief overview of the macroeconomic developments between 1989 and 1994, the years covered by the report.

xvii.The main findings and policy recommendations of the report are detailed below.

A Profile of Poverty

xviii. The poor in Romania can be divided into two groups: The transient poor and the longer term poor.

xix. ***Transient poverty is concentrated among salaried workers and the unemployed.*** As noted above, nearly half of the poor live in households headed by salaried workers and the unemployed, with the majority (70%) living in working poor households.

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the indicator of household welfare. The only conclusion that varies as we alter the poverty line is the relative poverty rates of the Northeast relative to the Northwest. Although the North is always poorer than the South, the distinction between the Northeast and Northwest regions is not always as strong.

[7] The poverty profile (ii) and the analysis of social programs (iii) is based on the 1994 Integrated Household Survey, a newly initiated nationally representative survey. The evolution of poverty (i) is based on the 1989 and 1993 Family Budget Survey. A description of both surveys and measurement issues in contained in Annex 1 of Volume II of this report.

- **Private sector led economic growth will benefit private sector workers, particularly those with a higher level of education.**

  o *The decline in wages* is the main reason behind the large group of low wage poor in Romania.

  o *Wage dispersion* increased over the transition, but has not contributed greatly to increased poverty. Wage dispersion has been concentrated the private sector.

  o *Public sector workers realized a much greater decline in wages than private sector workers.* Although public sector workers still earn more than private sector workers, the transition has narrowed the wage gap between the two sectors.

  o *Private sector white collar workers have gained the most over the transition.* The wages of highly educated white collar workers in the private sector increased in absolute terms and relative to all other workers in the economy.

- **Households headed by the unemployed are the most vulnerable members of the labor force.** The majority of the unemployed are young, between 14-35 years of age and should benefit from the expanded employment opportunities provided by the private sector. Not all unemployed will have an easy time finding a job. Urban women with one or two young children have the longest duration of unemployment. These women, coupled with individuals with little labor market experience, and secondary school education, are having the most difficult time getting employed. Of these, higher secondary (cycle II), vocational and apprenticeship graduates have the highest unemployment rates, reflecting the historically narrow focus of secondary school education.

xx. ***Farmers and pensioners represent a longer term aspect of poverty.*** Most of these poor individuals (70%) live in households with pensioners and the remainder live in farm households.

- **Elderly rural women with low pensions are the poorest of all pensioners.** As in other transition economies, pensioners have fared better than other groups over the transition. Poverty among pensioners is not widespread. Only 19 percent of the pensioners are poor.[8] The poorest pensioners are women heads of households, aged, who live in rural areas and receive low agricultural and survivor pensions. However, even these women are better off than the poor who do not receive pensions.

- **Elderly rural women with only farm income and no pensions or wages are the most vulnerable of all poor.** The most vulnerable group in Romania are farmers with small plots of land. This pocket of rural poverty, concentrated in the north of the country, has remained intact over the transition. The poorest farmers have no income from wages and pensions and survive only on agricultural income. The advanced age, little education, and the presence of few earning members in these households make these women the most vulnerable group of poor and the least likely to benefit from economic growth.

Common Characteristics of the Poor

xxi. Despite the variations in the occupational and regional composition of poverty, poor individuals, and poorer regions and judets have many of the same characteristics (Chapter III).

[8] This is in comparison to 17 percent poor among individuals in wage earner households, 46 percent poor among unemployed headed household population, and 40 percent poor among individuals in households headed by farmers.

xxii. ***Poor households have fewer wage earners, a larger number of unemployed members and more children.*** Poor households have fewer earning members (a lower activity rate), and relatively more non-working age members than non-poor households.

xxiii. ***The poor consume fewer calories and own fewer assets.*** Low income households spend a high share of expenditures on food (80%), but consume fewer calories per capita than richer groups. The poorest individuals consume only 1504 calories per day as compared to an average 2472 calories per day for the entire population. The poor own fewer durables and smaller plots of land. They also live in strikingly worse conditions. The majority of the poor live in traditional houses made of mud and straw, do not have access to piped water and have no sewage facilities.

xxiv. ***The poor have low health status.*** Romania has some of the lowest health indicators in Eastern Europe and the poor have the lowest health status in the country. Children in poorer rural areas also have a lower nutritional status.[9] Low health status may be a function of poor sanitation in poorer areas. It could also be a result of low quality of primary health care system. The report finds that as households get richer they tend to substitute out of primary health care facilities and towards secondary and tertiary levels of care.

xxv. ***The poor have low levels of education.*** Most worrisome, this link between education and poverty may persist in the future. Children of poor households and those with less educated parents have lower enrollment rates at each level of education, particularly in rural areas. Low enrollment rates of the poor can be a result of low quality or availability of schools in rural areas. However, anecdotal evidence indicates that crumbling infrastructure has also severely increased crowding in schools in selected urban and rural districts. Low enrollment rates could also be a function of higher out-of-pocket expenses of poor children, a greater distance school, and higher opportunity costs of forgone wages for working age children. It may also reflect the low participation of Gypsy children in the schooling system. Education does pay off in Romania however. The returns to completing an extra level of education are high. The highest marginal returns accrue to college (vs. secondary school) graduates, and are higher at almost every level of education (as compared to primary education or less) in rural than urban areas.

Poverty Alleviation Programs: Does Public Spending Benefit the Poor?

xxvi. The main purpose of Government spending on cash transfers (child allowances and discretionary social assistance) and in-kind transfers is to improve equity and reduce poverty. The unemployment benefit scheme is an insurance program that protects individuals against a short-term loss of income. Public spending on education and health is guided by both efficiency and equity concerns. But these objectives coincide in justifying better targeting of resources to the poor in areas that generate high economic returns such as basic education or preventive health care where the private sector would under-supply services (loans against human capital, for example) that benefit the society at large.[10]

xxvii. The report defines the *effectiveness* of a transfer or investment as the proportion of the transfer or subsidy in total household income (proxied by consumption)--a reflection of the adequacy of the benefit in alleviating poverty. *Targeting efficiency* is defined as the proportion of total transfer or subsidy that accrues to the poor relative to the share of poor in total population (20%). A benefit is progressive or strongly pro-poor if the poor receive more than 20 percent of the benefit; it is regressive, or only weakly pro-poor if the poor receive less than 20 percent of the benefit.

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[9] Ministry of Health, National Nutritional Survey, 1993.

[10] It is important to note, however, that child allowances, health and education are universal benefits and as such are not specifically targeted to the poor. In addition, unemployment benefits are geared to short-term unemployed and do not have the objective of protecting against long-term poverty.

xxviii. ***Public spending on some cash transfers became ineffective and less efficiently targeted over the transition.***

- **The adequacy of child allowances and social assistance benefits in protecting the poor declined.** In 1994, only 0.8 percent of GDP was spent on child allowances and social assistance programs as opposed to 2.6 percent of GDP in 1989.
- **The targeting efficiency of child allowances and social assistance benefits declined as well.** For child allowance benefits, this trend reflects the de-linking of child allowances from earnings and the transformation of the program into a universal benefit.[11] In social assistance, the increase in new claimants and the decline in spending on social assistance overwhelmed benefit delivery services and claim verification procedures, reducing the targeting efficiency of these transfers.
- **The unemployment insurance program became increasingly progressive and more effective in protecting the poor.** Expenditures on the unemployment insurance program instituted in 1991 increased to 1 percent of GDP in 1994. The program has been instrumental in helping to reduce the severity of poverty among the unemployed.

xxix. ***In 1994, the public transfer system was more strongly pro-poor and effective in reducing poverty than if no cash transfer system was in place--but its effectiveness varied by region and type of transfer.*** Cash transfers comprised 15 percent of the income of the poor. The cash transfer system reduced poverty by 7 percent and the depth of poverty by 4 percent than if no such system were in place.

- **Child allowances and unemployment benefits were the most effective and well targeted programs.** Benefits from both programs amounted to 13 percent of the income of the poor. While unemployment benefits were progressive in both rural and urban areas, child allowances were strongly pro-poor only in rural areas. There are exclusion errors and leakage in the child allowance system, as well. Most worrisome, many eligible poor households did not receive child benefits because their children were not enrolled in school. In addition, a large proportion of households did not receive benefits even though their children were enrolled in school, perhaps because the new delivery system was not fully in place.
- **Discretionary Social Assistance and In-Kind Transfers were not at all effective or efficiently targeted.** These transfers provided a negligible assistance amounting to 2 percent of the income of the poor. Also, both transfer systems are inefficient. Nearly 22 percent of social assistance and almost half of in-kind transfers accrue to the top 20 percent of Romanian households. Thus, the poorest households who were not eligible for pensions, unemployment benefits or child allowances were not well protected by the cash transfer system.

xxx. ***Public spending on health and education was effective, but biased towards non-poor programs, the richest 20 percent of the population, and urban areas.*** In 1994, the Government spent nearly 3 percent of GDP on education and roughly the same on health. Government spending on education was the most effective overall, amounting to 18 percent of the consumption of the poor. Basic education, comprising more than half of all Government spending on education, emerges as strongly pro-poor. This indicates the success to which compulsory education program is reaching the poorest households.

[11] Originally, child allowances were higher for lower wage workers. Over the transition, nominal wages increased, but the ceilings of benefit categories were not adjusted. As a result, over time all workers received the same level of benefit. Child allowances were transformed into a universal benefit in 1993, benefits were extended to all children (rather than simply those of state employees) up to age 16, and the delivery system was changed from enterprises to schools. In addition, children of compulsory school age are now required to be enrolled in school to receive benefits. The tax credit for child allowance was also discontinued, which likely increased the progressivity of wages.

However, nearly half of all education spending goes to secondary and tertiary education which are not well targeted at all.

xxxi. Public spending on health is only half as effective as spending on education. It is also regressive. Polyclinics and hospitals are the most regressive of all programs, but these programs together receive nearly two-thirds of total spending on health. Not only is public spending biased towards non-poor programs, it favors the top quintile of the population. Over 32 percent of public spending on tertiary education and nearly 33 percent of public spending on polyclinics benefits the richest 20 percent of the population. There is an urban bias to both programs, as well. The per capita spending on education and health is higher in urban than rural areas.

Poverty Alleviation Strategy: Growth and Well-Targeted Transfers and Investments

xxxii. These findings indicate a considerable scope for reducing poverty in Romania by promoting economic growth and by targeting cash transfers and public investments more effectively and efficiently to the poorest households.

xxxiii. ***Promote economic growth.*** Romania realized a 4 percent growth in 1994 and a 7 percent growth rate in 1995. Sustained growth along these levels will be critical to poverty alleviation for wage workers and the unemployed. National and sector specific sustained growth strategies have been discussed extensively in other World Bank reports. The basic strategy involves sound monetary and fiscal policies, a reduced role for government in financial and product markets, a market based price regime, and the creation of a more conducive environment for private sector growth.

xxxiv. In rural areas and agricultural settings where we find the highest incidence of poverty, growth in the non-agricultural sector coupled with agricultural sector reforms encompassing land titling legislation, the development of an active land market, reduced role for government and a corresponding increase in private sector involvement in input supply, distribution and marketing, all should help raise agricultural growth rate, increase average incomes and reduce rural poverty. The high incidence of poverty among the less educated and aged farmers with small plots of land strongly suggests that any initiatives to provide extension to farmers should not (given demand) bypass these vulnerable agricultural households. An investigation into the barriers (such as land titles) that may restrict the use of credit and inputs or sale of land by poor farmers should be undertaken in order to (where possible) eliminate these barriers to trade.

xxxv. ***Protect the poor through efficient and effective public transfers.*** The Government initiated a new means-tested program in 1995. The program is a response to the low level of protection offered by previous transfer programs and their inefficiency in targeting the poorest groups. As part of the new social assistance law, the Government has consolidated and phased out many discretionary social assistance benefits, linked the remainder of these benefits to income, simplified the claims procedure and strengthened the delivery system. In-kind transfers, the most regressive of all poverty alleviation schemes, were discontinued in 1995. These measures can be made all the more effective in reducing poverty if the following proposals are considered:

- **Monitor the efficiency and effectiveness of the newly instituted means-tested social assistance scheme.** The new means-tested social assistance program guarantees a minimum income of 45,000 lei per person (for a single person household) in 1996. This level is 70 percent of the poverty line used in this report, reflecting prudent fiscal considerations. Thus, if *all* individuals eligible for this program are correctly identified and *all* claim the benefit, the incidence of poverty would be significantly reduced. However, this is an unlikely scenario. Several problems need to be addressed in order to ensure that the new social assistance scheme is effective in reducing poverty:

o The report estimates the benefit costs of the new means-tested system may exceed 2.6 percent of GDP (March 1994 lei). The costs could be lower--2.3 percent of GDP--if the child allowances were included in the means test. The increased benefit costs should be financed in part by the phasing out of discretionary social assistance programs--0.5 percent of GDP (already being done). Consolidating the system with the child allowance program (see caveats below) would cover some costs as well (0.8% of GDP). Restructuring the pension system could also release resources that could be allocated to the means-tested system.

o It may be very difficult and therefore costly to monitor income in a transition economy where income sources are changing rapidly over time, where tax systems are not sophisticated and where information networks at the Government's disposal are poor and undeveloped. The administrative costs of the program may be high and should be monitored carefully.

o The proposed social assistance program should also incorporate work incentives for individuals who are able to work. Several options can be considered: (i) reducing benefits with increased earnings, but not lei for lei of additional income earned. In particular, single women with young children who may not take up new jobs because of increased day care costs merit attention; (ii) impose a maximum eligibility period (say 2 years) for claiming benefits; or (iii) require recipients to participate in community work projects (environmental clean up, for example); and (iv) as is currently the case, social assistance benefits should be set below the minimum payment for unemployment benefits and this should be below minimum wage. To this end, technical assistance supported by the World Bank could help the Government incorporate work incentives in its social assistance system.

o The benefit delivery mechanisms of the new social assistance program should be monitored carefully and improved where needed. Many households may not be physically able to claim benefits (e.g. aged sick individuals, or female headed households with many children) and information about program delivery points may not reach all eligible households. Technical assistance supported by the World Bank could be made available to help Government fine tune benefit delivery mechanisms of the Government, and consider supplementary self-targeting schemes to ensure that assistance reaches the intended beneficiaries of the program.

o The social assistance minimum should be adjusted periodically for inflation so as not to erode the real income of the poorest population groups. It should be based on some proportion of the poverty line chosen by the Government, and should be kept below minimum wages. The overall fiscal resources available to the Government should guide the proportion of the poor that can be protected under the social assistance scheme.

o Once the new program is fully operational and its costs and effectiveness in protecting the poor are better known, the entire package of cash transfers will need to be reevaluated to ensure that the overall system is the most efficient way of protecting the poor. The scope of the program should also be down-sized as the number of poor decreases. There is always a danger that the poverty alleviation programs may increase in scope even after they outlive their purpose as many beneficiaries develop vested interests in the programs and lobby hard to maintain benefits.

- **Improve the targeting efficiency of Child Allowances and Discretionary Social Assistance.**

o Improving the delivery system of child allowances through measures to stop leakage and reduce exclusion of eligible poor households would increase the targeting efficiency of child allowances. To this end, the stipulation that all school age children be enrolled in school to collect benefits should be reconsidered (at least for secondary school education) given the low rates of enrollment of poor children. The benefits do not appear to be adequate to encourage the poorest children to enroll in

school. Cash incentives to increase enrollments of the poor might well be needed as part of a comprehensive education program to increase education achievements of the poor (see below). An investigation into why particular children enrolled in school and under school age are not receiving benefits also merits serious attention.

o In the long run, the high costs of the means-tested social assistance program may make expenditures on both systems too costly to maintain. Redirecting child allowances only to the poorest households (with the largest number of children) would increase the targeting efficiency of child allowances and reduce poverty. It would also increase the level of transfers received by the poor. The increased efficiency of targeting may be offset by increased administrative costs of means testing--although, these costs will be marginal if the means-tested social assistance system is working well. Indicator-based targeting (geographic areas or number of children) or self-targeting mechanisms to target the poorest households could also be explored and used.

o Alternatively, child allowances could be phased out, perhaps by letting their value erode over time. This should only be done if and when the social assistance program is effective in reaching large poor households. In the meantime, as noted above, the delivery system of child allowances should be investigated and improved.

o Changes in the delivery system of discretionary social assistance programs should continue to be monitored to ensure that new mechanisms for delivery of benefits and processing claims has increased the targeting efficiency of these transfers. To this end, technical assistance, supported in part through the Employment and Social Protection project, could be made available to help design mechanisms to assess the effectiveness of benefit delivery and claims processing mechanisms and to improve them where needed.[12]

- **Improve the efficiency and equity of the pension system.** This report finds that pensioners are not the poorest group in the economy. It strongly recommends that the pension system not be used as a poverty alleviation program for pensioners. Currently, the pension system is running a deficit so that raising average pension levels would not be feasible from a financial point of view. Pockets of poverty amongst pensioners should be addressed through the means-tested social assistance system. The Government could also consider protecting pensioners by ensuring minimum pensions are adequate (linked to the poverty line) and adjusted to inflation in a discretionary fashion. Finally, more efficient financial markets that allow individuals to save for old age, or take out a greater coverage under life insurance policies, will be critical in reducing poverty among the aged.

xxxvi. ***Invest in human capital.*** Investments in human capital, both in education and health, will alleviate poverty and help reduce inter-regional disparities in income in Romania. A more healthy and productive labor force is critical for promoting and sustaining economic growth. Government spending on human capital is an investment that can be recouped through a higher stream of tax revenues in the future.

- **Invest in education of the poor.** The education sector has reduced the emphasis on vocational and technical education. Private educational institutions have been promoted. At the same time, curriculum changes are being made to ensure that the public education system turns out graduates suited for a market economy. The investment budget for education has also been increased from 3 percent to slightly over 4 percent to improve the quality of education in Romania and make spending more comparable to other Eastern European countries.

[12] Many of the poor who are institutionalized, such as the disabled and orphans, are not captured by this survey. The homeless and itinerant populations are not included in this survey, as well. It is critical to ensure that these individuals are able to attain a minimum standard of living and rendered capable of re-entering productive life, and that institutions in which they reside are adequately funded to achieve this goal.

Still, low education outcomes and low enrollment rates of the poor in general, and the rural poor in particular, indicate a considerable scope for investment in education by improving education levels of the poor, especially in rural areas and poorer regions. The type of investment (improvements in quality of education program, loans to cover out of pocket fees, better enforcement for compulsory education, improvements in infrastructure, adjusting classes to seasonal demand of agriculture labor etc.) needed to improve education attainment of the poor depends critically on the precise determinants of low enrollment rates of poor children in particular areas. The low enrollment of Gypsy children may be more of a problem in rural areas, while infrastructure investments to reduce crowding may be more critical in poor urban areas, for example. The report shows that cost recovery in tertiary education coupled with merit based scholarships for the poorest students could be used to make spending on tertiary education better targeted to the poorest groups.

- **Improve health outcomes of the poor.** Improving the quality of health facilities in rural areas and investment in sanitation and water supply facilities already initiated by Government, particularly in those areas (rural or urban) where the absence of such facilities lowers health indicators should improve health outcomes for the poor in Romania. Health outcomes of the poor in general, and the rural poor in particular, could be improved by a reallocation of spending from tertiary care (hospitals) towards improvements in the quality of primary health care, especially in poorer and less well served rural regions. The country has started to improve the quality of primary health care facilities and has initiated an investigation into the financing of the health system. But much remains to be done. Less than 10 percent of all dispensaries (primary care) have been rehabilitated and equipped.

xxxvii. ***Promote labor market policies that are pro-poor and conducive to economic growth.*** In the first few years of the transition steps have been taken to make labor markets more flexible and responsive to economic conditions. Restrictions on labor mobility have been eliminated and wages have been allowed to adjust to economic conditions. A well functioning labor force is critical for increasing the returns to investment in human capital. The Government should consider additional measures to increase the flexibility of labor markets:

- **Keep minimum wages low.** Minimum wages provide protection to already employed workers and are likely to discriminate in favor of higher skilled workers. As a result, they may well create unemployment for younger and/or less skilled workers. In countries such as Romania where unemployment is pervasive among younger workers, and where unemployment is likely to increase over the transition, minimum wages should not be institutionalized in the private sector as they may well discourage employment. In the public sector, minimum wages should be kept as low as possible and should be set on the basis of information on median not average wages. Average wages will become more and more sensitive to increasing wage dispersion in the economy.

- **Phase out the Wage Subsidy Program.** The wage subsidy program induces companies to hire college graduates over secondary school leavers. It also does not provide incentives to companies to increase overall employment. If it cannot be phased out completely, the wage subsidy program could be turned into a marginal employment subsidy program, targeting the long-term unemployed and secondary school leavers. This would provide a subsidy to employers only if employment of these individuals increases net employment. The subsidy would then influence both the unemployment rate and the composition of the unemployment.

- **Training programs should be responsive to labor market conditions.** General and firm specific experience are important for increasing a worker's chances for employment and higher wages. Public training efforts have not been as successful as private sector training programs in matching unemployed to jobs. Training programs that are responsive to labor market conditions, currently

being promoted by Government, would best serve unemployed workers by allowing them to acquire the necessary skills to re-enter the labor force. The increased role of private training programs and subsequent increased costs of training could be allayed for the poorest individuals (including cost of college should they decide to opt for higher education) through loans (or vouchers) to be repaid upon employment.

xxxviii. ***Develop a more progressive tax system.*** A progressive transfer and investment system should be accompanied by a progressive tax structure. The tax structure in Romania appears very progressive, but the Government could still raise revenues without worsening the distribution of income by taxing rent, petrol, tobacco, and public transport. The Government could also raise revenue from taxing pensions without altering the distribution of income. However, taxing pension income should be phased in the long-term when income sources can be better audited and monitored.

xxxix. ***Monitor poverty and the incidence of public spending.*** The Government has so far used the Family Budget Survey data for social policy. The FBS is not a nationally representative data set. The Government should therefore use the newly initiated and nationally representative Integrated Household Survey (see Annex 1), to derive minimum benefits, identify the poor and evaluate the incidence of public spending. The IHS allows an identification of the poor from a broad nationally representative sample. It captures the poorest population groups and provides detailed socio-economic characteristics of all households. It includes sources of income for each individual and allows an evaluation of the incidence of public spending. However, the ability of the household survey to measure agricultural and other self-employment income and to capture the incidence of public spending on education could be further improved. In addition, the survey could include a community price questionnaire to alleviate problems in constructing price indices. These and other changes could be implemented by technical assistance supported by the World Bank.

xl. ***Implications for Bank support for poverty alleviation strategies.*** The Government has shown its commitment to tackle poverty in an open manner. World Bank support could assist the Government in making macroeconomic and structural reforms to promote economic growth -- critical for reducing poverty in Romania. The World Bank could also assist current Government efforts to tackle poverty through a national dialogue reduce poverty by providing an effective and efficient safety net; to support and supervise ongoing investments in rural education and health; to assist in reform of the pension system; and to ensure that extension efforts in agriculture do not bypass the poorest farm households. Finally, World Bank technical assistance could be made available to support the initiatives of the Government and the National Poverty Commission to monitor public spending on the poor and ensure that policy initiatives to protect the most vulnerable groups in the society reach those most in need.

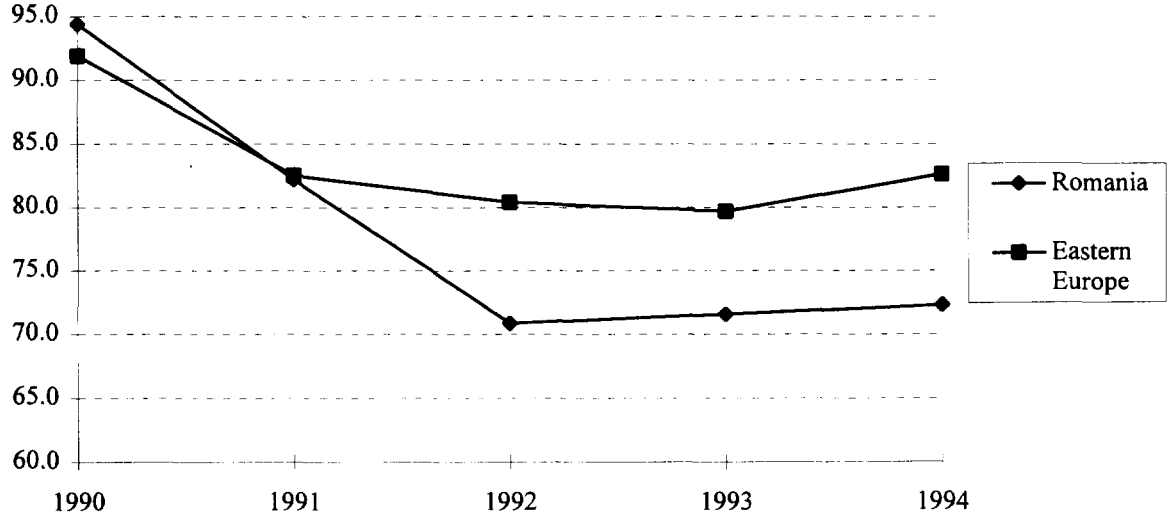
I. MACROECONOMIC DEVELOPMENTS

1.1 Romania embarked on a transition to a market economy after a decade of harsh economic conditions and social distress. In the decade of the 1980's the Government's main objective was to repay the country's large external debt, an objective achieved mainly by curtailing consumption of foreign and domestic goods. Imports of raw materials, new equipment, and spare parts from the West virtually stopped. The capital stock became increasingly obsolete and production was isolated from modern technology. As a result, economic output suffered considerably. Household consumption was also repressed. The supply of consumer goods declined sharply and households' use of electricity and heating was severely curtailed.

1.2 The first few years of the transition have also been difficult for Romania. Economic output declined by one-third between 1989-92. The dissolution of the central planning system, the loss of traditional markets, and increased exposure to foreign markets all contributed to a fall in economic activity. However, the drop in output has been more severe in Romania as compared to other transition economies (Figure 1.1). As a result, Romanian households have had to endure lower levels of income and consumption than other Eastern European countries.

1.3 Romania differs from other transition economies in its gradualist approach to economic liberalization. The Government's approach has been reflected in a slow rate of privatization in the economy and continued support to state enterprises either through budgetary transfers, off-budgetary transfers, or state bank credits. One result has been a small decline in employment levels. Unemployment rates have only gradually increased to 8 percent in 1994[1], and remain amongst the lowest in Eastern Europe (Figure 1.2). The decline in employment consists mainly of lay-offs or retirement of (mostly female) blue-collar workers in large state-owned enterprises which were producing textiles, metal products, and machinery. Over one-third of the layoffs, plant closings, and firings have occurred in the Northeast region, which now has one of the highest unemployment rates in the country (Annex 2, Table 38). The small drop in employment coupled with a sharp decline in output has reduced labor productivity

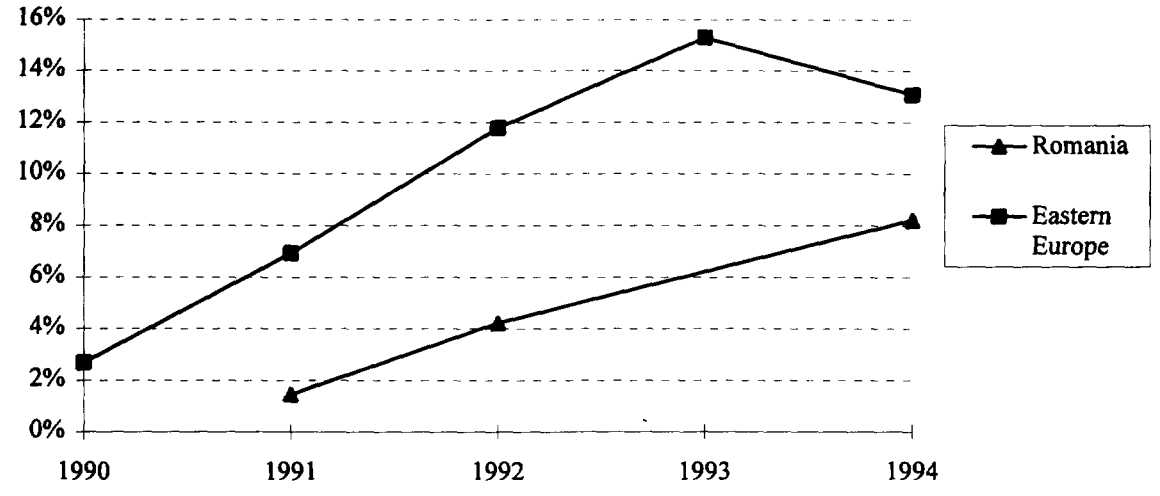
Figure 1.1: Index of Real GDP, Romania and Eastern Europe (1989=100)



NOTE: Eastern Europe is the average index of Bulgaria, Hungary, and Poland.

[1] The Government reports an unemployment rate of 11 percent, but both the Labor Force Survey (March, 1994) and the Integrated Household Survey reveal an unemployment rate at 8 percent in March, 1994.

Figure 1.2: Unemployment Rates, Romania and Eastern Europe

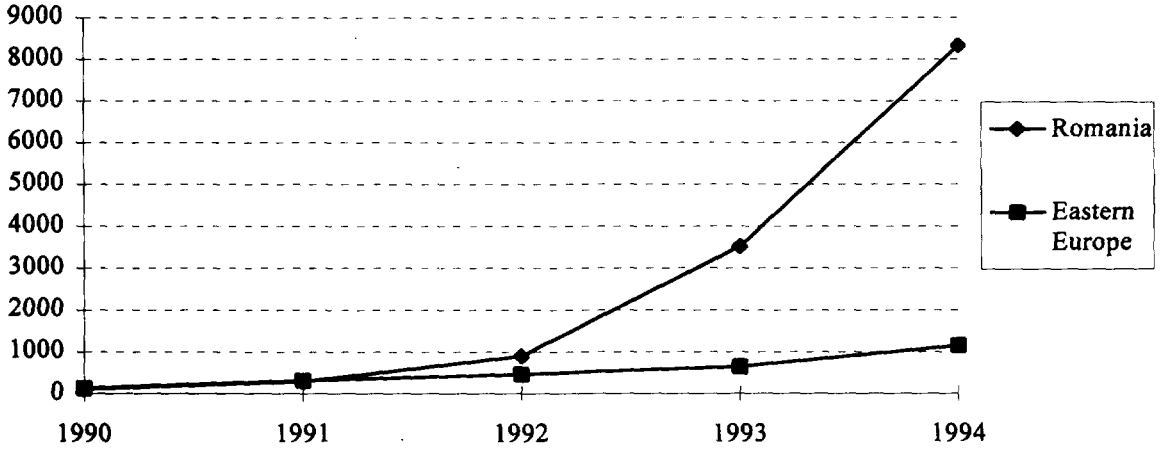


NOTE: Eastern Europe is the average rate of Bulgaria, Hungary, and Poland.

and contributed to a fall in real wages. Romania experienced one of the steepest declines in real wages in Eastern Europe. In 1993, real wages were only 66 percent of their 1989 level (Annex 2, Table 1). This slow rate of privatization has protected household welfare by maintaining employment, but at lower current wages and with adverse implications for economic growth.

1.4 The Government's gradualist policies are also reflected in the many step wise deregulations of foreign and domestic prices. The Government's domestic and foreign price liberalization program began in 1990, but consumer prices were "fully" deregulated only in 1994; the exchange rate has only recently been liberalized. The ad hoc and step wise liberalization of these prices has fueled inflation. Inflation rates, amongst the highest in Eastern Europe, reached 300 percent per annum in 1993 before declining to 62 percent per annum in December, 1994 (Figure 1.3). Thus, individuals faced an uncertain economic environment and realized further declines in wages and fixed benefits.

Figure 1.3: Index of Prices, Romania and Eastern Europe



NOTE: Eastern Europe is the average index of Bulgaria, Hungary, and Poland.

Table 1.1: GDP Growth by Sector, (Percent growth per annum), 1990-93

	1990	1991	1992	1993	1994
GDP	-5.9	-13.2	-9.4	1.5	3.9
-Industry	-16.7	-12.8	-13.7	0.3	2.1
-Construction	1.0	-19.4	-5.6	19.2	24.5
-Agriculture and Forestry	37.3	-12.3	-12.9	13.5	3.1
-Transport and Telecommunications	-21.4	-8.8	-4.0	2.7	1.4
-Trade	9.3	-25.6	-9.1	-9.6	2.3
-Other	11.0	0.5	13.9	0.6	3.4

1.5 A second difference between Romania and other transition economies has been government reliance - until 1993 - on consumer food subsidies rather than cash transfers to cushion the decline in output across individuals. Total Government spending on the three main cash transfer programs - (i) pensions, (ii) child allowances and (iii) discretionary social assistance - actually declined in Romania, from nearly 10 percent of GDP in 1990 to 8 percent of GDP in 1994. Most importantly, child allowances, the largest government cash transfer program (94 percent of all cash transfers, excluding pensions), declined from nearly 3 percent of GDP in 1989 to less than 1 percent of GDP in 1994. The decline occurred mainly because the Government did not fully protect benefits against changes in the price level. Thus, the reduced protection to the poor as a result of a decline in food subsidies was exacerbated by reduced spending on cash assistance programs. On the positive side, in 1991 the Government instituted an unemployment insurance program to protect workers laid-off or fired as a result of plant closings. In 1994, the program covered 500,000 unemployed and paid out benefits amounting to nearly 1 percent of GDP. Public spending on health and education (approximately 3 percent of GDP for each) has remained fairly constant over the transition (Annex 2, Table 4), but is amongst the lowest in the region.[2] The Government has recently increased spending on education to approximately 4 percent of GDP.

1.6 Romania has also seen a marked change in the distribution of land. Notably, 80 percent of the agricultural land has been transferred from the state to private hands over time. The reform has benefited aged individuals who owned land before the collectivization or their urban heirs. Nearly 43 percent of the land owners live in cities; another 39 percent are rural pensioners or salaried workers; only 18 percent are farmers. The privatization of land, favorable weather conditions, and a considerable injection of government resources to the sector (subsidies and credits) raised agricultural production by 14 percent in 1993. Agricultural growth has also changed the composition of output and employment. Agriculture and services have increased their share of output and employment while industry has lost ground in both (Table 1.2).

1.7 Despite the gradual progress of reform, the Government has been active in providing a solid framework for the development of a market economy. The enactment of a Constitution guaranteeing property rights followed by establishing the legal framework for a market economy; the establishment of

Table 1.2: Share of Production and Employment by Sector (%)

	Share in GDP		Share in Employment	
	1990	1994	1990	1994
Total Economy	100.0	100.0	100.0	100.0
-Industry	35.3	32.8	37.9	28.8
-Agriculture & Forestry	19.9	21.5	29.1	36.5
-Construction	4.7	6.4	5.5	5.6
-Services and Other	37.0	39.1	27.4	29.2

[2] The World Bank SCT Database.

a two-tier banking system and development of indirect instruments of monetary control; the reform of the tax system including the introduction of the VAT; the development of a framework for privatization and corporization of over 6000 enterprises are some of the key achievements of the country to date. Important steps are also being taken to reform health and education sectors and gear them to producing a healthy and productive labor force adapted to the needs of a market economy. This is particularly important given that the health status of the population in Romania is amongst the lowest in Eastern Europe.[3] Primary school enrollment rates (87%) are lower than the average for Eastern and Central European countries (97%) (Annex 2, Table 3b). More recently, the Government has reformed and consolidated the entire system of cash benefits. A new means-tested social assistance program that guarantees a minimum income to all households has been in place in 1995.

1.8 In addition to these structural changes, the Government adopted a strong stabilization program in 1993. The elimination of consumer subsidies allowed the budget, which showed a marked deficit (7.5% GDP) in 1992, to realize a small surplus (0.1% GDP) in 1993. In late 1993, the Government supplemented its tight fiscal policy with a strict monetary policy and a liberalization of the exchange rate regime. These policies had almost immediate results. By December 1994, inflation fell to 62 percent, output grew 4 percent, and exports increased by 24 percent in dollar terms. These favorable developments were sustained only partially through 1995. Inflation fell to 30 percent at year's end and growth rose to nearly 7 percent in 1995. However, these positive developments were overshadowed by a sharp rise in the current account deficit. The fiscal deficit increased to almost 3 percent of GDP by the end of 1995.

1.9 The Government's ability to consolidate these economic gains will depend critically on its commitment to follow through on its enterprise reform and privatization program. The recently introduced fiscal and monetary discipline can only be maintained if the Government takes steps to curtail the flow of resources to loss making enterprises through the banking system or the budget. There is a caveat. An acceleration of the privatization program is likely to raise expenditures on cash transfers that have been prudently maintained at less than 10 percent of GDP over the last four years. Restructuring of state enterprises may result in a short run increase in the number of unemployed; the number of pensioners may increase as well. The Government can reduce the magnitude of these costs by redoubling its efforts to increase the efficiency and effectiveness of its social programs and by stepping up the pace of reforms to ensure that a vibrant private sector led economy is ready to absorb surplus labor from restructuring enterprises. There is encouraging evidence that private sector has become increasingly important in the economy. New registered private businesses have grown explosively, to almost 535,000 in 1993, and account for 40 percent of new hires between January 1993 and March 1994 (Annex 2, Table 59). Private firms have expanded their share in many sectors in the Romanian economy (Table 1.3).

Table 1.3: Private Sector Share in the Romanian Economy (percent of GDP), 1991-1994

	1991	1992	1993	1994
Private Sector Share of GDP	23.6	26.4	32.0	35.0
-Industry	3.5	4.5	5.0	5.1
-Agriculture and Forestry	13.9	14.1	16.6	16.7
-Construction	0.7	1.0	1.3	2.0
-Trade	4.7	5.6	7.1	8.3
-Other	0.8	1.2	2.0	2.9

[3] For example, the infant mortality rate in Romania for 1994 is among the highest of Eastern European countries: 24 per 1,000 live births (World Health Organization, Health For All Database).

II. HOUSEHOLD WELFARE OVER THE TRANSITION, 1989-93

2.1 The macroeconomic developments described in the previous chapter had an adverse impact on the two key determinants of poverty and household welfare: the level and distribution of household income and consumption. The gross income of Romanian households fell by 21 percent while household consumption declined by 29 percent between 1989 and 1993 (Table 2.1). The decline in household income and consumption affected all households. However, poorer groups suffered a relatively greater decline in income and consumption. The distribution of both income and consumption worsened slightly over the transition. The gini index, an index of inequality, rose from 0.23 to 0.28 for income and increased from 0.21 to 0.23 for consumption over the five year period (see Box 2.1 for a definition of the gini index).

2.2 The decline in consumption and a worsening in its distribution caused an unambiguous increase in poverty over time.[1] Specifically, if we use the consumption of the bottom 20% as the poor in 1993, the incidence of poverty increased sharply from only 4 percent in 1989 (approx. 0.9 million persons) to 20 percent (approx. 4.5 million individuals), by definition, in 1993. The main reason for the increase in poverty is the decline in economic activity in Romania. The fall in mean consumption explains 81 percent of the increase in poverty over the four year period, 1989-1993.

Table 2.1: Change in the Level of Household Income and Consumption, 1989-1993
(Monthly Per Capita, in 1990 lei)

	1989	1993	% Change 1989-1993	% Contribution By Component
Total Income	**2161.1**	**1700.3**	**-21.3**	**-21.3**
Wages	1040.1	588.4	-27.9	-13.4
Agricultural Income	683.0	707.6	3.6	1.1
Pensions	98.3	62.7	-36.2	-1.6
Child Allowances	49.4	13.5	-72.7	-1.6
Social Assistance	20.0	6.5	-67.5	-0.6
Other	270.4	160.0	-40.8	-5.0
Total Consumption	**1520.3**	**1087.4**	**-29.2**	**-29.2**
Food	814.2	605.7	-25.6	-14.0
- Purchases	462.0	323.9	-29.9	-9.2
- Home Consumption	339.7	248.7	-26.8	-6.0
Non-Food	388.1	249.8	-35.6	-9.3
Services	220.6	157.4	-28.7	-4.2
Other	72.2	46.4	-35.8	-1.7

NOTES: The contribution of each component is estimated as the change in levels multiplied by 1989 (base year) shares. Home Consumption plus purchases does not exactly equal food consumption because households can consume from gifts or from depleting stock. Total Income is gross of taxes and net of food transfers. Declines in gross income do not match declines in consumption precisely because income is gross of tax. (Consumption declines should correspond more closely to declines in net income.) The food transfers variable is suspect in the data because the magnitude of transfers given out by households do not match transfers received by households. If we approximate net income by deducting taxes from gross income, we obtain a surprisingly high though declining rate of savings in Romanian households (29 percent in 1989 declining to 17 percent in 1993).

[1] The increase in poverty holds no matter what poverty line is used for Romania (Annex 2, Figure 20). Comparisons of income and consumption over the transition should be interpreted with care. The great change in relative prices of goods, and consumption relative to leisure (goods may be priced higher, but leisure may have increased because of less time spent queuing for particular groups) and the exclusion of income flow from durables and land may overestimate consumption declines. In addition, the data set is not nationally representative and does not capture the poorest groups of the population. It also does not capture income from the private sector.

Table 2.2: **Change in the Composition of Income and Consumption, 1989-1993**
(As a share of total)

INCOME	1989	1993	CONSUMPTION	1989	1993
Wages	0.48	0.44	Food	0.54	0.57
Agricultural Income	0.32	0.42	-Purchases	0.31	0.31
Pensions	0.05	0.04	-Home Consumption	0.23	0.23
Child Allowances	0.02	0.01	Non-Food	0.26	0.24
Social Assistance	0.01	0.00	Services	0.15	0.15
Other Income	0.12	0.09	Other	0.05	0.04
Total	1.00	1.00	Total	1.00	1.00

NOTE: Home consumption plus purchases do not exactly equal total food consumption because households can consume from gifts or from depleting stock.

Only 19 percent of the increase in poverty was the result of an increased dispersion of consumption in economy.[2]

2.3 This section traces the evolution of poverty over the transition by examining the underlying reasons for the decline in the level of consumption and income and a worsening of their respective distributions. A comparative analysis of regional and sectoral trends follows a description of overall trends for the country. The analysis is based on the 1989 and 1993 Family Budget Survey Data.[3]

Decline in the Level and Composition of Per Capita Income and Consumption

2.4 The gross income of Romanian households fell by 21 percent in real terms between 1989 and 1993 (Table 2.1). Nearly two-thirds of the decline in income was a result of a decline in real wages, but households also realized declines in income from pensions, social assistance and child allowances over this period. Agricultural income was the only source of household income that increased in real terms over the transition. However, the increase in agricultural income was not large in magnitude--it increased only 3.6 percent over a five year period. As such, it was not sufficient for households to maintain consumption levels over time. Household consumption also declined 29 percent between 1989-93. The decline in food consumption explained 14 percent of this decline in overall household consumption, while non-food goods and services contributed 9 percent and 4 percent to the fall in consumption.

2.5 These developments changed the composition of household income over time (Table 2.2). Consistent with macroeconomic trends, the share of agricultural income increased in total household income, while the share of wage income declined. The share of public benefits (pensions, child allowances and social assistance) in total income also fell over time. The composition of household consumption did not change much over the transition. The share of food in household budgets increased slightly. It was accompanied by a slight decline in the share of non-food goods in total consumption, while the share of services remained constant over time.

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[2] The change in poverty due to a change in mean consumption is estimated by shifting the distribution of consumption in 1989 downward by the change in mean consumption between 1989 and 1993 and estimating the poverty rate for the shifted distribution. The change in poverty due to a change in the mean is the poverty rate of the shifted distribution less the poverty rate of the original distribution. The remainder is the change in the poverty as a result of a change in the distribution (a change in the standard deviation and other higher moments of the distribution).

[3] It should be noted here that the FBS data is not a nationally representative data set. However, it is the only data set with which we can trace poverty over time. In general (see Annex I), the data underestimates poverty and inequality but its conclusions with regards to overall distribution of cash transfers and wages appear to correspond to the IHS data set used in the following chapter. It also shows the same groups to be poor as in the IHS (next chapter).

Box 2.1: Measures of Inequality

The **gini index** (or gini coefficient) is the most common measure of income and consumption inequality.[a] It measures the concentration of income in the population. The gini index varies from zero to one. A gini index of one indicates that all income is concentrated in the top (richest) percentile of the income distribution. A gini index of zero means that the distribution is perfectly egalitarian--each group in the population receives a share of total income (for example) that is equal to its share in the population. That is, 10 percent of the population receives 10 percent of total income, 30 percent of the population receives 30 percent of total income and so on. The closer the gini index is to one the greater the concentration of income among the richer individuals. Similarly, an increase in the gini index (e.g. of income) over time indicates a greater concentration of income among the rich over time.

The **concentration index** is also a measure of inequality. However, unlike the gini index which evaluates inequality of an income component (e.g. wages) with reference to itself (wages), the concentration index (e.g. wage) is used to evaluate wage inequality with reference to total income.[b] The concentration index varies from minus one to one. A concentration index of minus one implies that the income component (say, child allowances) accrues only to the poorest income group. A concentration index of one implies that the component is completely concentrated amongst the richest income households. The higher the concentration index of, say, wages, the greater concentration of wages amongst the rich; the lower, or more negative, the concentration index, the greater the concentration of wages amongst the poor.

The gini index for <u>total income</u>[c] can be shown to be the weighted average of concentration index of each component of income, where the weights are the shares of each component in total income (Kakwani, 1980).[d] The contribution of each component of income to total income inequality (as measured by the gini index) then is simply the share of the component in total income multiplied by its concentration index. The change in total income inequality <u>over time</u> can then be explained by the change in the <u>contribution</u> of each component (change in its share of total income or its concentration index, or both) over the specified time period.[e]

[a] It is formally expressed as 1-2L(p), where L(p)=area under the Lorenz Curve, a mapping of the proportion of population to the proportion of income (consumption) held by that proportion of population. (For technical explanation see Annex 1)

[b] More formally, the Lorenz curve for the concentration index is obtained by ranking the component of income or consumption by total income or consumption, not by itself.

[c] The same analysis applies for consumption.

[d] $G = \sum_i u_i c_i$, where c_i = concentration index of component i, u_i = share of component i in total income (consumption), and G = gini index.

[e] Theoretically, the gini estimated using the RHS of the above equation should be identical to the actual gini estimated from the data. However, empirically, the estimated gini and actual gini may differ because of measurement errors in the data.

Increased Inequality of Household Income and Consumption

2.6 The distribution of both household income and consumption became more concentrated among richer individuals over the transition. Although household income and consumption declined for rich and poor households alike, poor households suffered a proportionately greater fall in consumption and income. The gini index for income, a measure of income inequality that increases as income beco3mes more concentrated among richer households, rose from 0.23 to 0.28 between 1989 and 1993. The inequality in consumption increased far less, from 0.21 to 0.23 over the same period.

Table 2.3: The Determinants of Household Income Inequality, 1989-1993

All Households		Income	Wages	Pensions	Agriculture	Children Allow.	Social Assist.	Unemploy Benefits	Other Income
1989									
Share of Income	(a)	1.00	0.48	0.05	0.32	0.02	0.01	NA	0.13
Inequality Index (%)	(b)	23.03*	23.32	9.24	31.41	-20.18	-19.36	NA	20.95
Contribution to Income Inequality	(c)	23.79+	11.19	0.46	10.05	-0.46	-0.17	NA	2.72
% of Income Inequality	(d)	1.00	0.47	0.02	0.42	-0.02	-0.01	NA	0.11
1993									
Share of Income	(e)	1.00	0.44	0.04	0.42	0.01	0.00	0.01	0.09
Inequality Index (%)	(f)	27.98*	19.25	9.77	43.30	-19.03	9.11	-17.26	22.31
Contribution to Income Inequality	(g)	28.61+	8.49	0.39	18.02	-0.15	0.03	-0.09	1.91
% of Income Inequality	(h)	1.00	0.30	0.01	0.63	-0.01	0.00	0.00	0.07
1989-1993									
Total Change in Income Inequality	(i)	4.82	-2.70	-0.07	7.97	0.31	0.21		-0.81
% Contribution	(j)	100.00	-56.11	-1.48	165.46	6.50	4.34		-16.92

For definitions, see Box 2.1.

NOTE: Inequality index for income is the gini index while inequality indices for income components are Concentration Indices. (c) = (a)*(b); (d) = (c)/23.79; (g) = (e)*(f); (h) = (g)/28.61; (i) = (g)-(c); (j)=(i)/4.82.

*Actual gini, +Estimated gini (see footnote e, Box 2.1)

2.7 Why did the inequality of income increase over the transition? Table 2.3 shows that the increased inequality of income occurred mainly because agricultural income, its second largest component, increased its share in total income and became more skewed towards richer households. The benefits of increased agricultural income, most likely the result of the land reform program and government input subsidies to agriculture, have then mainly accrued to richer pensioner, farmer and rural households.[4] These households may also have benefited more from favorable weather conditions--perhaps through better access to credit and input distribution networks. The transition raised the average agricultural income but also increased its dispersion, with the relatively well-off gaining at the expense of the poor.

2.8 The distribution of wages in the public sector[5] did not contribute to the increase in income inequality[6] because the share of wages in total income declined and because wages became more equally distributed over time. The compression of wages in the public sector may result if government wage indexation policies constrained the wage growth of higher wage workers relatively more than low paid employees. The following chapter will show that while public sector wages became more compressed, the inequality of total wages (public and private) did worsen in Romania, and it was driven by growing wage inequality in the private sector.

2.9 One of the most disturbing trends is that public transfers (child allowances and social assistance) have become less well targeted to the poor. Child allowances, the main public transfer program, are still quite well targeted to the poor, but are marginally less well targeted than in 1989.

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[4] Clearly the increase in agricultural income could also have moved these individuals to the higher income deciles.

[5] The private sector is not represented in this data set.

[6] The smaller increase in the dispersion of consumption as compared to income may be a result of household transfers from rich to poor. While substantial transfers can be reported by households, many households severely under-report transfers received.

Table 2.4: The Determinants of Household Consumption Inequality, 1989-1993

	Consumption	Food	Non-Food	Services	Other
1989					
Share of Consumption	1.00	0.54	0.26	0.15	0.05
Inequality Index	21.05	16.23	23.85	26.26	41.16
Contribution to Consumption Inequality	20.96	8.76	6.20	3.94	2.06
% of Consumption Inequality	1.00	0.42	0.30	0.19	0.10
1993					
Share of Consumption	1.00	0.57	0.24	0.15	0.04
Inequality Index	22.51	17.07	28.92	28.08	51.76
Contribution to Consumption Inequality	22.95	9.73	6.94	4.21	2.07
% of Consumption Inequality	1.00	0.42	0.30	0.18	0.09
1989-1993					
Total Change in Inequality	1.99	0.97	0.74	0.27	0.01
% Contribution	100.00	48.51	37.16	13.71	0.62

For definitions, see Box 2.1.
NOTE: Inequality index for income is the gini index while inequality indices for income component are concentration indices.

The problem is far more severe for social assistance, a discretionary cash assistance program for the poor (these programs are described in Chapter IV). This program was very well targeted to the poor in 1989, but became severely skewed towards the rich in 1993. The only positive development is that unemployment insurance, a new program instituted in 1992, has mainly benefited poor households. Thus, not only did the government reduce social spending, it also allocated transfers less effectively to the poor (see Chapter IV for greater detail).

2.10 Consumption inequality increased far less than the inequality of income. Food contributed the most (49%) to the overall increase in consumption inequality. The increase occurred both because food increased its share of total consumption and because it became more skewed towards richer households over the transition (Table 2.4). Non-food goods contributed nearly 40 percent and services approximately 14 percent to the overall increase in consumption inequality, indicating that richer households spent proportionately more on these goods than the poor households over the transition.

Changes in Household Welfare Across Regions and Sectors

2.11 The transition reduced the level of consumption for all types of households, but the declines in consumption varied across household groups. Table 2.5 shows that household consumption declined less for rural, farm and pensioner households that have benefited from increased agricultural income over the transition. As a result, differences in average consumption across occupational groups narrowed over time.[7] Pensioners gained on wage earners, although farm

[7] The average declines in consumption for farmers and rural households do not match the declines in the respective incomes of these households, (e.g. urban households). This phenomenon may perhaps be explained by the existence of large intra-household in-kind (food) transfers from rural to urban residents. Once transfers are included in income, the decline in income for rural households is larger, nearly 22 percent, and more comparable to the decline in total consumption (Annex 2, Table 2). However, this discrepancy between the declines in income and consumption may also signal errors in the transfer data. While many households report transferring foods, rarely any report receiving these transfers. If we assume all rural transfers are received by urban residents then urban income declines are smaller, only 36 percent over the five year period. Thus, in-kind transfers from rural tenants or family members to urban land owners may have allowed both urban and rural households to realize roughly the same drop in consumption over the transition. The agricultural land reform could then be seen as benefiting both rural and urban households who have acquired land. The remaining discrepancy between the declines in income and consumption for rural farm households could be a result of higher savings rate for these agrarian households. Agriculture suffered two consecutive years of drought in 1991 and 1992. A part of the increase in agricultural income in 1993 may therefore have been perceived by households as temporary, due in large part to favorable weather conditions, and saved for the future.

Table 2.5: Comparison of the Level and Distribution of Consumption and the Incidence of Poverty, 1989-93

Household Category	Level of Consumption		Gini Index (x100)		Poverty Rate	
	1989	1993	1989	1993	1989	1993
All	1520.3	1087.4	21.05	22.50	3.7	20.0
Rural/Urban						
Rural	1463.9	1077.0	22.59	24.11	5.9	23.4
Urban	1585.9	1096.1	19.21	21.11	1.2	17.0
Occupation						
Pensioner	1582.3	1170.4	18.95	19.23	1.7	8.1
Farmer	1411.9	1060.4	23.64	25.47	8.8	26.6
Worker	1582.1	1101.1	19.73	21.37	1.4	17.4
Region						
SE	1496.2	1072.5	21.54	22.19	3.8	20.0
SW	1509.3	1121.6	20.63	23.50	3.6	19.9
NE	1487.6	987.1	22.25	22.57	6.5	28.0
Bucharest	1503.5	1176.5	19.91	20.30	1.5	10.0
NW	1586.4	1137.1	19.75	21.65	1.8	15.2

NOTES: Consumption is per capita household consumption (in 1990 lei per month). An increase in the gini index means increased concentration of income amongst richer households. Poverty Rate = % poor in total population.

households continued to have the lowest average consumption levels overall. One disturbing regional trend is that the Northeast, which had the lowest consumption levels in 1989, has suffered the greatest decline in average consumption over time. The restructuring of enterprises in this region and the subsequent lay-offs and job terminations noted in the macroeconomic section are the likely factors that explain this trend.[8]

2.12 The inequality of consumption increased for all regions and sectors[9], but the magnitude of these changes varied across household categories. Rural households, wage earners and farmers realized a greater (percent) increase in consumption inequality as compared to urban and pensioner households. However, in 1993, the consumption of rural and farm households still remains much more unequally distributed compared to urban areas and other occupation groups respectively. Interestingly, the decline in consumption in the Northeast appears to have been roughly equally distributed across the rich and poor. The increase in consumption inequality was the smallest for this region.

2.13 The decline in consumption and a worsening of its distribution increased the incidence of poverty (percentage poor in total population) for all regions and sectors in Romania. The poverty rate

[8] These changes altered the composition of income and consumption across household groups. The share of agricultural income increased for all households, but most sharply for rural, farm, and pensioner households. The share of wage income and public benefits in total income declined over the transition for all household categories. Food consumption became a much larger share of the consumption of all households, but its composition changed, particularly for those households which realized large gains in agricultural income. These households were able to substitute home produced food for more costly purchased food items (Annex 2, Tables 5a - f).

[9] These results should be interpreted with care since regional indices were not used to deflate consumption in the report. The results for the IHS data were obtained before deflators were used. Once deflators are used in the IHS data, however, the incidence of poverty remains highest in the Northeast and lowest in Bucharest. The only difference is that the Northwest also becomes poorer than the South.

Box 2.2: Public Perceptions of Living Standards

Individuals' perceptions about their own standard of living also provide information about the welfare of a population. How do Romanians perceive their current living standards? A national public opinion poll conducted in March 1995[a] revealed that only 20 percent of Romanians were satisfied with their incomes in March 1995--down slightly from 24 percent in March 1994. Although 40 percent of Romanians surveyed felt they had enough income to purchase their basic needs, about 30 percent found that their current level of income did not meet even their most basic needs. These proportions have not changed much since March 1994. In fact, over 80 percent report that they would rate their living standards as the same or worse in 1995 as compared to 1994. Romanians seem equally divided about their expectations of their living standards over the course of the next year (March 1995-March 1996). A third are optimistic about the future, a third feel that things will only get worse, while the remainder believe that their lives will not change much a year from now.

[a] "Public Opinion: National Poll," (March 1995) Institute for Quality of Life and National Institute for Economic Research, Romanian Academy.

increased by approximately 17.5 percent in rural areas. The increase in the poverty rate was slightly lower in urban areas, where an an additional 15.8 percent of the urban population fell into poverty over the transition. Poverty rates have increased the most in absolute terms for farmers and wage earners, while poverty amongst pensioners increased the least. These findings are consistent with the poverty study for Poland. Not surprisingly, the Northeast region has experienced the largest increase in poverty rates of any region in the country. But, these changes have not affected the relative position of the poor over the transition. In 1993, as in 1989, farmers and households in rural areas and the Northeast region emerge as the poorest groups in Romania.

III. A PROFILE OF POVERTY AND ITS DETERMINANTS, 1994

The previous chapter traced the evolution of poverty in Romania between 1989-93, the first few years of the transition. This chapter provides an in-depth view of poverty in 1994. It details the characteristics of the poor and attempts to determine the main causes of poverty in Romania. The chapter is based on nine month (April to December) data from the 1994 Integrated Household Survey.

An Overview of Poverty in Romania

3.1 An identification of the poor requires a definition of 'poverty'. This report defines the poor as individuals with per capita consumption below a critical threshold, or a poverty line. Romania did not have an official poverty line in 1994 Therefore, this report uses a *poverty line* of 35,592.90 lei per month (April 1994 prices, equivalent to US $3.30 per day). The line is based on a daily per capita intake of 2425 calories per person - the minimum daily nutritional requirement for Romanian individuals. It defines a consumption level that is approximately 50 percent of the mean per capita expenditure of the population.[1] This poverty threshold (50% of average consumption) is consistent with poverty lines drawn up for other countries in Eastern Europe - Hungary and Poland. It is also 10% lower than the level of the minimum income guarantee instituted in Romania in June, 1995.[2]

3.2 According to this definition of poverty, nearly 21.5 percent of the Romanian population (4.88 million individuals and approximately 1.64 million households[3]) lives below the poverty threshold.[4] The incidence of poverty[5] (% poor) varies considerably across geographic areas. Poverty rates are more than double in rural than urban areas and the North (Northeast and Northwest) is poorer than the South (Southeast, Southwest). At the poverty line, the Northeast is the poorest region in Romania while Bucharest emerges as the richest area in the country (Figure 3.1).[6]

3.3 The incidence of poverty also varies by occupation, sex, and education level of household heads. The unemployed and farmers (agricultural self-employed) emerge as the occupation groups with the highest incidence of poverty, while pensioners and salaried workers have the lowest incidence of poverty in Romania (Figure 3.2). However, pensioners and wage earners are the largest population groups in the economy and constitute nearly 70 percent of the total poor population (Table 3.1). The education level of head of household is a significant indicator of poverty (Figure 3.3). Nearly half of all illiterate household

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[1] See Box 3.1 for a description of the method used for constructing this poverty line and Annex 1 for sensitivity analysis of alternate poverty indicators.

[2] In June 1995, 45,000 lei per person (single person family) was defined as the minimum income guarantee (MIG) of the social assistance program. Deflated to April 1994 prices, the MIG is 32,846.72, nearly 10% lower than the poverty line used in this report. However, the MIG is based on the maximum income level of the first income decile of households sampled by the Family Budget Survey in 1993.

[3] Based on an average household of 2.97 members (IHS data).

[4] Consumption rather than income is the chosen indicator of poverty for both theoretical and empirical reasons. In theory, consumption better approximates permanent income, or household wealth. It is also less prone to measurement error in the data. Consumption is measured in per capita terms and not per adult equivalent. Per capita consumption is easier to interpret, particularly in the case of poverty measures. However, it tends to show more poverty among households of larger size because it does not capture differences in the age composition across households. Given that there is no consensus in the literature over the superiority of one measure over the other we have chosen per capita consumption as a welfare indicator for simplicity. The consumption measure includes food, non-food, and services. It does not include flow of services from durables or imputed rent from housing mainly because of measurement errors in the data (see Annex 1, for details). However, consumption does correlate strongly with the ownership of durables and land (see below). Annex 1 of the report provides a comparison of poverty incidence using consumption aggregate that includes durables and for consumption constructed as per the OECD and Romanian equivalence scales.

[5] The incidence of poverty, or the poverty rate (used interchangeably in the text) defines the '% poor' in the population or particular group of individuals.

[6] These results hold no matter where we set the poverty line. The Northeast is the poorest region at the food and non-food poverty lines, but this result only holds for poverty lines below 50,000 lei. Above this consumption level, the ranking between the Northeast and Northwest is less clear.

Figure 3.1: Regional Poverty

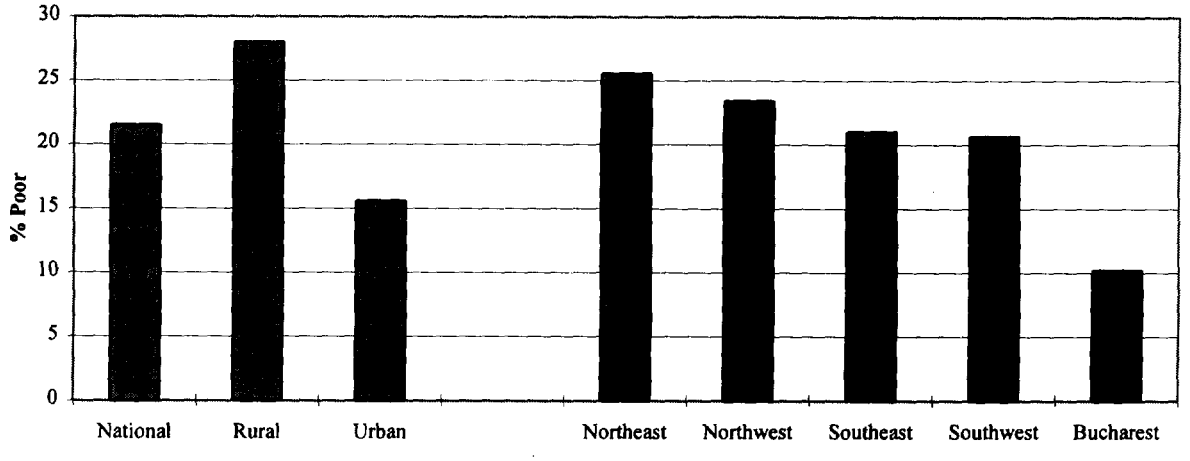


Figure 3.2: Poverty and Occupation of Household Head

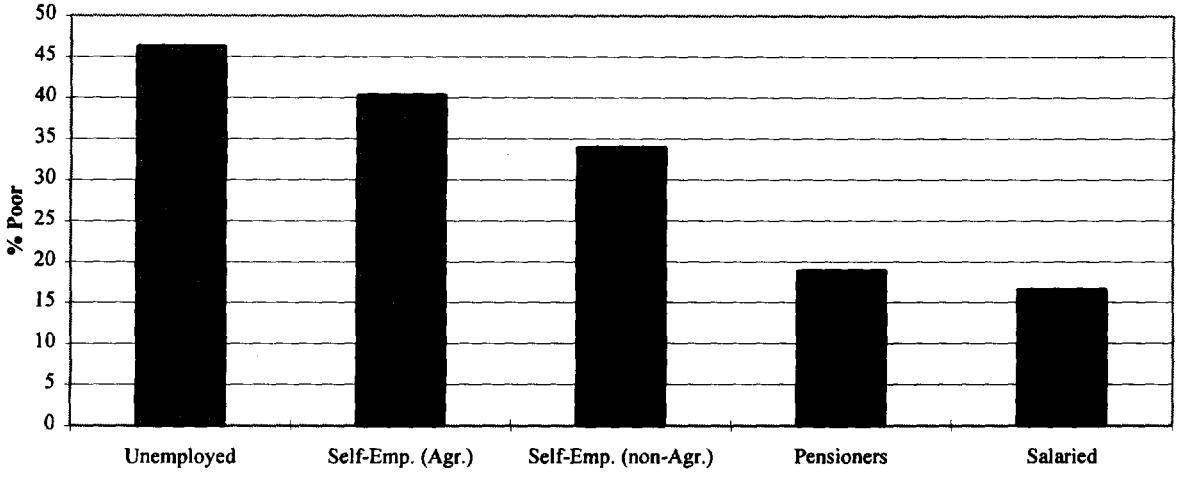
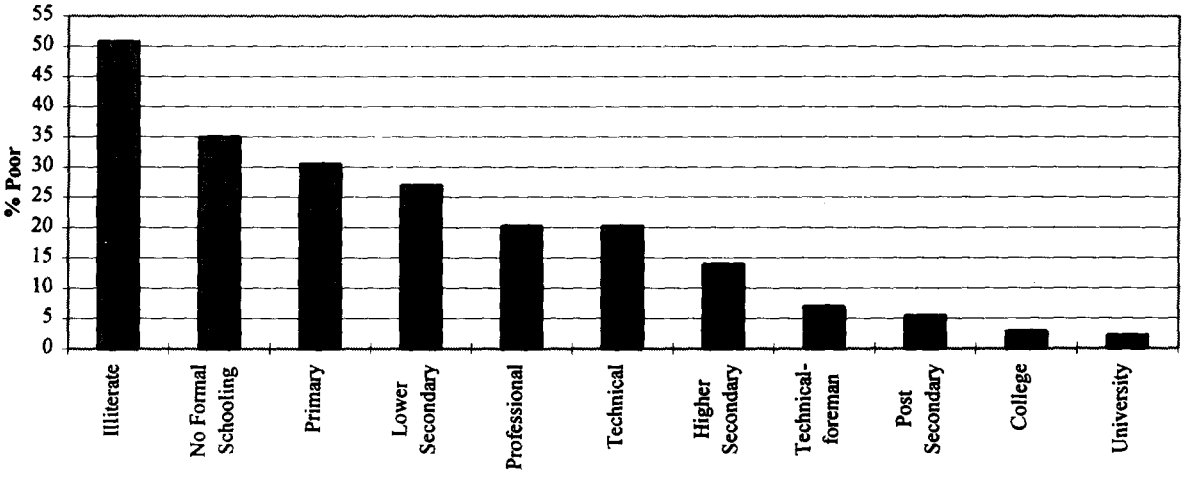


Figure 3.3: Poverty and Educational Status of Household Head



Box 3.1: Poverty Lines

There are many types of poverty lines, each with its own advantages and disadvantages. The most common are proportionate, food share, and caloric poverty lines. *Proportionate poverty lines* simply use a particular consumption level, say 50% of the average consumption in the economy or the consumption of the first or second deciles (deflated over time for real comparisons) to define poverty. One argument against proportionate poverty lines is that they are not based on a minimum level of consumption necessary for survival. A poverty line based on 50% of average consumption in a particular country may exceed or fall short of subsistence needs in that country.

Caloric poverty lines attempt to remedy this shortcoming by defining a subsistence level of consumption in terms of a 'minimum caloric intake' level that is derived from nutritional studies. An empirical relationship between the caloric intake of each household and total consumption of each household is derived from the data. This relationship is used to estimate the level of consumption that yields the minimum caloric intake established for the country. This level of consumption (which incorporates both food and non-food items) is defined as the caloric poverty line. This approach is simple, easily communicable, and yields a poverty line based on food and non-food items. However, the Romanian data yields a very flat relationship between calories and per capita consumption--small changes in caloric levels lead to large changes in expenditure per capita. Therefore, the caloric poverty line is not a robust indicator of poverty for Romania.

The *food share method* for deriving poverty line is based on Engel's law which finds that food share increases with income. This relationship between household consumption and the food share for Romanian households is illustrated in Annex 2, Fig ure 4. Consistent with Engel's observations, the first decile spends 81% of its budget on food, while the richest households spend only half of their budget on food items. The figure shows that a poverty line based on a food share of 86% would result in a poverty rate of 10% , while a poverty rate of 20% is obtained if the poverty line is based on a 71% food share. Food is an important share of the household budgets of poor households and it therefore seems plausible that food share should be used to measure household welfare. However, the importance of food in household budgets is not sufficient to show why food share rather than total consumption or total nutrient intake should not take precedence in defining welfare. In fact, it has been convincingly argued that the food share does not correctly indicate welfare over households of different compositions (Deaton, "An Analysis of Household Surveys," 1994).

This chapter uses a poverty line based on a combination of the caloric and food share methods (Ravallion, 1994). The method first estimates the <u>average</u> consumption basket (kg or liters of commodities consumed) of households in the reference population (in Romania, the bottom 30% of the consumption distribution). This basket is then scaled by a constant proportion, the ratio of the minimum required caloric intake to the actual caloric intake of the reference population. In the case of Romania the <u>minimum</u> caloric intake was 2425 calories while the <u>average</u> caloric intake of the reference population was 1716.27. Therefore the reference consumption basket was scaled up by the ratio 2425/1716. The 'scaled' consumption basket is priced using the average national household specific prices facing reference households to yield a 'food poverty line' of 29,636.05 lei. The non-food share is the estimated non-food share of households with per capita expenditure *just equal* to the food poverty line. The total poverty line is the 'food poverty line' plus the non-food poverty line---35,592.90 lei/person (April 1994 prices).

This consumption level corresponds to *50% of the average consumption level of the population.* It is also close to the minimum income guarantee (or the 'effective' poverty line) for the social assistance program. Chapter II uses a proportionate poverty line, the consumption level of the second consumption decile (deflated for comparisons over time) based on the Family Budget Survey data, to trace the evolution of poverty over time. A proportionate poverty line is used because the poverty line derived above yielded a very low level of poverty in 1989 and 1993 as compared to 1994. This is not because the number of poor suddenly shot up in 1994, but because the traditional Family Budget Survey data, unlike the Integrated Household Survey, tends to under sample the poor. The second consumption decile was used simply to correspond to the poverty rate derived by the poverty line (above) in this chapter.

It is important to note that the empirical and conceptual problems in estimating poverty lines make the choice of a poverty line arbitrary at best. Poverty lines are best used to profile poverty, gauge the impact of changes in economic development on household welfare or assess the effectiveness of poverty alleviation efforts. However, using poverty lines to define a cut off between poor and non-poor is somewhat dangerous. Although it is important to assign greater weight to the welfare of the poorest households, there is always the possibility that policy makers will assign zero welfare to those above the line and only count those below the poverty line for policy purposes.

Box 3.2 Poverty Measures and Indicators

Poverty measures attempt to gauge the incidence, depth, and severity of poverty in the population. As noted in Box 3.1, individuals are considered 'poor' if they realize a consumption level below the poverty line. The **head count index**[a] (also referred to the incidence of poverty or the poverty rate interchangeably in the text) is simply the proportion of poor individuals in the total population, or in a particular group. However, the head count index does not change if one person below the poverty line becomes poorer. The **poverty gap index** is the ratio of the minimum cost of eliminating poverty (the cost of supplementing each poor person's income by an amount sufficient to reach the poverty line) to the maximum cost of targeting (each person in the population is given a lump sum transfer equivalent to the poverty line).[b] It can also be represented as the product of the **head count index** and the **poverty gap**, where the poverty gap is defined as the difference between the mean consumption of the poor and the poverty line as a proportion of the poverty line[c], does show an increase if a poor person becomes poorer. We use the poverty gap to define the depth of poverty in this chapter. Poverty is defined as shallow if the poverty gap is small and deep if the average consumption of the poor is far below the poverty line. The poverty gap *index* has a shortcoming in that it gives equal weight to the consumption deficit of all poor people. The **poverty severity index** remedies this problem by weighting the poverty gap of the poor by the poverty gap itself.[d]

[a] Define q=number of poor and n=total population then the Head Count Index, HCI=q/n

[b] The poverty gap index , PGI, can also be written as [(z-u)*q]/[z*n]. The numerator is the minimum cost of eliminating poverty. The denominator is the maximum cost of eliminating poverty.

[c] If we define the poverty line as z, the mean consumption of the poor as u, and the poverty gap as PG then the poverty gap index, PGI = [(z-u)/z] q/n.=PG*HCI where PG=[(z-u) /z].

[d] The head count Index, the poverty gap index, and the poverty severity index are poverty measures derived from Foster-Greer-Thorbecke additively separable class of poverty measures. The poverty gap is one component of a poverty measure, the poverty gap index. See Annex 1 for derivations and other details.

heads and more than a third of literate households with no formal schooling are poor, while only an insignificant 2 percent of college and university graduates fall below the poverty line. The link between education and poverty may persist in the future. Children of less educated (poor) household heads are less likely to be enrolled than those of more educated (less poor) heads (Annex 2, Table 35). In addition, a larger household size[7], the presence of one or more unemployed members, and a lower number of wage earners increase the chances of being poor in Romania. The sex of household head is a significant determinant of poverty. Households headed by females are more likely to be poor than male headed households (Annex 2, Table 6). The incidence of poverty among female headed households is somewhat higher than for male headed households, but poor male headed households significantly outnumber female headed households in the country (Table 3.1).

3.4 These findings are consistent with the earlier results in which rural groups, farmers, and the Northeast region emerged as the groups with the highest poverty rates over the transition (Chapter II). These results are also largely consistent with the poverty profiles for Poland, Kyrgyz Republic and Russia in which the unemployed, farmers, and rural areas (Poland) were found to have the highest incidence of poverty, and wage earners constituted the bulk of the poor. The main difference from the Polish and Kyrgyz studies is that in Poland the self-employed emerged as a prosperous group in the country.[8]

[7] This effect may be the result of using per capita consumption rather than consumption per equivalent adult as a welfare indicator.

[8] Under-reporting of income by the self-employed may result in this outcome. Although we use consumption as the indicator of welfare, errors in consumption may tend to be correlated with errors in income as both are not reported independently in the data.

Table 3.1: Poverty and Inequality Indicators, 1994

	Number of Poor (millions)	HC Index (% poor)	Poverty Gap Index (%)	Poverty Gap (%)	Poverty Severity Index	Gini Index
Total	4.88	21.52	5.50	25.56	2.12	0.30
Rural	3.04	27.96	7.19	25.72	2.76	0.31
Urban	1.84	15.59	3.95	25.34	1.53	0.28
Region						
Southeast	1.04	20.99	5.32	25.35	2.01	0.29
Southwest	1.08	20.65	4.87	23.58	1.80	0.29
Northwest	1.18	23.43	6.03	25.74	2.35	0.30
Northeast	1.36	25.56	7.13	27.90	2.88	0.32
Bucharest	0.22	10.18	2.12	20.83	0.70	0.28
Male headed Households	4.12	21.14	5.39	25.50	2.06	0.30
Female headed Households	0.76	23.88	6.17	25.84	2.48	0.31
Education (Household Head)						
Illiterate	0.22	50.77	16.05	31.61	7.27	0.33
No Formal Schooling	0.11	34.96	10.61	30.35	4.36	0.28
Primary	1.36	30.48	8.20	26.90	3.25	0.30
Lower Secondary	1.63	26.90	7.02	26.10	2.73	0.30
Higher Secondary	0.49	13.92	3.14	22.56	1.12	0.28
Professional	0.82	20.26	4.72	23.30	1.68	0.28
Technical	0.11	20.28	4.73	23.32	1.69	0.27
Technical-Foreman	0.07	7.02	1.32	18.80	0.42	0.23
Post Secondary	0.03	5.49	1.08	19.67	0.37	0.26
College	0.01	2.92	0.36	12.33	0.10	0.24
University	0.03	2.15	0.34	15.81	0.11	0.25
Occupation (Household Head)						
Salaried	1.88	16.59	3.76	22.66	1.30	0.28
Self-Employed (non-Agr.)	0.17	33.98	9.25	27.22	3.64	0.34
Self-Employed (Agr.)	0.70	40.35	12.45	30.86	5.35	0.36
Unemployed	0.56	46.29	15.10	32.62	6.91	0.33
Pensioner	1.41	18.95	4.40	23.22	1.57	0.28

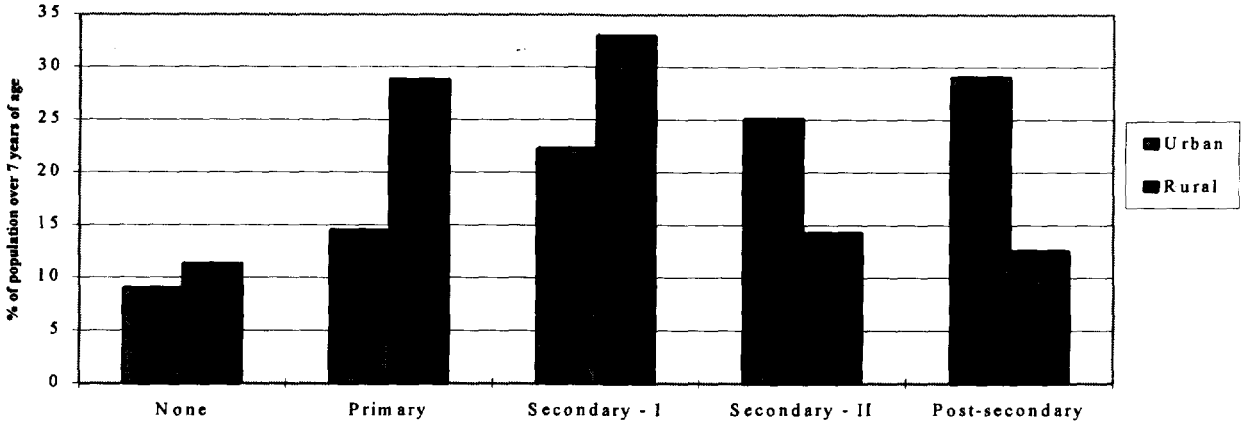
NOTE: See Box 3.2 for definitions of Head Count (HC) Index, Poverty Gap Index, Poverty Gap, and Poverty Severity Index. See Box 2.1 for a definition of the Gini Index.

3.5 The consumption shortfall of the poor relative to the poverty line, or the poverty gap, is 25.6 percent nationally, much higher than in Poland (13-15%) but much lower than for Russia (43%) and Kyrgyz Republic (52%)[9]. Poverty is deep in Romania and the poor are not concentrated around the poverty line. Also, the depth of poverty is higher for particular groups of the poor (Table 3.1). For example, the poverty gap of the self-employed in the agricultural sector is one and a half times the depth of poverty among salaried workers, while households headed by primary school leavers have twice the depth of poverty of university graduates (see Box 3.2 for definitions of poverty measures).

3.6 **Rural and Urban Poverty** At first glance, the determinants of poverty in rural and urban areas appear broadly the same. The chances of being poor are higher in both urban and rural areas if a household

[9] This comparison may be imprecise because the poverty lines are not strictly comparable.

Figure 3.4: Level of Education Completed, Urban vs. Rural



is not headed by a wage earner, pensioner or females. An additional worker or pensioner in the household and higher educational achievement of household heads and their spouses also reduces a household's chances of being poor in both areas (Annex 2, Tables 9, 11). However, on closer inspection, there are five key differences in the characteristics of the poor in rural and urban areas. First, the household size, composition and occupation of the poor vary across rural and urban areas. Poor rural households have a somewhat smaller household size than poor urban households (3.7 vs. 4.0), and a higher proportion of members over 60 (Annex 2, Table 26). In contrast, poor urban households tend to have a greater proportion of children under 16 years of age and members of working age (17-59 years) (Annex 2, Table 26). There are occupational differences as well. Farmers make up a higher proportion of the rural poor while the unemployed and wage earners constitute a larger share of the poor in urban areas (Annex 2, Tables 21, 22).

3.7 Second, *education levels* are significantly lower in rural areas. Slightly over 40 percent of the rural population has only completed primary or less than primary education, in contrast to 24 percent in urban areas (Figure 3.4). This large rural-urban gap in educational status exists even between the rural and urban poor (Figure 3.5). The link between poverty and education may continue in rural areas. Enrollment rates are lower at each level of education - basic, secondary and tertiary - for poor children in rural than in urban areas (Annex 2, Table 35).

Figure 3.5: Education Level of Household Head, Urban vs. Rural Poor

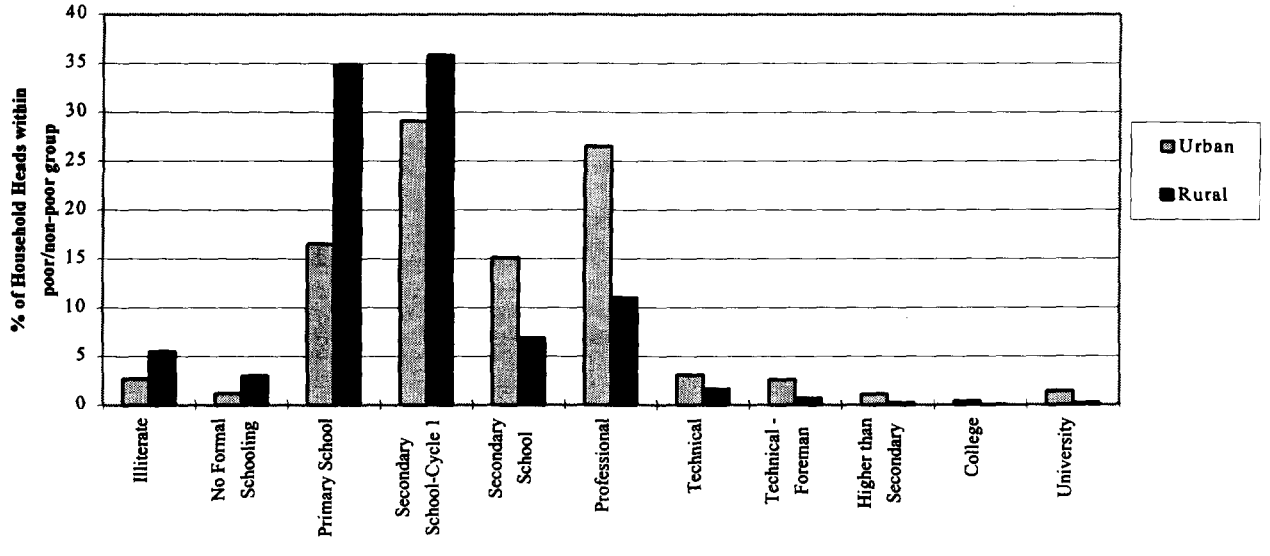
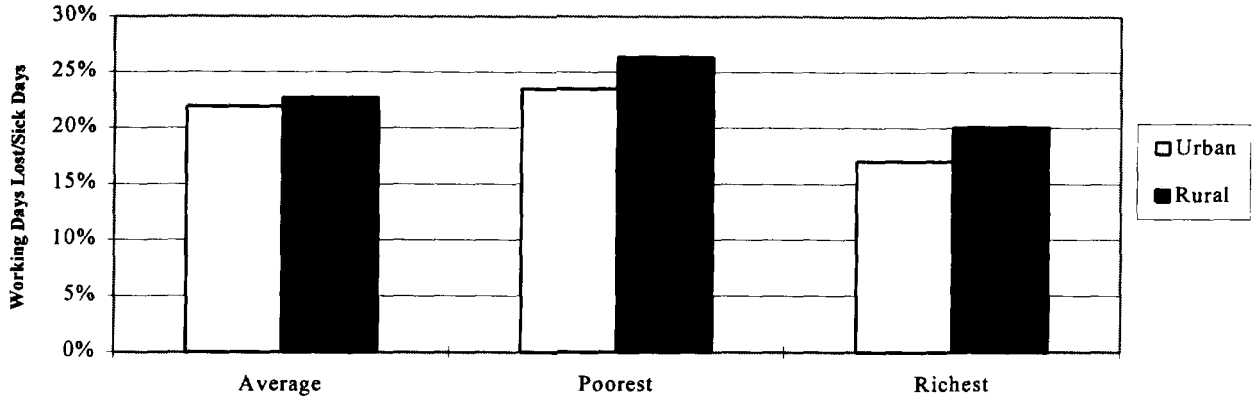


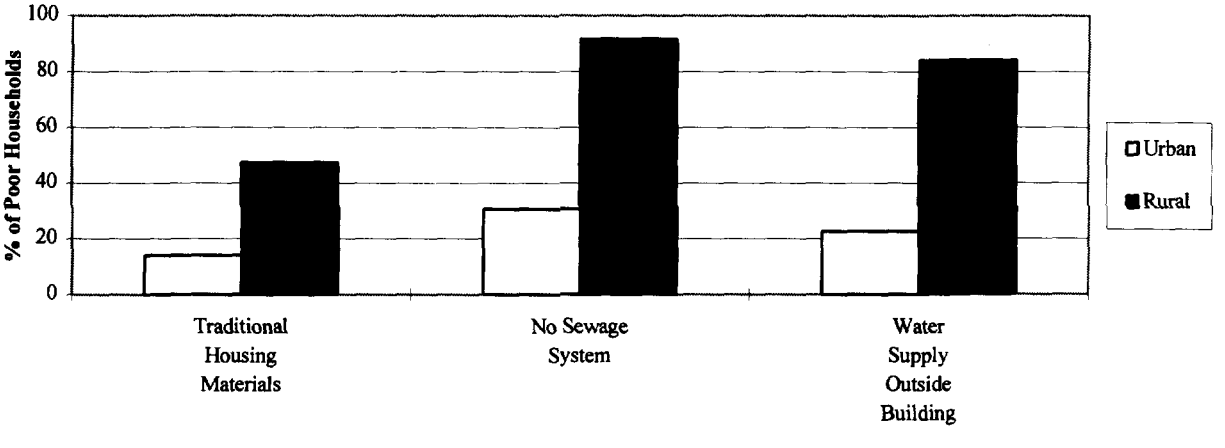
Figure 3.6: Percentage of Working Days Lost to Sick Days, Urban vs. Rural



3.8 Third, *health outcomes* appear to be worse in rural areas. The rural poor report a higher ratio of work days lost to sick days than the non-poor in Romania (Annex 2, Tables 32, 33). However, rural households report a higher ratio work days lost to sick days than urban poor households indicating a greater severity of sickness in rural than in urban areas (Figure 3.6). Recent studies have also confirmed that health outcomes are significantly lower for children in rural areas.[10] In particular, rural children tend to have a higher prevalence of low height-for-age (8.1% vs. 5.6%) and low weight-for-age (10.4% vs. 7.8%) than urban children (Figure 3.7a-c). The prevalence of low-height-for-age was found to vary significantly by the education of the mother. Less educated mothers (with 8 years of formal education or less), more likely to be found in rural areas, had the highest incidence of low-height-for-age and low-weight-for-age children. Low-height-for-age suggests a low quality diet and greater risk of disease among these children, while low-weight-for-height (wasting) also indicates a marginal nutritional status and a greater risk of wasting.

3.9 The fourth major difference between rural and urban areas is that *living conditions* in rural areas appear strikingly worse. Nearly half of rural households live in households made of mud and straw, the traditional building materials. The majority of rural households obtain water from an outside pipe or well, and have no sewage system. These conditions are significantly better for the urban poor (Figure 3.8). This

Figure 3.8: Poverty and Housing Characteristics, Urban vs. Rural Poor



[10] Romania National Nutrition Survey, Romania Ministry of Health and UNICEF, Romania, October 1993. Reproductive Survey of Romania, Preliminary Results, Institute for Mother and Child Care, Ministry of Health, January 1994. The IHS anthropometric data is not reliable and has considerable measurement errors (NCS).

Figure 3.7a: Prevalence of Low Anthropometry Indexes Among 2-5 Year Old Children by Region

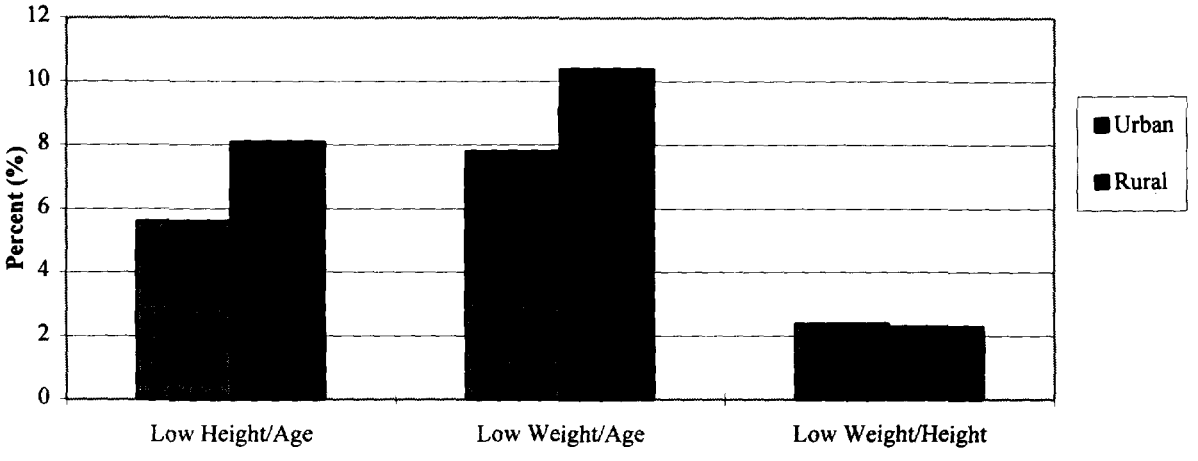


Figure 3.7b: Age-Specific Prevalence of Low Height-for-Age by Mother's Education

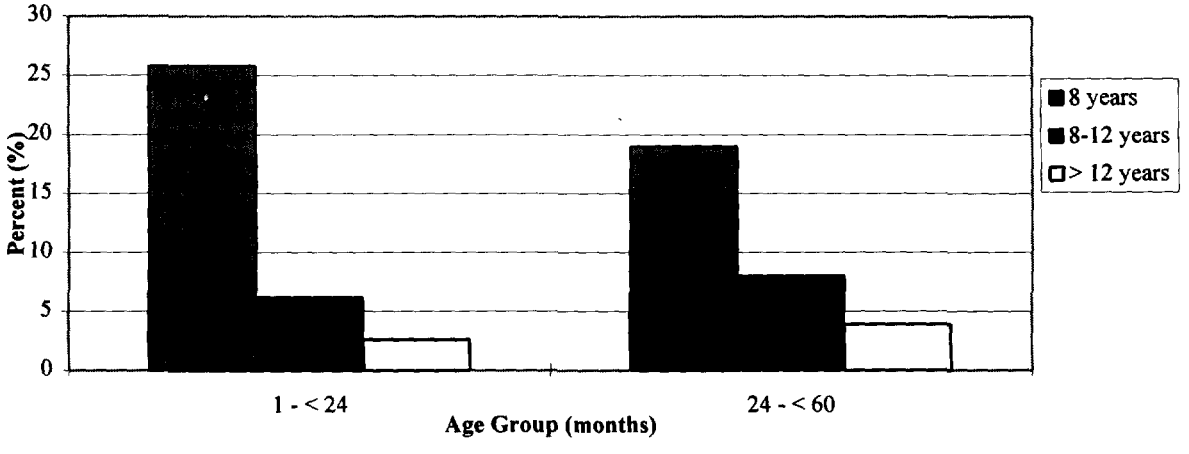
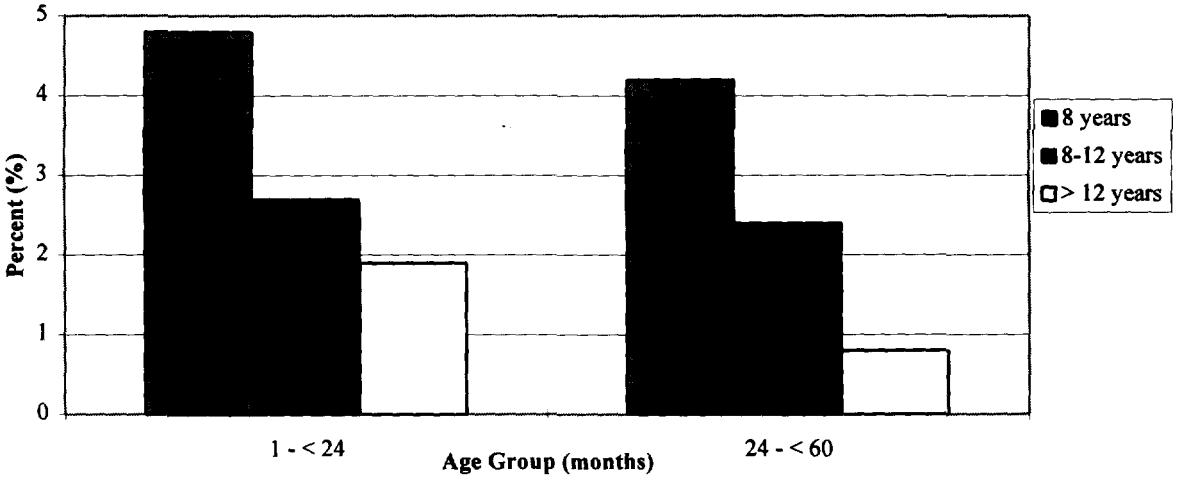
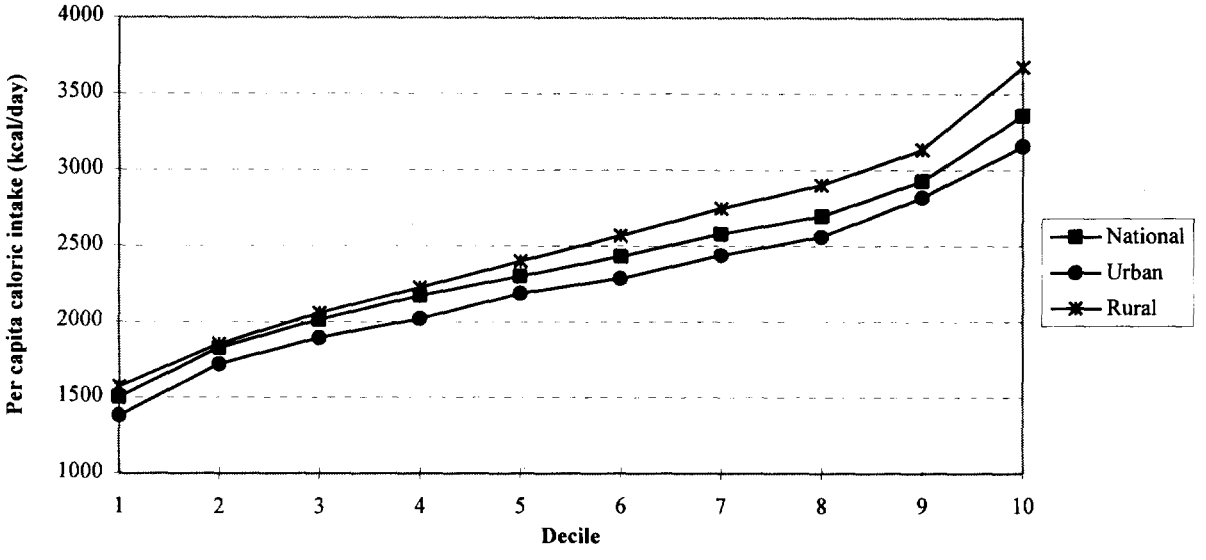


Figure 3.7c: Age-Specific Prevalence of Low Weight-for-Height by Mother's Education



SOURCE: Romania National Nutrition Survey, Romania Ministry of Health and UNICEF, Romania, October 1993.

Figure 3.9: Daily Caloric Intake (Average Per Capita)



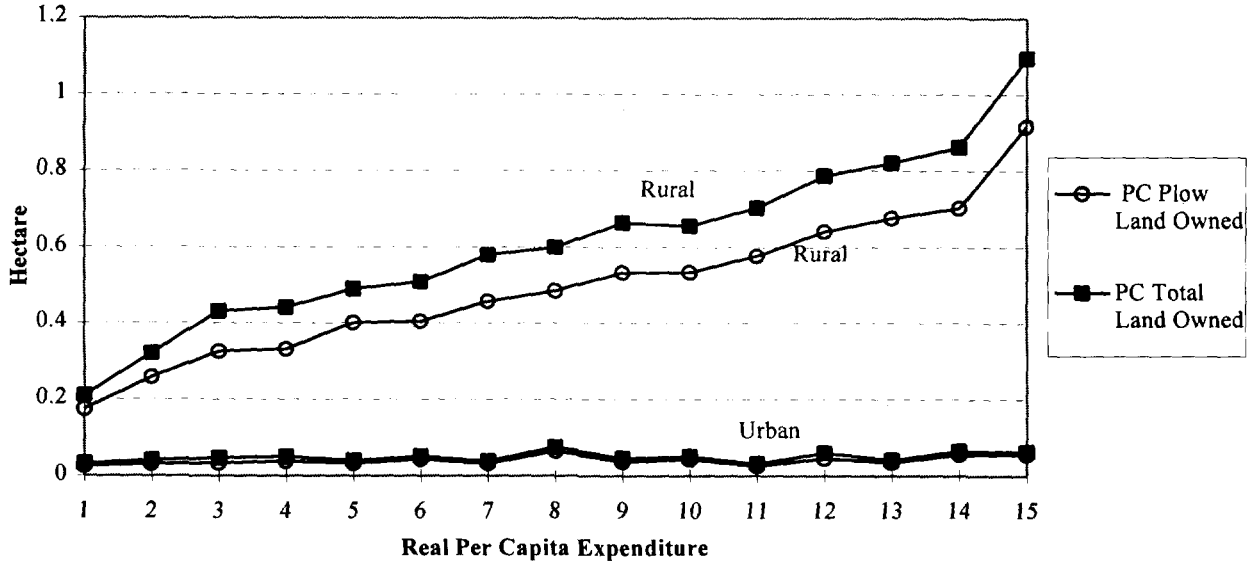
inadequacy of living conditions may well explain lower health outcomes in rural areas. However, the data does not allow us to make a judgment about the overall quality of water supply or sanitation systems, and particular rural areas may have better quality of water and sanitation than some urban areas because of a breakdown in systems.

3.10 Finally, the composition of consumption varies across rural and urban areas. In Romania, as in other countries, the share of food consumption in total expenditure is higher for poorer households. The poorest households spend a striking 85 percent of total outlay on food items while the highest expenditure group allocates only 42 percent of its budget on food (Annex 2, Figure 4a). However, at each level of expenditure, food consumption comprises a greater share of household budgets in rural than urban areas, reflecting lower prices of food relative to non-food goods in rural areas (Annex 2, Figures 4b, 4c). The composition of the diet is largely the same for both rural and urban poor. In both areas, the poorest households spend a greater share of their budgets on grain and less on meat, alcohol and tobacco than richer groups. The shares of vegetables and fruits, and dairy products are roughly the same for all expenditure groups (Annex 2, Figures 7b, 7c).

3.11 The level of caloric consumption also differs across rural and urban households. The average daily caloric intake in Romania is 2,472 per capita, slightly above the minimum daily caloric intake established for the country. However, this high average daily caloric intake masks a wide dispersion in caloric consumption. The average person in the lowest expenditure decile consumes only 1504 calories per day while individuals in the top expenditure decile consume almost 3500 calories daily (Figure 3.9). The national average also hides significant rural/urban differences. Urban households consume a lower average calories per person each day than households at the same expenditure level in rural areas, reflecting the higher share of food in rural budgets noted above (Annex 2, Table 15).

3.12 The *asset composition* of households is also markedly different in rural and urban areas. Urban households (poor and non-poor alike) own very little land. Rural households not only own more land than urban households (at every expenditure level), but, unlike urban areas, owning less land is a significant

Figure 3.10: Land Ownership (Average Per Capita), Rural vs. Urban



NOTE: For the expenditure amounts comprising each level, refer to the box on Figure 4, Annex 2. All expenditure levels below level 4 are below the poverty line.

indicator of poverty for rural households (Figure 3.10). In contrast, the share of durables in total consumption is lower for rural households at each level of expenditure than for urban households (Annex 2, Figure 5b, 5c).[11] In fact, except for bicycles, radios and gas cylinder cook stoves, the rural poor own far fewer durables than the urban poor (Annex 2, Table 24). Thus, the rural poor own more land but fewer durables than poor urban households.

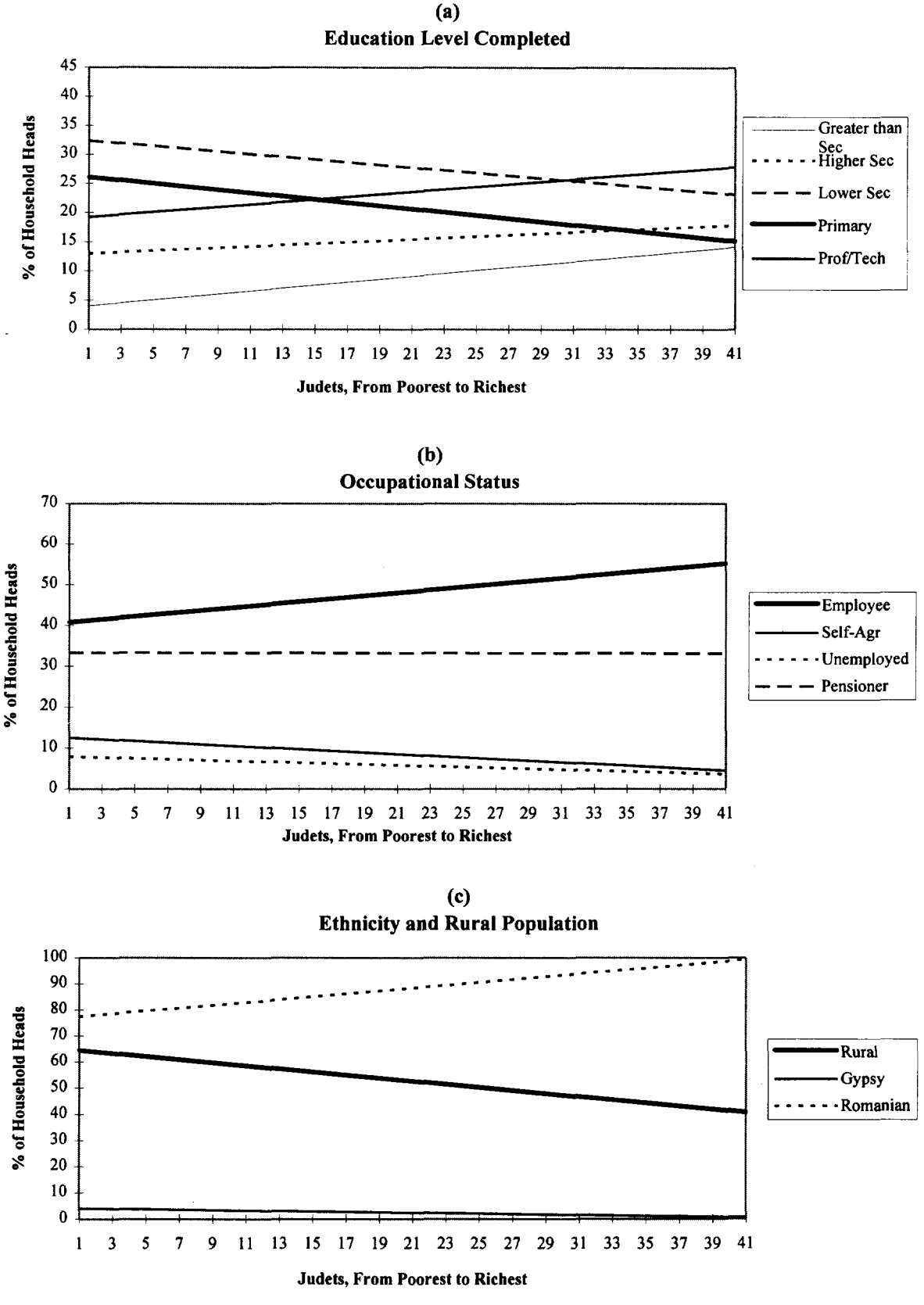
3.13 **Regional Poverty.** As noted above, the incidence of poverty is higher in the North (Northwest and Northeast) as compared to the South (Southeast, Southwest). However, there is considerable intra-regional variation in poverty rates (Annex 2, Map 1). If we look at poverty rates across the 41 judets in Romania, two areas of extreme poverty incidence (>30% poor) emerge: a north/south belt of extreme poverty extending from Maramures, Bistrita Nasaud, Mures in the Northwest to Covasna in the Northeast; and a southern crescent of poverty, stretching from Vilcea in the Southwest to Giurgiu, Calarasi and Tulcea in the Southeast.[12]

3.14 Despite this large intra-regional variation, the determinants of poverty across judets are generally the same as the determinants for Romania as a whole. Judets with a larger proportion of rural population have a higher incidence of poverty (Figure 3.11c). There is also the link between education and poverty observed in the national population. Judets with a lower incidence of poverty tend to have a smaller proportion of household heads with only primary (or secondary cycle I) schooling and a correspondingly higher proportion of household heads that have completed higher secondary, professional/technical, and post secondary education (Figure 3.11a). These findings indicate that intra-regional disparities in poverty rates are attributable in part to the differences in the education attainments of the population.

[11] The share of durables in total consumption (including durables) increases with household expenditure from 8 percent of total expenditure for the first income decile to 36 percent of total expenditure for the top expenditure group.

[12] Poverty rates and total population vary across judets. As a result, the number of poor are not necessarily the highest in judets with high poverty rates. The largest number of poor (>130,000) are located in Iasi, Neamt, Bacau, and Suceava in the Northeast, Maramures and Mures in the Northwest, Vilcea and Olt in the Southwest and Prahova and Bucharest in the Southeast. Vrancea in the Northeast, Salaj and Sibiu in the Northwest, Timis, Caras-Severin and Gorj in the Southwest and Tulcea in the Southeast have the least number of poor in Romania (Annex 2, Map2).

Figure 3.11: Characteristics of Regional Poverty



Box 3.3: Poverty and the Gypsy Community

The Gypsy community is believed to be the poorest segment of the population in Romania.[a] A 1993 survey of the Gypsy community conducted by Zamfir and Zamfir (1993)[b] estimated that gypsies constitute approximately 4.6 percent of the total population in Romania. More than half of the gypsies surveyed were unemployed. Unemployment was lower among heads of households than their wives. Nearly 71 percent of women were unemployed (2% receiving benefits) while only 22 percent of male heads report unemployment (4% receiving benefits).

The level of education among Gypsy families is extremely low. Nearly 60 percent of all women and almost 45 percent of all men cannot read. The low level of education reflects poor school attendance among Gypsy children. Only 51 percent of children attend school regularly, 16 percent attend occasionally, while 33 percent have never attended school or have dropped out of school altogether.

Living conditions are worse among gypsies than among the rest of the population. Gypsy households have approximately 3.03 persons per room as compared to 1.30 persons per room in the total population. Basic appliances are quite rare. Only 44 percent of households have a gas stove and only 20 percent own a refrigerator. Asked to evaluate their own standard of living, nearly 40 percent of the Gypsy households surveyed reported that their incomes were not enough to meet their basic needs, while nearly 50 percent report that incomes barely meet their minimum requirements. Not surprisingly, a comparison of poverty rates for gypsies compared to the total population revealed that while only 16 percent of the total population was under the subsistence level (defined by the Institute for Research for the Quality of Life) nearly 63 percent of the gypsies lived below subsistence.

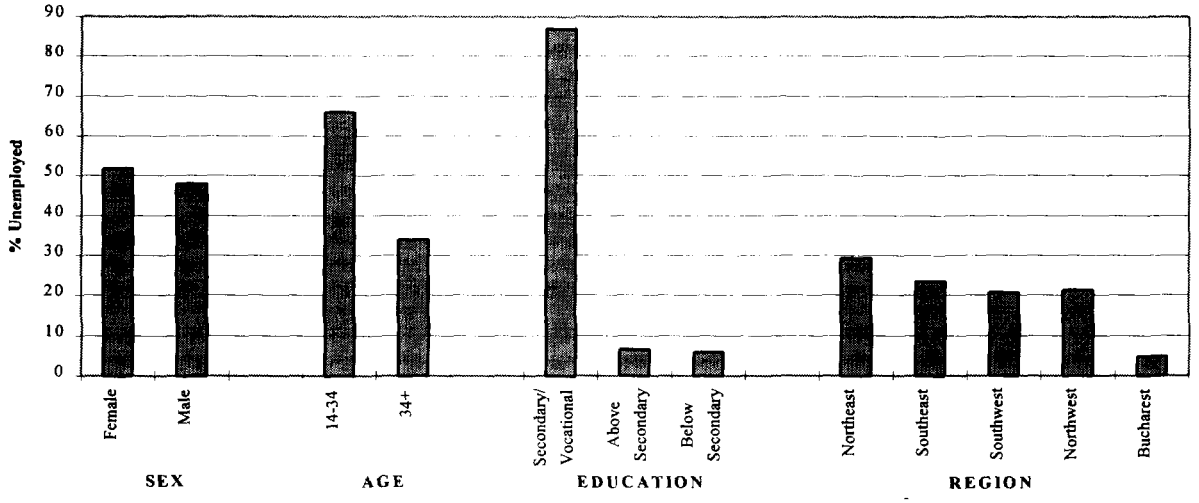
[a] Unfortunately neither of the household surveys used in this study captures the living standards of gypsies. The Family Budget Survey does not provide any information on the ethnic make up of the sample. The Integrated Household Survey does try to elicit information about ethnicity by asking respondents to name the main language spoken in the households (one option is Gypsy), but only a handful of households (6) report speaking the Gypsy language at home.

[b] Zamfir, C. and Zamfir, E., "The Romany Population", Manuscript, Institute for Research into the Quality of Life, Bucharest, 1993

3.15 The variation in poverty rates across judets can also be explained by the employment status of the population. Judets with lower poverty rates have a higher proportion of households headed by wage employees and a correspondingly lower proportion of households headed by the unemployed and agricultural self-employed (Figure 3.11b). There is an ethnic dimension to regional poverty as well. The lower the poverty rate of a judet the greater the proportion of households headed by a Romanian speaking household head (Figure 3.11c). Although there is scant information on Gypsy households and these households can only be identified by language spoken in the household (not ethnic classification), the poorer a judet the greater the proportion of households headed by a Gypsy language speaker. In all judets, however, almost all households headed by a Gypsy speaking household head are poor (Figure 3.11c) (See Box 3.3).

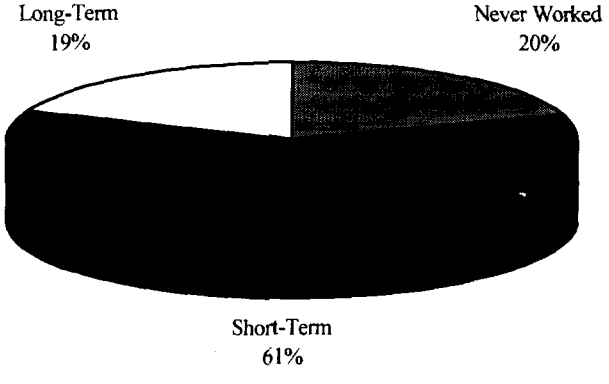
3.16 **Sectoral Poverty** **The unemployed** have the highest incidence of poverty and the largest poverty gap in the economy. Unemployment of the head of household or a family member significantly increases the chances that a household will be poor (Annex 2, Table 12). Given that unemployment is strongly linked to poverty, it is important to identify the characteristics of the unemployed and assess their chances of finding employment.

Figure 3.12: Characteristics of Unemployed



3.17 Who are the unemployed? The typical unemployed is female, 35 years of age, with secondary school education and seven years of labor market experience. Nearly half of all unemployed live in rural areas and close to a third reside in the Northeast (Figure 3.12).[13] The majority (80%) of the unemployed have some previous job experience, while only 20 percent are new entrants to the labor force (NWU) (Figure 3.13).[14] Most short-term unemployed are rural males, married, about 33 years of age, with 6 years of labor force experience, while the average long-term unemployed is an urban female, with one child,

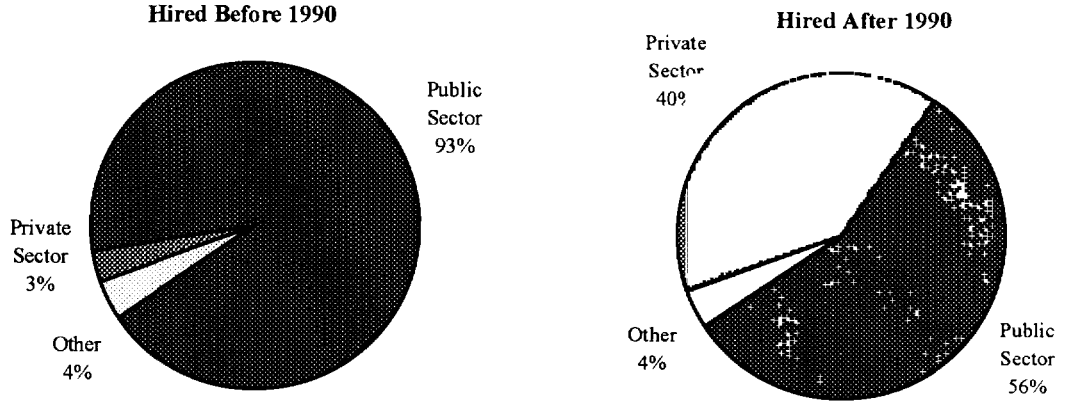
Figure 3.13: Composition of Unemployment



[13] Of those with previous work experience, slightly over half have been unemployed for more than a year (LTU), while the remainder have been unemployed less than twelve months (STU). The majority (75%) of the unemployed with labor market experience were fired from public sector jobs and the rest (25%) were laid off due to closure of a public enterprise. There are no significant differences between the characteristics of these two types of unemployed. They are mainly blue-collar workers, evenly divided between males and females, between 25-49 years of age, with secondary school education. New entrants to the labor force that are currently unemployed are typically single, young (21), urban females with secondary schooling (cycle II). Most unemployed live in households with one other wage earner and almost a third live in households with more than one other unemployed worker. The proportion of poor among the unemployed is virtually the same (30%) irrespective of whether individuals are new entrants, short-term or long-term unemployed (Annex 2, Table 47).

[14] The unemployment rate is highest among young workers (14-34 years old), especially for new entrants to the labor force (14-19 years of age), for secondary school graduates, and for those living in the Northeast and in urban areas. The duration of unemployment is concentrated between 3-5 months or greater than 12 months. Long-term unemployment is very widespread: nearly 45% of the unemployed have been unemployed for over 12 months. The duration of unemployment is essentially the same irrespective of age for the total pool of unemployed. However, a longer duration of unemployment is more common for females than both males (for every age group) and younger workers(Annex 2, Tables 46, 47).

Figure 3.14: New Hires by Type of Industry



secondary schooling, 35 years of age, with 14 years of labor force experience. Lay offs and plant closings appear more common reasons for unemployment in the Northeast. Otherwise, there are no regional differences explaining the reasons for unemployment (Annex 2, Table 38).

3.18 Where are new jobs located? A look at the labor market hires in 1993/94 shows that the public sector accounts for nearly 60 percent of all new jobs in the country. However, the proportion of workers hired in the private sector has increased significantly, from a mere 3 percent before 1990 to nearly 40 percent in January 1993/ December 1994 (Figure 3.14). Despite this increase in hiring, the size of the private sector remains small. Only 10 percent of all employed currently work in the private sector (Annex 2, Table 49).

3.19 The industrial composition of new hires has also changed over the past 4 years. Traditional industries such as agriculture, mining and processing that accounted for 55 percent of new hires before 1990, now account for only 34 percent of new jobs. Retail and construction industries have increased their share of new hires, from 11 percent in 1990 to nearly 30 percent in 1994. There has been an increase in the demand for services/sales occupations while the proportion of hires from traditional occupations of craftsmen, operatives and technicians have declined. There has been a shift away from workers with cycle I education towards secondary school graduates - a positive development given the large share of secondary school leavers among the unemployed. The labor demand for 4-year college graduates has also increased and appears quite strong. The demand for apprentice/technical/post-secondary specialty degrees continues to be negligible. More jobs are being created in urban than rural areas, as well as in the regions of Bucharest, Southwest and Northwest. However, rural areas have significantly increased their share of employment since 1990 (Annex 2, Table 58).

3.20 What characteristics of workers increase their chances of employment? Individuals who are male (vs. female), married, between the ages of 14-24 (relative to 55 years and older), with college level education (vs. secondary) are most likely to be hired[15]. Having obtained an education less than or equal to technical studies (as compared to college education), fewer years of labor market experience, being 30 years or older, and having a young child residing in a poor household, and living outside of Bucharest significantly reduce the chances of being employed.

[15] This analysis is based on comparing the characteristic of currently employed workers hired before 1990 with those hired after 1990.

3.21 For females, anything less than a college education and having one or two children (less than six years old) reduces the chances of being employed, but being a household head increases the chances of employment (Annex 2, Table 61). For males, being less than 30, and having one or more older children increases the chance of employment (Annex 2, Table 62). Males with a secondary education and labor market experience have increased chances of being employed (Annex 2, Table 63). In addition, for males, having a college education proves critical to being hired, especially for individuals 14-35 years of age - one of the two main categories of unemployed in Romania (Annex 2, Table 64).

3.22 These results are worrisome in three respects. First, secondary school education appears to reduce the chances of being hired (as compared to college graduates). This is particularly troublesome since most of the unemployed are secondary school graduates. There are two possible explanations for this trend. Secondary school education in Romania has traditionally been very specialized and may be producing graduates with too narrow a range of skills, which in turn make these graduates difficult to employ.[16] This has changed recently, particularly with the introduction of private universities, but remnants of the old system may well remain, particularly among recent graduates and the older unemployed.

3.23 An additional obstacle that reduces the employment chances of secondary school graduates is the government's Wage Subsidy Program which gives a subsidy equal to the unemployment benefit the worker would have received to the employer as an incentive to employers for hiring recent graduates. Given that unemployment benefits of college graduates are only slightly higher than those received by secondary school graduates, the program essentially rewards employers for hiring college graduates over secondary school leavers. However, a positive development is the growth in retail and sales industry that appears to have increased the employment of young secondary school graduates.

3.24 Second, females, over 30, with one or more child have a lower chance of being employed than all other women. This does not bode well for the long-term unemployed workers who are mainly women, 35 years of age, with one child. Although new female entrants to the labor force are single, prospects for their employment also appear slim as they are mainly secondary school graduates. A positive result from a poverty standpoint is that being a female household head increases the likelihood of being employed.

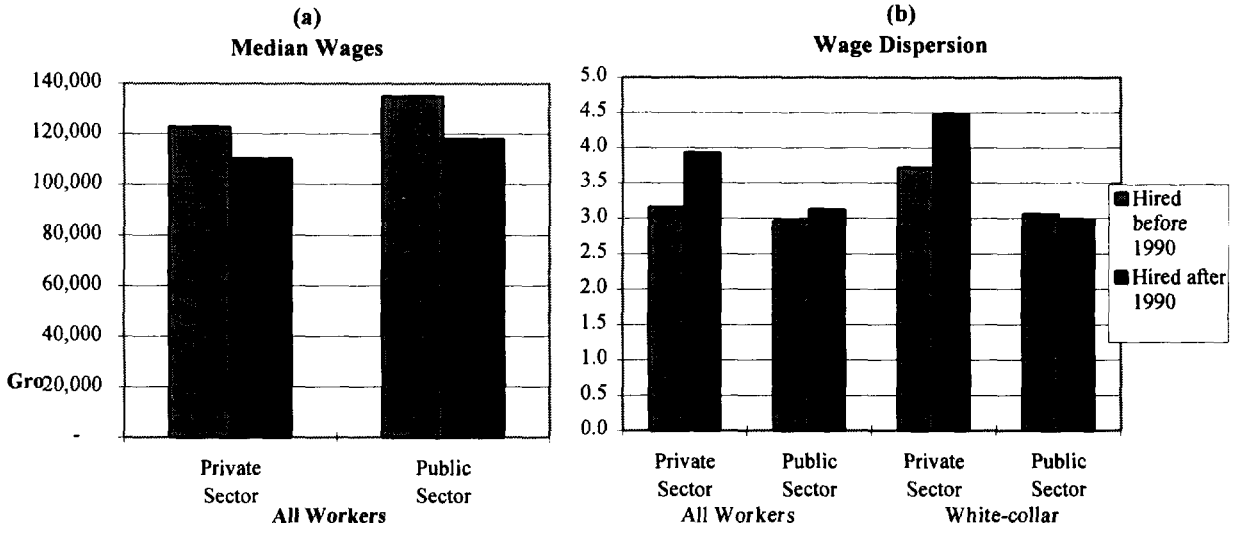
3.25 Finally, for the same age, sex, education and labor market experience, the poor have lower chances of being employed than the non-poor. From a poverty standpoint, this fact signals that poor households may be isolated within the labor market and constitute an 'under-class' in the economy. Why might the poor have more difficulty in obtaining jobs? The poor may have fewer contacts for finding jobs, potentially very important in a state-sector dominated labor market, and may also have less information about jobs in the economy. The poor may also be less mobile and entrepreneurial in finding jobs than other workers.

3.26 **Salaried workers** have the lowest incidence of poverty in Romania, but they constitute a third of all the poor in the country (Table 3.1). The typical low wage employee is female, married, 35 years old with approximately 18 years of labor market experience and a lower level of education (compared to high wage workers) (Annex 2, Table 50). In Romania, low wages are mainly the result of a lower level of education and limited general (labor market) and firm specific experience (job tenure)[17]. The returns to completing an additional level of education are high: individuals with 4 years of college education earn wages that are 53 percent higher than primary school leavers and 36 percent higher than secondary school graduates. There appears to be some discrimination against female workers. For the same age, experience and education,

[16] Earle and Oprescu, Ibid.

[17] These results are from estimates of earnings function with the following functional form: e=s+s2+ex+ex2+fex+fex2+d, where e=log of earnings, s=schooling level, ex=labor force experience, fex=firm specific experience, and d= regional and industry dummies. (Annex 2, Tables 17a & 17b) The marginal returns to increased level of education (primary, secondary, etc.) is high, but, the rate of return to an additional year of schooling is low; one extra year of schooling raises earnings by only 3 percent, but is somewhat higher for females than males. This result suggests that the returns to education is not linear in Romania; returns increase not by year but once a particular level of schooling has been completed. Thus, individuals are paid on the basis of whether they have completed high school, college or graduate studies, rather than the number of years they have been in school.

Figure 3.15: Wages of Workers Hired Before and After 1990



NOTE: Wage Dispersion is defined here as the ratio of the wages of the 9th decile to the wages of the 1st decile. The higher this ratio the greater the dispersion of wages.

women earn significantly less than their male colleagues. From a regional perspective, rural workers earn lower wages than their urban counterparts (Annex 2, Table 56). The returns for completing an additional level of educaiton are higher in rural than in urban areas.

3.27 Which workers will benefit from private sector led growth? One way of gauging the impact of privatization on different groups of wage earners is to evaluate the level and dispersion of wages of currently employed public and private sector workers that were hired before and after 1990.[18] Figure 3.15a shows that median wages of both private and public sector employees have declined over the past four years.[19] The decline in wages has been greater for public sector workers than for private sector workers. Before 1990, both blue and white-collar private sector workers earned less than similar workers in the public sector. This has changed over the transition. Although private sector workers still earn less than public sector workers, the wage gap between workers in the two sectors has narrowed. White collar workers at the top end of the wage distribution now earn more in absolute terms compared to all other workers in the economy (Figure 3.16).

3.28 The transition has also increased the distribution of wages in Romania (Figure 3.16). Most of the increased disparity in wages is attributable to a decompression of wages for white-collar workers in the private sector. White-collar workers at the top end of wage distribution now earn more in both absolute and relative terms compared to other private sector, white-collar workers. The increase in wage dispersion of blue-collar workers in the private sector is mainly a result of a relative decline in earnings at the bottom end of the distribution - high wage, private sector blue-collar workers have maintained their wage level over time (Figure 3.16c).

3.29 In comparison to the private sector, the dispersion of wages in the public sector has increased far less (Figure 3.15b). In fact, the small increase in wage decompression in the public sector is a result of a

[18] Annex 2, Table 53. Comparing the wage dispersion of old hires (hired before 90) and new hires (hired after 90) is the only way that we can use cross section data set to evaluate wage dispersion over time.

[19] In large part the decline in overall median wages is a function of lower age and shorter job tenure and general labor market experience for workers hired after 1990.

Figure 3.16: Distribution of Gross Monthly Wages of Workers in Public and Private Sector

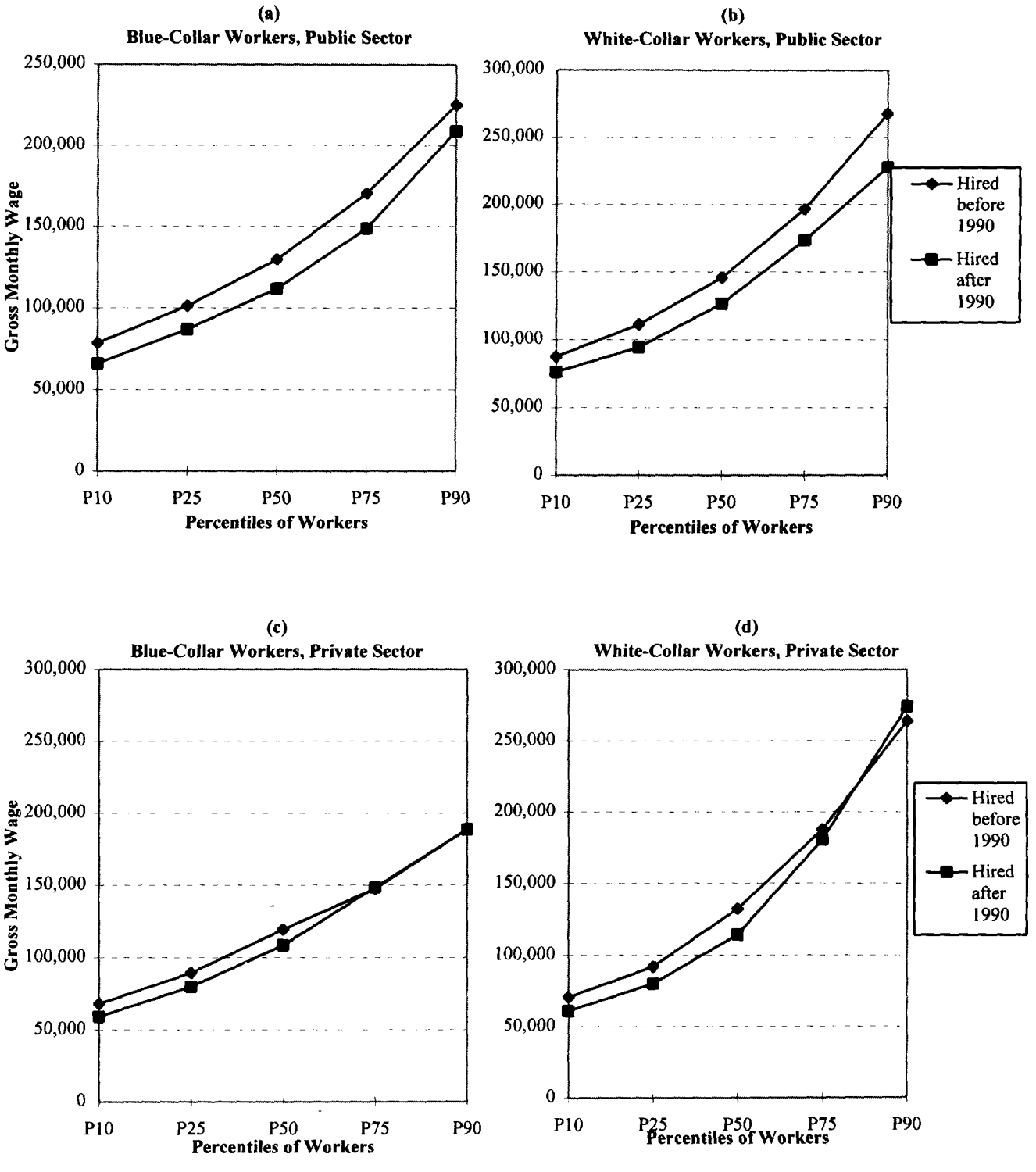


Table 3.2: Characteristics of the Rural Poor

	Poor Households
Land Held (hectare)*	1.22 ha.
Households with at least 1 wage earner (% poor)	18%
Households with at least 1 pension recipient, but no working adult (% poor)	18%
Households with no pension recipient and no working adult (% poor)	31%

* defined as land owned, only; Rural mean = 1 ha.

marginal increase in the wage dispersion of blue-collar workers. The wages for white-collar workers in the public sector have actually become more compressed over time. High wage white-collar workers in the public sector earned less in 1994 compared to 1990. This result is attributable in part to government policies that have contained wage growth in the public sector by reducing the real wages of higher paid workers.

3.30 Private sector led economic growth that raises overall employment and real wages should reduce the incidence of poverty among low wage workers and the unemployed. However, given the compressed wage distribution in Romania, an increase in average wages may also be accompanied by an increase in the dispersion of wages.[1] If wage dispersion outpaces the growth in average wages, there is a *possibility* that some workers may be absolutely and relatively worse off than before the transition. This analysis shows that highly skilled white-collar workers in the private sector may gain in both absolute and relative terms from private sector led economic growth. Public sector blue-collar workers with the least amount of education and skills appear to be the most vulnerable group of employed in the economy.

3.31 **Farmers** have the second highest incidence of poverty and the second largest poverty gap in Romania. Over half of all those self-employed in agriculture are over 45 years of age and more than two-thirds are women. More than three-quarters have less than 8 years of education. The majority (62%) reside in the Northeast (32%) and the Southwest (30%) (Annex 2, Table 48). The poorest of farm households have the smallest land sizes, report income from farming as their primary income, and have no wage earners and pensioners in the household (Table 3.2). The absence of a fixed income means that aged, small farmers are very exposed to variation in agricultural income as a result of weather and other income risks. This exposure to risk is heightened by the low use of pesticides and formal and informal credit for farm production (Table 3.3 and 3.4). Moreover, agricultural production in rural areas is subsistence in nature,

Table 3.3: Input Purchases and Marketing Behavior of the Poor

Percent of rural households reporting purchases of:	All Households	Poor Households	Non-Poor Households
Herbicides	3.6	2.4	3.8
Fertilizers	16.7	11.6	18.1
Seeds	18.2	12.7	19.6
Pesticides	9.0	5.4	9.9
% of households marketing crops	15.3	10.1	16.7

[1] Opening up markets to foreign competition may also increase the dispersion of wages. This phenomenon is not uncommon even in market economies. In the United States, an increased dispersion of wages of blue-collar workers, attributable in part to increased competition from foreign workers, has recently accompanied economic growth.

Table 3.4: Credit and Capital Used by Rural Households

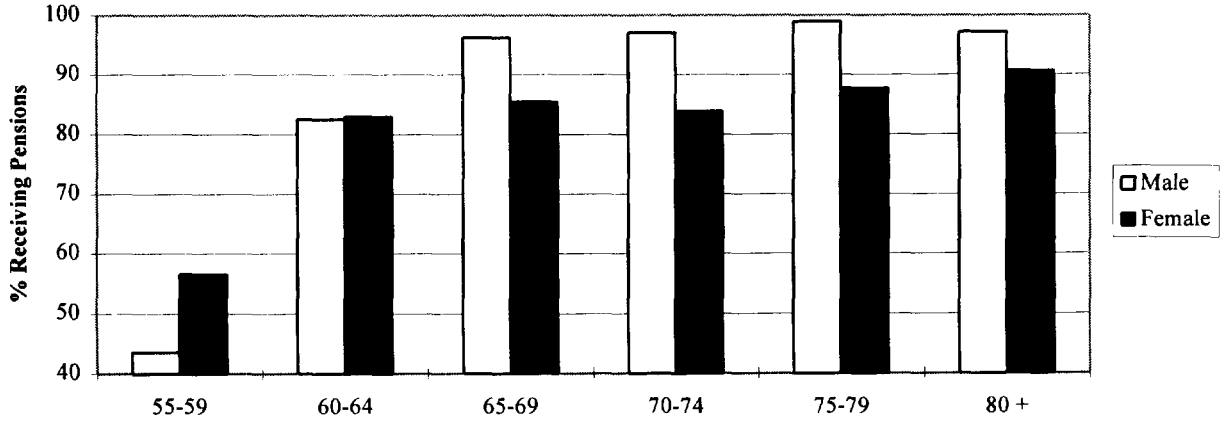
Credit	% of Rural Households			Capital	% of Rural Households		
	All HH	Poor HH	Non-Poor		All HH	Poor HH	Non-Poor
Bank Loans	2.3	1.1	2.6	Agr. Machinery	2.7	2.2	3.0
Loans from Friends/ Relatives	6.0	5.6	6.1	Tractor	1.1	0.5	1.3
Loans to Purchase Agr. Machinery	0.1	0.1	0.1	Plow	2.5	2.1	2.6

particularly for poor farmers. Only 10 percent of poor households marketed their crop as compared to 17 percent of non-poor agricultural households.[2] Subsistence agriculture tends to discourage crop specialization and limit gains from trade, increasing income risk from crop failure. Farm households are also tied to their land. Although 80% of agricultural land has been privatized, land titling is not complete and land sales are difficult, if not impossible. Thus, even though poor farm households may have added wealth as a result of the land reform, without land titling and appropriate institutions to register land, this wealth is not liquid as farmers cannot sell this land or use it as collateral should they need to obtain credit.

3.32 Self-employed agricultural households in Romania are typically female, older, and have very low levels of education (Annex 2, Table 48). The poorest of these have no source of fixed income such as wages and pensions.[3] These characteristics make poor farm households ill-equipped to respond to a changing environment. Furthermore, there is a possibility that, as in the past, these particular farm households may not benefit directly from agricultural growth.

3.33 **Pensioners.** Pensions are received by a large proportion of the elderly in both urban and rural Romania. This is a natural outcome of high labor force participation rates in the country even prior to the transition. By age 65, almost 100% of all men and nearly 86% of all women in Romania receive either old age, disability or survivor pensions (Figure 3.17). Old age pensions from State Social Security System, for

Figure 3.17: Percentage of Elderly Receiving Pensions



[2] This very striking finding may well be due to underreporting of sales by farm households, but is consistent with findings in the Agricultural Sector Review (1994) and macroeconomic reports that indicate that agriculture in Romania is largely subsistence oriented. The data also shows only 50% of households report purchasing food in March, 1994.

[3] As shown below aged women with no pensions are amongst the poorest in rural Romania.

Table 3.5: Average Pension in April - December 1994

Type of Pension	Male		Female	
	Urban	Rural	Urban	Rural
State Social Security	80188	70189	66733	59914
Disability	58315	54270	51458	46236
Survivor	30698	28605	38018	35332
Agricultural	14464	13417	10426	12374

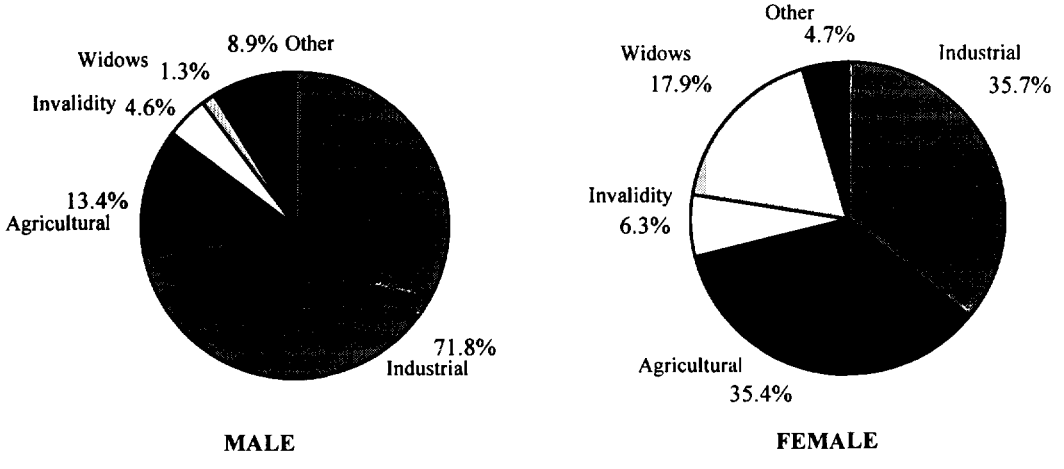
individuals previously employed in the (non-agricultural) state sector are the most common type of pension benefits. Over two-thirds of all male pensioners and more than one-third of all female pensioners claim industrial pensions as their primary pension. The next most common pension is agricultural retirement pension from the Farmers Social Security System for workers of agricultural cooperatives and self-employed farmers, and is largely claimed by rural women. Disability and survivor pensions (mainly claimed by women) make up the remaining pension categories (Figure 3.18).

3.34 Average pensions are highest for State Social Security (non-agricultural, industrial) pensions, followed by disability and survivor pensions. Agricultural pensions pay the smallest average benefit, largely because the contribution rates for these pensions are lower and as with any form of self- employment, there is a tendency for households to underestimate their income (Table 3.5).

3.35 Pensioners are not poor relative to non-pensioners in Romania. In both urban and rural areas, poverty rates among households with a pensioner are lower than among households without a pensioner (Table 3.6).[4] The relatively lower incidence of poverty among pensioners compared to non-pensioners in 1994 is consistent with low pensioner poverty compared to other socioeconomic groups in Romania over time (see Chapter 2). Low poverty rates for pensioners have also been found in Hungary, Poland and Russia (Table 3.1).[5]

3.36 However, despite a low poverty rate, pensioners (after salaried workers) are the second largest group of poor in Romania. What are the characteristics of poor pensioner households? Poor pensioner households are located mainly in rural areas, are larger in size and have fewer pensioners per capita than

Figure 3.18: Type of Primary Pension Received



[4] This finding is based on a comparison of households headed by individuals who receive a pension. The higher poverty rate of pensioners than wage earners in Table 3.1 results from a comparison based on the main occupational status of household head.

[5] van de Walle, Ravallion and Gautam, 1993; Milanovic, 1993; and World Bank, 1993.

Table 3.6: Characteristics of Poor Pensioner Households

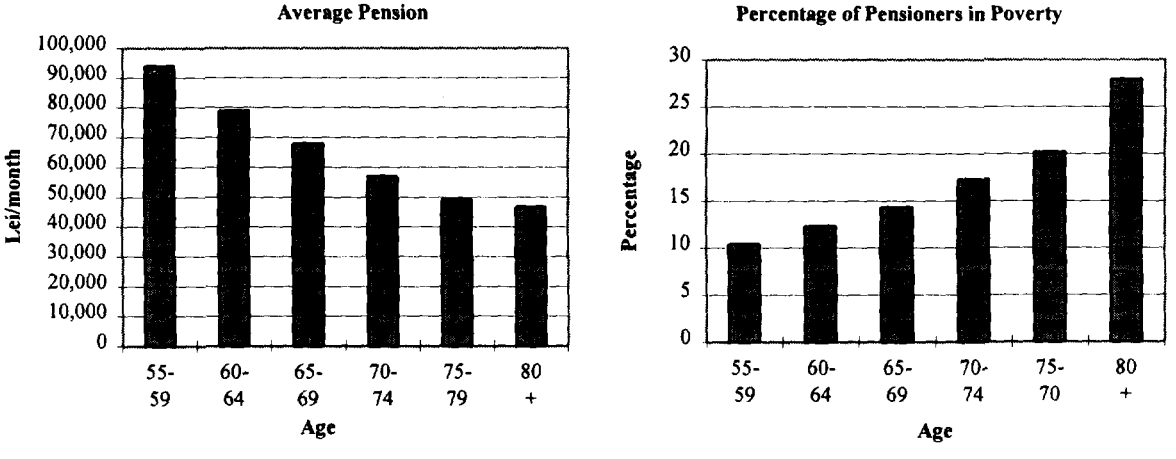
(% Poor)	Urban	Rural	(% Poor)	Urban	Rural
Female Headed Households	11.0	22.0	Size of Household		
Male Headed Households	9.6	18.3			
Households with pensioner(s)	10.1	19.5	- 1	6.5	15.9
Households without Pensioners	12.4	26.0	- 2	7.2	15.5
Single Pensioner Households	6.5	15.9	- 3	11.1	19.8
All Pensioner Households	10.1	19.5	- 4	13.3	26.2
Non Working Pensioners	9.6	22.2	- 5	17.0	25.0
Working Pensioners	9.9	17.6	- >5	36.4	40.4

non-poor pensioners. Single pensioner households tend to be less poor than households containing at least one pensioner (Table 3.6). This is somewhat surprising because poverty is substantially higher among single pensioners in OECD countries.[6] In Romania, at least, these results indicate a transfer from pensioners to other household members. The greater the number of household members who have to share in the pension income, the poorer the household is on average.

3.37 Older pensioners are more likely to be poor as compared to younger retirees. These results are consistent with evidence from OECD countries where ad hoc and partial pension adjustments of pension benefits to inflation have increased poverty among the most aged pensioner groups - average pensions for women in Romania decrease quite sharply with age (Figure 3.19).[7]

3.38 Pensioners whose primary pension is a survivor or agricultural pension (mostly women/widows) are more likely to be in poverty than individuals whose primary pension is an industrial pension, largely because of the small size of agricultural and survivor pensions (Figure 3.20). Thus, pensioners in rural areas, predominantly the recipients of agricultural and survivor pensions, are much more likely to be poor than urban pensioners in Romania. A large proportion of rural pensioners work to compensate for lower pensions, leading to lower poverty rates among working than non-working rural pensioners (Table 3.6).

Figure 3.19: Female Pensioners in the State Social Security System



[6] Luxembourg Income Study for Norway, U.K., Israel, U. S and Canada. In the U.S., for example, 24.7% of the poor pensioner households in 1991 consist of only one pensioner, compared to the overall poverty rate of 12.2% of households with pensioners.

[7] The correlation is less strong for male pensioners.

Figure 3.20: Percentage of Pensioners in Poverty by Pension Type

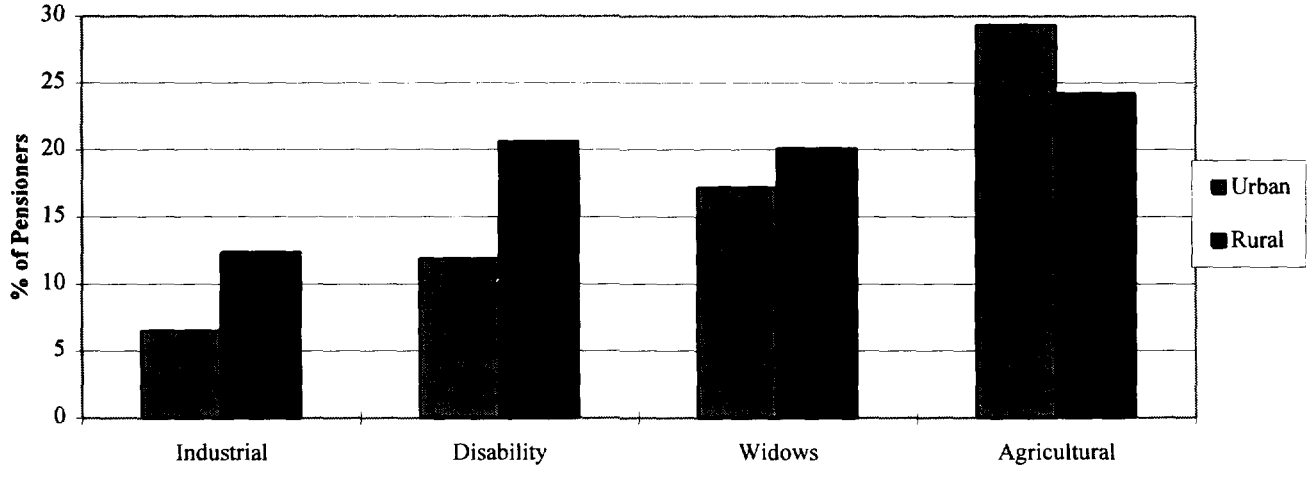


Figure 3.21: Poverty Rates for Female Pensioners and Non-Pensioners

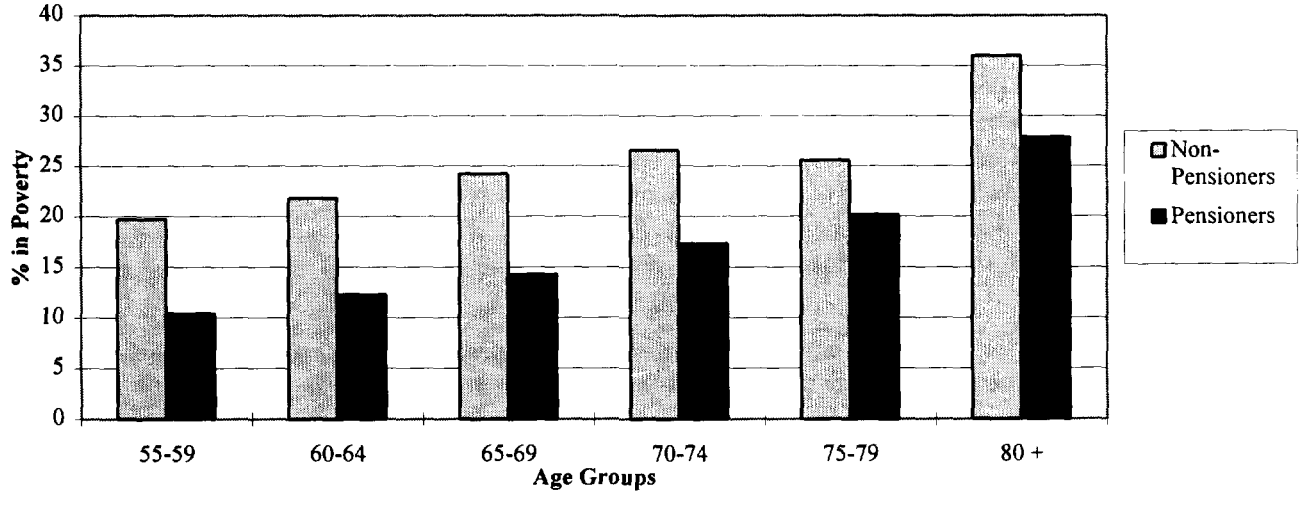


Figure 3.22: Poverty Rates for Male Pensioners and Non-Pensioners

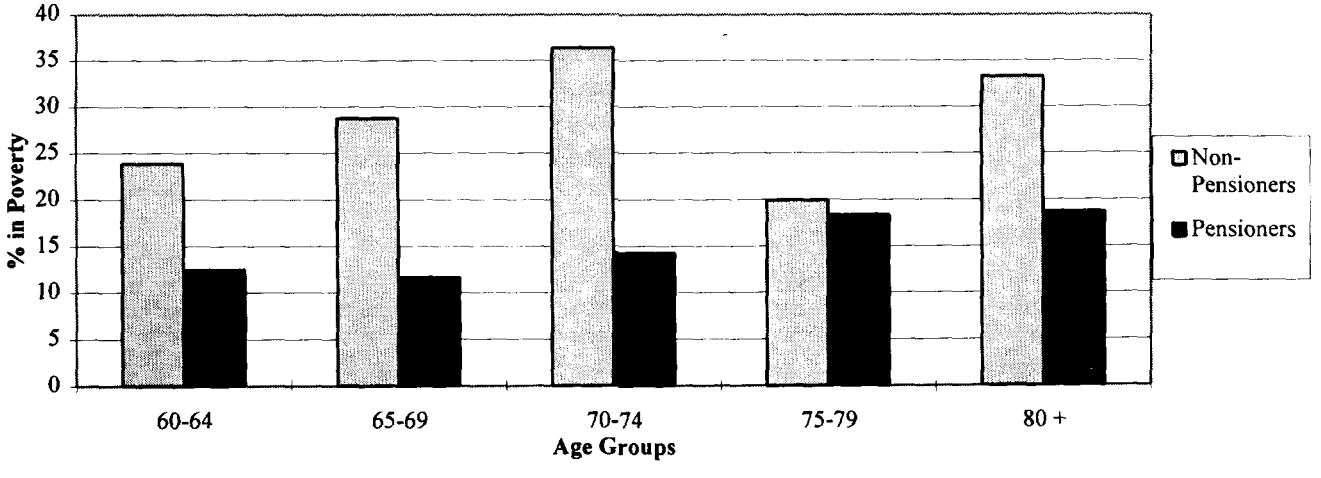


Table 3.7: Characteristics of Female and Male Headed Households

	Male	Female
Marital Status (%)		
-Married	92.43	5.20
-Cohabitating	3.81	5.77
-Divorced	0.32	10.15
-Separated	0.32	6.26
-Widow/Widower	2.66	67.99
-Never Married	0.46	4.63
Age of Household Head (Average)	49.19	63.05
Proportion		
- 0-5 years	8.53	3.38
- 6-16 years	19.66	11.28
- 17-59 years	52.09	35.66
- over 60 years	19.73	49.67
Household Size (Average)	4.23	2.57

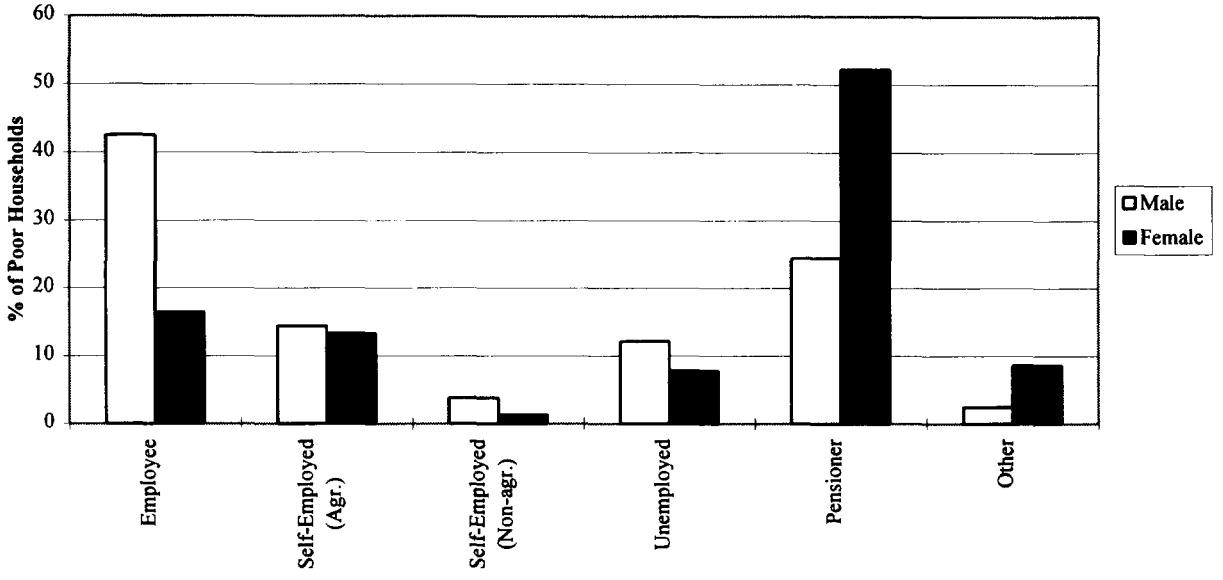
3.39 Female headed pensioner households, the main recipients of low survivor or agricultural pensions, also tend to be poorer than male headed pensioner households in both urban and rural Romania (Table 3.6). This result is consistent with OECD countries where female headed, pensioner households are more likely to be poor than male headed households.[8] However, older women with pensions are still better off than non-pensioned females, particularly at higher age groups (Figure 3.21). The poverty rates of male pensioners are also lower than non-pensioners although unlike women, very few men above 65 do not receive pensions (Figure 3.22).

3.40 In summary, poor pensioners are older, female, reside in rural areas, and receive low agricultural and rural pensions. However, poor pensioners are better off compared to aged individuals who do not receive any pensions. These latter households are the most vulnerable group of elderly in Romania.

3.41 **Female headed households** are a small proportion of the poor in Romania (Table 3.1). However, living in a female headed household significantly increases the chances of being poor, particularly in rural areas. What are the characteristics of female headed households? The majority of all female heads of household are widows. The remainder are divorced, separated or never married (Table 3.7). Over half claim pensions as their main source of income, although a significant proportion are wage employees and involved in (non-agricultural) self-employment activities (Figure 3.23). Female headed households tend tobe smaller in size with a much smaller proportion of members in productive ages (17-59). Furthermore, the average age of a poor female head of household is 14 years higher than a male head of household (Annex 2, Table 27). In contrast, most male headed households are married and salaried workers or pensioners.

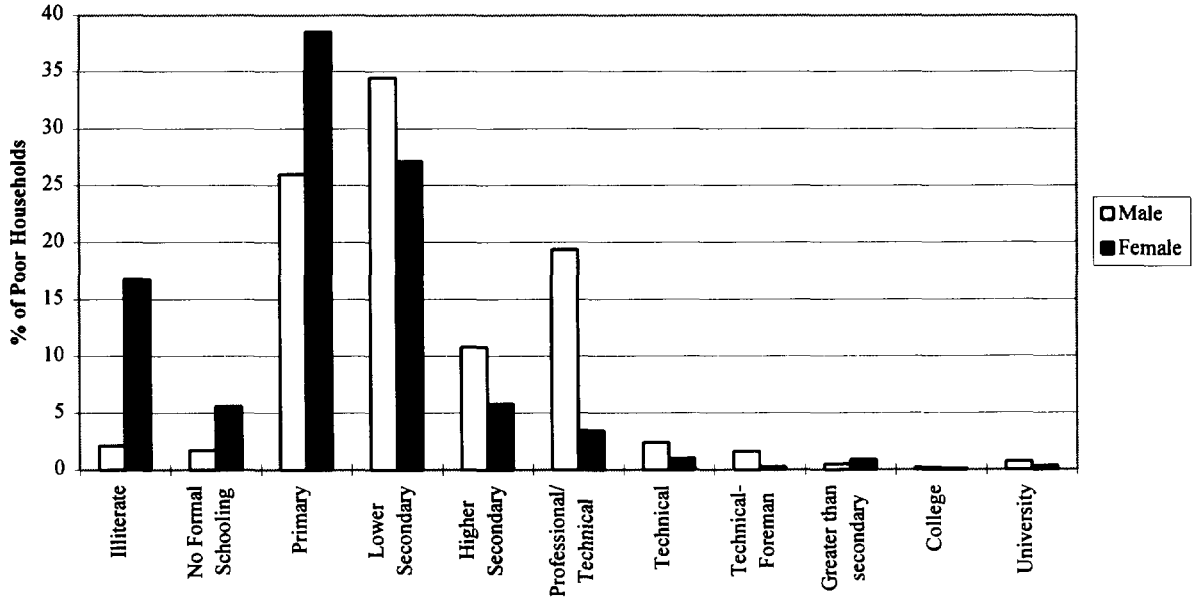
[8] A higher incidence of poverty among female headed households is largely consistent with data from OECD countries. The Luxembourg Income Study reports that female single pensioner households are 60% more likely to be poor than other pensioner households in Canada, United States and Israel.

Figure 3.23: Occupation of Household Head, Poor Female vs. Poor Male



3.42 Poor female headed households also appear more vulnerable than poor male households (Figure 3.24). Female heads of household are less educated and therefore likely to receive lower wages than male household heads. And, as noted earlier, pension income for female heads is likely to be lower than average pensions received by males. Thus, female headed households are poorer on average because they are older, less educated, receive small pensions, are likely to be in low paying jobs and have limited earning capacity. These characteristics make female headed households very vulnerable to poverty and reduce their chances of benefiting directly from economic growth.

Figure 3.24: Education Level of Household Head, Poor Female vs. Poor Male



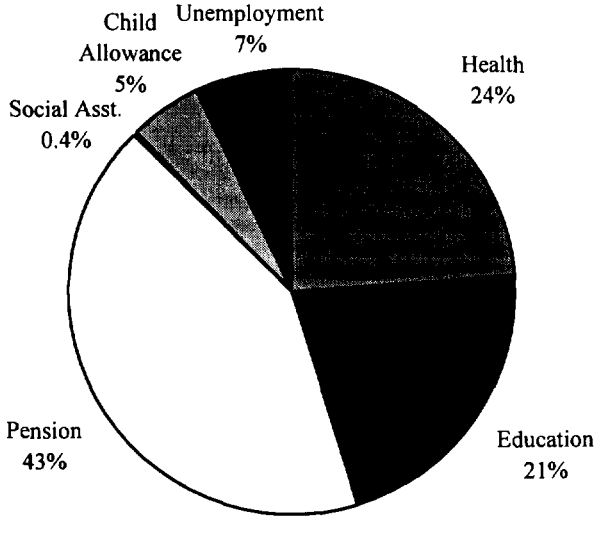
IV. POVERTY ALLEVIATION PROGRAMS AND POLICIES

4.1 This chapter discusses the main public cash transfer and investment programs and their potential for alleviating poverty. The first part of the chapter discusses public transfer programs: (i) the pay-as-you-go pension system, established to protect workers and their families against a drop in income from retirement, disability, or loss of earning member in the family. The program also provides social assistance pensions to the retired poor; (ii) active and passive labor market programs, which together protect workers against temporary loss of income because of job loss and help workers in escaping poverty by facilitating their re-entry to the labor force; (iii) public cash transfers: the child allowances program, which provides benefits to all households with children, the social (or public) assistance program, which provides discretionary assistance to the poor (canteen meals, birth indemnities, benefits to large families, and the handicapped, etc.); (iv) in-kind transfer programs, intended to provide a measure of support to poor families to defray their expenses on coal, electricity and heat, especially in winter); and (v) the recently legislated means tested social assistance program, which would provide a minimum guaranteed level of income to all households irrepective of their characteristics.

4.2 The second section of the chapter discusses public investment programs: the public education and health system in Romania. An evaluation of the comparative efficiency and effectiveness of public transfer and investment programs concludes this discussion. Cash transfer and public investment programs should ideally be financed through progressive taxes that do not fall mainly on poor households. The last section of this chapter evaluates the progressivity of the tax system in Romania and identifies which taxes likely raise revenues without lowering the welfare of the poor.

4.3 In 1994, the Government spent almost 7 percent of GDP on public cash transfers and slightly over 6 percent of GDP on investments in health and education. Spending on both programs constituted 40 percent of total government expenditures (Annex 2, Table 4). The largest share of government outlay on cash transfers was spent on pensions, followed by health and education, and unemployment benefits. Spending on child allowances and social assistance comprised the smallest share of government spending on social sectors (Figure 4.1).

Figure 4.1: Social Sector Expenditure as a Percentage of Government Expenditure, 1994



4.4 The main purpose of Government spending on cash transfers is to improve equity and reduce poverty. Public spending on education and health is guided by both efficiency and equity concerns. But these objectives coincide in justifying better targeting of resources to the poor in areas that generate high economic returns such as basic education or preventive health care where the private sector might undersupply services that benefit the society at large. Government spending on health and education is essentially an investment in human capital, an indirect in-kind loan to individuals that is recouped through a higher stream of tax revenues in the future.

4.5 This chapter measures the *efficiency* of poverty alleviation programs as the share of public spending on each program that is received by the poorest population groups. Transfers or investments are considered to be more efficient the less the leakage to non-poor groups. The targeting of programs is judged to be strongly pro-poor (progressive) if the share received by the poor is larger than their proportion of the population. It is considered weakly non-poor (regressive) if the share exceeds their share in total income. The *effectiveness* of public spending is defined as the size of the per capita expenditure received by the poor expressed as a proportion of per capita consumption. It captures the adequacy of the transfer in protecting the poor. As in the previous chapters of this report, consumption is used as a proxy for income.

Pensions

4.6 The objective of the pay-as-you-go pension system in Romania, like other pension systems in Eastern Europe, is to provide individuals a measure of security against old age, disability and loss of earning member in a family. The pension system has protected pensioners relative to other groups. Pensioners are not poor compared to non-pensioners in Romania. However, despite this protection, poverty among pensioners does exist, and pensioners constitute the second largest group of poor in Romania. The poorest pensioners are individuals who receive low paying agricultural and state pensions. Should the pension system address poverty among pensioners in Romania? One way of reducing the poverty among pensioners would be to increase the level of agricultural and survivor pensions, as recipients of these pensions are the poorest amongst all pensioners. However, there are some significant problems which arise when the pension system is re-focused toward achieving this poverty alleviation goal.

4.7 First, even though agricultural pensions are low, the Farmers Fund receives a large subsidy directly from the state. The financial precariousness of the fund is attributable in large part to the high benefit to contribution ratio set for farm workers. Agriculture workers contribute only 7 percent of their income towards retirement (as compared to 28 percent of earnings for state workers) but, like state workers, receive 60-65 percent of their past earnings as benefits. Raising agricultural pensions will only aggravate the financial problems of the Farmers Fund. Second, since the benefit rate for both industrial and agricultural workers is the same, agricultural pensions are low for one of two reasons. Agricultural income may be significantly lower than industrial income or individuals may have underreported earnings. In the first case, the best policy is to promote growth in agricultural incomes, not raise benefits. In the second, raising the minimum pension will only further reduce the incentive to report any income above the amount required to qualify for the minimum pension.[1]

4.8 Similar disincentives may arise when attempting to raise survivor pensions. If the percentage provided to the survivor is raised from 50 percent to 100 percent for example, poverty may fall, but the second earner in a household would have very little incentive to contribute to the pension system. As the privatization of the Romanian economy proceeds, these incentive effects will become important and affect not only the sustainability of the pension system, but also the labor supply decisions of individuals.

[1] Other methods of raising the agricultural pensions such as lowering the number of contributory years will also serve to break the link between contributions and benefits, providing additional incentives to evade and causing further insolvency of the Farmer's Fund.

4.9 Attempts to deal with old age poverty through the pension system will not reach those aged individuals who for various reasons do not qualify for pensions. In addition, there are many pensioners who have a source of income, but only a small pension, or those who live with family, but with the entire household being poor, who remain poor despite receiving pensions. Poor pensioners and the old age poor will be eligible under the new social assistance scheme which should provide income support for poor elderly.[2]

4.10 Finally, simply increasing the efficiency and financial viability of the pension system (by increasing retirement ages, for example) and thereby reducing contribution rates from current levels might make the best overall contribution towards reducing poverty, at least among workers, by increasing their job opportunities and perhaps even their net wages, without adversely affecting pensioners.[3]

Labor Market Programs and Policies

4.11 Since 1990, the year the transition from socialism to a market based economy began, the Romanian Government (Ministry of Labor and Social Policy (MOLSP)) has adopted four basic labor market programs to assist the unemployed: (a) the Unemployment Benefit Program (UEB); (b) The Support Allowance Program (SA); (c) The Wage Subsidy Program for New Graduates (WS); and (d) Worker Training and Retraining Programs.[4] The first two are passive labor market programs intended to provide a combination of social insurance to individuals against short-term income declines due to job loss and means-tested income support for the long-term unemployed. The objective of the second two programs is to reduce long-term poverty among the unemployed by helping the unemployed rejoin the labor force. These active labor programs are geared to increase the demand for labor and improve the matching between the unemployed and the available job openings.

4.12 The **Unemployment Benefit Program** (UB) provides unemployed individuals who have lost a job (and have little or no land) with benefits up to 50 to 60 percent of their *previous wage* for up to 9 months of unemployment.[5] The UB program has some elements of means testing. Households whose income exceeds half of minimum wage and individuals with a particular land size (different if on plains or mountainous) cannot receive benefits. After exhausting unemployment benefits, the unemployed (with an income up to 40 percent of the minimum wage) are eligible for a **Support Allowance**, of approximately 60 percent of minimum wage, for an additional 18 months of unemployment. This allowance, as well as unemployment benefits, are paid out of the unemployment insurance fund. Poor unemployed also qualify for discretionary social assistance (see below), but will now be eligible (if they pass the means test) to receive a minimum guaranteed income under the new social assistance program.

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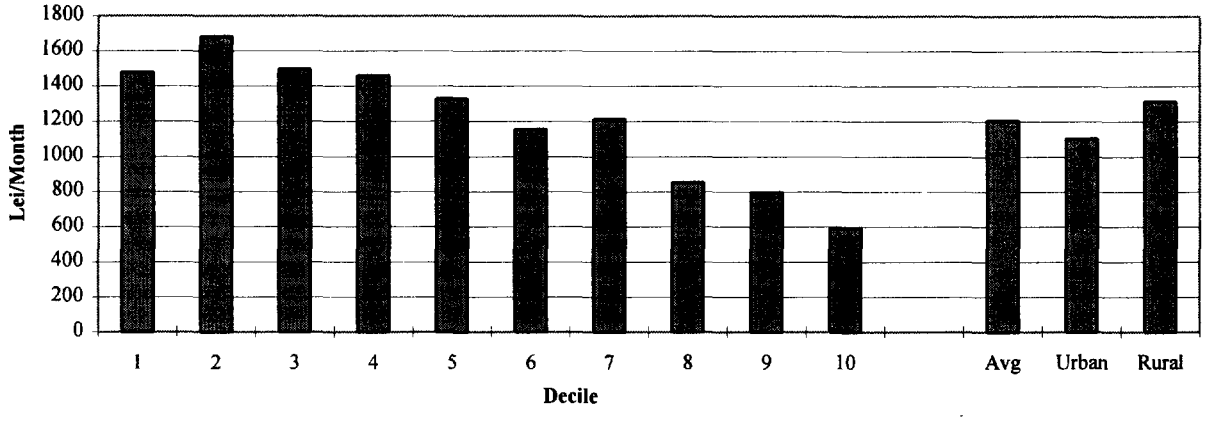
[2] The Government did provide some protection to the poorest pensioners through social assistance pensions but the amount of benefits was very small. This benefit will be phased out and consolidated into the new program

[3] While the surpluses in the pension system may be due to the slower pace of industrial restructuring in Romania relatively to other Eastern European countries, which have substantial deficits, lowering the contribution rates might increase the contribution compliance when the industrial restructuring accelerates.

[4] There is also a Small-Business Program that promotes starting small-businesses by the unemployed through training in business skills. Apparently, there are no public works programs in place in Romania.

[5] Benefit levels vary for new entrants compared to laid-off workers, by level of education for new entrants and by years of experience for experienced workers. Laid-off workers receive 50 to 60 percent of their wage in their final three months in the last job (depending upon the length of service) or 75-85 percent of the minimum wage if their last wage was below the minimum wage.

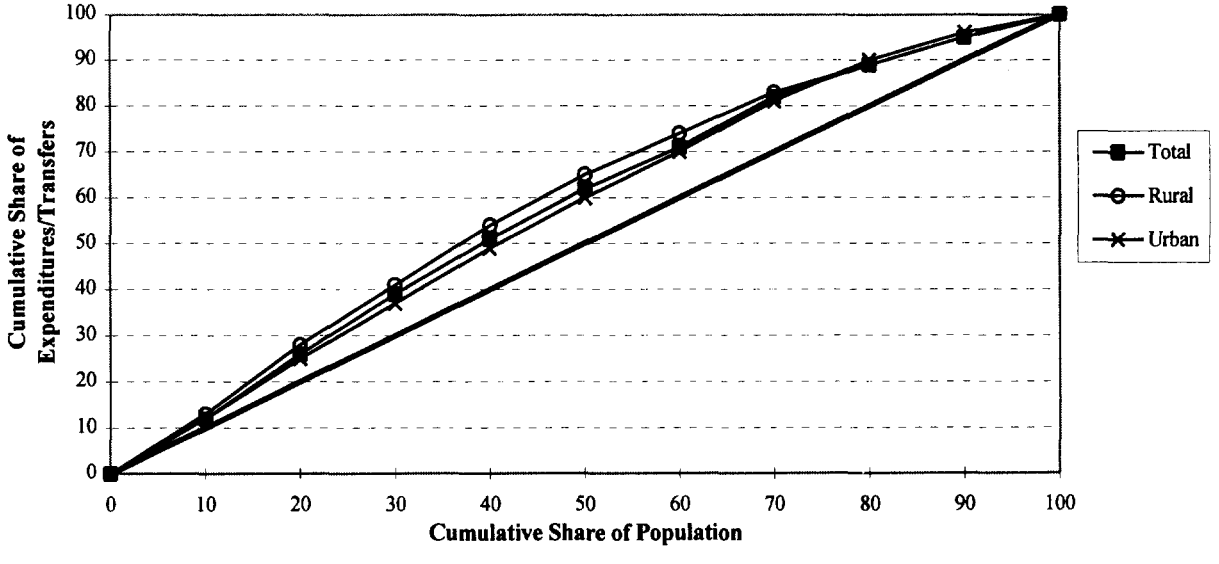
Figure 4.2: Unemployment Benefits Per Capita



4.13 **Per Capita Unemployment Benefits** Unemployment benefits and support allowances are not intended to reduce long-term poverty and are essentially an insurance indemnity against temporary loss of income. The program does provide a greater level of support to poor households, however. The poor receive a higher per capita benefit as compared to the better off (Figure 4.2). Specifically, the highest income households receive a benefit of only 600 lei per capita as compared to 1,400 lei for the poorest group.

4.14 **The Targeting of Unemployment Benefits** Figure 4.3 illustrates the incidence of unemployment benefits in 1994, overall and by rural and urban areas, using Lorenz curve analysis. The horizontal axis shows the cumulative percentage of individuals ranked by per capita consumption. The vertical axis gives the cumulative percentages of consumption and the transfer. The 45 degree line indicates equal shares of total transfer. These curves allow a comparison of the distribution of the transfers and the distribution of consumption (as a proxy for income). Cash transfers are progressive, or

Figure 4.3: Distribution of Unemployment Benefits and Support Allowances



NOTE: A transfer is progressive if its distribution lies above the 45 degree line. A transfer is regressive if its distribution lies below the 45 degree line.

strongly pro-poor, if the poor receive a larger share of the transfer than their share in total population. In this case the Lorenz curve for the transfer will lie above the 45 degree line. The transfer is weakly pro-poor if the poor receive a share of the transfer that is less than their share of total population but larger compared to their share of national consumption. In this case, the Lorenz curve for the transfer lies between the 45 degree line and the distribution of consumption. Transfers are strongly non-poor if the poor receive a smaller proportion of the transfer than their share of national consumption. The Lorenz curve for the transfer will then lie entirely below the consumption line.

4.15 Unemployment benefits are strongly pro-poor. The poor receive a higher share of unemployment benefits as compared to the share of population. Unemployment benefits and support allowances are strongly pro-poor in both rural and urban areas.[6] This is also a reflection of the large proportion of blue-collar workers among the unemployed (Chapter III). These workers had relatively low paying jobs (compared to other economic agents) and therefore qualify for a low level of benefits. The rural bias to unemployment benefits is consistent with the large proportion of short-term unemployed (who qualify for unemployment benefits) in poorer rural areas. Results from a multivariate analysis indicate that the receipt of unemployment benefits and support allowances significantly reduces the likelihood that the recipient will be poor, confirming the importance of these benefits in poverty alleviation for recipient households (Annex 2, Table 12).

4.16 There is some evidence that the unemployment benefit program has adverse incentive effects on labor supply. Unemployment falls off between 9-11 months duration, indicating that the unemployed re-join the labor market (or else become discouraged and drop out of the labor force altogether) just as unemployment benefits are exhausted (Annex 2, Table 47).[7] This is not surprising since unemployment benefits are a proportion of past wages and as such may be higher than wages at which employed are able to find employment. However, as is currently the case, minimum unemployment benefits should be kept below minimum wage.

4.17 The extended protection of the long-term unemployed in the social assistance program and the higher benefits under the new system (see below) may delay the entry of these individuals in the labor force. The new means tested social assistance program should therefore include incentives to promote re-entry of unemployed workers in the labor force (see discussion below). The predominance of women with young children among the long-term unemployed indicates that particular attention should be paid to designing work incentives that ensure that the costs of day care for these women do not constrain their accepting employment.

4.18 **Minimum Wage Regulations** are one of the main incomes policies that have the most direct impact on the market for labor.[8] The level of negotiated minimum wage is used to set the minimum benefits received by the unemployed and poor.[9] Minimum wages, generally enacted to protect less skilled workers, likely create unemployment among low skilled workers. If perfectly enforced, minimum wages constrain employers from hiring low skilled workers that have a market wage less than minimum wage.

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[6] Unemployment benefits have become more progressive since their inception in 1990. Rashid, "Household Welfare in a Transition Economy: Poverty, Equity and Growth in Romania, 1989-92.

[7] The estimates of the impact of aid income on decision to participate in the labor market are sensitive to model specification. If we exclude binary variables indicating whether or not a person receives benefits, there appears to be a significant negative effect of aid income on labor supply. However including these variables, the impact of aid income on labor supply becomes insignificant. This sensitivity is likely to arise from the endogeneity/simultaneity of the decision to participate in the labor force and/or receive unemployment benefits.

[8] For a detailed description of the intricacies and inconsistencies of Romanian incomes policies see Earle and Oprescu (1993).

[9] Minimum wages represent the bottom wage of negotiations, but it is possible to pay less and the minimum is not enforced (E&O, 1993).

4.19 Since the increasing liberalization of the wage setting process is likely to stretch out the upper tails of the wage earnings distribution of both white-collar and blue-collar workers, especially as the private sector grows, it is bound to increase average wages in the economy and ultimately the level of negotiated minimum wages and benefits. Setting the level of minimum wages as some proportion of average wages would essentially reduce the incentives for the unemployed to re-join the labor force and make hiring low skilled unemployed more attractive to employers.

4.20 The **Wage Subsidy Program for New Graduates** (WS) is intended to reduce unemployment by inducing firms to hire new graduates. The Government pays firms the same amount in subsidy as the unemployed graduate would have received in unemployment benefits: 60 and 70 percent of the minimum wage for secondary school and university graduates, respectively. The almost equal pay for both types of graduates essentially provides incentives for firms to hire college graduates over secondary school graduates[10], although it is the latter educational group that exhibits the highest unemployment rates. The WS program also does not necessarily reduce unemployment, as firms may simply reduce workers and replace them with new graduates. Moreover, the wage subsidy does nothing to encourage the hiring of the long-term unemployed. Therefore, it would be best to phase out the wage subsidy program altogether. If this is not politically feasible, a marginal employment subsidy might be considered as it could both stimulate employment and impact its composition. A **marginal employment subsidy** would give firms subsidies for hiring unemployed persons only if there was a *net* increase in employment. This is one way to provide incentives to firms to increase employment. This subsidy could be targeted towards unemployed individuals with secondary schooling and/or the long-term unemployed. Targeting the subsidy to the long-term unemployed may be more desirable, as a considerable fraction of the long-term unemployed are poor (42%), females (70%), concentrated in urban areas (73%) and have secondary school education (62%).

4.21 **Training Programs** In Chapter III, more labor market experience proved to be significant in increasing the chances of employment and the level of wages. Currently, all registered unemployed, irrespective of whether they receive unemployment benefits and supporting allowances, are eligible for up to 2 re-training courses.[11] However, between September 1991 and September 1993, less than 7 percent of the total number of unemployed persons had completed courses.[12] Unemployed participants who completed training courses organized by private firms were very successful in getting jobs (approximately 90 percent of those completing training course were hired). In contrast, unemployed participants who completed training courses organized by local labor offices fared poorly, as only 15 percent of those completing training course were placed in a job. A large part of the lack of success of existing public programs is due to a lack of time and proper training on the part of staff to screen and counsel potential trainees, conduct proper labor market analysis and to make and follow up on contracts with employers. In addition, the main institutions supplying the training are the traditional vocational schools, which are not used to providing training in a market oriented environment. This highlights the importance of demand driven private sector training programs that allow unemployed or other workers with narrow skills no longer suited to the economy to re-tool their skills in order to re-enter the labor

[10] The 1994 Staff Appraisal Report of the World Bank states that the Wage Subsidy program (or School leavers program) had "very limited success" but no explanation is offered as to the criteria used for measuring success.

[11] In the IHS, the only information related to participation in training programs is contained under the reasons for why a person did not look for work. Under these circumstances, it is not possible to determine anything meaningful about the determinants of participation in training programs.

[12] Earle and Oprescu, Ibid.

market.[13] Young secondary school leavers could invest in a college education in order to increase their chances of employment and lifetime wages. Simulations show that at lower levels of experience, a college education could substitute for experience and raise the probability of employment among these workers.

Public Cash and In-Kind Transfers

4.22 In 1994, the main public (non-pension) **cash transfer** programs in Romania were: (i) child allowances, (ii) discretionary social assistance, and (iii) public in-kind transfers. **Child Allowances** is the most important cash transfer program in Romania. Public spending on child benefits constituted 80 percent of total government expenditures on cash transfers in 1994. The program provides a universal lump sum benefit per child for all children under the age of 16, irrespective of family income. The amount of allowance is quite small, however. In 1994, households received only 7000 lei per child. School age children (7-16) must be enrolled in school to receive benefits.[14] The benefits are delivered to children under school age through local offices and to school age children through the school system.

4.23 These eligibility and benefit conditions were instituted in May 1993. Prior to that date, child allowances were delivered through state enterprises and only available to state employees. Workers with higher earnings received a lower level of benefits compared to lower paid workers, and benefit levels increased per additional child in the family.[15] The child benefit scheme was accompanied by a tax credit (20 percent of wage, now discontinued) for all households with children.

4.24 These changes have made child allowances a universal program that is not explicitly targeted to the poor. But, the changes in the transfer system in 1993 were in fact considered a more effective way of reaching poor households. A lump sum benefit per child and the universality of the benefit was devised to reduce the administrative costs of means testing benefits. Instead, the higher number of children in poor households would ensure that the benefit accrued disproportionately more to the poor. The stipulation that children be enrolled in school was included to encourage the poor to send their children to school. Increasing the eligibility to include private sector workers was intended to improve the equity of benefits.

4.25 In 1994, **Discretionary Social Assistance** provided a variety of benefits to the poor from the general budget (handicapped and pensioned elderly, mothers with three or more children, birth grants, canteen meals, etc.). **Other Social Assistance** includes cash assistance to war veterans, their widows, and politically persecuted persons.[16] Public **in-kind transfers** include subsidies for coal, heating, and electricity that are provided mainly in winter for the poorest groups under a special law.

4.26 **The Targeting of Cash Transfers Over the Transition** As noted in Chapter I, public expenditures on cash transfers decreased in real terms between 1989 and 1993, largely because the Government did not index benefits fully to inflation. The transfer system also became less effectively targeted to the poor. Social assistance, strongly pro-poor in 1989, became regressive in 1993. The child allowance program remained strongly pro-poor throughout the transition, but its progressivity declined over the four year period. There may be several reasons for this outcome. The decline in real spending may have adversely affected social assistance outreach efforts, reduced monitoring of new clients, and

[13] While firms have incentives to provide firm-specific experience, they are not as likely to provide 'general experience' that could allow workers to change jobs and reduce firms return to investment. However, asking employees to post bonds is one way to recoup this investment in general training for workers.

[14] Benefits are extended to age 18 if child is enrolled in school.

[15] The incremental benefit per child reflected Government's pro-natalist policies. In Romania, as in other countries in Eastern Europe, child allowances were not sufficient to stem the long term decline in fertility rates.

[16] These are considered separately because assistance to war veterans etc. is not specifically targeted to the poor.

Table 4.1: Relative Shares of Transfers by Region and Degree of Poverty

	Ultra-poor[1]		Near-poor[2]		Non-poor[3]	
	Urban	Rural	Urban	Rural	Urban	Rural
Unemployment	26.6	20.9	23.0	22.0	13.6	21.6
Children's Allowances	68.0	65.6	69.0	59.2	67.5	51.2
Social Assistance	2.9	6.3	3.6	6.7	3.4	6.5
Other Social Assistance Benefits	0.8	5.9	1.4	10.0	3.5	14.6
In-Kind	1.7	1.2	3.0	2.2	12.0	6.1

[1] Households below the food poverty line (29636 lei).
[2] Households below the poverty line (includes a minimal allowance for non-foods) and above the food poverty line (35593 lei).
[3] Households above the poverty line.

delayed claims processing by local offices, particularly since the decline in real spending occurred at a time when local offices were most burdened with an increasing number of social assistance clients. The decline in funding and the increase in potential beneficiaries also reduced incentives to disseminate eligibility information widely.[17] The growth in private sector incomes may also have made it increasingly difficult to target benefits to the poorest groups (Annex 2, Table 37).

4.27 The slightly lower concentration of child allowances among poorer households over time[18] can also be explained in part by the lack of adjustment in the wage eligibility levels of the child benefit program to reflect inflation induced increases in nominal wages. The wage levels for determining the amount of benefit to be received by workers remained fixed over time. As nominal wages increased, all households moved into the highest wage category. As a result, after 1990, all households received the same level of benefit per child, irrespective of earnings.

4.28 **Per Capita Cash and In-Kind Transfers, 1994** The size distribution of transfers, by type of transfer, and group of poor in 1994 are presented in Table 4.1. The Ultra-Poor are defined as households that fall below the food poverty line, while the Near Poor, are households with per capita consumption below the poverty line but above the food poverty line. Households with consumption levels above the poverty line are labeled Non-Poor. Child allowances comprise more than half of all transfers received by Romanian households, although this share is somewhat higher for urban than rural households. In contrast, social assistance and other cash benefits, and in-kind transfers account for a much smaller share of total transfers (Table 4.1). The share of transfers in total income (proxied by consumption) of the poor is higher than for non-poor households. Transfers comprise 17 percent of total income of the lowest income groups and fall to only 4 percent of income for the top income decile (Annex 2, Table 67).

4.29 The levels of per capita transfers by income (proxied by consumption) group are illustrated in Figures 4.4a-d, next page. Child allowances is the largest per capita transfer in absolute terms. The average per capita transfer is 1220 lei per month, almost identical to the average per capita unemployment benefit. The poorest group receive a per capita child allowance benefit of nearly 1,800 lei per month in child allowances, while the highest income group receives only 800 lei per month in child allowances. There is an urban bias to child allowances--urban households receive a higher average per capita transfer than rural households.

[17] Government of Romania. Social Assistance White Paper.

[18] Any increase in the concentration of child allowances among richer households since May 1993 which might have occurred as the benefits were officially delinked from earnings should be evaluated together with the progressivity in taxes which would occur because of elimination of the tax credit for children.

Figure 4.4: Public Transfers per Capita

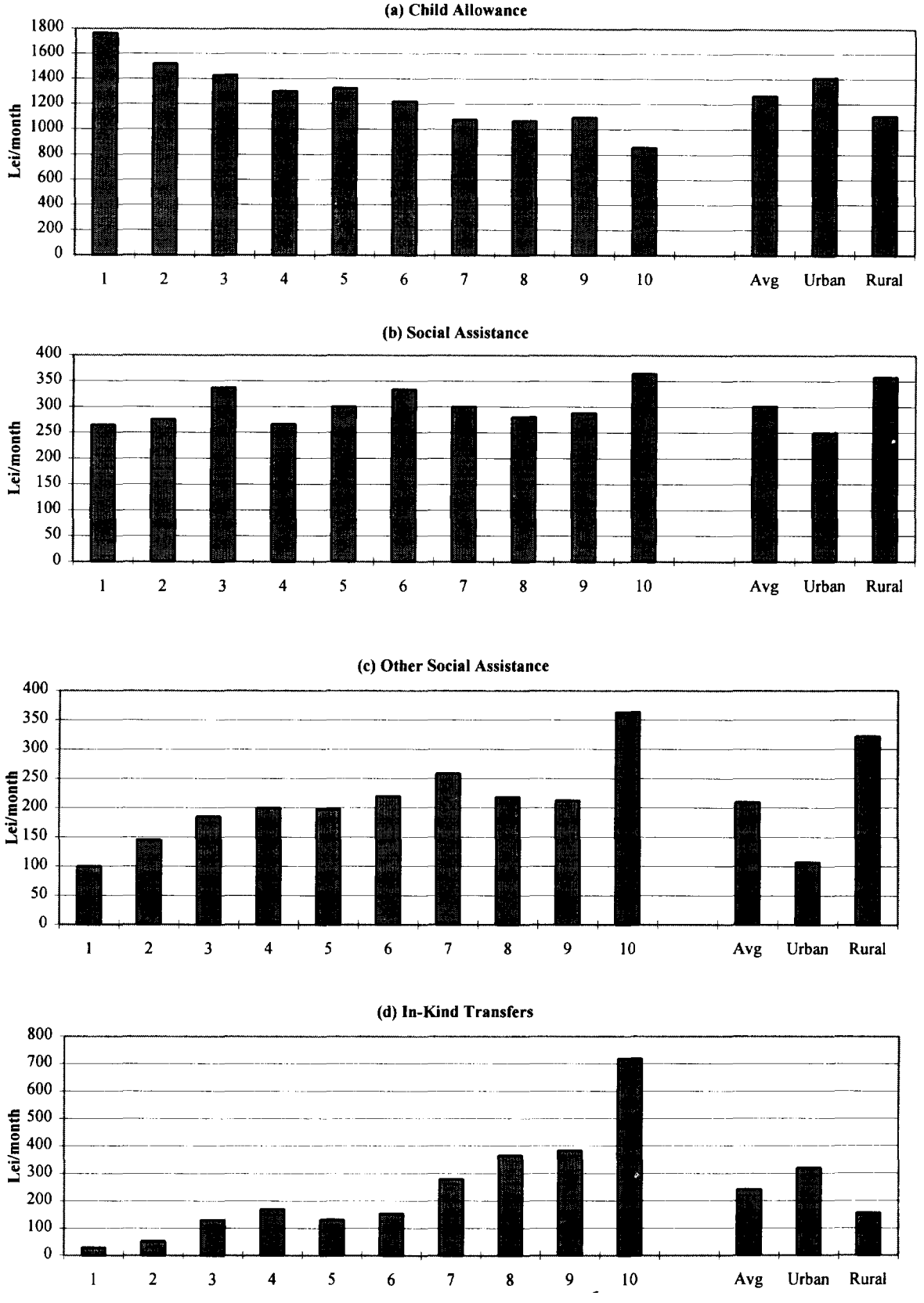
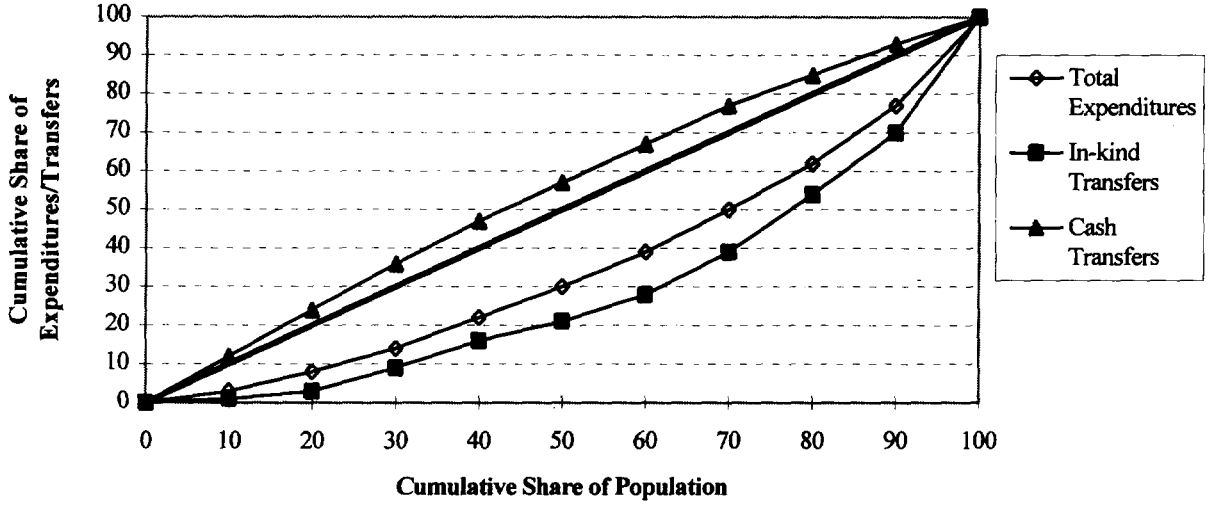


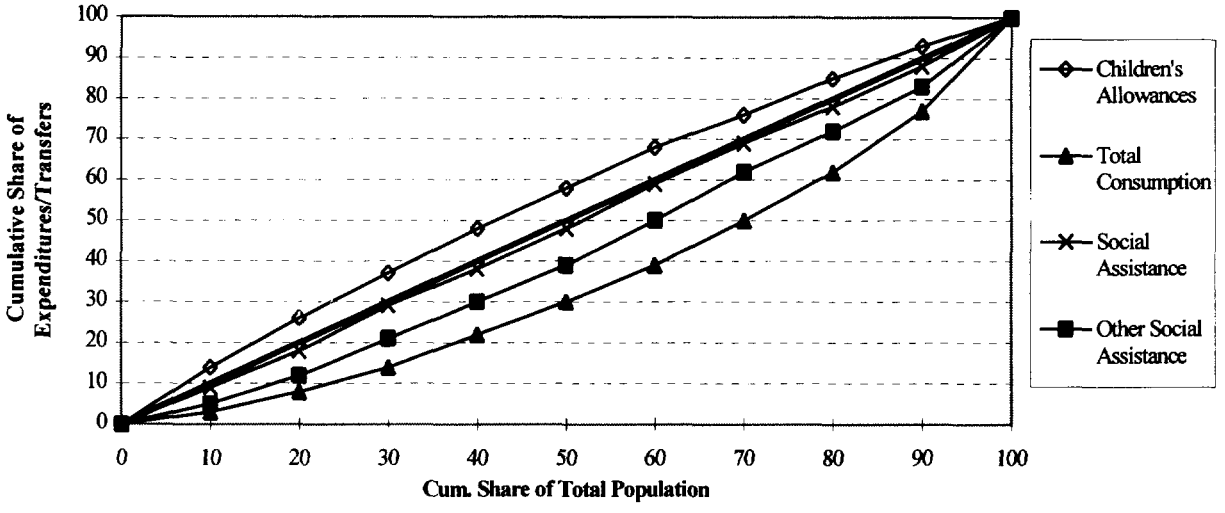
Figure 4.5: Distribution of Transfers



4.30 The amount of average per capita social assistance transfer is much lower, only 300 lei per capita per month and has a rural bias. The poor receive only 250 lei per person each month as compared to over 350 for the highest income group. The average cash assistance for war veterans and their widows (other social assistance) is lower still, amounting to only 200 lei per person per month. The richest income group captures the highest amount of the subsidy (nearly 350 lei per person per month) as compared to only 100 lei for the poorest households. The average in-kind subsidy for energy is 200 lei per capita per month, roughly the same as other social assistance, but with an urban bias. The lowest two income groups receive less than a 100 lei of child allowances while the highest income group receives more than seven times this amount or 700 lei per capita.

4.31 **The Targeting of Cash and In Kind Transfers, 1994** The overall *cash transfer system* (including unemployment benefits) is strongly pro-poor (Figure 4.5). The poor receive a higher proportion of cash transfer as compared to their share in the total population. *In-kind transfers* are strongly non-poor and accrue disproportionately to the better off population. However, not all types of cash transfers are strongly pro-poor (Table 4.1). Although child allowances are strongly pro-poor, social assistance is only weakly pro-poor (Figure 4.6, next page). The poor receive a higher share of transfers relative to their share of consumption, but not according to their share of total population. The distribution of 'other social assistance' is poor. The assistance to war veterans and their widows accrues mainly to higher income groups.

Figure 4.6: Distribution of Transfer by Type



4.32 The progressivity of transfers also varies by rural and urban areas. Public spending on child allowances and social assistance favors higher income urban groups. Children's allowances and social assistance are both strongly pro-poor in rural areas, but both cash transfers are only weakly pro-poor in urban areas (Figure 4.7, next page). *In-kind transfers* are strongly non-poor, both in rural and urban areas (Figure 4.8, next page).

4.33 Despite the overall progressivity of the cash transfer system and its poverty reduction impact, the level of benefits is low. Child allowances, the largest of the cash transfers, averaged 1,220 lei per capita per month in 1994. In addition, better off groups receive a substantial share of cash and in-kind transfers. Specifically, 72 percent of child allowances and 81 percent of social assistance accrue to non-poor households (Table 4.2). Approximately 95 percent of all government subsidies to allay the energy and other costs for the poor accrue to better off households. The Government's efforts to meet basic needs and to reduce the impact of higher energy prices on the poor did not reach the target groups.

Table 4.2: Shares of Total Transfers: Poor and Non-poor

Households	Percent Distribution of:					
	Children's Allowances	Social Assistance	Unemployment Allowance	Total Cash Transfer	In-kind Transfer	No. of Children
Top 20%	15.4	21.7	11.5	15.3	45.6	12.2
Top 40%	32.4	40.9	28.7	33.0	72.5	28.9
Top 60%	52.5	62.1	49.3	53.4	84.2	48.4
Non-poor	72.3	80.8	72.1	74.1	94.9	68.9

Figure 4.7: Distibution of Types of Transfer, Rural vs. Urban

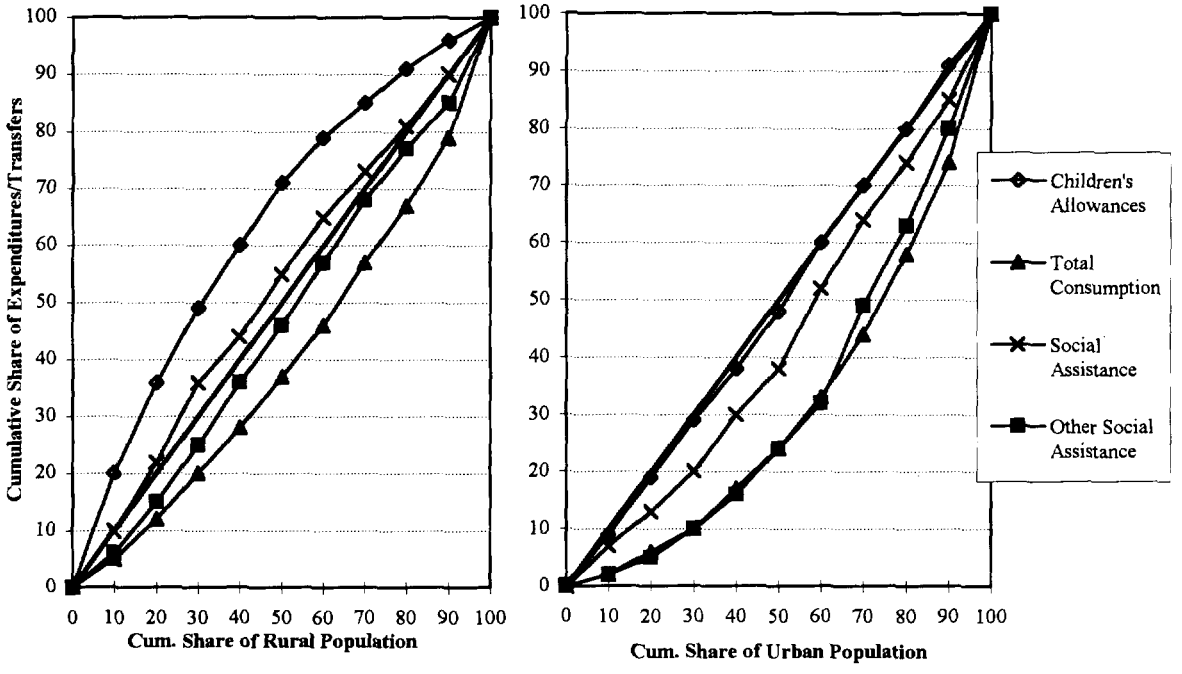


Figure 4.8: Distribution of Transfers, Rural vs. Urban

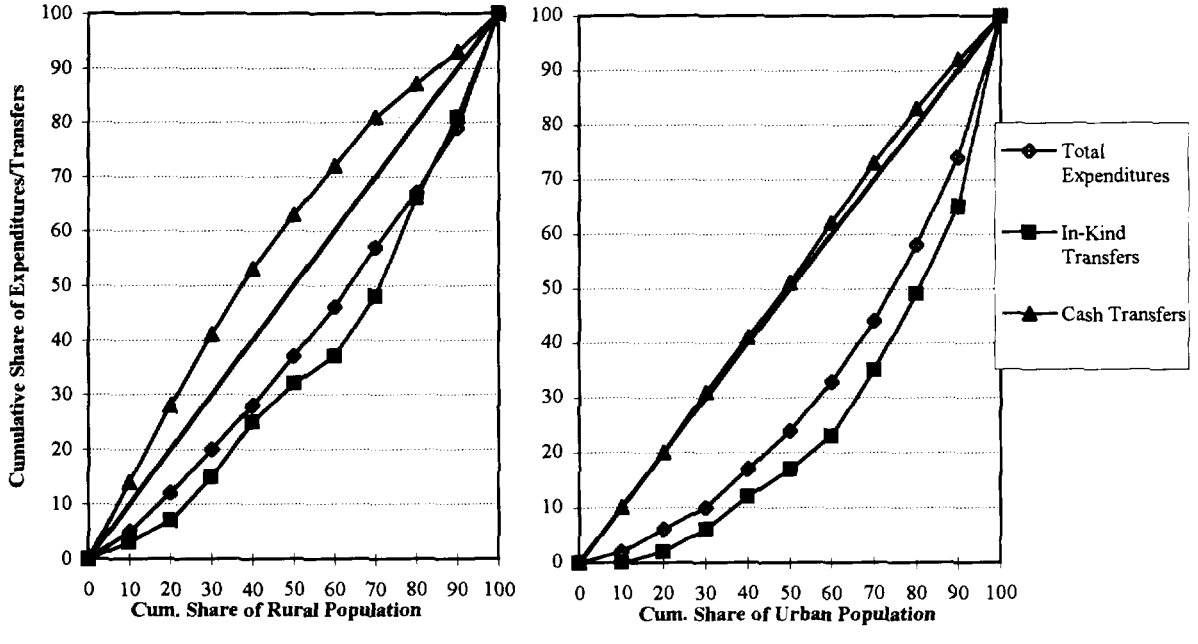


Table 4.3: Child Allowances: Exclusion and Inclusion Errors

	Rural		Urban	
Per Capita Consumption Decile	Households not Receiving Child Allowance as Percent of Eligible Households	Households Receiving Child Allowance as Percent of Ineligible Households	Households not Receiving Child Allowance as Percent of Eligible Households	Households Receiving Child Allowance as Percent of Ineligible Households
1	17.8	1.3	16.8	9.7
2	19.3	1.9	14.2	5.4
3	18.4	3.0	15.2	6.8
4	17.2	2.2	16.8	4.8
5	17.7	3.3	13.1	8.4
6	16.3	1.7	12.7	6.0
7	19.8	1.8	19.0	5.0
8	18.0	1.2	16.9	5.0
9	15.0	2.4	18.5	6.2
10	21.4	1.4	24.5	3.9
Total	18.1	2.0	16.7	5.6

Note: Eligible households are defined as those with one or more children 0-16 years of age.

4.34 The Child Allowance Program (along with unemployment benefits) is the most progressive benefit program in Romania, but a closer look at the child allowance program reveals that these transfers do not reach all eligible households and some 'leak' over to ineligible households. Table 4.3 shows the number of eligible households not receiving child allowances (exclusion errors), and the number of ineligible households receiving this benefit (inclusion errors). The table shows that approximately 18 percent of eligible rural and nearly 17 percent of eligible urban households are not receiving children's allowances. The high proportion of excluded eligible urban households in the high income deciles may be voluntary; richer households may not take up the allowance. Inclusion errors—the proportion of ineligible households receiving child allowances—is fairly low in rural areas, and only somewhat higher in urban Romania.

3.35 The characteristics of eligible households not receiving child allowances raise grave concerns. Nearly 24 percent of these households are poor while nearly 9 percent are ultra-poor, with consumption well below the food poverty line. Nearly 13 percent are female headed, 20 percent have unemployed members and 8 percent of the households have three or more children (Table 4.4, next page). The low take up of child allowances at higher income levels may be voluntary; the small amount of allowance may not compensate for the opportunity costs of time in claiming the benefit for better off households.

4.36 Why might poor households not claim or receive child allowances? The change in benefit delivery to schools and local offices from state enterprises had not been fully affected in 1994. If schools in poorer neighborhoods had greater difficulty applying the new procedures, then poor eligible households may not have received benefits in the survey months. Table 4.4 (next page) shows that a large proportion (63%) of eligible households not receiving benefits have children that are currently enrolled in school. The delivery of child allowances through local offices also was not fully effective, at least in 1994. A significant proportion of eligible excluded (34%) are under school age children who are now eligible to receive child allowances through the local offices.

Table 4.4: Characteristics of Eligible Households Not Receiving Children's Allowances

Percent	All Households	Eligible Households Not Receiving Child Allowances
Poor	16.6	23.7
Ultra-poor	9.6	9.3
Female Headed	22.5	12.6
Rural	48.0	43.4
Head has less than primary education	26.9	17.9
Households with 3 or more children	5.8	8.3
Households with unemployed members	14.1	19.9
Households with children 0-6 years of age	17.5	34.0
Children 7-16 years of age currently enrolled	26.6	62.8
N	24540	1678

4.37 Exclusion errors in the child allowance program may result from a lack of information about new eligibility conditions (open to all families with children and not just state employees). It could also be a result of low enrollment rates of poor children. If low income children have low enrollment rates and distances to local offices are great in rural areas, then poor households are less likely to claim benefits. Multivariate analysis confirms that school enrollment rates are lower for children in rural areas, for poorer households and for those with less educated household heads (Annex 2, Table 35). The stipulation that children be enrolled in school to receive child allowances may not be sufficient inducement for poor children to enroll in school, given the low level of child allowances, especially if the out-of-pocket school expenses and opportunity costs of forgone wages (for secondary school children) are relatively high. But these households are the very groups that would benefit the most from additional income provided by child allowances. The condition that children be enrolled in school to receive benefits may need to be eased for children, especially beyond the compulsory school age.

4.38 **Improving the Targeting of Child Allowances** Can child allowances be targeted more efficiently to the poor? Consider three experiments using child allowances. The first experiment (Simulation I, Figure 4.5) shows that the current child allowance program reduces the incidence, depth and severity of poverty than if there were no such system at all. Specifically, the incidence of poverty is reduced by 7 percentage points in rural areas and slightly over 5 percentage points in urban areas. The second experiement

Table 4.5: Effect of Child Allowance Transfers on Gini and Poverty Ratios - Actual & Simulation

	Current (With Transfers Per Child)	Simulation I (No Transfer System)	Simulation II (Child Allowances Per Family)
Rural			
- Gini	0.31	0.34	0.35
- % Poor	27.9	34.40	27.0
- Poverty Gap Index	7.2	10.8	8.6
- Poverty Severity Index	2.8	5.2	4.3
Urban			
- Gini	0.28	0.31	0.30
- % Poor	15.6	20.8	15.1
- Poverty Gap Index	3.9	6.5	3.9
- Poverty Severity Index	1.5	3.4	1.5

Table 4.6: The Effect of Redistributing Child Allowances and Social Assistance from Rich to Poor

	Current Allocation	Redistribute top 20% to bottom 20%		Redistribute top 40% to bottom 20%	
		Children's Allowance	Social Assistance	Children's Allowance	Social Assistance
Rural					
- Gini	0.31	0.33	0.34	0.33	0.33
- HC Ratio % Poor	27.9	24.5	24.8	21.6	24.3
- Poverty Gap Index	7.2	7.3	7.4	6.2	7.1
- Poverty Severity Index	2.8	3.4	3.6	2.9	3.4
Urban					
- Gini	0.28	0.29	0.29	0.29	0.29
- HC Ratio % Poor	15.6	13.9	13.9	13.4	13.9
- Poverty Gap Index	3.9	3.0	3.1	2.4	3.0
- Poverty Severity Index	1.5	0.9	1.0	0.7	1.0

NOTE: Percentage of children in distributions based on number of children

(Simulation II, Table 4.5, previous page) compares the existing program with one that simply redistributes the existing budget on child allowances equally to all households (with or without) children. Table 4.5 compares the impact of this change on the distribution of consumption and the incidence, depth and severity of poverty. It shows that the current child allowance scheme reduces the number of poor in the population, as well as the depth and severity of poverty compared to a lump sum transfer scheme that gives the same transfer to all households irrespective of the number of children. Thus, allotting equal benefits per child used by the current system is more efficient than a simple lump sum transfer to all households.[19]

4.39 In the third experiment (Table 4.6), child allowances are no longer universal. Instead, child benefits are denied to the top 20 percent of households and the resources so saved are redistributed to the bottom 20 percent in accordance with the number of children in the household, irrespective of whether they are located in urban or rural areas. The bottom 20 percent now receive a larger absolute transfer per child. The third experiment repeats the second, but with children's allowances being denied to the top 40 percent of eligible households. Table 4.6 shows that the poverty reduction from denying child allowances to the top 40 percent of the households (as opposed to only the top 20 percent) is quite substantial, particularly in rural areas. The incidence of poverty falls by 6 percentage points. The gains to the poor in urban areas are minimal: the redistribution is essentially occurring from the urban non-poor to the rural poor.

4.40 There is one caveat. Our estimates do not include any incremental administrative costs of means testing benefits. These costs may well be substantial and could sharply reduce the gains from re-targeting existing benefits to the poor. Thus, any attempts to re-target benefits should only be attempted after a careful assessment of the incremental administrative costs of means testing benefits (given the recently legislated means tested program is already conducting a means test--see below) and a careful consideration of indicator based targeting (for example, the number of children or geographic areas) and other selection mechanisms to target child allowances more effectively to the poorest groups.

[19] All three tests keep the current spending on child allowances fixed and assume that child allowances delivery systems are strengthened so that only all eligible households receive benefits.

4.41 **Improving the Targeting of Discretionary Social Assistance and In-Kind Transfers** Why are social assistance benefits only weakly pro-poor? In 1994, many benefits of the discretionary social assistance program were granted irrespective of income and without regard to the eligibility of individuals for other benefits. For example, all income groups and recipients of child allowances were also eligible for benefits to mothers with three children. Some programs such as canteen meals were located only in urban areas and many poor eligible households (sick, elderly) found it difficult to avail benefits. The localized administration of benefits also resulted in a wide variation of eligibility criteria across localities. The distribution channels for the many types of benefits were confusing. Individuals had to go to different locations to apply for and receive different benefits. The lack of funds for all eligible groups meant that information about eligibility conditions were not publicized widely. Many eligible families did not have information about the programs and these were likely the poorest groups.[20]

4.42 The discretionary social assistance and in-kind transfer program has changed considerably since 1994. The low levels of benefits provided by these two programs and their low targeting efficiency has been one reason for the institution of the new means tested social assistance program. The new program will provide an adequate protection to all poor regardless of their characteristics (see below), reducing the need for many of the benefits provided by discretionary social assistance and in-kind transfers. The scope of the discretionary social assistance program has therefore been considerably reduced and in-kind transfers, the most regressive transfers of all, have been discontinued.

4.43 The discretionary social assistance program will now provide a reduced number of benefits: birth indemnities, canteen meals, assistance to widows of war veterans, cash benefits for the handicapped, occasional benefits for families in crisis, and a foster family allowance. Benefits to mothers with more than three children, social assistance pensions, and support allowances to the long-term unemployed are being phased out. Efforts are also being made to strengthen and consolidate the delivery mechanisms of the discretionary assistance program. For example, meals for frail elderly unable to leave their homes will be delivered at home. The link between benefits and income is being tightened. Non-poor elderly will also receive meals in canteens but will pay for these meals on a sliding income scale. The government is also taking steps to improve the dissemination of information about program eligibility conditions to ensure that all eligible individuals can apply for benefits.

4.44 These changes should improve the efficiency of the discretionary social assistance program. Simulations show that a better targeting of these transfers (at 1994 levels of expenditure) will reduce poverty. The much smaller amount spent on discretionary assistance means that the gains in poverty reductions are not as great as for child allowances (Table 4.3).

4.45 **The Recently Legislated Means Tested Social Assistance Program.** The Government adopted a means tested social assistance program in June 1995. The proposed program would guarantee a minimum income of 45,000 lei per month to single person families, with the level of guaranteed income per capita decreasing for larger families to incorporate economies of scale associated with a larger family size.[21] The new program was instituted to provide a minimum subsistence level of benefits and universal coverage to all poor in the country. In order to encourage individuals to work, the guaranteed minimum income is increased by 5,000 lei for each working member of a family who supplies evidence of wage or self-employment. The level of transfer to each family would then be the difference between each family's income and the guaranteed minimum income for that family.

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[20] Government of Romania. Social Assistance White Paper.

[21] The schedule for the Minimum Income Guarantee is as follows: 45,000 lei (single person family), 81,000 lei (two person), 113,000 (three-person), 142,000 (four person), 169,000 lei (five person), and 25,000 lei per person for five person families.

Table 4.7: Benefit Cost of the Proposed Minimum Income Guarantee Scheme

Household Size	Number of Households	Eligible Households		Expenditures	
		Protected	Not Protected	Protected	Not Protected
1	4665	1224	1217	22,530,377	22,203,170
2	6344	1084	1073	32,123,547	31,559,634
3	5068	886	839	40,289,505	37,524,131
4	4569	929	838	53,984,704	47,386,670
5+	3712	1218	1130	108,520,195	92,656,765
Total	24358	5341	5097	257,448,328	231,330,370
Per capita cost of transfer per annum:				52,296	45,915
Total cost income (in billion lei)*:				1,202.8	1,056.0
As percent of GDP (1994):				2.6	2.3
As percent of budget expenditure (1994):				6.8	5.9
As percent of budget deficit (1994):				62.1	54.5

Children's Allowances are protected (included) while calculating current net income.
Children's allowances are not protected (excluded) from current net income.
*Does not include administrative and incentive costs of program

4.46 The main advantage of this program is that it would provide a safety net for individuals who currently fall through the cracks in the existing system and increase the level of cash benefits received by the poorest households. The level of guaranteed minimum income is almost identical to the poverty line used in this report. Therefore, if perfectly targeted, and if all individuals claim benefits (a very unlikely scenario), the program will almost completely eliminate poverty in the country. However, several issues need to be considered in order that the program can effectively and efficiently reduce poverty in the country.

4.47 First, the social assistance minimum should be established as some proportion of the poverty line. The proportion should reflect the fiscal resources available to the government. However, the minimum should be adjusted periodically for inflation in order to ensure that the poorest groups do not realize an absolute deterioration in benefits

4.48 Second, the costs of the program may be higher than expected. The costs of program benefits (if child allowances are protected (or excluded) when calculating household income for the means test) are approximately 2.6 percent of GDP, and approximately 6 percent of total government expenditure (in 1994) (Table 4.7). This level of expenditure would roughly restore the expenditures on public transfers to their 1991 level (Annex 2, Table 37). Program costs would be lower if child allowances are included in household income used for the means tes. The benefit costs of the program would then decline to 2.3 percent of GDP. There is a caveat. These simulated costs exclude administrative costs and incentive costs of means testing which may well be substantial. It may be very difficult and therefore costly to monitor income in a transition economy where income sources are changing rapidly over time, where tax systems are not sophisticated and where information networks at the Government's disposal are poor and undeveloped at best.

4.49 Third, this scheme, like most social benefit packages, is likely to have adverse incentive effects. The proposed system would impose a 100 percent tax on individuals within the system for accepting jobs with wages (or reporting self-employment income) from 5,000 lei up till the level of the minimum guaranteed income.[22] If the minimum wage were enforced in Romania then individuals who worked would, by definition, receive wages above the minimum. This problem is all the more acute because actual wages can be well below 'institutional' minimum wages in Romania.[23] Many individuals in the program might earn benefits greater than the wages of the employed individuals, posing a serious disincentive to work and to move out of the system. As currently configured, the system also provides disincentives to work for single person households who are earning just above 50,000 lei. If these individuals value leisure (at least 5,000 lei) they could stop working altogether and still claim 45,000 lei. This is particularly important for low skilled workers that often lose as much in benefits as they gain in wages. Women (particularly single) with under school age children are most often caught in this trap as the net gain in income does not make up for increase in day care costs of young children.

4.50 Fourth, the absence of work incentives in the social assistance program is a very serious potential problem and could create a permanent group of poor. There are several options that might be considered to minimize this 'welfare' trap. Benefits could be reduced but less than one to one (on a sliding scale) to encourage participation in the labor force. Thus, benefits could be phased out after a particular period of time, say two years, or benefits could be made contingent on actively seeking work or participation in community or other public works. In addition, the social assistance minimum should be well below minimum unemployment benefits and this should in turn be set well below minimum wages.

4.51 Fifth, even the best means tested scheme may not reach some vulnerable eligible groups. Some households (e.g. elderly sick individuals, female headed households with small children living some distance from social assistance offices in rural areas) may not have information about the program or could have difficulty in filing claims, a result of weak delivery/client identification/information systems. The scheme should be monitored carefully to ensure that it is reaching the most vulnerable group of poor identified in the previous chapter. It is particularly worrisome that the child allowance payments, considered one of the easiest benefits to target, are not reaching eligible poor households and that discretionary social assistance programs have not been successfully targeted to the poor. The delivery of means tested social assistance benefits to the eligible poor may be harder still.

4.52 Finally, the entire system should be reevaluated once the means tested social assistance is fully operational and its effectiveness and costs are better known. The Government has already made important strides in consolidating and eliminating many benefits that were being replicated by the new program. But, the costs of the new scheme may make the provisions of a universal child allowance program costly, for example. In this case, child allowances might be targeted only to the poorest groups through a means test or by indicator based targeting (restricting eligibility to households with a larger number of children or eliminating eligibility of two earner households with one child) with attention to the caveat given above. Any changes must await information regarding the costs and effectiveness of the existing program. In the meantime, efforts should be to strengthen the delivery systems of child allowances and discretionary social assitance.

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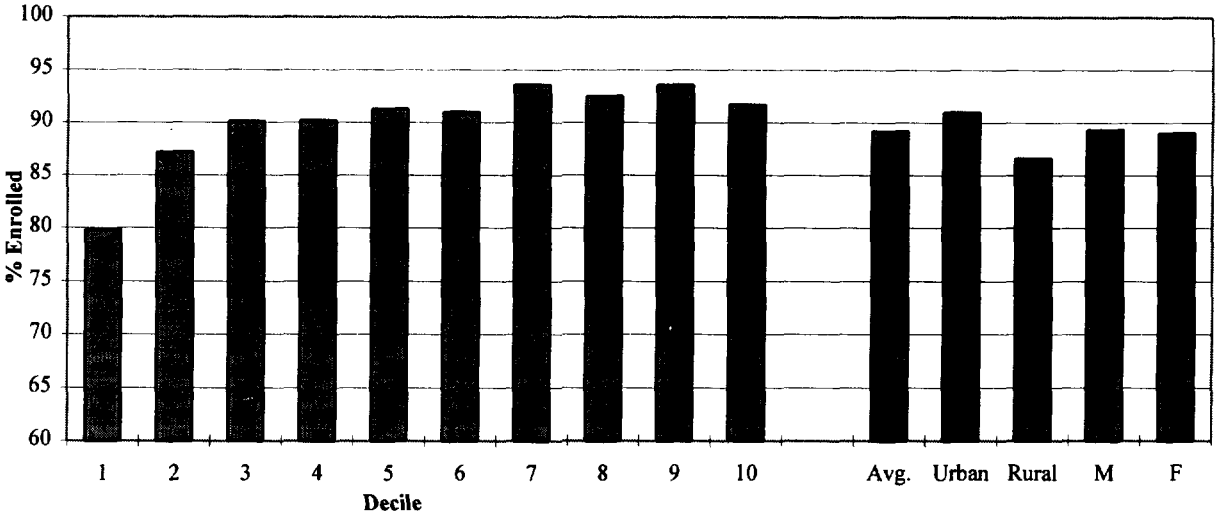
[22] Consider a single individual who does not work. She earns 45,000 lei in social benefits. If she starts to work and makes say, 1,000 lei she will earn 49,000 in benefits as the minimum income guarantee goes up to 50,000 once a person is employed. The increase in income continues until the individual earns 5000 lei. However, between 5,000 lei and 50,000 lei however, individuals lose benefits one to one with an increase in income and they lose any incentive to work. Consider a working individual with an income of 5,000, this individual receives 45,000 in benefits so that she receives a total income of 50,000 income. However workers with income of 45,000 also have a total income of 50,000 because they receive 5,000 in social assistance benefits. Thus, there is no incentive for individuals to have an income greater than 5,000 lei.

[23] E&O, Ibid.

Figure 4.9: Enrollment Rates, Primary Education



Public Investment in Education and Health

4.53 **Education** Basic education, grades 1-8 (ages 6/7-14 years), is compulsory in Romania. Secondary level schooling is diversified, comprising four year academic high schools (general secondary), technical high schools offering four year day and five year evening programs, and two and three year vocational schools attached to enterprises and vocational programs attached to cooperatives. Higher education is offered through 48 public universities, polytechnics and institutes, as well as an estimated 66 private universities that have sprung up since 1989.

Figure 4.10a: Enrollment Rates, Secondary Education

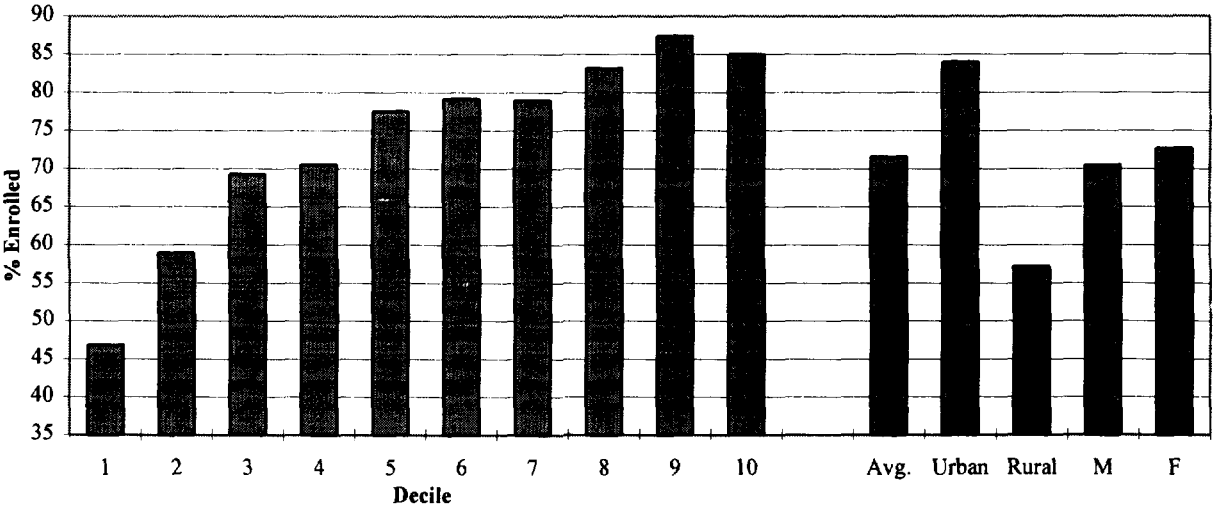
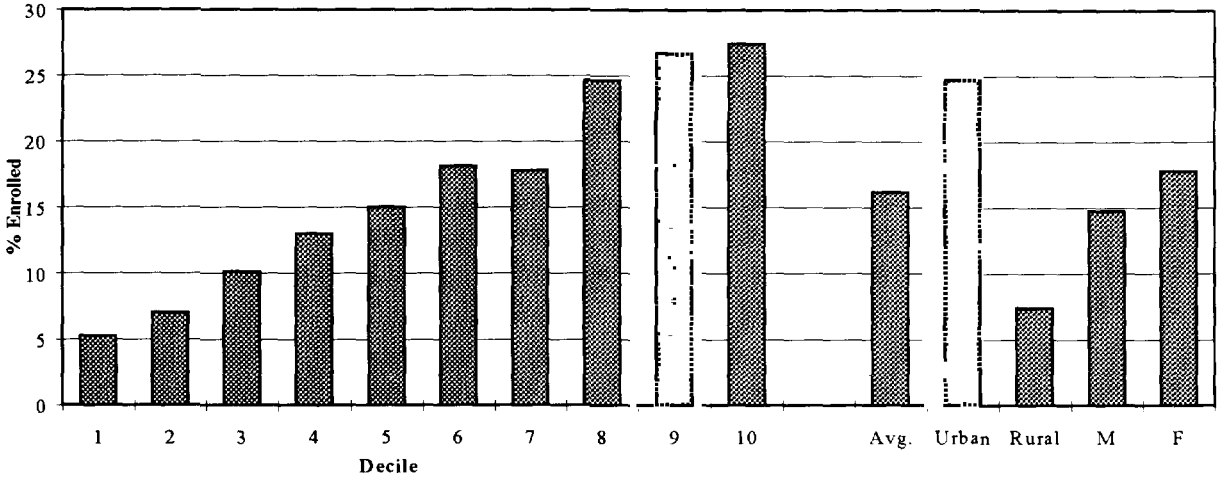


Figure 4.10b: Enrollment Rates, Tertiary Education



lower and perhaps reflects the historically elitist (but now changing) higher education policies in Romania. Only a little over 15 percent of the 19-25 year olds report being enrolled in tertiary education (Figure 4.10b).

4.55 The low enrollment rate in secondary school should be seen in historical context. The gross enrollment rate in secondary education was higher than 100 percent in 1989 and has declined precipitously since that year. In 1989, the gross enrollment rate was highest in technical and vocational training programs because of Government policy placing students in specialist programs to prepare them for particular occupations. The sharp decline in the secondary school enrollment rate reflects a marked shift out of traditional vocational and training programs, a natural student response to the easing of restrictions on forced participation in narrowly focused vocational and technical schools that were not adapted to the emerging labor market conditions. The increasing private direct cost of higher education, coupled with the decline in the average income of households, also served to reduce enrollment rates in secondary education. The declining trend in secondary education enrollment rates also reflects a reduction in the required period of compulsory education from 10 years to 8 years. In contrast, the enrollments in general secondary programs increased over the transition. This trend can be attributed, in part, to the increased relevance and, therefore, to an increased demand for general education. It also reflects Government policies to convert many vocational, technical schools to academic, or general education schools. [25]

4.56 There are considerable differences between rural and urban enrollment rates. Enrollment rates are higher in urban areas for all levels of education. The enrollment gap between rural and urban areas is least marked for children of basic education age, indicating the success to which Government has been able to provide basic education in the country. In secondary education, the gap widens. Only 55 percent of rural children of secondary school age are enrolled in school as compared to almost 85 percent of secondary school age urban children. The enrollment gap is widest in tertiary education. The average enrollment rate in rural areas of tertiary age children (19-23 years) is only 7 percent as compared to a remarkably higher 25 percent in urban areas. The lower enrollment rate in rural areas reflects the higher direct costs of education in rural areas. Secondary schools are located mainly in urban areas and the private costs of education (as % of income) are likely to be higher for the poorer rural regions. The opportunity costs of

[25] Gross and net enrollments, and dropout rates are possible to obtain from Ministry of Education data for all Romania. However, it would not be possible to link the national data to household income, needed to find the link between enrollment and poverty.(Education Paper, SCT, EC1/2HR) In any case, the age-specific enrollment rates obtained from the IHS correspond closely to the gross enrollment rates obtained from national data (MOE): 95 percent for basic education, 66 percent for secondary education, and 19 percent for higher secondary education. The SCT Education Paper also catelogues the changes in enrollments in Romania over the first few years of the transition by level of education.

education to rural households (in terms of foregone wages) also likely reduces enrollment in rural relative to urban areas. More positively, the enrollment rates of males and females are not significantly different in Romania. In fact, the enrollment rate for females is actually higher than for males in secondary and tertiary education.

4.57 Enrollment rates also differ by level of income, particularly at higher levels of education. The differences in enrollment rates by income groups are the most marked for tertiary education. Only 5 percent of the lowest income group is enrolled in tertiary education as compared to over 25 percent to the top income groups. The gap in the enrollment rate narrows for secondary school age children and is the least marked for children of basic education, reflecting the compulsory education for this age group. Once again this reflects the higher opportunity costs and direct costs of education for the poor, particularly at the higher levels of education. where such costs are higher.

4.58 What explains low enrollment rates of the poor? The low enrollment rates of the poor in secondary and primary school age raise significant concerns. Studies generally attribute low enrollment rates of the poor to high out-of-pocket fees (clothes, stationery, etc.), distance to school, and opportunity costs of forgone wages. The lower chances of being enrolled in rural areas (controlling for income and other characteristics), particularly in secondary education indicates that opportunity costs of work forgone is higher for poor rural households. In fact, 12 percent of individuals aged 14-19 report being self-employed in agriculture (Annex 2, Table 48).

4.59 In Romania, as in other countries, a low educational attainment of the household head also reduces the likelihood of being enrolled. This often signifies the lack of importance attached to education by parents with less education and could be a particular problem among Gypsy households. Aside from demand problems, low enrollment rates among the poor could result from a lack of adequate facilities and low quality of education in poorer areas. There is evidence from Romanian studies that schools (mostly primary, but also secondary) in poor rural and urban areas are less well maintained and have very poor infrastructure. Some schools have been completely evacuated because of this damage. Thus, children in remote areas have difficulty in travelling to nearby schools. Access roads are rudimentary particularly in bad weather, and the closest school can be 5 km away. The lack of space and crowding in these and adjacent schools has increased the number of shifts beyond the recommended number to accommodate local demand, reducing learning time and the quality of education. The Ministry of Education officials in Vaslui, one of the poorest counties, estimated that nearly 10% of eligible children are not able to attend schools because of a lack of availability of schools in their area.

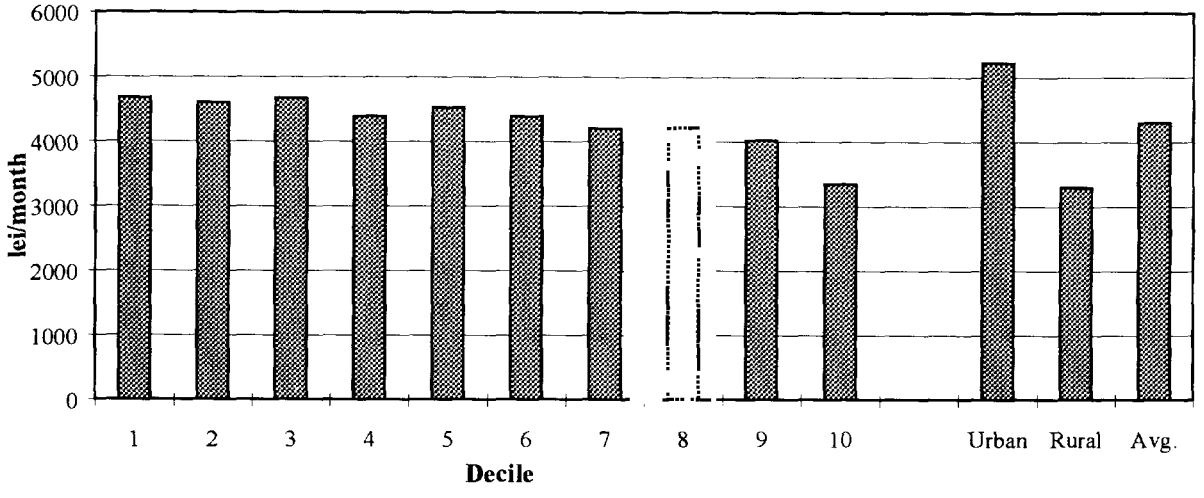
4.60 **Per Capita Spending on Education** In 1994, the Government spent nearly 3.4 percent of GDP on education. The public education system is almost completely funded by the Government. Therefore, the spending per student is simply the total recurrent expenditure on education divided by the number of students enrolled in school. The incidence of public spending on education[26] is derived by multiplying enrollments per capita in each decile by the average spending per student (age-specific enrollment rates are used to proxy gross enrollment rates not available in the data).[27]

4.61 The average per person spending on education is 4,300 lei per month (Figure 4.11, next page) and it is higher for lower income groups. The pro-poor bias of education spending reflects the priority assigned by the Government to basic education. Nearly half of the Government's education expenditures

[26] Enrollment rates cannot be disaggregated into enrollment in public and private education institutions. Therefore subsidies on education, particularly at the higher level (where the highest enrollments in private sector are concentrated) are likely to be overestimated.

[27] This method keeps spending per student constant at each level of education. It does not capture differences in spending levels in poorer areas, and therefore it tends to overestimate spending on the poor.

Figure 4.11: Education Spending Per Capita



are allocated to basic education (see Figure 4.19, page 66). Not surprisingly, the Government spends the most per person on basic rather than secondary and tertiary education (Figure 4.12, next page).

4.62 There is a pro-urban bias to the education system, however. The Governments spends overall less per person on rural than urban households and spends less at each level of the education system (Figure 4.11). The greatest gap in per person education spending between urban and rural households is at the tertiary education level. The gap narrows at the secondary school level and is least wide in basic education. However, even here, rural households receive only 70 percent of the per capita spending on urban areas.

4.63 Government spending on education is biased towards the poor. The government spends more on the education of poor individuals as compared to better off groups. This result does not hold for all levels of education, however. The level of per person spending on basic education is higher for the poor than the better off, but spending on secondary school education is fairly constant across income groups. In contrast, there is a large gap in per capita spending between rich and poor at the level of tertiary education. Figure 4.12 shows that the poor only obtain 22 percent of the total per capita tertiary education spending received by the top income group.

4.64 These incidence patterns reflect differences in the proportion of children enrolled in total school age population and the proportion of school age children in the total population of each decile (Annex 2, Table 65). Enrollment rates increase with income at each level of education, but the share of school age population in the total population declines with income for all three levels of education. In primary education, and for all education categories taken together, the decline in school age population overwhelms the increase in enrollment rates for higher income groups so that the per capita spending on education tapers off as income rises. In contrast, the per capita spending on secondary school education is roughly the same across income groups because increases in the enrollment rate at higher income levels just compensate for the decline in school age population for higher income groups. The increase in the enrollment rate for tertiary education at higher income levels far overwhelms declines in tertiary school age population for high income groups, explaining the sharp increase in per capita tertiary education spending with income.

Figure 4.12: Per Capita Education Investment by Education Level

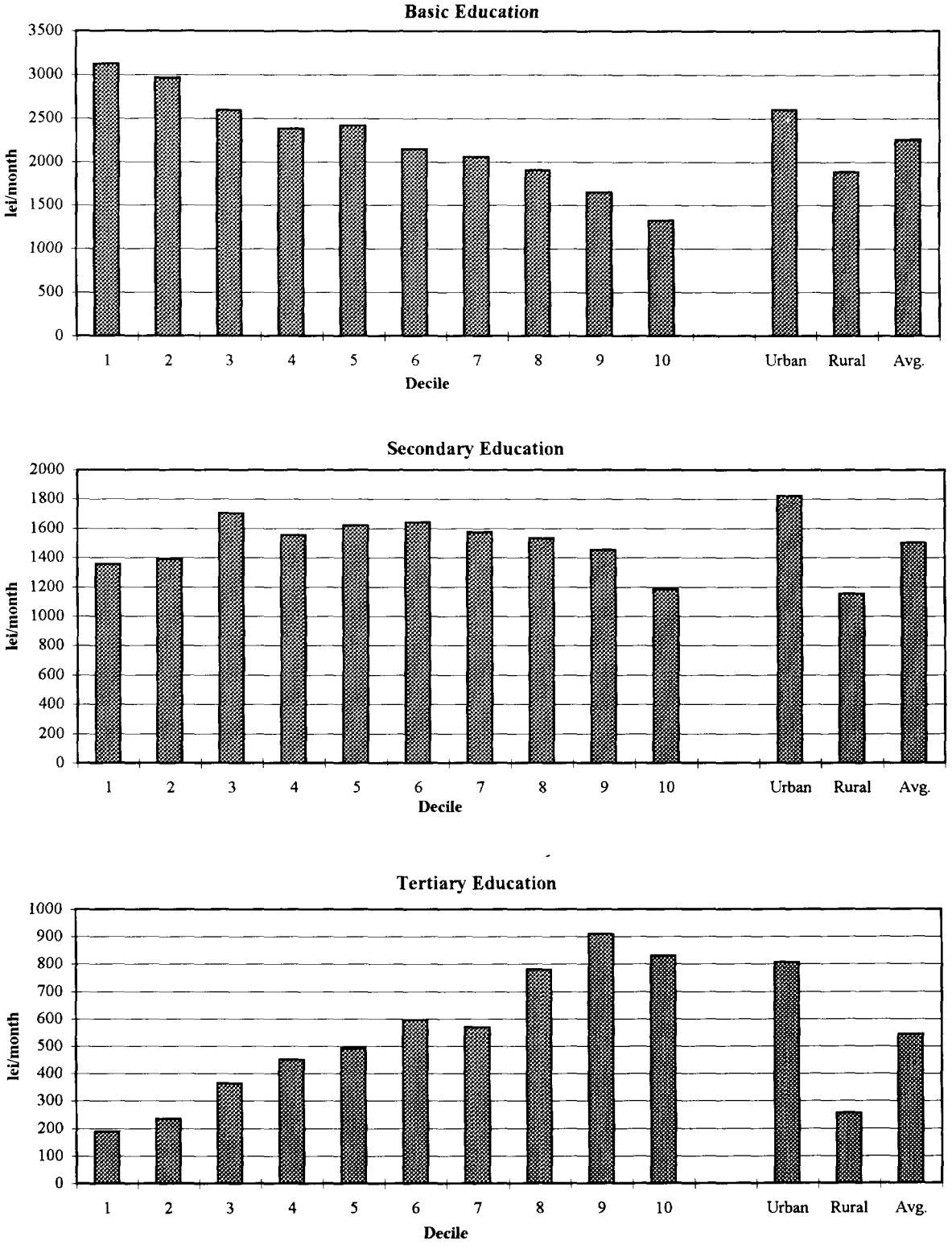
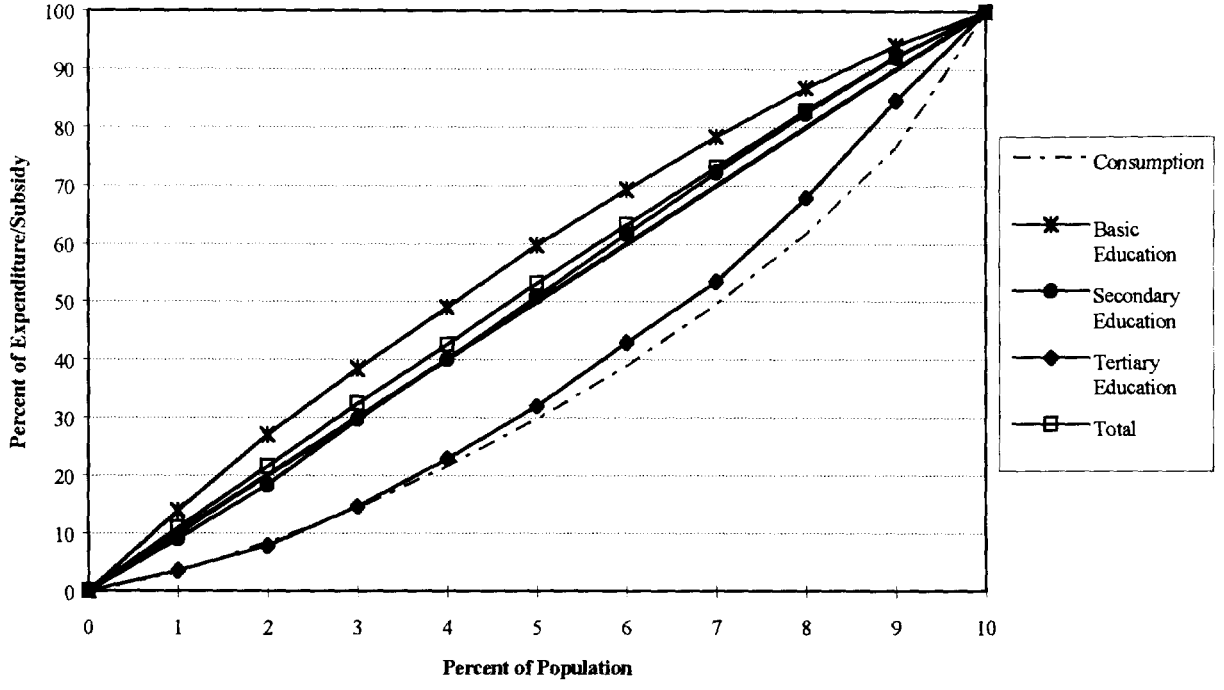


Figure 4.13: Distribution of Education Spending by Level of Education



4.65 **Targeting of Education Spending** The overall spending for education is strongly pro-poor. The poor receive a larger share of the public spending on education than their share of total population. In large part, this is driven by the large share of spending on basic education that is strongly pro-poor. Spending on secondary education is distribution neutral. The share of secondary education received by the poor is roughly the same as their share of total population. In contrast, the tertiary education spending is only weakly non-poor. The poor receive a smaller share of total government spending on post-secondary and higher education than their share in total population (Figure 4.13).

4.66 **Improving the Targeting of Education Spending** Can public expenditure on education be better targeted to the poor? A major objective of public spending on education is to improve the education levels of the poorest groups. The high incidence of poverty among less educated individuals and the lower enrollments rates of children from poor households indicate a considerable scope for investing in education to alleviate poverty.

4.67 Investment in education of the poor would help alleviate long-term poverty by removing one of the main causes of poverty in the country. Multivariate analysis confirms that returns to education are high in Romania. The returns to completing each additional level of education (as compared to primary or less) are higher in rural than urban areas. Thus, investment in education (particularly in rural areas) should reduce poverty overall and also lower regional income (rural/urban, inter-judet) disparities in the country. The exact type of investment in education (infrastructure, loans or scholarships for the poor to cover out of pocket costs, for example) should be guided by the precise reasons for low enrollment rates in Romania. Some of these were discussed in the preceding section, but a more in depth analysis of low enrollment rates should be the focus of further investigation. Finally, investments in tertiary education could be made pro-poor through increased cost recovery at the tertiary level. Poor students could be protected from the cost increases by merit and need-based scholarships.

Table 4.8: Health Indicators, 1994

Country	Infant Mortality Rate	Maternal Mortality Ratio	Average Life Expenctancy at Brith
Romania	23.9	60.4	69.5
CEE Average	14.4	20.9	71.1
EU Average	7.8	6.7	76.9

4.68 **Health** Health outcomes in Romania are amongst the lowest in Eastern Europe. Table 4.8 shows key health indicators for Romania compared to averages for Central and Eastern Europe and the European Union[28]. There is growing evidence that the rural poor and less educated individuals have the lowest health outcomes in the country. Where do poor households receive health care? The health system in Romania is universal in coverage and almost entirely publicly financed and provided. Patients typically enter the health care system through dispensaries, the primary health care facilities in Romania. Dispensaries are mainly located in villages and towns and staffed with at least one doctor and auxiliary staff. The primary functions of the dispensary include: initial diagnosis and screening, primary treatment, prenatal care, growth monitoring, care of newborns and infants, some disease prevention, home care and follow up visits after hospitalization. Health problems that cannot be solved by the dispensary are referred to polyclinics. Polyclinics are mainly located in cities and generally staffed with specialists. The most complicated cases are referred to the district hospital or to teaching and other very specialized national hospitals.

4.69 The majority of the poor receive health care from dispensaries. The proportion of poor seeking care from dispensaries is higher in rural than urban areas--not surprising given that dispensaries are generally located in villages and small towns (Figure 4.14, next page).[29] However, as households get richer, they circumvent the primary health care system and go directly to polyclinics and hospitals. In rural areas, the substitution is towards hospitals while urban households tend to substitute towards polyclinics. In large part, the increased utilization of a higher level of care reflects the inadequacies in the primary health care system. Many dispensaries have poor infrastructure and are both ill-equipped and under-staffed.[30] In fact, as households get richer, they by-pass the public health system all together and seek care from private providers, an expression of choice based on perceived quality, willingness and ability to pay for services.

4.70 **Health Spending Per Capita** The Government spent 3.6 percent of GDP on the health system in 1994. The largest share of the health budget (86%) is spent on personal health care. Of this, approximately 60 percent is spent on hospitals and polyclinics. The remainder is spent on dispensaries. The incidence of public spending on health can be estimated by a comparison of the level of spending per capita accruing to different income groups. Health spending per capita for each level of healthcare is derived by multiplying the number of visits per capita in each decile by the average expenditure per visit.[31]

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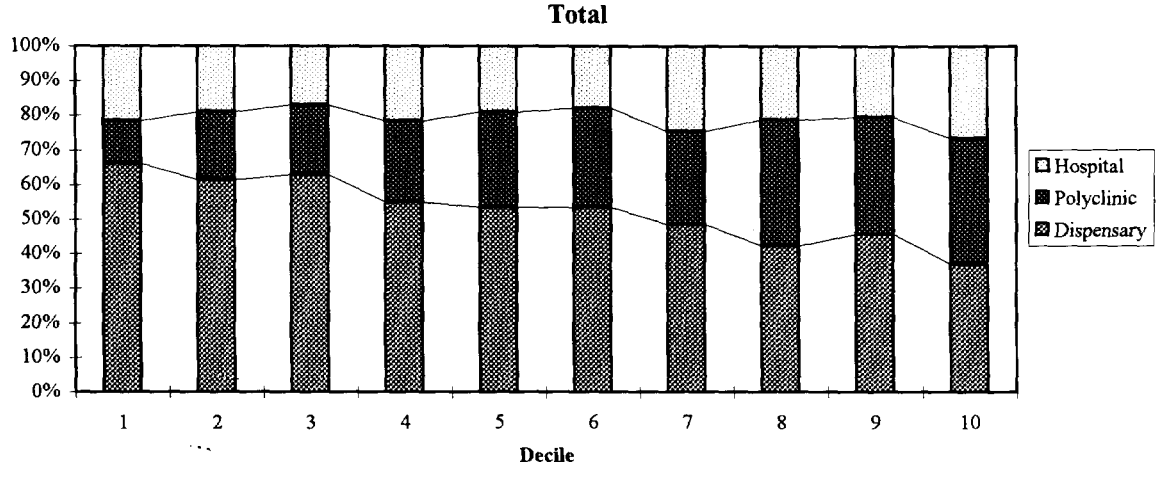
[28] These indicators, measured for 1994, reflect a pattern of overall short-term declines in health status in CEE during the transition, particularly for adult males.

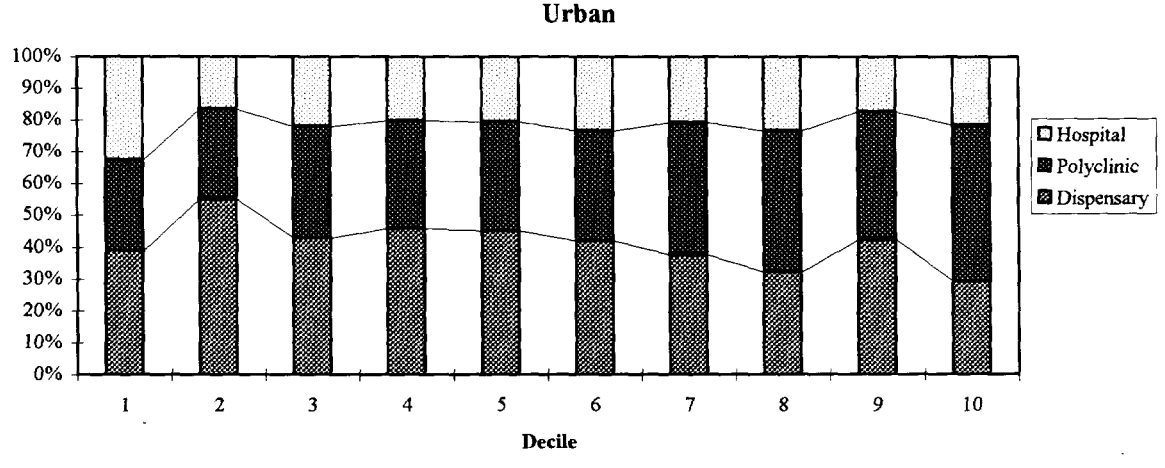
[29] The results in this section should be interpreted with care as very few individuals report utilization of health services in the data set.

[30] Romania: Human Resources and the Transition to a Market Economy, World Bank, 1992.

[31] The magnitude of the per capita health spending should be interpreted with care. The survey response to the health module was very low. In addition, the number of visits were not available for the national data. These were derived by applying the proportion of visits to each type of health facility given by the sample to the total population. Thus, errors in sample visits would carry over to national estimates. The amount spent on dispensaries is maintained as the same proportion of total personal health spending as in 1990. A disaggregation of government spending between polyclininc and dispensaries is not available. Therefore, we have distributed health care expenditures between polyclinics (40%) and hospitals (60%). Polyclinic (hospital) spending will be overestimated if expenditures on polyclinics (hospitals) are lower (higher) than assumed. The absolute level of spending across hospital and polyclinics is sensitive to this assumption. For example, changing the share to 50-50 increases the average per capita spending on polyclinics to 1,560 lei per month (from 1,260) and reduces the average per capita spending on hospitals to 4377 lei per month (from 4,690). The relative level of spending across levels of health care is also sensitive to this assumption --but the distribution of spending across income groups is not.

Figure 4.14: Of Those Sick, Percent Seeking Care from Public Providers





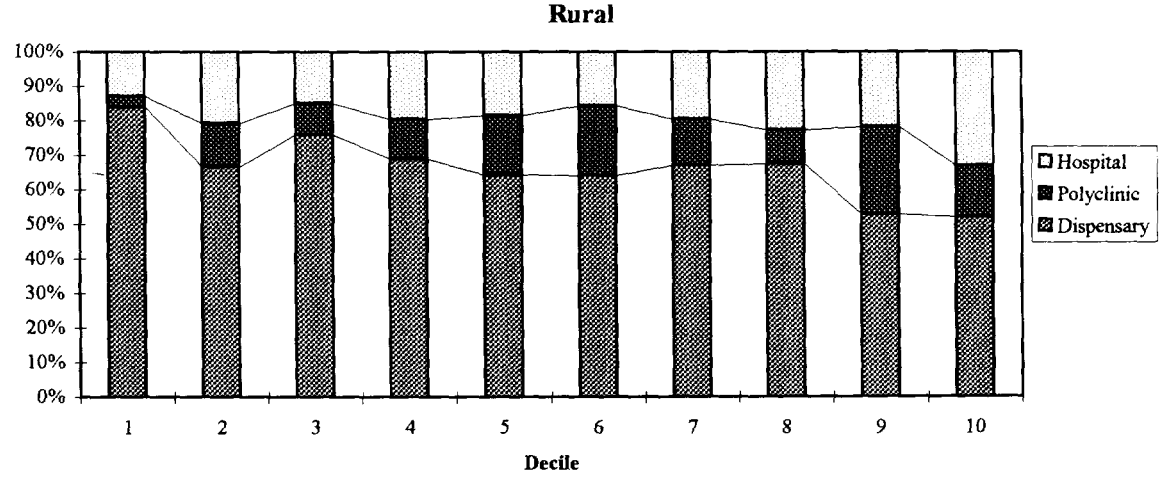
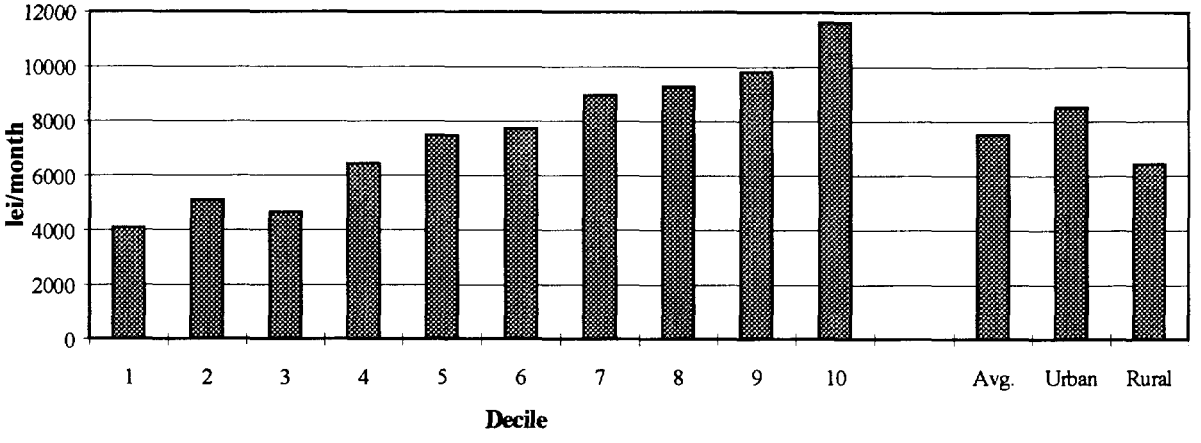


Figure 4.15: Health Spending Per Capita



4.71 In 1994, the per person spending on health averaged nearly 8,000 lei per month, far higher than the per capita spending for education (Figure 4.15). Overall, health spending per capita is larger for better off individuals, rising from 4,000 lei per month for the first decile to nearly 12,000 lei per month for the highest income group. Looking across the levels of healthcare, the average per capita spending is the highest (nearly 4,500 lei per month) for hospitals, followed by polyclinics and dispensaries (Figure 4.16, next page).

4.72 As in education, per capita health spending is more biased towards urban areas (Figure 4.15). However, this varies by level of health care. Rural areas receive a higher level of per capita spending on primary health care than urban centers, indicating a greater use (and closer of location) of dispensaries in rural areas. In contrast, a higher level of spending per person on polyclinics for urban areas reflects the easier access of urban residents to polyclinics. The difference in hospital spending per person is not significantly different across rural and urban areas. Rural as well urban households use hospitals to circumvent the lower levels of the health care system. The greater use of hospitals by the poor coupled with the greater distance to urban hospitals for these groups may also explain a higher ratio of work days lost per sick day for rural than urban poor households.

4.73 Comparing health spending per person by income levels, the poor receive only a third of the total spending received by the top decile. This gap in per capita spending received by the richest and poorest groups is most marked at the level of hospital investment, reflecting the large share of public spending on hospitals and the high utilization rate of hospitals by higher income groups. The gap in per capita spending across income groups narrows for polyclinics and is least wide for dispensaries. As a result, 80 percent of the total per person governement spending on the health care of the better off is delivered through hospitals. The remaining 20 percent is channeled through polyclinics. The bulk of government per capita spending on the poorest group (60%) is also delivered through hospitals; the remainder is distributed through dispensaries.

Figure 4.16: Per Capita Health Investment by Level of Healthcare

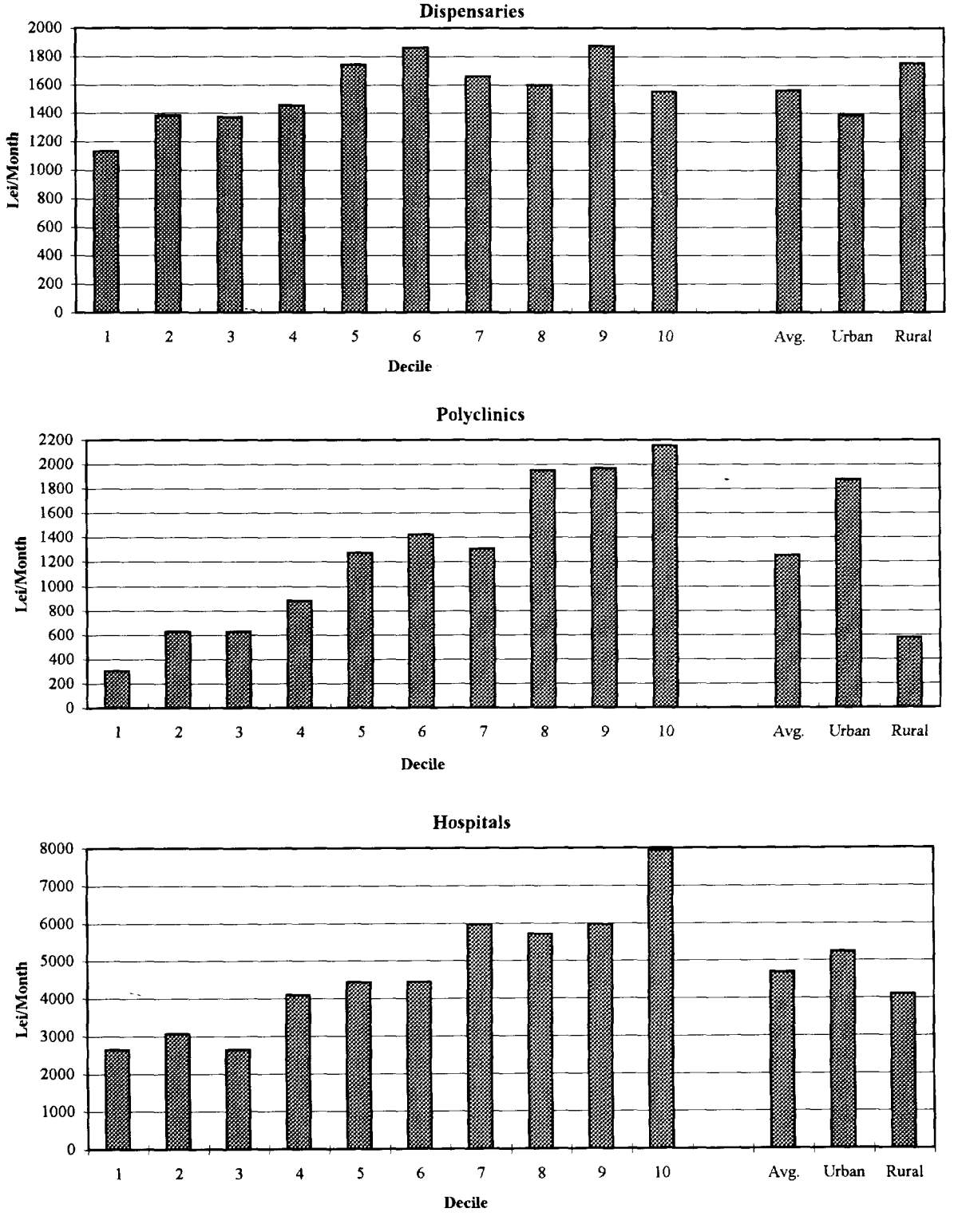
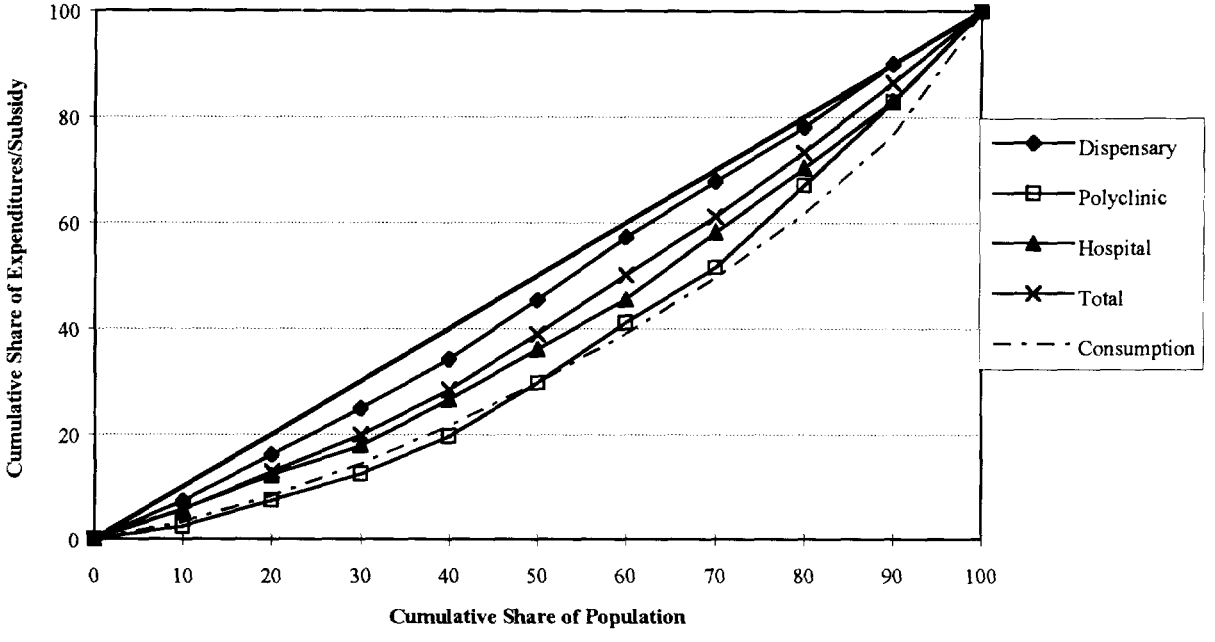


Figure 4.17: Distribution of Health Spending by Level of Healthcare

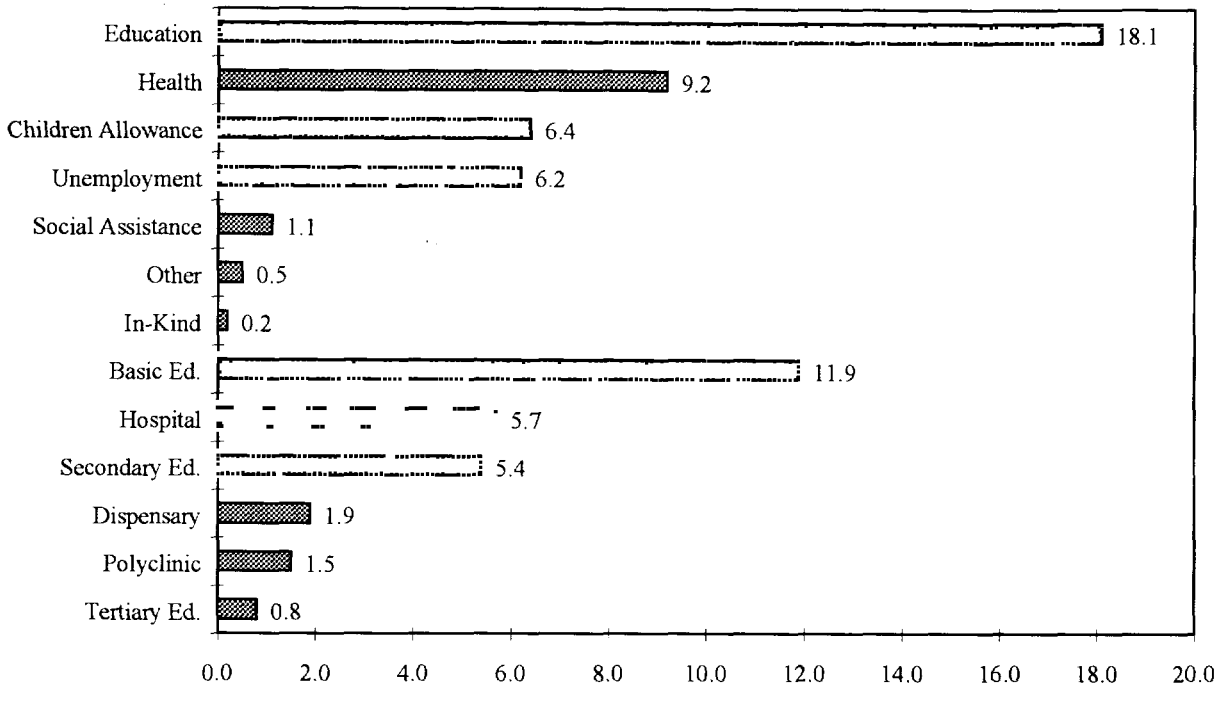


4.74 **The Targeting of Health Spending** How well targeted is health spending towards the poor? The Lorenz Curve for the distribution of health spending is shown in Figure 4.17. The distribution of total spending on health is weakly non-poor. The poor receive a greater proportion of total health spending than their share in total income (proxied by consumption), but a much a smaller proportion of the total health spending than their share in total population (total health spending lies below the 45 degree line but above the distribution of consumption). The spending for primary health care is the least regressive of all health spending (primary health care line lies closest to the 45 degree line). Public spending on hospitals is also weakly non-poor. The poor receive a smaller share of the hospital spending than their share of total population. The distribution of the spending on polyclinic is strongly non-poor especially at lower levels of income. Not only do the poor receive a smaller absolute amount of public spending on polyclinics, they receive an even smaller share of the polyclinic spending than their share in income.

4.75 **Improving the Efficiency of Health Spending** Can public expenditures on health be better targeted to the poor? Improvements in the quality of primary health care system could be instrumental in improving the health status of the poorest groups. Incremental spending on primary health care could be undertaken by a reallocation of the tertiary care health spending, mainly received by the better off, to the primary health care system. A reallocation of public spending on health (as in the case of education) would have a greater poverty alleviation impact without requiring large increases in public spending. Mechanisms for increasing the allocative and technical efficiency of health spending should be the focus of a more in-depth analytical work on the health sector of Romania. This analytical work should be linked with on-going policy dialogue between the Bank and the Ministries of Health and Finance, and should build upon earlier work, including the evaluation of the health sector reform in eight pilot districts.[32]

[32] Jenkins S, James J, Waddington, C. Evaluation of the health reform in eight pilot districts in Romania. November, 1995.

Figure 4.18: Comparative Effectiveness in Reaching the Poor (Subsidy as a Percentage of Consumption)



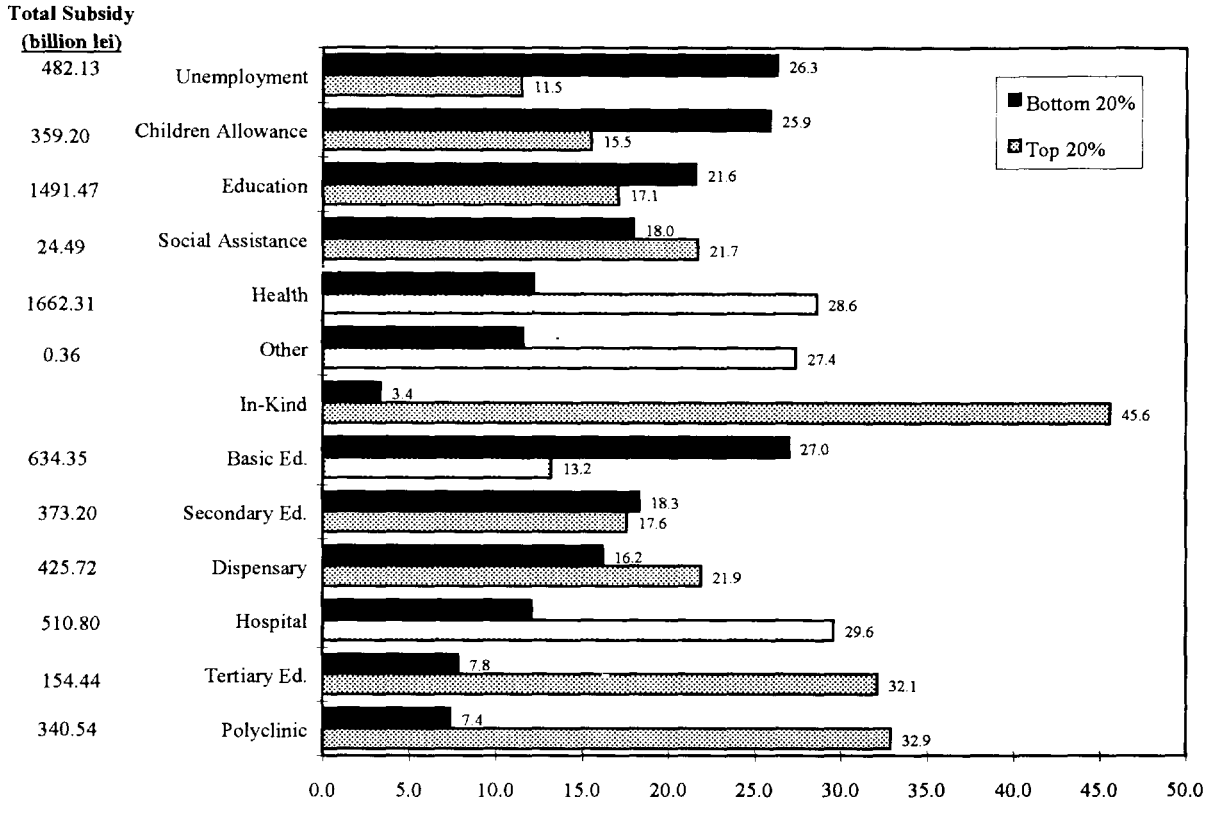
The Comparative Efficiency of Public Spending on Cash Transfers and Investments

4.76 This section evaluates the comparative efficiency and effectiveness of public spending on cash transfers and public investments in health and education. How effective are current programs in reaching the poor? Figure 4.18 illustrates the share of cash transfers as a proportion of per capita consumption of the poorest 20 percent of the population - those that fall below the poverty line. This measures the extent to which public spending on poverty alleviation programs raises the income of the poorest groups. This is not a stated aim of many programs but is a way of measuring the distributional focus of poverty alleviation programs that is also a convenient form of comparison across diverse Government programs.

4.77 From this perspective, education expenditures stand out as the most effective of all transfers, comprising 20 percent of the total consumption of the poorest groups. In comparison, spending on health is almost half as effective as spending on education. Furthermore, outlays on child allowances and unemployment benefits are only a third as effective as spending on education. Discretionary social assistance, other social assistance and in-kind benefits taken together are the least effective instruments, augmenting income of the poor by only 2 percent. Looking across individual programs, only basic education is really effective, and comprises nearly 12 percent of the consumption of the poorest households. Secondary education and hospital spending is only half as effective while spending on tertiary education, polyclinics and dispensaries is not effective at all.

4.78 The effectiveness of transfers depends on how much the government spends on programs that are efficiently targeted. Figure 4.19, next page, illustrates the great diversity in the efficiency of Government programs. Once more, efficiency is defined as the proportion of benefits received by the poor. And, once again, there is a caveat that education, health and child allowances are universal benefits and, together with unemployment benefits, are not explicitly intended for the poor. Nevertheless, using the bottom 20 percent as a proxy for the poor, unemployment benefits, child allowances and education are strongly pro-poor, with the poor receiving over 20 percent of all benefits. The remaining programs, including health, are weakly pro-poor, with the poor receiving a smaller proportion of benefits than their share in total

Figure 4.19: Comparative Efficiency of Targeting
(Percent of Subsidy Received by Different Income Group)



population. In-kind transfers emerge as the most inefficient program with the poor receiving only 3 percent of total benefits. Looking more closely at spending on the three levels of education, only basic education is strongly pro-poor and secondary and tertiary levels are weakly pro-poor. Among health programs, dispensaries are the most efficiently targeted while polyclinics are the least efficiently targeted of all health spending.

4.79 These graphs illustrate the small proportion of public spending that accrues to the poorest groups. But the large share of public expenditure accruing to the richest 20 percent is also striking. Low targeting efficiencies are almost directly correlated with a higher share of subsidies accruing to richer households. The share of the top 20 percent in total government expenditures ranges from nearly 12 percent of total unemployment benefits to a third of tertiary education, polyclinic and hospital spending and nearly half of all in-kind transfers.

4.80 The large extent of these variations in the efficiency of public spending indicate significant gains to reallocating resources across programs that are better targeted. For example, very little is spent on dispensaries (relative to polyclinics and hospitals) yet there appear to be significant efficiency gains towards redirecting spending to primary health care facilities. Similarly, a considerable amount is spent on basic education, but there is considerable scope for spending more on improving the quality and scope of basic education. In addition, increased expenditure on the new social assistance program can be financed by reductions in spending on in-kind subsidies and discretionary social assistance--a strategy that is currently being implemented by the Government.

Table 4.9: Gini Income Elasticities, 1993

Variable	Share of Expenditure	Income Elasticities			
Gini Parameter		v=6	v=4	v=2	v=1.5
Gini		0.430	0.367	0.225	0.146
Family Size		-0.65	-0.61	-0.52	-0.47
Expenditure per Capita					
Clothing	12.4	1.16	1.14	1.08	1.05
Tobacco	2.3	1.03	1.02	1.01	0.99
Wood, Coal, Oil	1.0	1.11	1.18	1.31	1.37
Petrol	1.3	1.80	1.84	1.84	1.80
Rent	0.0	1.11	1.19	1.48	1.65
Water	1.1	0.95	0.90	0.82	0.78
Electricity	1.0	0.98	0.89	0.70	0.61
Gas	1.6	0.94	0.85	0.68	0.61
Transport Cost	2.1	1.14	1.10	1.01	0.96
Food	61.3	0.79	0.78	0.76	0.74
Non-Food	23.6	1.28	1.28	1.28	1.28
Wage tax	6.4	1.24	1.21	1.13	1.08
Other Taxes	2.2	1.15	1.11	1.01	0.95
Total Taxes	18.4	1.23	1.20	1.11	1.06
Wage Income	72.8	1.19	1.15	1.05	1.00
Agricultural Income	55.2	0.98	1.01	1.08	1.09
Pensions	3.9	1.31	1.30	1.19	1.09
Child Allowances	1.8	-0.59	-0.65	-0.70	-0.69
Social Assistance	0.6	0.58	0.58	0.60	0.60
Unemployment Benefits	1.0	-0.59	-0.64	-0.67	-0.65
Interest and In-kind Income	0.7	1.09	1.14	1.37	1.53
Other Income	18.1	1.08	1.17	1.40	1.57
Income Per Capita	154.2	1.07	1.07	1.07	1.07
Gifts	20.0	1.17	1.22	1.32	1.35

NOTE: Clothing category includes scholarships and pharmaceuticals

A Pro-Poor Tax System

4.81 Public Transfers and Investment Programs are financed through taxes on the population. From a poverty alleviation and equity standpoint the tax and benefit system should both be progressive and pro-poor. This section evaluates the existing tax system and identifies taxes that would raise revenues without changing the welfare of the poor. The (Gini) income elasticities for each component of income and consumption are presented in Table 4.8. An income elasticity of greater than (less than, equal to) one indicates that the income (consumption) component is progressive or pro-poor (regressive, neutral). It also means that a tax (can also be considered as a reduction in the subsidy) on that component will not worsen the distribution of income.[33] This analysis takes the

[33] Table 4.8 also shows that child allowance and unemployment are distributed progressively while social assistance is a regressive transfer. (The data used here is from the 1993 Family Budget survey.)

status quo as given and considers raising taxes (or lowering subsidies) from the *current situation* facing households.

4.82 Table 4.8 also allows an evaluation of progressivity of taxes that takes into account the value society places on the welfare of the poor. The extreme left column (v=6) presents income elasticities that value the welfare of the poor the most, with each successive column on the right valuing the poor less and less. The extreme right hand column places the greatest weight on the welfare of the rich.[34]

4.83 Is the current tax system progressive? The main source of personal taxes in Romania are wage (payroll) taxes (Chapter II, Table 2.1). In 1993, the current tax system is progressive, with the progressivity increasing as more weight is given to lower income groups. Wage taxes are more progressive than the other taxes in Romania. Therefore, wage or payroll taxes are being paid by higher income wage earners. What taxes could be imposed without hurting the poor? Table 4.8 indicates that imposing taxes (or reducing subsidies) on petrol, rent, tobacco, and transport would be progressive and would not increase income inequality in Romania. Interestingly, contrary to evidence from other countries where these taxes are progressive, a tax on electricity and gas would be regressive in Romania.[35] Discussions with Romanian academics suggest that this is a result of the use of electricity and gas for heating for the urban poor. Thus, in this case, reduction of the current subsidy for gas and heating for the poor would worsen the distribution of income. A tax on agricultural income would only be mildly progressive, and less so if one values the welfare of the poor. However, a tax on pensions will be pro-poor, and will reduce income inequality.[36]

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[34] v=2 is the normal Gini index

[35] Britain, Indonesia, and Israel.

[36] The Gini income elasticities presented in Table 4.7 also provide the Government with a simple method for evaluating the impact of a tax reform on income inequality. Assume that we care about income inequality as explained by the sample Gini index (v=2). Consider two examples. In the first suppose the Government is considering imposing a uniform tax on petrol and gas, the impact of this policy is progressive if:

$$L = (a * x + b * y) / (a + b) > 1$$

where a and b are shares of petrol and gas in total expenditure and x and y are the appropriate Gini income elasticities. From Table 4.7 a = 1.3, b = 1.6, x = 1.84, and y = 0.68 and therefore L = 1.2; that is, tax reform is progressive. Taxing petrol is progressive while taxing gas is regressive but a uniform tax is progressive. In the second example, suppose the Government would like to impose a tax on gas to generate an additional lei of revenue. However, to mitigate the adverse impact on inequality a policy of taxing gas and petrol is considered. By how much should the tax on petrol be increased so that inequality does not change. The Government has to solve the following problem:

$$c * (x - 1) + d * (y - 1) = 0$$

where d = 1 lei additional revenue from gas, x and y are the respective income elasticities. Solving for c we get c = 0.38 which means that if each lei of tax on gas is accompanied by 0.38 lei of tax on petrol, inequality will not change. Note, however, that the tax lowers the level of income in Romania. For the exercise to be meaningful, it is assumed that it is returned to the population in a neutral way.

V. SUMMARY OF POLICY IMPLICATIONS

This chapter summarizes the policy implications from the previous chapters of this report.

5.1 **Promote Economic Growth**. The increase in poverty in Romania has mainly been a function of a decline in economic growth. Thus, economic growth that raises overall wages and employment will be critical in reducing poverty among low wage workers and unemployed. National and sector specific growth strategies have been discussed extensively in Bank Reports. The basic strategy involves sound monetary and fiscal policies, a reduced role for the Government, a market-based price regime, and the creation of a more conducive environment for private sector growth. In rural areas and agricultural settings where we find the highest incidence of poverty, growth in the non-agricultural sector, coupled with agricultural sector reforms encompassing land titling legislation, the development of an active land market, reduced government intervention and a substantial increase in a competitive private sector role in input supply distribution and marketing should help raise average incomes and reduce poverty among farmers. The high incidence of poverty among the less educated and aged farmers with small plots of land strongly suggests that any initiatives to provide extension to farmers should not (given demand) bypass these vulnerable agricultural households. An investigation into the barriers (such as land titles) that may restrict the use of credit and inputs or sale of land by poor farmers should be undertaken in order to (where possible) eliminate these barriers to trade.

5.2 Simulations show that an increase in distribution-neutral economic activity, economic growth that does not change the distribution of consumption, will reduce the incidence of poverty among the unemployed and wage earners. Specifically, a one time 3.5 percent growth in GDP would reduce poverty by 10 percent, while a sustained economic growth of 5 percent per annum for five consecutive years, a very achievable target for Romania, should reduce poverty by half.[1] Romania is well on the way to meeting this target. The country realized a 4 percent growth in 1994 and a 7 percent annual growth rate in 1995. The higher depth of poverty for particular groups of poor however indicates that economic growth will not lift all the poor (or all areas) out of poverty at the same pace. The most vulnerable groups may be left behind. The report identifies the less educated, female headed household, aged farmers with no fixed incomes, aged with no pensions and pensioners with low pensions as the most vulnerable groups of poor in Romania.

5.3 A strategy to promote economic growth must therefore be accompanied by efforts to protect the most disadvantaged groups in the population by effective, efficiently targeted and financially sound cash transfer schemes. An efficient targeting of existing programs can also promote economic growth by containing fiscal costs and promoting macroeconomic stability. The link between poverty, low levels of education and low health outcomes implies that investment to improve the health status and education levels of the poorest groups will also be critical for reducing poverty. Investment in human capital is a long-term poverty alleviation strategy that would eliminate on of he main causes of poverty in Romania and have a positive impact on economic growth. The returns to investments in education and health would be made all the more significant by labor market policies that are conducive to economic growth. The remainder of the chapter discusses specific measures that should be considered for promoting these objectives.

5.4 **Protect the Poorest Groups With Efficiently Targeted and Financially Sound Cash Transfer Programs.** In 1994, indicator-based targeting cash transfers (unemployment benefits, child allowances) were progressive overall. In contrast, discretionary targeting programs such as social assistance and (particularly) in-kind transfers were regressive and accrued disproportionately to higher income groups.

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[1] This is obtained by evaluating the distribution of consumption below the poverty line. Specifically, the median consumption below the poverty line is 28284 lei. The rate of growth required to reduce poverty by half in five years is simply this level divided by the poverty line raised to the power of 1/5. A similar calculation is employed for estimating the growth rate required to reduce poverty by 10 percent.

assistance and (particularly) in-kind transfers were regressive and accrued disproportionately to higher income groups. The ineffectiveness and inefficiency of public cash transfers in alleviation poverty led the Government to institute a new means-tested scheme in 1995 that would provide an adequate level of protection to all poor households irrespective of their characteristics. As part of this program, the scope of discretionary social assistance was reduced and many benefits were consolidated with the new means-tested social assistance scheme. The delivery and claims procedure of the remaining benefits is also being improved. In-kind transfers, the most regressive of all public transfers, was discontinued in 1994. The reduction or elimination of the most regressive transfers (in the face of an uncertain outcome of the new scheme) was coupled with the expansion of child allowances, the most progressive cash benefit scheme, to all households with children regardless of income. The only stipulation was that school age children should be enrolled in school to claim benefits. These are impressive gains but several issues must be tackled to ensure that the new system is protecting the poor in the most effective and efficient way.

- **Monitor the efficiency and effectiveness of the newly instituted means-tested social assistance scheme.** The new means-tested social assistance program guarantees a minimum income of 45,000 lei per person (for a single person household) in 1995. Deflated to 1994 prices, it is 70 percent of the poverty line used in this report. If *all* individuals eligible for this program are correctly identified and *all* claim the benefit, the incidence of poverty would be significantly reduced. However, this is an unlikely scenario. Several problems need to be addressed in order to ensure that the new social assistance scheme is effective in reducing poverty:

  o The report estimates the benefit cost of the new means-tested system may exceed 2.6 percent of GDP (March 1994 lei). The costs could be lower--2.3 percent of GDP--if the child allowances were included in the means test. The increased benefit costs should be financed in part by the phasing out of discretionary social assistance programs--0.5 percent of GDP (already being done). Consolidating the system with the child allowance program (see caveats below) would cover some costs as well (0.8% of GDP). Restructuring the pension system could also release resources that could be allocated to the means-tested system

  o These estimates underestimate the full costs of the social assistance program. They do not include the administrative or incentive costs of means-testing benefits (see below) which may well be substantial.[2] It may be very difficult and therefore costly to monitor income in a transition economy where income sources are changing rapidly over time, where tax systems are not sophisticated and where information networks at the Government's disposal are poor and undeveloped.

  o The proposed social assistance program should also incorporate work incentives for individuals who are able to work. Several options can be considered: (i) reducing benefits with increased earnings, but not lei for lei of additional income earned. In particular, single women with young children who may not take up new jobs because of increased day care costs merits attention; (ii) impose a maximum eligibility period (say 2 years) for claiming benefits; or (iii) require recipients to participate in community work (environmental clean up, for example) projects; and (iv) as is currently the case, social assistance benefits should be set below the minimum payment for unemployment benefits and this should be below minimum wage.

  o The benefit delivery mechanisms of the new social assistance program should be monitored carefully and improved where needed. Many households may not be physically able to claim benefits (e.g. aged sick individuals, or female headed households with many children) and information about program delivery points may not reach all eligible households.

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[2] See Zamfir and Zamfir, ibid. for similar concerns.

chosen by the Government, and should be kept below minimum wages. The overall fiscal resources available to the Government should guide the proportion of the poor that can be protected under the social assistance scheme.

o Once the new program is fully operational and its costs and effectiveness in protecting the poor are better known, the entire package of cash transfers will need to be reevaluated to ensure that the overall system is the most efficient way of protecting the poor. The scope of the program should also be down-sized as the number of poor decreases. There is always a danger that the poverty alleviation programs may increase in scope even after they outlive their purpose as many beneficiaries develop vested interests in the programs and lobby hard to maintain benefits.

- **Improve the targeting efficiency of Child Allowances and Discretionary Social Assistance.**

o Improving the delivery system of child allowances through measures to stop leakage and reduce exclusion of eligible poor households would increase the targeting efficiency of child allowances. To this end, the stipulation that all school age children be enrolled in school to collect benefits should be reconsidered (at least for secondary school education) given the low rates of enrollment of poor children. The benefits do not appear to be adequate to encourage the poorest children to enroll in school. Cash incentives to increase enrollments of the poor might well be needed as part of a comprehensive education program to increase education achievements of the poor (see below). An investigation into why particular children enrolled in school and under school age are not receiving benefits also merits serious attention.

o In the long run, the high costs of the means-tested social assistance program may make expenditures on child allowances too costly to maintain. Redirecting child allowances only to the poorest households would increase the targeting efficiency of child allowances and reduce poverty. It would also increase the level of transfers received by the poor. The increased efficiency of targeting may be offset by increased administrative costs of means testing--although, these costs will be marginal if the means-tested social assistance system is working well. Indicator-based targeting (geographic areas or number of children) or self-targeting mechanisms to target the poorest households could also be explored and used.

o Alternatively, child allowances could be phased out, perhaps by letting their value erode over time. This should only be done if and when the social assistance program is effective in reaching large poor households. In the meantime, as noted above, the delivery system of child allowances should be investigated and improved.

o Changes in the delivery system of discretionary social assistance program should continue to be monitored to ensure that new mechanisms for delivery of benefits and processing claims has increased the targeting efficiency of these transfers.

- **Improve the efficiency and equity of the pension system.** This report finds that pensioners are not the poorest group in the economy. It strongly recommends that the pension system not be used as a poverty alleviation program for pensioners. Currently, the pension system is running a deficit so that raising pension levels would not be feasible from a financial point of view. Pockets of poverty amongst pensioners should be addressed through the means- tested social assistance system. The Government could also consider protecting pensioners by adjusting minimum pension payments to inflation in a discretionary fashion. This has reduced the relationship between age and low pensions for male pensioners, but not for female pensioners and should be investigated. Finally, more efficient financial markets that allow individuals to save for old age, or take out a greater coverage under life insurance policies, will be critical in reducing poverty among the aged.

5.5 **Invest in Education** The report finds a strong link between low levels of education and poverty. There is a chance that this link may persist in the future. Children of poor less educated households are less likely to be enrolled in school, particularly in rural areas. But returns to education are high in Romania and are higher at each level of education (as compared to primary or less) for rural than urban areas.

The study also finds that most unemployed are secondary school graduates and that having a secondary and lower level of education (relative to college education) reduces the likelihood of a worker's being employed. These findings indicate that the current secondary school system may not be adequately preparing individuals for the labor market, perhaps because of its narrow focus and specialized programs. Thus, improvements in the quality of education should also focus on increasing the general focus education in basic education and in secondary school in order to make the curriculum responsive to emerging labor market conditions.

The exact type of investment (improvements in infrastructure to reduce crowding, the provisions of loans or scholarships to poor students to cover out of pocket fees, improvements in quality of curriculum, etc.) would depend critically on the reasons for low enrollment rates of the poor.

The report finds considerable scope for cost recovery in the tertiary education system. The poor could be protected from the removal of subsidies for tertiary education by need and merit based stipends and/or scholarships.

5.6 **Improve Health Outcomes**. The poor have lower health outcomes, particularly in rural areas. Low health outcomes may be a function of low quality of rural health care and poor quality of sanitation and water supply facilities in particular poor rural areas. Improving the quality of health facilities in rural areas and investment in sanitation and water supply facilities in those areas (rural or urban) where the absence of such facilities lowers health indicators should improve health outcomes for the poor in Romania. The report finds that the majority of government expenditure on health is spent on tertiary care and subsidies for both tertiary and secondary level of care accrue mainly to higher income urban groups. Health outcomes of the poor in general and rural poor in particular, could be improved by a re-direction of health sector budget towards improvements in the quality of primary health care, particularly in rural areas.

5.7 **Promote Labor Market Policies that are Conducive to Economic Growth.** The Government has made significant steps towards making labor markets more flexible and responsive to economic conditions. Most importantly, restrictions on labor mobility have been eliminated and wages have been allowed to adjust to economic conditions. A well functioning labor market (in addition to efficient financial markets) is critical for increasing the returns to investment in human capital. The Government should consider steps to:

- **Keep Minimum Wages Low**. Minimum wages provide protection to already employed workers and are likely to discriminate in favor of higher skilled workers. As a result, they may well create unemployment for younger and/or less skilled workers. In countries such as Romania where the unemployment is pervasive among younger workers, and where unemployment is likely to increase over the transition, minimum wages should not be institutionalized in the private sector as they may well discourage employment. In the public sector, minimum wages should be kept as low as possible and should be set on the basis of information on median not average wages. Average wages will become more and more sensitive to increasing wage dispersion in the economy.
- **Phase Out Wage Subsidy Program**. The wage subsidy program gives induces companies to hire college graduates over secondary school leavers, who constitute the bulk of the unemployed. It also does not provide incentives to companies to increase overall employment. If it cannot be phased out completely, the wage subsidy program could be turned into a marginal employment subsidy program, targeting the long term unemployed and secondary school leavers. This would provide a subsidy to

employers only if employment of these individuals increases net employment. The subsidy would then influence both the rate and composition of unemployment.

- **Training programs should be responsive to labor market conditions**. General and firm specific experience is important for increasing a worker's chances for employment and higher wages. Current public training programs have not been successful in matching the unemployed to jobs. Training programs that are responsive to labor market conditions would best serve unemployed workers by allowing them to acquire the necessary skills to re-enter the labor force. The increased role of private training programs and subsequent increased costs of training could be allayed for the poorest individuals (including cost of college should they decide to opt for higher education) through loans (or vouchers) to be repaid upon employment.

5.8 **Develop a more progressive tax system.** A progressive transfer and investment system should be accompanied by a progressive tax structure. The tax structure in Romania appears very progressive, but the Government could still raise revenues without worsening the distribution of income by taxing rent, petrol, tobacco, and public transport. The Government could also raise revenue from taxing pensions without altering the distribution of income. However, taxing pension income should be phased in the long-term when income sources can be better audited and monitored.

5.9 **Monitor poverty and the incidence of public spending.** The Government has so far used the Family Budget Survey data for social policy. The FBS is not a nationally representative data set. It does not allow an identification of the poorest population groups and has limited information on the socio-economic characteristics of individuals and an individual's sources of income. The Government should therefore use the newly initiated and nationally representative Integrated Household Survey, with some modifications to reduce measurement errors now present in the data (see Annex 1), to derive minimum benefits, identify the poor and evaluate the incidence of public spending. The IHS allows an identification of the poor from a broad nationally representative sample. It captures the poorest population groups and provides detailed socio-economic characteristics of all households. It includes sources of income for each individual and allows an evaluation of the incidence of public spending.