What happens to poverty and income inequality during the early period of transition to a market economy? Poverty is on the rise, and income inequality widens. Better targeting of social assistance and pension reform are the necessary policy reforms.

Poverty, Inequality, and Social Policy in Transition Economies

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Summary findings

In examining what happens to poverty and income inequality during the early period of transition to a market economy, Milanovic covers the period up to 1993.

His analysis includes almost all transition economies that were not affected by wars, blockades, or embargoes. (In economies so affected, the intrinsic issues of transition are overshadowed by more basic issues of war or quasi-war economy and survival.)

The two key issues of social policy in transition economies are pension reform and better targeting of social assistance.

Pensions represent 70 to 80 percent of cash social expenditures. No reduction of current levels of social spending (which is unsustainable) can be envisaged without pension reform.

Better targeting of social assistance is needed because many universally or enterprise-provided benefits have been terminated, poverty has increased, and social programs lack funding. If poverty is on the rise and money is scarce, better targeting is the only option.

This paper — a product of the Transition Economics Division, Policy Research Department — is part of a larger effort in the department to study social effects of transition. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Grace Evans, room N11-041, telephone 202-458-5783, fax 202-522-1152, Internet address bmilanovic@worldbank.org. November 1995. (56 pages)
POVERTY, INEQUALITY AND SOCIAL POLICY
IN TRANSITION ECONOMIES

Branko Milanovic

"Unfortunately, efficiency is a fact and justice a slogan"

INTRODUCTION

This paper examines what happened to poverty and income inequality during the early period of transition to market economy. It covers the period up to 1993, and includes almost all transition economies that were not affected by wars, blockades or embargoes. This is because in the latter case the intrinsic issues of transition are overshadowed by more fundamental issues of war or quasi war economy and survival. The two key issues of social policy in transition are pension reform and better targeting of social assistance. Pension represent 70 to 80 percent of cash social expenditures. No reduction of current levels of social spending (which may be unsustainable), can be envisaged without pension reform. Better targeting of social assistance is needed because many universally or enterprise-provided benefits have been terminated, poverty has increased, social programs lack funding. If poverty is on the rise and money is scarce, better targeting is the only option.

Section 1
THE LEGACY — AND WHERE TO GO?

Social insurance. The socialist system insured full employment in the state sector—thus obviating the need for unemployment insurance. The employees were paid relatively low net wages with low returns to education. Job security was guaranteed. Economic risk-taking was discouraged. The environment was the one of very low risk in almost all spheres—except when failing to toe the political line.

High payroll taxes were used to finance pay-as-you-go (PAYG) pensions received by all those who worked in the state sector (from 60-70 percent of all employed in Poland and Yugoslavia where agriculture was mostly private to almost 100 percent in Czechoslovakia and

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I am grateful for many useful comments to Zsuzsa Ferge, Alan Gelb, Christiaan Grootaert, Janos Kornai, Martha de Melo, Milic Milovanovic, Rita Purina, Martin Rein, Michal Rutkowski and Martin Schrenk as well as to participants at seminars at Harvard University, University of Maryland, World Bank, and Council of Europe where the paper was presented. Yvonne Ying and Nadia Sobojeva provided valuable research assistance.
the USSR), as well as generous sickness and maternity allowances and family benefits. Pensionable age was low, with many privileged groups enjoying even earlier retirement rights. Pensions were non-actuarial. In Eastern Europe, average pension as a percentage of average state-sector wage tended to be high (around 55-60 percent), while in the former Soviet Union it was rather low (around 40 percent). 2

The role of enterprises. A number of social functions devolved to enterprises. The enterprises provided housing for workers and, in the Soviet Union, they often provided and paid for workers' utilities (heating, hot water). Enterprises ran their own canteens, health facilities, owned vacation houses that provided cheap holidays, and subsidized child care. Enterprises were often the conduits through which workers were supplied with scarce products at low prices. Although enterprises in the West also fulfill some of these functions, their importance was much greater in socialist economies. Not convenience, but ideological and political reasons explain the role played by the enterprises.

Ideologically, state sector was viewed as the backbone of socialist development. In consequence, the "good citizen" of the socialist commonwealth was the one who worked in the state sector. Toward him or her were to be directed all the benefits. Hence the role of enterprises which, by definition, insured perfect targeting of benefits. The enterprises were not regarded as mere producers of goods or (less valued) services, but rather as places where people were brought together to participate in the process of socialization and creation of a "new man". Indeed, this original, naive, blueprint gradually faded; few of the new entrants in the labor market in the late 1970s or 1980s thought of the firms where they worked in such terms. Yet the role of the enterprises continued to reflect that initial ideological bent, and cannot be, probably, adequately understood without it. In words of Russian writer Alexander Zinoviev: "I asked him [a Communist ideologist] how really important was the Great Construction Site [the enterprise]. Were the victims justified? The Construction Site—he replied—was without importance, meaningless from economic as from any other practical standpoint. But precisely this was its great historical meaning. This was, above everything else, a form of organization of human life, and only after that, was this a phenomenon of secondary importance in economics and industry". 3

In addition, anchoring social benefits in enterprises and linking them to working for a monopoly employer, the state, ensured political obedience. Those who did not want to work for the state were treated as non-persons4, left without sustenance for themselves and their family. Linking benefits to jobs and keeping money wage distribution relatively egalitarian had a further objective: to prevent accumulation of private wealth to which those who decided to ignore (or

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2Romania and Bulgaria are exceptions in Eastern Europe. Their pension-wage ratios were similar to those in the Soviet Union.

3Quoted from Serbo-Croatian translation of Nashey yunostii polet [The elan of our youth], p. 145.

even worse, oppose) the state/party could resort. Many ministers realized precariousness of their position when loss of job entailed eviction from the house, end of a chauffeur-driven limo and resumption of queuing for food. On a less grand scale, many workers became party members and attended endless boring meetings in order to qualify for enterprise-provided housing or subsidized vacation.

**Health care and education.** Health care was almost entirely socialized and free (a few countries had some private practice). It was financed from general revenues. The services were widely available, particularly when measured in terms of the usual indicators (doctors or beds per capita), but bad organization, wrong incentives (e.g. to prolong the stay of the patients in hospitals in order to collect more money from the insurance), and demoralized personnel (doctors were uniformly badly paid) made services to be of low quality and queuing widespread. Inadequate preventive care, insufficient dissemination of information on healthy living etc. led to stagnation or even declines in life expectancy (in Romania and the USSR) even before the onset of the GDP declines.

Education was also entirely socialized and practically free (there were small fees for some university courses and textbooks). Private schools were not allowed. Only Church, as in Poland, could run some limited educational facilities (unrelated to clergy). Measured in terms of standard indicators, educational achievements were considerable even if below those of Western countries. However, the mismatch between the type of education produced and needs of modern economy was great. Even those people who had skills needed in a modern economy could not be used efficiently by enterprises that remained mired in the old ways of doing business. Low returns to education further depressed any incentive to acquire and productively use the education.

**Inequality and poverty.** Socialist countries exhibited relatively low levels of inequality. Measured inequality was, on average, at the low end of inequality found in OECD countries—comparable to that in Scandinavia. Even if adjusted for some flaws in household surveys from which these data were derived and for privileged consumption in kind enjoyed by the elite, inequality still remained very modest. Furthermore, if consumption of the privileged were to be taken into account, other subsidies—most of them for food and other essentials—should be included as well. This would invariably reduce income inequality because of low income elasticity of the most heavily subsidized goods. Fragmentary data on housing

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5 Except for the former Yugoslavia and China. In case of Yugoslavia, higher inequality compared to other socialist economies was due to wide inter-regional differences in average income.

6 They include omission of the very poor, and the top "nomenklatura", creating the bias—particularly present in Soviet surveys—toward the "average" income or consumption.

7 Elite privileges were exaggerated both by the population (because of the secrecy in which privileges were held) and by too credulous Western analysts. In effect, as anybody who has visited vacation homes previously kept strictly "off-limits" for all but the top Party brass can testify, their level of comfort and service is below an average Holiday Inn.

8 For the results for Poland see World Bank (1989); for Hungary, Kupa and Fajth (1990, p. 37); for Czechoslovakia, World Bank (1991, p. 59). The most pro-poor were, obviously, food subsidies; the least, transportation and culture.
subsidies show, in contrast, that they did not reduce overall inequality: richer households received proportionately more of the subsidy, and urban benefitted compared to the rural.

The "really" poor were relatively few. It is very likely that towards the end of the Communist rule, their percentage was in single digit numbers (say, between 3 and 7 percent of the population) with the possible exceptions of Albania, Romania (because of the harshness of the last Ceausescu years) and the less developed parts of the Soviet Union.

Authorities' attitude toward the poor. Social assistance was relegated to a subsidiary role. Neither in terms of its size nor concentration on the poor did social assistance have the role that it typically has in the West. In part it was due to the fact that poverty was not widespread (at least in Eastern Europe and the European part of the USSR), and in part to the ideological taboo that preferred not to see poverty because in an ideal socialist system poverty would be eliminated. Specifically anti-poverty policy thus dealt only with "excess" cases of alcoholics, handicapped, lone old-age people etc., was undertaken half-heartedly by local authorities or, if tolerated, by charitable organizations (e.g. in countries where Church involvement, as in Poland and Hungary, was impossible to prevent).

There was little sympathy for the "socialist poor" as such. Here one must distinguish between sympathy for the poor that were perceived to be the victims of the previous system (e.g. rural illiterate and poor, unskilled urban workers etc.) and the lack of sympathy for the "socialist poor" that is, people without steady jobs, vagrants, the handicapped. The poor from the previous regimes were often helped by the Communists. During the first 10-15 years after the Communist revolutions all socialist countries achieved significant progress in the eradication of diseases, literacy and school enrollment, overall social mobility, that is in the indicators where the main beneficiaries were precisely the underclass from the previous system. Not surprisingly, the "capitalist" poor, who, under the new system, were given the chance to educate their children, migrate to cities, or make successful careers in state- or Party-sponsored institutions, often proved the strongest supporters of socialist regimes.

But, in regard to the "socialist poor" the authorities were generally cool and toward some of them even inimical. Not only did the existence of the poor make mockery of the regime's claim that poverty is a capitalist phenomenon, Communist ideologues genuinely regarded such people as aberrations. They argued that if everyone was guaranteed free schooling, to be followed by a steady state job and all the benefits that go with it, if everyone could avail of generous family allowances, and, after retiring, could enjoy adequate pension, then the fault for being poor lied with these people and not the system. Poverty was not only viewed as social pathology and an implicit denial of the "perfectness" of the system but —not unlike in Calvinist ethics and the recent backlash against unwed mothers in the USA— rather sinisterly, as an
explicit *anti-social choice* by the poor ("the poor do not want to work" hence "they do not want to contribute to the building of the new society" hence "they are anti-social elements, parasites"). Communist view was not unreasonable: if perfect society is here, and its virtues are self-evident, only the ill-disposed and wicked people can refuse to participate in such an endeavor. Communist authorities therefore evinced little sympathy for some poor; they encouraged the stigma in which other citizens anyway tended to hold them. And, to make the plight of the poor worse, Communist authorities discouraged non-government organizations, in particular the Church, to help them, because they distrusted all non-governmental initiatives and viewed them as a politically motivated ploys to acquire influence by helping the disenfranchised.

The negative attitude toward the poor had several practical consequences. Social assistance systems were rather rudimentary: practices differed from one social assistance office to the next; little effort was made to improve income-testing, on which, at least in theory, some of the benefits depended; social workers were few in numbers, demoralized and badly paid. The authorities thus lacked experience in identifying the needy and in delivering social aid. The "social minimum" lines were defined mostly by the "armchair" economists and nutritionists and were unrelated to any social policy. They were "socially desirable" levels of consumption—kind of "how people should be living under Communism"—and were targets rather than any realistic, much less guaranteed, minimums. In conclusion, anti-poverty policy was haphazard and not at all integrated into the overall economic and social policy: it was viewed as a "foreign body" in an otherwise perfect system.

Finally, in a personal observation, rereading some of the papers and books published before the end of Communism, and quite obviously written by Party hacks, I was struck by two things: first, self-congratulatory description of the size of social spending—clearly viewed as one

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* Carr (1966, p.114) quotes Lenin's article from January 1918 where he writes that "he that does not work, neither shall he eat" as "the practical *credo* of socialism". Workers who "slack at their work" were included among the categories of misdemeanants "who deserved to be put in prison".

* Although this was not true for all the countries: former Czechoslovakia and Yugoslavia, as well as Hungary had relatively well-developed systems. For an excellent review of poverty measurement and social assistance policies before the transition see Sipos (1992) and Sipos (1994).

* Although there too, like in some other areas (macroeconomics and growth), the Soviet Union was among the pioneers. The first workers' social minima were calculated in 1921 in the then Soviet Russia (see Sipos, 1992a); after the Second World War, the first Soviet annual household budget survey dates from 1951 and has continued uninterrupted since. By contrast, the first regular annual US household survey was done in 1979. The Soviet data were of the panel type. Because the survey results were secret, they were never disseminated and very little work was done on the data. Most of the data are still existent (although in non-electronic form) and probably represent a golden mine for some future student of economic history of the Soviet Union.

* A Hungarian commentator noted in the midst of the *perestroika* in 1988: "Institutional assistance for the poor has still not been put on the public agenda in the Soviet Union. After all, the fact that a substantial portion of the citizens live under seriously deprived conditions remains to this day a taboo topic. In a country where until very recently it had not been acknowledged that there were drug addicts and homosexuals, and where it was forbidden to entertain the possibility that anybody could be unhappy, it is hardly surprising that official policy makers were reluctant to take note of poverty" (quoted from Hollander, 1991, p. 15).
of accomplishments of socialism—without any discussion of its costs or possible negative incentive effects; and, second, great reticence toward discussion of poverty, sometimes omitted altogether.

**Changes in the economy.** Transition brought about many important and sometimes dramatic changes in the picture sketched above. The key policy changes that affected the population were two kinds of elimination of subsidies: enterprise and product subsidies. An end to open-ended subsidization of enterprises (i.e. to the notorious "soft-budget constraint") meant an end to life-long guaranteed employment and to unlimited demand for labor. Unemployment appeared. Elimination of most product subsidies (housing and energy are still subsidized in a few countries)\(^3\) meant that the relative price of the essentials increased, thus putting a further squeeze on the poor.\(^4\) On the positive side, though, the elimination of product subsidies meant the queuing disappeared while quality and variety of goods improved. The people with higher opportunity cost of time who are normally better-off benefitted more than the poor, however.\(^5\)

**Main directions of change in social policy.** The change of the social insurance and assistance systems is the joint outcome of the starting point (the system as it was) and ideological views regarding the "desired" system toward which the formerly socialist countries want to evolve.

The change is easiest in the areas where both financial and ideological considerations combine to make the maintenance of the previous arrangement impossible. This is the case with the heavy involvement of enterprises in social policy. Facing harder budget constraint and elimination of tax benefits that favored "collective consumption", that is fringe benefits, rather than cash wages, enterprises tend to shed these functions.\(^6\) They cease to subsidize canteens, sell vacation homes or charge market prices, reduce the access to free child care. Ideologically, they are also pushed in that direction because their new role is, like in capitalism, to be producers of goods and services—not appendages of the state protection system.

This does not go without problems though. The heavily subsidized functions either need to be discontinued to the great dismay of their users (e.g. employed mothers who lose affordable child care) or subsidies have to be taken over by somebody else. That "somebody else" should most often be local government. But as local governments are strapped for cash, they are

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3Explicit (paid-out) consumer subsidies decreased from between 5 and 7 percent of GDP to less than 1 percent of GDP (see Milanovic, 1994, p. 195).

4Rising relative price of the essentials is relected in cost-of-living indexes rising faster than broader indexes like GDP deflators or wholesale prices. Thus in Bulgaria, CPI inflation rate in 1992 and 1993 was one-a-and-a-half times the GDP deflator; in Poland, Slovakia, Slovenia, Estonia and Latvia 1.2 times. Only in slow reformers, where consumer prices were not liberalized, did CPI indices rise slower than the GDP deflator (Belarus until 1994, and Central Asian countries).

5For an empirical estimate of the gain brought about by the elimination of queuing in Poland and Russia see Roberts (1993).

6It was a common practice in socialism, continued nowadays in China, not to tax "collective consumption" but to heavily tax wages. Enterprises thus found it convenient to pay a part of wages in kind (through goods like meat, sugar, cooking oil).
reluctant to take over these functions: a game "hot potato" where each side tries to push the responsibility onto somebody else ensues between enterprises, local governments and the center.

A particular problem in the FSU countries are utilities (district gas and heating) that were built and maintained by enterprises. Utilities' consumption was either entirely paid for by enterprises or households were charged a fee reflecting apartment space or number of household members. Meters to measure individual consumption did not exist. As enterprises cease to subsidize utilities, huge arrears to power companies build. Local governments cannot pay them, while making consumers more responsible, and charging them for what they actually consume, requires additional investments (metering the consumption and sometimes changing the whole set-up of the system).\(^{17}\)

Most economists also agree that sickness benefits, maternity leave and possibly family allowances need to be made more restrictive.\(^{18}\) For example, sickness allowance may have to be paid, for the early part of the sick leave, by enterprises rather than by social insurance funds. This should cut on the abuse as more cost-conscious enterprises try to control expenditures. The duration of over-generous maternity leave may be reduced. Family allowances may become income-tested.

All countries have allowed private health care. Little of the necessary restructuring in insurance (e.g. 100% of private health costs is paid by the users), has accompanied the reform.

The change is much more difficult in the area of pensions because it directly affects the acquired rights of a large segment of the population and because the exact direction of change is not clear. Pension schemes have come under pressure everywhere, due to aging populations, sometimes massive early retirement in anticipation of privatization-related lay-offs, and reduced tax base, both because of GDP declines and worsening tax collection from the private sector.

Only a few countries have proceeded to modest changes in the pension system. Estonia, Latvia, Romania and Slovenia have started to gradually increase the retirement age. Others (Hungary) have legislated that such increases would begin in the future. Administratively simple benefit schemes, resulting in practically equal pensions for all, have been introduced in two Baltic countries. Attempts have been made to protect the minimum pension levels to mitigate poverty among the elderly, frequently relating the minimum pension to the subsistence minimum.

\(^{17}\)For example, if consumption is to be metered, households must be able to adjust their heating. Under the current system, this is impossible. Thus introduction of metering also requires a change in the set-up of the system.

\(^{18}\)In the political arena the agreement on these benefits is elusive. Christian democratic parties are strongly pro-family and thus in favor of generous maternity leave and family allowances; nationalist parties are pro-natalist and thus again in favor of high family allowances; social democratic parties wish to protect sickness benefits.
The desired direction of change in the pension system is not clear either. There are those who believe that, once the reforms described in the previous paragraph are introduced, the system's main characteristics should no longer be changed—that is, the system should remain PAYG, state-run and state-mandated with only a limited role for private pension schemes, and with some (albeit smaller than in the past) redistribution. The proponents of this option point out that the reformed system would be the same as the existing West European pension systems. Historical factors are also present: the population and the governments have had experience with PAYG systems only (e.g. Hungary has had a PAYG system since 1927).

A different view is that the pension system should be fundamentally overhauled, by moving to a system where most of the old-age insurance is provided by private, fully-funded pension schemes with full correspondence between individual contributions and pensions. Despite some sizeable initial costs that the move to such a system would entail (for a generation, workers would need to keep on paying both for the existing pensioners and to build their own funds), the proponents of this options argue that the current PAYG system are unsustainable in the long-run as the adverse demographic transition sets in. They also point out to several countries (Chile, Switzerland, Australia) that have recently introduced similar systems.

The exact shape of new instruments of social protection, like unemployment benefits and social assistance is even more debated. The introduction of unemployment benefits raised some of the difficult questions having to do with the interaction between social insurance and social assistance. The problem was whether unemployment benefits, fixed after some period of unemployment (9 to 12 months) at the subsistence level, should be used in lieu of social assistance. The idea was appealing because it would dispense with the need to introduce yet another new scheme (income-tested social assistance). The drawback, however, was that the unemployed and the poor were not necessarily the same overlapping groups and many people who were out of the labor force rushed to have themselves registered as unemployed. The idea of open-ended unemployment benefits was soon abandoned, and replaced everywhere with benefits whose duration was limited to one year or less.

As for social assistance, the logical approach, at the beginning of the transition, seemed to introduce income-tested social assistance, and, in some countries, even the minimum income that would be guaranteed to all. This was in keeping with the prevalent West European practice. The transition economies that aspired to become more like OECD economies appeared poised to move in that direction. Also, chronologically the transition started in Poland and Hungary whose level of development, relative administrative sophistication, and the existing taxation systems were much closer to the West European than, for example, those of the Central Asian republics. However, financial non-feasibility of guaranteed minimum income, a concept that France managed to introduce only in 1988 and which Italy or Spain still do not have, soon became clear. The plans for its introduction were shelved everywhere, either officially or de facto. No transition economy is currently financially able to explicitly undertake to guarantee to all its citizens a decent minimum income. On the other hand, income testing, as a mechanism to screen the increasing pool of applicants for social assistance (i.e. to decide whom to help and
whom not), is working, however haphazardly, using the existing infrastructure of social assistance offices and personnel. The funds, numbers of recipients, and even more, the number of applicants for social assistance have all increased since the transition. The importance of social assistance has also increased—not least because it is viewed as critically important for the survival of reforms and good political fortune of the current governments.

Section 2
WHAT HAS ACTUALLY HAPPENED -- SEVEN STYLIZED FACTS

Five years into the transition is a period long enough to allow us to draw "a stylized picture" of what the transition has meant in the social sphere. I will deal primarily with the costs of the transition. Many of its benefits, not only higher incomes for some, but the increase in freedom, will not be dealt here. But, clearly, the benefits should not be forgotten.

Fact 1. Higher social costs than expected.

When socialism collapsed, no one knew what exactly to expect. During the earlier, reverse transition, from capitalism to socialism, many Communists and socialists used to complain that they had little to go by in terms of theory. They lamented the fact that Marx—who did not like to write, as he put it, "the cookbooks for the future"—discussed with such parsimoniousness how socialism would look. But Communists at least had some idea how to proceed: nationalization of key industries, "mobilization" of labor, social equality, labor as the key (only?) source of income etc. But how to move from socialism to capitalism, no one knew. For socialists, it was unthinkable. Advocates of capitalism likewise never put down clearly what should be done: did they too believe it was far-fetched?

When the transition began, populations, governments, and international organization had a much more optimistic view of the likely social costs than shown by the subsequent events. Indeed, everybody expected some unemployment but nobody expected such massive drops in output and incomes: the drops that in many countries dwarf even the loss of output during the Great Depression in the US and Germany, the two then most affected countries. The rationale for this relative optimism was that state ownership was such an inefficient system so that redeployment of labor and capital could not but have immediate positive effects. The less efficient socialism was, the greater was thought to be the gain from the "regime switch". And quite possibly this might still be the case. But not in the short-run.

The reflection of this optimism can be seen in governments' own projections as well as

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19A more detailed analysis of the results in section can be found in Milanovic, Income, Inequality and Poverty during the Transition, forthcoming.

20Gomulka (1995, p.329) lists over-optimism as the first among the major errors in assumptions and policies during the transition.
in those of international organizations. They consistently underestimated the actual declines in GDP (Table 1). Of course, some of the discrepancy between the expectations and outcomes may be explained by political developments that few could predict. The collapse of the Soviet Union and the breakdown of the CMEA severely disrupted trade flows and led to large short-run output declines.

Fact 2. Emergence of unemployment and increased poverty.

Higher social costs are reflected in two things: unemployment and increase in poverty. Indeed the two go to some extent together. The linkage between unemployment and poverty is stronger in countries where unemployment rates are high, and where, even more importantly, the share of the long-term unemployed (those unemployed for more than a year) is greater. This is because unemployment benefits usually run for one year, and those who are unemployed for longer either lose the eligibility altogether or receive only a fraction of earlier benefits. In Poland in 1993, for example, poverty of 36 percent of the poor could be related to unemployment. Poverty of half of those 36 percent was due to long-term unemployment.

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21 According to some estimates, up to a third of the output decline in the FSU may be attributable to trade disruption. For Eastern Europe, the estimates range from 8.5 percent of GDP for Czechoslovakia to 6.3 percent for Poland (see Rosati, 1993).

22 In some countries (the Baltics) for even less—6 months; in Armenia, 3 months only. In Ukraine, unemployment benefits are (in 1995) to be cut from 3 months to 1.

23 In Romania, for example, the long-term unemployed receive, at best, only an income support equal to about 11 percent of the average wage, while the minimum unemployment benefit is about 25 percent of the average wage (see Subbarao and Mehra, 1995, p3). In Poland, (flat) unemployment benefits are 35 percent of the average wage; the maximum amount of social assistance is 28 percent of the average wage. Even in Russia where the position of the unemployed is notoriously bad, an unemployed worker who was earning average wage before being laid off will receive more during the 15 months while unemployment benefits last than after provided rate of inflation remains less than about 400 percent per year. (This is because unemployment benefits are normally unindexed. Social assistance after expiry of the benefits is equal to the minimum wage which is, in the second half of 1994, was about 8 percent of the average wage. Calculated from Layard (1994, p.102).
Table 1
Projected and actual GDP growth rates

<table>
<thead>
<tr>
<th>Years</th>
<th>Poland</th>
<th>Hungary</th>
<th>Soviet Union</th>
<th>Czechoslovakia</th>
<th>Bulgaria</th>
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<tr>
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<td>Actual</td>
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<td>Actual</td>
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<tr>
<td>1990</td>
<td>-5.0</td>
<td>-11.9</td>
<td>-1.9</td>
<td>-4.0</td>
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<tr>
<td>1991</td>
<td>3.0</td>
<td>-8.0</td>
<td>-3.0</td>
<td>-7.5</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td></td>
<td>-15</td>
<td></td>
<td>-18.4</td>
<td>-5</td>
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<tr>
<td>1993</td>
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<td>-5</td>
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<td>-12</td>
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<td>1994</td>
<td></td>
<td>-8</td>
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<td>-15</td>
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Note: In all cases, projection are government projections most often agreed with IMF and the World Bank. Sources: For Hungary and Poland, Commander and Corricelli (1993, pp. 174-5); for Czechoslovakia and Bulgaria, Bruno (1993, p.20). For Russia, Birzhevniye Vedomosti, 7 December 1994.
Specific poverty rates are also higher in households affected by unemployment. In Poland, Bulgaria and Hungary, the poverty rates for the households where at least one member is unemployed, are between 2½ and 4 times higher than the country average. In Poland, for which we have very detailed data for 1993, one can observe the increase in poverty incidence as unemployment becomes more severe: households with one unemployed member who is not the head of the household had poverty rates twice the average; for households with a long-term unemployed, the incidence is 2.6 times higher than the average; for households with two or more unemployed members, it is 3.3 times higher, and for households headed by an unemployed person 4 times. We can expect that even if unemployment no longer rises, the share of the long-term unemployed will, and the linkage between unemployment and poverty would grow stronger.

But, while unemployment is an important cause of poverty, it is not the most important. Most of the poor—maybe as many as ¾—are the working poor. The poverty of these families is due to low-paying jobs held by their active members. And, indeed, it would be surprising if the working poor (including their children) were not the main category of the poor. Since drops in real GDP which ranged between 10 and 50 percent (excluding the countries at wars; see Table 2) did not lead to equivalent decreases in employment, output-per-person and real wages for many of those who remained employed plummeted.

By how much has poverty increased? Measures of poverty are notoriously unreliable and difficult to interpret. They depend not only on how frank people are in reporting their incomes (or expenditures), but also how good the statistical offices are in collecting the data (how representative are the surveys) and what is the poverty line used. Yet, one could make a fairly strong proposition that for any real poverty line, we are bound to find an increase in poverty in all the transition economies.

The recorded increase is, probably, greater than the actual increase. This is because before the transition, the estimates of the poverty rates were biased downwards, while today, they are biased upwards. Downward bias before the transition was because the surveys excluded people from the groups that were likely to be poor (institutionalized population, vagrants, the few unemployed), or underrepresented the groups with higher specific poverty rates (pensioners, farmers, large households, students). Income data, on the other hand, were relatively reliable. Today, the situation is reversed. The surveys are improving, bringing in some of the previously excluded "unreasonably" low or high poverty lines for which poverty may be unchanged at 0 or close to 100 percent.
unreported poor, while incomes are highly underreported.\textsuperscript{27} Thus, somewhat ironically, both an improvement (better surveys) and a deterioration in statistical practices (greater underreporting) combine to push the poverty rates up.

However, even after some adjustments are made, e.g. "blowing up" the reported household incomes by the macro data (whose downward bias is less), or by using expenditures rather than incomes—the poverty rates in 1993-94 are higher than they were before the transition for all the countries.

Table 2 shows poverty estimates using a single poverty line ($120 per capita per month at 1990 international prices).\textsuperscript{28} By using the same line, we can compare poverty in a given country through time, and poverty between the countries. This poverty line is 4 times higher than the World Bank absolute poverty line. It is, however, only ½ of the US and Germany's poverty lines.\textsuperscript{29} For all the transition economies as a whole, the poverty headcount has increased from about 4 percent or 15 million people to (conservatively estimated) about a third of the population or more than 100 million people. The latter figure excludes the Central Asian countries whose data are more dubious. If we "guessestimate" their poverty, total number of the poor may exceed 125 million. Almost 90 million of them live in the Slavic republics of the FSU—with 64 million in Russia alone.

The percentage of the poor increased from 5 to 23 in the Balkans and Poland, and from ½ to 1 in Central Europe (the Czech and Slovak republics, Slovenia and Hungary). Small increase in poverty in Central Europe is due to the fact that the common poverty line ($PPP 120) is low relative to these countries' average incomes both in 1987-88 and in 1992-93. Very few people had income below that level, in either year. The Baltic countries started the transition with very low poverty rates, close to those of Central European countries. Their poverty recorded sharp increases affecting over a third of the population. In the Slavic republics of the former USSR and Moldova, the poverty rates increased even more than in the Baltics. Russia's poverty headcount is estimated to have risen from 2 percent to about 43 percent of the population; Ukraine's from 2 to 41 percent. Finally, the Central Asian countries began the transition with relatively high poverty headcounts (in double digits except in Kazakhstan). The recent data for these republics show that poverty, as defined here, affects almost ½ of their population.

\textsuperscript{27}In the past, declared earnings were typically checked with enterprises, and pensions with post offices. None of that is done any longer, and a greater share of overall income is composed of sources that are intrinsically more difficult to verify.

\textsuperscript{28}Purchasing power of domestic currencies for 1990 is obtained from the latest round of International Comparison Project (ICP). $120 are multiplied by the 1990 local currency (LC) purchasing power to obtain the LC equivalent of the $120 poverty line in 1990. This amount is then inflated by the country's cost of living index to get the poverty line expressed in LC in the ensuing years.

\textsuperscript{29}$PPP 120 is below the so-called social minima used in Eastern Europe which range between 150 and 250 international dollars per month per capita. It is only slightly higher than the "austere" Russian Ministry of Labor subsistence minimum in existence since November 1992. The Ministry of Labor minimum is, in turn, less than 3/5 of the old Soviet social minimum.
### Table 2
Estimated Gini coefficients and poverty headcounts in transition economies

<table>
<thead>
<tr>
<th>Country</th>
<th>Real GDP decline</th>
<th>Gini coefficient (annual)</th>
<th>Poverty headcount (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>-10</td>
<td>26</td>
<td>31(^a)</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>-25</td>
<td>23(^b)</td>
<td>31(^c)</td>
</tr>
<tr>
<td>Romania</td>
<td>-33</td>
<td>23(^b)</td>
<td>33(^a)</td>
</tr>
<tr>
<td>Balkans and Poland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>-15</td>
<td>23(^b)</td>
<td>28</td>
</tr>
<tr>
<td>Czech rep.</td>
<td>-19</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>Slovakia</td>
<td>-21</td>
<td>20</td>
<td>20(^c)</td>
</tr>
<tr>
<td>Slovenia</td>
<td>-22</td>
<td>24</td>
<td>29</td>
</tr>
<tr>
<td>Central Europe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>-51</td>
<td>23</td>
<td>37</td>
</tr>
<tr>
<td>Latvia</td>
<td>-43</td>
<td>23</td>
<td>27(^a)</td>
</tr>
<tr>
<td>Estonia</td>
<td>-33</td>
<td>23</td>
<td>40(^a,d)</td>
</tr>
<tr>
<td>Baltic</td>
<td></td>
<td>23</td>
<td>35</td>
</tr>
<tr>
<td>Russia</td>
<td>-37</td>
<td>24</td>
<td>36</td>
</tr>
<tr>
<td>Ukraine</td>
<td>-37</td>
<td>23</td>
<td>33</td>
</tr>
<tr>
<td>Belarus</td>
<td>-14</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>Moldova</td>
<td>-43</td>
<td>24</td>
<td>36</td>
</tr>
<tr>
<td>Slavic and Moldova</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>-30</td>
<td>26</td>
<td>33</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>-21</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>-14</td>
<td>26</td>
<td>36</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>0</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td>Central Asia</td>
<td></td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>Comparators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>+5</td>
<td>34</td>
<td>37</td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>+66</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
<td>0</td>
<td>64</td>
</tr>
</tbody>
</table>


**Notes:** The poverty headcount as a percent of total population. Based on the poverty line=$120 per month per capita at 1990 international prices. Regional means for Gini's and growth rates are unweighted averages; regional poverty rates are population-weighted averages. Macro incomes used to "blow" up HBS incomes whenever HBS data underreport income relative to macro data. **Source:** Countries' household budget surveys. For details see Milanovic (1995, forthcoming).
How much would be needed in current dollar terms, assuming perfect targeting,\(^3\) to eradicate poverty in transition economies? The annual total is estimated at some $10.2\) billion.\(^3\) Around \(\frac{3}{4}\) is needed for the Slavic republics of the FSU and Moldova, with Russia alone accounting for the lion’s share ($6.4 billion per year). The Balkans and Poland would need some $2.5\) billion. The requirements of the other two regions, the Baltics and Central Europe, are small, amounting to some $300 million per year for both combined. In the case of Baltic countries, this is because the population is small even if the headcount ratios are high (the total Baltic population is less than that of Bulgaria). For the Central European countries, this is because the poverty rates are low.

The poverty deficit is estimated at 2.4 percent of the countries’ aggregated GDP. The poverty deficit as a percentage of GDP varies widely among the regions. It is very small in Central European countries: only about 0.1 percent of GDP. In the Balkans and Poland, the poverty deficit is 1.6 percent of GDP. In the Baltics, the poverty deficit is 3.7 percent of GDP. In Russia and the rest of Slavic republics and Moldova, it is 4½ percent of GDP. These figures may be contrasted with the poverty deficits of 3.8 percent of GDP for Turkey, 4.4 percent for Brazil and 5.4 for Colombia (all in the late 1980’s and using the same poverty line of $PPP 120).

However, these amounts are based on the unrealistic assumption of perfect targeting. If transition economies were as efficient in poverty alleviation as Western economies, the actual costs would be about twice as high ("the gross-up" factor) as the costs estimated on the assumption of perfect targeting.\(^3\) But they are probably less efficient. This is because of lower administrative efficiency and because more people are likely to be potential claimants. And when the numbers of the people near the poverty line increase, the probability of errors in targeting rises as well. In Poland, a country with a reasonably developed social assistance system, the "gross up" factor in 1993 was 2.4. For other countries, this factor could easily be around 3, implying that the overall cost of poverty alleviation may be close to $30 billion per year or between 7 and 8 percent of the countries’ combined GDP. This is about as much as what they spend on health and education together.\(^3\)

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\(^3\)Perfect targeting means that transfers are received only by the poor and in just the amounts required to bring them up to the poverty line.

\(^3\)This excludes the countries at war or various blockades (all of the former Yugoslavia except Slovenia, and the Transcaucasion countries) and the countries for which the 1993 data are not very reliable (Central Asia and Albania).

\(^3\)See Sarah Mitchell (1991, p.82) where the gross-up factor for all cash transfers (including social security) ranges from 4 for Sweden to 2 for Australia. Since most of Australia’s transfers are income- or means-tested transfers, 2 can be taken as the gross-up factor specifically for poverty-related transfers.

\(^3\) Note, as a matter of comparison, that all US anti-poverty spending is about $160 billion per year, that is about five times higher than the estimated poverty gap, inclusive of "leakages", in Eastern Europe and European part of the FSU.
Fact 3. Decline of average income and increased inequality.

What may be called "the dynamics of the descent in poverty" involves two movements: an across-the-board decline in real income and "stretching out" of income distribution. Both contribute to the increase in the numbers of the poor. The income and distribution effects are roughly equal: each is responsible for about 1/2 of the increase in poverty.

As income declines, the income distribution curve slides leftward and, for a given poverty line (z in Figure 1) more people become poor. But also for each given decline in income, the numbers of those who "descend" into poverty increase. This happens because we gradually move toward the "thicker" part of the income distribution curve where most of the population is located. To put it in a slightly technical jargon, the elasticity of poverty with respect to income declines. Empirical results show that for poorer countries, the Balkans, Poland, and all of the FSU, the elasticity is about 0.5, meaning that each one percent across-the-board decrease in income leads to a 0.5 percentage point increase in the poverty headcount. What does it mean in actual numbers for, say, Russia? Each 10 percent income decline will make an additional 5 percent of the population, or about 7 million people, poor. These are high elasticities, the outcome of relatively compressed income distribution in the formerly socialist economies.

Figure 1
Income distribution curve (lognormal density function)

Note: z=poverty line.

A growing income differentiation also added to poverty. Income distribution has become more unequal in a specific way. There is bunching (enmassment) of the distribution at low income levels, around the poverty line, while at high income levels, the distribution has become stretched out ("thinner"). Broadly speaking, the "winners" at the top (private entrepreneurs, professionals) have pulled far ahead of the rest of the population. The socialist middle classes (clerical staff, production workers, teachers, administrators, doctors) have all slid downwards, and since the losses were greater for the better-off among them, income distribution has become
"bunched" around the poverty line. On average, income inequality has increased by around 5 to 6 Gini points. The increases seem to have been the largest in the Baltics (which strongly contributed to the rise in poverty), followed by Russia, Bulgaria, Czech republic, and Poland.

What does a 5 to 6 points increase in the Gini coefficient—from about 24 in 1987 to about 30 in 1993—mean in practical terms? Two comparisons can be useful. First, this amount of increase is about one-half of that which occurred in the UK over the 10 years of the Thatcher rule. In Eastern Europe and the FSU, however, the change was compressed within 4 to 5 years, so the intensity of change was about the same. But, in addition, in transition economies, increasing inequality took place against the background of shrinking overall income. Second, a Gini coefficient of about 30 for transition economies as a whole means that they now have an income inequality close to that of medium- to high-inequality OECD countries.

We can break-down the increase in the number of the poor between the effects of lower incomes, more unequal distribution, and demography. Demography too can add up to the number of the poor even if the poverty rates are constant. The results, however, show that the demographic effects are negligible. Out of the total (conservatively estimated) 57 million new poor in Eastern Europe and the European part of the FSU, demographic changes were responsible for only 1.2 million. This is not surprising since population growth rates in almost all the countries were very low or even negative. Distributional changes brought in poverty for 29 million people, 19 million of whom live in Russia and 4 million in Poland. Decreasing incomes alone "pushed" into poverty 27 million people, 8.5 million of whom live in Russia, and 10 million in Ukraine and Belarus.

Fact 4. Private sector drives inequality up.

The driving force behind the increase in inequality appears to be substantially higher earnings of the skilled white-collar workers and private sector people (including the self-employed) and a growing share of private sector income. Earnings inequality has risen almost everywhere. We have unambiguous data to show that for Poland, the Czech republic, Slovakia,

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34Kolosi and Robert (1993, p.34) thus describe the situation in Hungary: "...[income] differentiation [was such that] the highest income groups exceeded the average income levels more than they did two years earlier, while the deviation of the lowest income decile from the average did not come about. Meanwhile, the income position of the middle strata...strongly deteriorated".


36UK, Australia, Italy, France, Canada have Ginis of around 30. US, Switzerland, and Ireland are more unequal; Scandinavian countries, Benelux, Western Germany are more equal. See Atkinson, Rainwater and Smeeding (1994, Figure 2).

37Simple growth of the population with the poverty rate constant, will increase the number of the poor.

38Of course, unfavorable distributional changes at low income level are also responsible for increased inequality (as witnessed by their sizeable contribution to increased poverty). But, it seems that even more important distributional changes took place at the top of income distribution.
Slovenia, Bulgaria and Russia. The second "contributor" to increasing inequality is a rising share of private sector income which is, of all broad income categories like wages, social transfers etc., the most unequally distributed. A very vivid, almost textbook, illustration of the trend is provided by the Bulgarian data. Inequality of private sector income, already higher than that of other sources (see Figure 2) shoots up at the same time as its share in total income rises (Figure 3). The importance of wages (most of them still derived from the state and semi-state sectors) declines, and targeting of social transfers does not change.

Social transfers have failed to mitigate the increase in inequality. As in the past, the concentration coefficient of cash social transfers has remained close to zero. This means that the correlation between the level of income and the level of social transfers received, which is expected to be negative, is not statistically significantly different from zero. This is in contrast, to use again the UK as an example, to the situation during the Thatcher era when declining cash social transfers were accompanied by better targeting. Between 1979 and 1989, the share of cash transfers in disposable income of the British population declined from 17 to 13 percent; meanwhile, the concentration coefficient of transfers moved from -18 to -32 (the larger absolute value indicates a sharper focus on the poor).

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39For Poland, see World Bank (1994); for Slovenia, Vodopivec and Orazem (1994); for the Czech and Slovak republics, Vecernik (1994) and Chase (1995); for eastern Germany, Bird, Schwarze and Wagner (1992).

40The concentration coefficient provides an index of transfer progressivity. It indicates how much of the transfer is captured by poorer households compared to the better-off. If all benefits are received by the poorest individual, the concentration coefficient would be -100; if everybody receives the same amount regardless of income, the coefficient is 0; if all benefits accrue to the richest person, the coefficient is +100.

41See Milanovic (1994, p. 190).
Figure 2
Bulgaria: Concentration coefficients of various sources of income

Note: More unequally distributed income source has a higher coefficient. The concentration coefficient also shows how much a given source "pushes" up the overall inequality.

Figure 3
Bulgaria: composition of disposable income (in percent)

Figure 4
Percentage of a transfer received by three lowest deciles in Chile, UK, Bulgaria, and Poland

Note: SA=social assistance; UEB=unemployment benefits.
Source: Countries' household budget surveys; Chilean data for 1987; UK 1991; Poland 1993; Bulgaria 1992.
It is also in strong contrast to Chile, where social transfers are extremely well targeted. For example, almost $\frac{1}{2}$ of the benefits from public works and unemployment insurance in Chile accrue to the lowest income decile and $\frac{3}{4}$ to the bottom three deciles. In the UK, about 80 percent of benefits from social assistance ("income support") is paid to the bottom three deciles (Figure 4). In Poland, on the other hand, the bottom three deciles receive less than 60 percent of social assistance and unemployment benefits, and in Bulgaria, only 40 percent of unemployment benefits. In Romania and Russia, social assistance accrues proportionately more to the rich than to the poor.\textsuperscript{42}

**Fact 5. The "winners": the educated, private sector.**

The "winners" in the transition are skilled white-collar workers, private entrepreneurs, city people, and (less certainly) women. An explanation for improved position of the skilled white-collar workers is increased demand for many "new" skills: for computer specialists, people with knowledge of foreign languages, accountants, bankers, even economists, the usual service sector people who do well in Western economies. This increased demand is a reflection of the rising share of the almost entirely private service sector in the GDP.\textsuperscript{43}

Returns to education have also risen. Večerník (1994a) calculates for the Czech republic that the rate of return to one additional year of education has, on average, risen from 3.5 percent to 6.2 percent. Comparing Czech and Slovak earnings distributions for 1984 and 1993, Chase (1995) finds the increase in the rate of return to education to have been between 2 and 3 percent. World Bank (1994, p. 93) report on Poland finds the increase to be from 6.4 percent in 1989 to 7.5 percent in 1992. As for returns to experience, one would expect that they decline as experience acquired under the previous regime becomes of less value in new market conditions. Indeed this is what the studies find in eastern Germany, Poland, the Czech Republic, and Slovakia. Only in Slovenia, returns to experience have increased.\textsuperscript{44} The results for Slovenia may be due to the less dramatic system change in that country (Slovenian enterprises were much more independent from the state than their counterparts in Czechoslovakia or Poland) and to some possible endogeneity in the results: it seems that wages of the older workers were deliberately raised in order to increase their pension base and allow them to retire early at rather comfortable pensions.\textsuperscript{45}

\textsuperscript{42}For Russia, see World Bank (1995, p. 49). For Romania, see Subbarao and Mehra (1995, p. 22).

\textsuperscript{43}There may be some similarity between the recent distributional outcomes in transition economies and in the West. In both, "winners" seem to be the people employed in non-tradables; losers, blue-collar workers whose industries became exposed to foreign competition.

\textsuperscript{44}For eastern Germany, see Bird, Schwarze and Wagner (1992); for Poland, World Bank (1994, p. 93); for the Czech republic and Slovakia, Chase (1994); for Slovenia, Vodopivec and Orazem (1994).

\textsuperscript{45}It is also worth noticing that, after fitting the standard human capital regression, all studies find that the unexplained portion of the earnings variation is greater after the transition. The conjuncture is that firm- and individual-specific factor that are not captured by education or experience are now much more important than before. The goodness-of-the-fit is about the same as obtained by the standard human capital models in Western economies.
The success of private entrepreneurs needs no explanations. They have done quite well, and, it seems, even better than the official data show. First, because some of them who have become very rich are unlikely ever to take part in any survey, and second, because they seem, on the whole, to be particularly keen to underreport their incomes.

City people have done better than rural folks. Cities are where most of the demand for new skills has been located. Large cities have lower rates of unemployment and poverty than the rest of the country. Almost all capital or large cities have unemployment rates $\frac{1}{2}$ or less of the country average (see Table 3).

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Unemployment rates in capital cities and country-wide</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capital city</td>
</tr>
<tr>
<td>Warsaw; Krakow (Poland)</td>
<td>7.9 and 7.5</td>
</tr>
<tr>
<td>Riga (Latvia)</td>
<td>2.2</td>
</tr>
<tr>
<td>Budapest (Hungary)</td>
<td>2.6</td>
</tr>
<tr>
<td>Bratislava (Slovakia)</td>
<td>5.1</td>
</tr>
<tr>
<td>Bucharest (Romania)</td>
<td>5.6</td>
</tr>
<tr>
<td>Prague (Czech republic)</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Finally, women seem to have done better than men, mostly because the increase in demand has been for those services that were traditionally under-developed and under-paid in socialism (e.g. banking, tourism, accounting), and strongly "feminized". Improvement in women's relative wages should not, however, let us forget that often blatant discrimination of women has increased and that elimination of subsidized child care, and sometimes abortion rights, has affected them disproportionately more than men.

**Fact 6. Growing urban-rural and regional inequality.**

The fact that the city folks have gained has the two following implications. First, farmers seem to have lost, in relative terms, to workers.\footnote{Workers include both white- and blue-collar workers employed in the public and mixed sectors (but not the self-employed and the small-scale private sector).} Table 4 illustrates that, with the exception of Romania and Kyrgyzstan, in all other ten countries, the relative position of farmers either remained unchanged (in three) or worsened (in seven). In some countries, worsening was due to the removal of subsidies that provided cheap inputs for farmers and assured them relatively
high margins. In the Czech and Slovak republics, and Poland the explicit parity policy that linked farmers’ incomes to those of workers was abandoned. In yet others (e.g. the Baltics, Ukraine, Albania, Bulgaria), large dislocation of the farm sector occurred as land was privatized, collective farms disbanded, but uncertainly regarding ownership and confusion reigned.

The second implication is increased regional inequality. Examples include Budapest vs. the rest of Hungary, Warsaw vs. South-east Poland, western vs. eastern Latvia and Estonia. The industrial areas, developed in the 1950's and 1960's, based on attracting labor force from villages, and oriented in their production towards the Eastern markets, have suffered the most. The current restructuring is partly the undoing of the misguided Communist industrialization. In most hard-hit countries (Romania, Armenia) some urban dwellers go back to the land. As a clear indicator of social demodemization in these countries, the importance of income in kind rises.

Table 4
Change in the relative position of farmers vis-a-vis workers (comparing 1987-88 with 1992-93)

<table>
<thead>
<tr>
<th>Change in relative position</th>
<th>Farmers better off in 1987-88</th>
<th>Farmers=workers</th>
<th>Workers better off in 1987-88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers win</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poland</td>
<td>Lithuania</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Estonia</td>
<td></td>
<td>Russia</td>
</tr>
<tr>
<td></td>
<td>Latvia</td>
<td></td>
<td>Bulgaria</td>
</tr>
<tr>
<td>The same</td>
<td>Belarus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Slovakia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Czech</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmers lose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Russia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Slovenia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Workers’ relative position improves if the ratio between worker-farmer per capita income has improved by more than 3 percentage points.
Source: PRDTE data base.

Fact 7. Pensioners hold their ground.

Pensioners seem, on average, to have retained their relative position vis-a-vis workers.

*In the Czech republic, agricultural subsidies as a share of GDP decreased from 4.2 percent in 1989 to 0.8 percent in 1993 (from Mladek, 1994, p. 5).

*See also Blanchard, Commander and Coricelli (1995, pp. 320-23).
Pensioners’ relative position stayed unchanged in 7 countries, improved in 5, and got worse in 6 (see Table 5). In Hungary, Poland and Slovenia, where pensions account for almost 15 percent of GDP, and the pension/wage ratio stands at its historical high (see Figure 5), they have even gained relative to workers. They same is the case in Central Asian republics. However, the pension system crisis severely afflicting Eastern Europe and parts of the FSU is less of an issue in Central Asia because of a much younger population.

There is a interesting bifurcation in the position of pensioners. In Central Europe, where pensioners were, prior to the transition, well-off in relation to workers, their position has further improved. In the European part of the former Soviet Union, and in Romania and Bulgaria, where the average pension-to-average wage ratio was historically low (ranging between 35 and 45 percent), pensioners have either lost compared to workers, or just maintained their relative position (see Table 5).

![Figure 5](image)

**Figure 5**

Pension-wage ratio for Hungary and Poland, 1956-93

<table>
<thead>
<tr>
<th>Year</th>
<th>Hungary</th>
<th>Poland</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>61</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>66</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>71</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>76</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>81</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>86</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>91</td>
<td>90</td>
<td>95</td>
</tr>
</tbody>
</table>

Note: Average pension to average wage (in percent).

Juxtaposing this finding to the earlier point regarding the relative loss for farmers, leads us to the conclusion that the approximate order of gain by social class during the transition is as follows: private sector people and the self-employed > workers = pensioners > farmers. If one were asked, in 1990, to make the guess about these rankings, chances are that he would have erred by assuming that pensioners would fare the worst (but, then, he would have erred even more by failing to forecast the huge decreases in income). Why have pension expenditures shown themselves to be rather sticky? To this question, which is important for two reasons, we turn next. First, pensions represent by far the largest chunk of cash social expenditures (accounting for 70 to 80 percent of them). The continuation of current pension trends is fiscally unsustainable, or, at the very least, incompatible with faster investment and growth.\(^4\) Pension

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\(^4\)See Krumm, Milanovic and Walton (1994, Chapter 2).
reform is needed. It is important to try to explain why it has been slow in coming. Second, pensions are at the heart of the very sharp trade-off between the welfare of the elderly and the young which is currently being played out in all the transition economies.

Table 5  
Change in the relative position of pensioners vis-a-vis workers  
(comparing 1987-88 with 1992-93)

<table>
<thead>
<tr>
<th>Change in relative position</th>
<th>Below 40%</th>
<th>Between 40 and 50%</th>
<th>Above 50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pensioners win</td>
<td>Kyrgyzstan Turkmenistan Ukraine</td>
<td></td>
<td>Slovenia Poland</td>
</tr>
<tr>
<td>The same</td>
<td>Romania Kazakhstan Belarus Russia</td>
<td>Moldova Uzbekistan</td>
<td>Hungary</td>
</tr>
<tr>
<td>Pensioners lose</td>
<td>Lithuania Estonia Latvia</td>
<td>Bulgaria Slovakia</td>
<td>Czech</td>
</tr>
</tbody>
</table>

**Note:** Improvement (deterioration) requires that the 1992-93 pension-to-wage ratio has increased (decreased), by more than 3 percentage points. **Source:** PRDTE data base.
Section 3
THE KEY ISSUES OF SOCIAL POLICY:
PENSION REFORM AND BETTER TARGETING OF SOCIAL ASSISTANCE

The two key issues in social policy reforms are the pension reform and improvement of social assistance. They are the key issues for different reasons. The pension reform’s importance stems from financial considerations: pensions account for between 7 and 15 percent of GDP in transition economies, and for 70 to 80 percent of all cash social transfers. The reform of social assistance is needed to prevent massive increases in destitution during the transition. Its main motivation is thus humanitarian or welfarist (minimization of utility losses of the population) and political (to prevent backlash against the transition). In both reforms, incentive issues also play a role, although incentive issues are probably subsidiary to the two key objectives: financial and political. Examples of incentive considerations that must be taken into account in the design of the reforms are: for pensions, the current non-actuarial pension calculations that lead people to choose early retirement and then continue working; and for social assistance, 100 percent withdrawal of benefits which makes recipients indifferent between working and not working.

THE ISSUE OF PENSIONS: RISING SHARE OF PENSIONS IN GDP

In all East European countries, pensions spending as a share of GDP increased during the transition. The average (unweighted) increase between 1987-88 and 1993 is 3 percentage points of GDP: from an average of 7.4 percent to 10.3 (see Table 6). The most spectacular increases were recorded in Poland and Slovenia where the share rose by respectively 8 and 4 percentage points. The situation is less dramatic in the former Soviet Union for two reasons. First, historically, pension spending was less—even in the parts of the USSR that were demographically similar to Eastern Europe—because the pension-wage ratios were lower. Second, the share of pensions in GDP has remained about the same in the Slavic republics, Moldova, and the Baltics (at under 7 percent), and in Central Asia (6 percent). Overall, out of 20 countries, pension spending as a share of GDP decreased by more than 1 GDP percentage point in only three: Estonia, Moldova, and Kyrgyzstan. In seven others, it remained within ± GDP percentage point where it was before the transition. In ten countries, it went up.

It is useful to illustrate the problem with a simple "back of the envelope" calculation. The composition of Eastern European population is such that ¼ of the population are the young, little more than ½ is of the working age (between 15 and 55, for women, or 60 for men), and some 20 percent are the people of the retirement age. However, large numbers of early and invalidity pensioners make the actual number of pension recipients greater than the number of people of pensionable age. We can then, for simplicity, put the number of pension recipients at ¼ of the population. This gives about 2 working-age persons per each pensioner. But, only about 80

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*For a very comprehensive review of the pension issue see World Bank (1994a; Chapter 8).*
percent of the active population are in labor force. The ratio between wage earners (or earners in general because many of them may be self-employed) and pensioners thus becomes 1.6 to 1. Finally, add to that 10 percent of labor force that is jobless. The ratio between the employed and the pensioners declines further to 1.5 to 1. Now, let the average pension to average wage ratio be relatively conservatively set at 50 percent. We then have the requirement that for each $1.5 paid out in net wages, there should be $0.5 paid for pension contributions. This gives a rate of payroll taxation for pensions alone equal to 33 percent—more or less what that rate is in transition economies. When we add to that all other benefits that are financed out of payroll (contributions for sickness benefits, maternity benefits, family allowance, unemployment benefits etc), about 40 percent or more of net wages are "earmarked" for various social transfers. Then if wages account for about 40 percent of GDP, pensions will amount to some 13 percent of GDP and total cash transfers to 16 percent.

Is the pension problem in the formerly socialist economies a new problem? No—it has been there, simmering even before the transition as population was aging and liberal retirement provisions were getting more out of step with stagnant incomes. However, several features, some of them linked with the transition, some of them concurrent with the transition have aggravated the problem. First, for the concurrent issues. The mere passage of time makes the problem of how to provide for the elderly more acute, because all East European countries, the Baltics and the Slavic republics of the FSU have an aging population. Thus, the passage of five years alone made the problem more serious. Second, for the features related to the transition. There was, due to fears of unemployment, an increase in the already prevalent practice of early retirement. As staffing was cut, workers close to their retirement age either took the opportunity to retire, or were encouraged to do so. The numbers of the relatively young retirees swelled: for example, in Poland, between 1989 and 1992, about 500,000 people benefitted from early retirement related to industrial restructuring.\(^5\) This is almost 1/3 of the increase in the number of pensioners between these two years. Loss of job for many meant that the number of contributors declined. Growth of private sector did not contribute much to revenues both because of its still small size, and, more importantly, high tax evasion. The number of contributors declined precisely when the number of pensioners rose. The fact that the transition was accompanied by severe declines in income made the problem even more acute because distributional conflicts are sharper when the size of the cake is shrinking.

Our next issues are two. First, how can we explain that pensions did not contract faster than wages? We saw in Table 5 that the pension-wage ratio in seven out of 20 countries remained the same and in six increased. The pension outlays/GDP ratio remained the same in seven countries and rose in nine. In other words, what is the explanation for pension "stickiness"? Second, what, in the area of pension reform, was done so far in various countries that warrants attention.

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\(^5\)Another 1 million also retired early, but in connection with other provisions on work in harmful or difficult conditions. See Galinowska (1994, pp.32-3).
Why are pensions sticky?

There are several possible reasons. First, in countries where inflation already existed before the transition, pension rules allowed for indexation. This protected them from inflation, whether anticipated or not. This was the case in Poland, Hungary and the former Yugoslavia. Since the rules were legislated, they were difficult to change. When real incomes began to decline, the existence of these relatively inflexible rules meant that pensions continued to reflect increases in the cost of living more or less adequately whereas wages did not. In countries where indexation did not exist prior to transition as in the former Soviet Union, pensions were at first rapidly eroded by inflation. However, in conditions that were approaching hyper-inflation, pensioners learned the importance of indexation, and newly introduced legislations arrested or decelerated further erosion.\footnote{Quarterly indexation of pensions was introduced in Russia from January 1993—one year after the price liberalization drove practically all the pensions down to the minimum level.}

Second, since no-one, as we saw in Section 2, anticipated GDP declines of such magnitudes, ex-ante pension spending plans turned out to be more generous than warranted by the actual GDP outturns.

Third, pensions benefitted from the perception that they were a relatively low priority issue. When the transition started, launched often with the “Big Bang”, pension reform was low among reform priorities. The dominant issues were removal of subsidies, price liberalization, unification of the exchange rate, control of inflation, reform of the banking sector, creation of the capital market, privatization. Indeed, new governments' administrative capacity was stretched to the extreme. At that early stage of reforms, the fate that befell pensions was the same as that of family allowances at the time of the big social reform in France under Leon Blum. Asked why family allowances were not touched, Leon Blum disarmingly replied: "We forgot about them".\footnote{Quoted from Murard (1993, p.53).}
Table 6
Pensions and total cash social transfers as percent of GDP

<table>
<thead>
<tr>
<th>Country</th>
<th>Pensions</th>
<th>Total Cash Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1987-88</td>
<td>1993</td>
</tr>
<tr>
<td>Belarus</td>
<td>5.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>7.7</td>
<td>9.6</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Estonia</td>
<td>6.9</td>
<td>5.6</td>
</tr>
<tr>
<td>Hungary</td>
<td>9.0</td>
<td>10.4</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>5.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>6.8</td>
<td>7.2</td>
</tr>
<tr>
<td>Latvia</td>
<td>5.9</td>
<td>9.6</td>
</tr>
<tr>
<td>Lithuania</td>
<td>6.6</td>
<td>6.8</td>
</tr>
<tr>
<td>Moldova</td>
<td>7.1</td>
<td>5.9</td>
</tr>
<tr>
<td>Poland</td>
<td>7.1</td>
<td>14.8</td>
</tr>
<tr>
<td>Romania</td>
<td>3.9</td>
<td>6.8</td>
</tr>
<tr>
<td>Russia</td>
<td>6.2</td>
<td>7.2</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>7.4</td>
<td>9.6</td>
</tr>
<tr>
<td>Slovenia</td>
<td>8.7</td>
<td>13.0</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>4.0</td>
<td>4.6</td>
</tr>
<tr>
<td>Ukraine</td>
<td>7.9</td>
<td>7.1</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>5.4</td>
<td>9.2</td>
</tr>
<tr>
<td>EEurope</td>
<td>7.4</td>
<td>10.3</td>
</tr>
<tr>
<td>Baltic</td>
<td>6.5</td>
<td>7.3</td>
</tr>
<tr>
<td>Slavic &amp; Moldova</td>
<td>6.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Central Asia</td>
<td>5.5</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Note: Regional means are unweighted averages. Source: World Bank PRDTE data files. Total cash transfers include pensions, various family benefits, sick leave benefits (including maternity leave) and unemployment allowances.

a = includes only pensions; b = only pensions and unemployment benefits; c = only pensions and sick leave benefits;
The fourth reason is that pensioners have become a very important political constituency. We saw that in East Europe, the Baltics and the Slavic republics of the former Soviet Union, pension recipients represent between 20 and 25 percent of the population (see also Table 7 below). In Slovenia, Bulgaria, Hungary and the Czech republic, they are approaching 30 percent. This represents between \( \frac{1}{3} \) and 40 percent of the voting population.\(^{53}\) Not all pensioners entirely depend for their livelihood on pensions. In the FSU, one out of each five or six pensioners has a part-time or full-time formal job; in Eastern Europe, perhaps one in ten.\(^{54}\) Some are employed in the informal sector. Many have income in kind, often from the plots of land they cultivate. However, for all of them, pensions are an important, and for most of them, the most important source of income. Thus their interests are virtually identical: to protect pensions from eroding.\(^{55}\) This makes them into a powerful political group. They are a large single-issue constituency.\(^{56}\) Further, the success or failure in the defense of that single issue is very transparent—as practically everything depends on the pension formula that is understandable to most people. Thus pensioners combine several elements needed for a successful political mobilization:

- they are numerous;
- they fight for a single issue;
- the issue is transparent;
- they have enough time to spend fighting for this issue.\(^{57}\)

The fifth reason for downward inflexibility of pension spending lies with what Lindert (1991) has dubbed "affinity". As the population ages, more people get closer to the retirement age and have an interest in keeping the current system unchanged. They feel greater affinity of interest with pensioners and vote accordingly. The affinity is particularly strong if there are many individuals without children. The key role they assign to the state is provision of benefits for the old age. They are not concerned with family benefits, not even with wages of the next generation as they would be if they had children and regarded them as insurance for the old age.

\(^{53}\)For the so-called pluralist hypothesis on pensioners as voters see Williamson and Pampel (1993).

\(^{54}\)Their numbers have declined fast in Eastern Europe. In 1987, about a quarter of pensioners in the Czech republic were employed; in 1992, only 9 percent. In Slovakia, over the same period, the share decreased from 21 to 7 percent (calculated from the countries' Statistical Yearbooks for 1993).

\(^{55}\)Their interests are not entirely coincidental, as there are potential conflicts between different cohorts of pensioners whose pensions are calculated according to different formulas ("old vintage" vs. "new vintage" pensioners, invalidity pensioners vs. old age pensioners etc). The differences between the old and new cohorts of pensioners, to the detriment of the old, used to be very large in several countries (the Soviet Union, Poland). The 1990 changes in the Polish pension law, for example, improved the position of the old pensioners but at a significant cost to the pension fund.

\(^{56}\)In most countries, pensioners tend to support socialist or former communist parties as these parties are thought to be more inclined to protect pensioners' interests. In Sofia, a week before the December 1994 parliamentary elections, in anticipation of socialists' victory, pensioners organized a large celebration with singing and dancing. In Poland, Estonia and Hungary, those over 60 years of age voted overwhelmingly for the left-wing parties (including former Communists) in 1994 and 1995 elections.

\(^{57}\)And, thanks to the disappearance of the queues, they now have more free time than in the past.
This is, of course, not unique to the transition economies. The same reasons explain why pensioners in developed countries have, in the course of the last 20 years, become less poor than the average, and children poorer than the average (the exact reverse of the situation twenty years ago). The feeling of "affinity" in transition economies was increased as many redundancies were "solved" through early retirement. Those who have not retired, but see themselves threatened by an early retirement, also try to protect themselves and vote for maintaining favorable pension rules.

The (limited) reform experience

It is not surprising that against this background, pension spending increased, and almost no countries except the Baltics were able to change the pension formulas, with a view of reducing the fiscal burden, let alone to reform their pension systems.

The score card of pension reform is indeed limited. Pensionable age was raised in Estonia (by six months per year until it reaches 65 for men and 60 for women), Czech republic (two months per year until it reaches 62 for men and between 57 and 61 for women), Slovenia (by 2 years) and Romania. These increases, however, do not lead to substantial savings in the short-run. Raising the retirement age by six month every year for both men and women, saves (in case of Poland) only about 0.3-0.4 percent of GDP annually. Moreover, to the extent that the young unemployed workers and the old workers are substitutes, one needs to offset against these savings the additional outlays for unemployment benefits. If the young and the old are perfect substitutes, and an average pension is twice as high as an average unemployment benefit, savings are only one-half of the estimated amount.

More important reforms are needed for a reduction in overall spending. Reduction in spending combined with the need to protect the lowest pension (i.e. to keep it at least at the level of the poverty line), translates into a compression of pensions. The compression may be come about in three different way.

- A flat or almost flat pension structure where everyone receives the same, or almost the same, pension can be introduced either as a temporary or permanent measure. The implicit,
even if weak, linkage between contributions and pensions is severed. Latvia and Estonia provide examples. In Estonia, since 1992, the old-age pension amounts are calculated according to the following formula:

\[
Pension = 0.6 \times \text{Minimum wage} + A \times \text{years of service}
\]

where \( A \) = the accrual factor. People who have worked the same number of years, regardless of their wages and contributions, receive the same payment. The situation is the same in Latvia.\(^6\)

- Another way to compress pensions is through differential indexation, such that higher pensions are not fully indexed or are indexed less than lower pensions. Differential indexation was used in Romania and in Russia after price liberalization in early 1992. All pensioners received the same absolute increases, thus reducing pension differentials.

- The third way in which compression occurs is, as it were, by chaos: pensions are equalized through payment delays. No new pension rules are enacted. The system ostensibly stays the same, but real pension amounts depend much more on when the pension is received than on what the official rules are. This happened, at different periods, in the Ukraine, Georgia, Armenia, Azerbaijan, Yugoslavia (Serbia-Montenegro) and Macedonia. As can be seen from the list, it occurred in conditions of hyper-inflation and exposure to war.

The three approaches differ in terms of "orderliness" with which they are implemented. Under the first approach, the new pension rules have to be legislated. Under the second approach, the pension-formation rules remain unchanged, and, temporarily, the type of indexation changes. Under the third approach, nothing needs to be changed: chaos takes care of everything.

\(^6\)The Latvian formula is

\[
pension = \bar{w} (0.3 + A \times \text{years of service})
\]

where \( \bar{w} \) = average wage, and \( A \) = accrual factor equal to 0.4%.
How were Baltic countries able to change pension rules and contain pension costs? The contrast between the Baltics and Central European countries (including Poland) is striking because their original starting points were either similar, or Central European countries’ position for cost-cutting was more advantageous. First, the Baltics started the transition with a low pension-wage ratio (under 40 percent), while Poland, Hungary, Slovenia and former Czechoslovakia had pension-wage ratios between 45 and 60 percent (see Table 7). Four years into the transition, the ratios for the Baltics have gone further down, while those in Central European countries, with the exception of the Czech Republic, have stayed the same or gone up. Second, since the wage (the denominator in our pension-wage ratio) declined even faster in the Baltics, the real cut in the pensions in the Baltics was even more substantial than indicated by the pension-wage ratio alone. Between 1987-88 and 1992-93, the average pension and pension

### Table 7

<table>
<thead>
<tr>
<th>Region</th>
<th>Pension recipients as percent of the population</th>
<th>Average pension-average wage ratio (in %)</th>
<th>Real average pension (1987 = 100)</th>
<th>Total real pension spending (1987 = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>22.2 24.0</td>
<td>39 42</td>
<td>50 42</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>21.9 25.2</td>
<td>39 34</td>
<td>57 74</td>
<td></td>
</tr>
<tr>
<td>Lithuania</td>
<td>22.0 23.9</td>
<td>35 29</td>
<td>61 52</td>
<td></td>
</tr>
<tr>
<td>Baltics</td>
<td>22.0 24.4</td>
<td>38 35</td>
<td>56 56</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>22.7 27.4</td>
<td>59 62</td>
<td>84 93</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>17.4 22.4</td>
<td>48 64</td>
<td>103 147</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>27.8 29.4</td>
<td>56 49</td>
<td>72 85</td>
<td></td>
</tr>
<tr>
<td>Slovakia</td>
<td>22.5 25.3</td>
<td>44 43</td>
<td>76 89</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>23.8 29.8</td>
<td>54 58</td>
<td>67 90</td>
<td></td>
</tr>
<tr>
<td>Central Europe</td>
<td>22.8 26.9</td>
<td>52 55</td>
<td>80 101</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Regional means are unweighted averages.
**Source:** World Bank PRDTE data files.
spending in the Baltics were cut by 45 percent. Meanwhile, in Central Europe, real pension was reduced by 20 percent, and real pension spending was flat. Therefore, despite relatively low pensions at the onset of the transition, and sharper declines in real GDPs, the Baltics ended up with the constant, and Central European countries with the sharply increasing, share of pension spending in GDP. The explanation for the difference in the outcome lies probably in the sphere of political economy.

Three elements may explain "Baltic exceptionalism".

- Strong feeling of discontinuity with the previous regime reflected in the feeling that it was foreign occupation. The implicit contract between the individual who made pension contributions and the state was much less compelling that in other countries where the feeling of country's "ownership" in the decisions by which pensions were determined was stronger. As an illustration, consider a statement by Latvia's Minister of Welfare who addressed the pensioners as follows: "you do not need big pensions, because you worked under the Communist regime, and your work accomplished nothing". It is unthinkable that such a statement could have been made elsewhere—without any apparent effect on the minister (although the pensioners associations did protest).

- The fact that many losers who are ethnic Russians are not citizens and cannot vote. Their political clout is negligible. Although their demographic structure is not much different from the rest of the Baltic population, many more of them are located in cities with few complementary sources of income. In contrast, more of the older native Baltic inhabitants (who are citizens and vote) live in rural areas where they have access to other income sources. Pension cuts affect them less.

- The fact that pension-wage ratio in the USSR was lower than in Eastern Europe made it easier to introduce a low flat rate at around 30 percent. However, this is only a partially satisfactory argument because it explains only why low flat rate was acceptable, not why flat rate as such was acceptable. Central European countries could have established a higher flat rate.

Some preliminary conclusions

The pension changes to date suggest that:

- The pension reform is not primarily a technical but rather a political economy issue. The difference in outcomes between, for example, the Baltic states and Central Europe, cannot be explained in terms of the difference in the initial conditions, population shares of pensioners, population age structure, or wage structure. 

62The 45 percent reduction in pension spending is calculated from the unweighted pension expenditures, that is, pension spending in 1987-88 in each country, regardless of its absolute amount, is considered as 100.

63See Baltic Observer BM:
or features of the pension system. None of these were different. The difference in outcomes is
explained by the difference in the political clout of the constituencies. This is hardly surprising
since social insurance systems historically were, and remain today, strongly influenced by
political elements. That this is not peculiar to the transition economies, but to all countries, and
democracies in particular, can be noted from the fact that politics play a key role in determining
the outcome of pension reforms in developed countries. Sweden, Italy, Germany, France have
all begun with various intensity and success to reform their systems. In all cases, the political
rapport de force is crucial for the outcome.

• The changes in the pension system should start within the parameters given by the
existing PAYG system without waiting to introduce more ambitious private and funded systems.
The introduction of the funded systems may take years. The need for reforms is more
immediate. The key ingredients of the immediate reforms are reasonably well-known, and not
particularly contentious (in theory). They are, in order of increasing "radicalism":

  • penalization (via taxation or through reduced pensions) of working pensioners,
  • tighter eligibility rule for disability pensions,
  • elimination of many early retirement provisions,
  • actuarial early retirement pensions for those who still qualify,
  • gradual increase in the retirement age and its equalization for women and men,
  • increase in the number of years of earning that are used in the calculation of pension,
  • and, finally, if necessary, pension compression through either differential or partial (i.e.
  not full) indexation, or all but complete severance between the contribution and benefits (by a
  removal of the wage element from the pension determination formula).

Social assistance reform
The problem defined: increasing number of claimants and shortage of money

The second area of reform concerns social assistance. Social assistance services in many,
although not all (the exceptions are Central Europe and Bulgaria), transition economies were
rudimentary and many of them still remain so. Social assistance offices often distribute only
benefits in-kind and are concerned mostly with what may be called dysfunctional
households—that is, single parent families, the handicapped, alcoholics, people recently released
from prison, and so forth. The social assistance workers seem to think that their principal role
is to help particular disadvantaged categories of households. Households and individuals are, as
it were, placed in different "niches". Social workers do not think of the poor or the indigent in terms of a generic category of people whose transitory, or sometimes long-term, income is below a certain minimum.

Since the beginning of the transition, spending on family benefits as a share of GDP has increased in the FSU countries where universal family allowance was introduced in 1989 only. It is now fairly high in Central Asia, where, due to demographic structure, it reaches 2½ percent of GDP. In Eastern Europe it has been flat in terms of GDP, and, of course, declining in real terms (see Table 8). Comparable data on social assistance spending are not available. However, for the countries where we have the data, there was a clear increase in spending as a share of GDP. Higher spending was driven by —in some cases— huge increases in claimants and recipients of social assistance. Thus, in Poland, the number of recipients rose from little over 1 million in mid-1980s (2½ percent of the population) to more than 3 million in 1993, and spending rose from 0.1 percent of GDP to 0.5 percent;64 in Hungary, the number of claimants doubled between 1990 and 1993. Social assistance offices are sometimes overwhelmed by the sheer number of claimants; even more often, they run out of resources. In Riga, for example, the city-defined poverty line at the end of 1993 was Lats 12.9 (about $22) per capita per month. The city authorities, however, estimated that they had only 5 percent of the total amount needed to help everyone who could have claimed benefits based on that poverty line.65 In Poland, in November 1993, the legislature passed the law authorizing special benefits for expecting mothers with low incomes. The financing, supposed to come from the Center, never materialized, and local authorities, short of funds, simply failed to provide any benefits. In Ukraine, the 1994 centrally-decreed increase in allowance for War veterans was never implemented due to shortage of funds on the local level. The twin pressures of people and lack of resources mean that the current systems ought to be reformed with two objectives in mind:

- How to reduce the number of people who are eligible or who think they may be eligible for social assistance, that is, how to "pre-screen" the candidates before they come to social assistance offices;
- How to better use the money, that is how to improve targeting.

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64See World Bank, Poverty in Poland, Chapter 4.

65Note also that the official poverty line at the time was Lats 36! And this was not the "accounting" social minimum line (meaning that it is derived by the "armchair" economists never to be implemented), but the "minimum crisis basket", explicitly worked out to serve as a poverty line during the transition.
<table>
<thead>
<tr>
<th></th>
<th>Family benefits as % of GDP</th>
<th>Real spending on family benefits in 1992-93</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>87-88</td>
<td>92-93</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Hungary</td>
<td>2.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>2.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Latvia</td>
<td>0.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Moldova</td>
<td>0.8</td>
<td>n.a.</td>
</tr>
<tr>
<td>Poland</td>
<td>1.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Romania</td>
<td>5.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Russia</td>
<td>1.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>2.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Ukraine</td>
<td>0.4</td>
<td>1.1</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>EEurope</td>
<td>2.5</td>
<td>2.4</td>
</tr>
<tr>
<td>Baltics</td>
<td>1.4</td>
<td>2.0</td>
</tr>
<tr>
<td>Slavic &amp; Moldova</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Central Asia</td>
<td>2.4</td>
<td>3.3</td>
</tr>
</tbody>
</table>

**Note:** Regional means are unweighted averages.

**Source:** World Bank PRDTE data files.
The current system

A social assistance system in a narrow sense of cash help for those whose transitory income is low did not exist in the past. As explained in Section 1, the development of social assistance system was limited because it was: (i) redundant because the intrinsic features of the system such as full employment, high participation rates of women, free health and education, guaranteed state pensions, and subsidies on essential goods, implied that few people would have very low transitory incomes, and (ii) because of the dim view that the authorities took of the poor.

If we define the three key features of West European social assistance systems as: (i) there is an official poverty line; (ii) having income below the poverty line and assets below a certain minimum is a sufficient condition for eligibility; and (iii) social assistance offices try, in principle, to cover the entire gap between the poverty line and actual income, no country in Eastern Europe had such a system. We can call such a system the Minimum Income Guarantee (MIG) system.66 Czechoslovakia’s social assistance apparently came closest to it, but due to the sensitivity with which Communist authorities treated the issue of poverty, the rules of social assistance remained opaque. It appears, however, that social assistance offices in Czechoslovakia tried to cover the entire gap between the poverty line and actual income.67

The existing systems in the transition economies was differ from MIG in the following respects. Although income testing is an integral component of the system, having an income less than the poverty line is only a necessary but not a sufficient condition for receiving social aid. Criteria other than income must be fulfilled as well. These are mostly related to low earning capacity (almost zero elasticity of labor supply): single-parent households, presence of handicapped or elderly members, alcoholism in the family etc. For example, Polish 1990 law on social assistance lists eleven such conditions, at least one of which, in addition to low income, must be present to be eligible for social assistance.68 The Czech 1991 law also stipulates that individuals must be unable to "increase their income due to their age or health situation".69 Social assistance is viewed as temporary and is most often provided in kind (e.g., hot meals or food vouchers, drugs, help in looking after the children, payment for kindergartens, wood and coal, payment of utilities and rent). Social assistance does not aim to fully cover the difference between the poverty line and actual income. How much is covered depends on the judgment of local social assistance workers and is even impossible to determine exactly because

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66 Obviously, in reality, not all of the gap will be identified (less than 100 percent take-up rate), nor filled (mistakes in assessment). Also, the MIG system can be implemented in different ways: through direct payments up to the poverty line, universal negative income tax (same flat amount paid to everybody and then subject to taxation), or specific negative income tax to the poor (akin to earned income credit).


68 The Law became effective in January 1991. For the text, see Fijalkowski (1992, pp. 63-85).

of the prevalence of in-kind assistance. We can call such systems Income Testing as Screening device (ITS) to indicate that income testing does exist, but no minimum income guarantee.\footnote{The definitions of MIG and ITS systems are similar to respectively Type A system that seeks to eliminate poverty, and Type B system that only seeks to alleviate it (see Sipos, 1994). As Sipos points out, West European systems are generally Type A; the US has a Type B system.}

None of the three MIG features hold in an ITS system. The poverty line is not an official, published and publicized, line, even if there is a \textit{de facto} poverty line that social assistance offices follow when screening the candidates.\footnote{Note that there could be several or even many poverty lines for different parts of the country. Multitude of poverty lines is consistent with both ITS and MIG systems.} Secondly, having income below the poverty line is only a necessary, but not a sufficient condition for assistance. And thirdly, the offices do not try, even in principle, to fully fill the poverty gap.

ITS systems are in existence in practically all the countries in Eastern Europe and the FSU. Poland, and Czech and Slovak republics and Estonia have officially an ITS system where low income \textit{plus} family dysfunctionality or zero elasticity of labor supply are the requirements for social assistance. The situation is similar in Hungary, Bulgaria, the successor states of Yugoslavia, Romania. In Russia and Ukraine, a "weaker" form of an ITS system is applied. The major difference is that low income is often not an explicit necessary condition for receiving the assistance—but rather a "desirable" condition. Although there are poverty lines which social assistance are supposed to follow (in a country as vast as Russia, the lines differ widely by region), these are "weak" lines since a lot depends on social workers’ judgment, and, of course, availability of funds.\footnote{A regionally very diversified system does not exist only in large countries like Russia and Ukraine. Latvia too has a regionally-based social assistance—such that the poor in different parts of the country are treated differently.} It is still an ITS system—income is used for screening the candidates—but more than elsewhere is left to judgment.

**How to improve targeting?**

The central issue in the reform of social assistance is how to improve targeting. Targeting can be improved in two ways. One is to move from ITS to MIG-type systems. The latter, in theory, should achieve perfect targeting. The second course is to retain the ITS system (and for those with "weak" ITS systems to move to "firm" ITS systems), but to reinforce indicator targeting. In order to reduce the number of potential claimants whose incomes must be assessed, transfers would then be focused on the best and \textit{firm} (i.e. difficult to hide or manipulate) proxies of poverty like number of children, age of the household head, unemployment, and so forth. Also, the key economic variables (minimum pension, minimum unemployment benefit, family allowance etc.) need to be structured in such a way that most of their recipients cannot be candidates for social assistance (see Section "Some essential rules for transfer payments" below). Social assistance would be the last resort, dealing with those that have "fallen through the net". But it would remain an ITS system in the sense that there would be no attempt to fill the entire
poverty gap, nor would low income alone be a sufficient condition for assistance.

The two approaches differ in their attitude toward some of the currently existing benefits which are reasonably well targeted. For example, under the "movement to MIG", there is no reason to retain family allowance. It can be discontinued altogether (or kept at a very low level), because everybody who is really poor should be helped via the guaranteed minimum income. But, if the second alternative is selected, family allowances would continue to play an important role. Their role would be to "pre-screen" many of the families—"vault" them over the poverty line—so that they do not come applying for social assistance.\textsuperscript{73}

Before we move to a comparison of MIG and ITS systems, we shall look at some current experience with targeting using the 1993 Polish data.

**Targeting in practice: an example from Poland**

Targeting mistakes are of three types.

- **Spillover.** Payments to the poor in excess of the amount they need to reach the poverty line.
- **Inclusion error.** Payments to the non-poor who should not receive social assistance.
- **Exclusion error.** Non-payments to the poor.

The first two are also called "Excess" or E-mistakes (Stewart and Cornia, 1994); the third is also called "Failure" or F-mistake.

Excess\textsuperscript{74} and failure mistakes were analyzed on the individual 1993 Polish data using the Heckman-type procedure. Equation (2) is the "screening" equation, explaining the process of "selection into poverty". Equation (3) explains the determinants of the error of exclusion and inclusion. It controls for the selection bias by using the reverse Mills-ratio calculated from (2).\textsuperscript{75}

\begin{align*}
P_i &= f (C_{hi}, E_{i}, U_{i}, M_{i}, LC_{i}, MC_{i}, SC_{i}, V_{i}) \\
ES_i &= f (C_{hi}, E_{i}, A_{i}, U_{i}, M_{i}, MC_{i}, SC_{i}, V_{i})
\end{align*}

\textsuperscript{73}The focus of family allowances can be improved by some rough income-testing (e.g., discontinuing payments to families with income or wage three or more times higher than the average).

\textsuperscript{74}"Excess" mistake in this case does not include spillover.

\textsuperscript{75}In order to exactly identify the two equations, we drop large cities from equation (3), and number of adults from equations (2).
where

\[ P_i = \text{poverty status of household } i \text{ prior to receiving social assistance}, \]
\[ ES_i = \text{error status (binary variable 0,1)}, \]
\[ E_t = \text{years of education by the head of household}, \]
\[ A_i = \text{number of adults in household}, \]
\[ C_{hi} = \text{number of children in household}, \]
\[ U_i = \text{number of unemployed members in household}, \]
\[ M_i = \text{family type status (binary variable: single mother with children } = 1, \text{ all others } = 0), \]
\[ L_i = \text{size of locality (4 types)} \]

We classified a household as "poor" if its expenditures per equivalent adult were less than the minimum pension, which is the eligibility criterion for social assistance in Poland. The results are shown in Table 9.

Table 9
Determinants of the failure and excess mistakes of social assistance

<table>
<thead>
<tr>
<th></th>
<th>Failure to deliver</th>
<th>Excess assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>t-value</td>
</tr>
<tr>
<td>Education; household head; number of years</td>
<td>0.117</td>
<td>1.72</td>
</tr>
<tr>
<td>Number of adults</td>
<td>0.457**</td>
<td>2.73</td>
</tr>
<tr>
<td>Number of children</td>
<td>-0.434**</td>
<td>-4.53</td>
</tr>
<tr>
<td>Number of the unemployed</td>
<td>-0.719**</td>
<td>-3.61</td>
</tr>
<tr>
<td>Dummy (omitted: no)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother-with-children</td>
<td>-1.322**</td>
<td>-3.59</td>
</tr>
<tr>
<td>Dummy (omitted: very large city)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium city</td>
<td>0.019</td>
<td>0.05</td>
</tr>
<tr>
<td>Small city</td>
<td>0.401</td>
<td>0.96</td>
</tr>
<tr>
<td>Village</td>
<td>0.009</td>
<td>0.03</td>
</tr>
<tr>
<td>Mills ratio</td>
<td>-2.761**</td>
<td>-6.43</td>
</tr>
</tbody>
</table>

**: Pr > Chi, at 1%  
* : Pr > Chi, at 5% (both shaded)
Number of children, presence of the unemployed, of single mothers with children, and of more than one adult in a household are strongly associated with the failure to deliver social assistance. The first three reduce the failure error; the third increases it. It seems that the characteristics such as presence of children, the unemployed and single mothers, tend to convince social workers that households are indeed "needy". On the other hand, presence of an additional adult makes a household, even if poor, more likely to be excluded. This is probably explained by skepticism of social assistance officers regarding the real economic situation of the household. Social workers implicitly assume that such households have informal sector income. Interviews confirm this: social workers tend to believe that the presence of an additional adult means that he or she is either involved in some informal sector activity, or (an element of paternalism) that he should be. Social workers therefore prefer to withhold aid.

As for the error of "excess" assistance, we find that none of the variables except the presence of single mothers seems to matter. Single-parent households are more likely to be assisted even if they are not poor.

Interestingly, education of the household head has no influence on either type of errors.

Another important issue in targeting is what are the withdrawal rates (i.e. by how much social assistance is reduced as income increases) and how social assistance interacts with labor income (i.e. if there are incentives to look for a job rather than to rely on state aid). The thick line in Figure 7 shows disbursed social assistance in Poland as function of pre-social assistance income. As income rises, social assistance is cut in the ratio 1-for-1. The average withdrawal rate for the range between 100,000 and 900,000 zloty per equivalent adult is slightly above 100 percent. This is shown by the 45 degrees slope of the regression line (the broken line in Figure 7). After Zl. 900,000, the withdrawal rate is almost zero, because social assistance no longer varies (actually it becomes negligible) as income increases. At that point, incentive to take up a job is strong. By contrast, up to the level approximately equal to \( \frac{3}{4} \) of the poverty line, greater labor income is irrelevant because all of it is "dissipated" in smaller social assistance. For a one-person household, this disincentive does not matter because taking a job paying at least the minimum wage would place him far to the right in Figure 7, beyond the Zl. 900,000 point where his income is higher with work. The disincentive does matter, however, in case of a large family. There a choice by the household head to take the minimum wage job might raise the (equivalent) pre-social assistance household income by only 300-400,000 zloty, going, for example from Zl. 300,000 to Zl. 700,000. But then, as Figure 7 shows, all of the increase would be "dissipated" in smaller social assistance.

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66This view is similar to the "man in the house" rule, struck out by the US Supreme Court in 1968. The rule was used by many states to deny AFDC (Aid to Families with Dependent Children) to families where "a man" was present in the home even if he was not legally liable for children's support.

77This is the expected social assistance for a given level of income: it gives the average payment of social assistance for all households including those who receive none.
Of course, this problem is not specific to transition economies. The withdrawal rates are often around 100 percent in Western economies too. Two things may, however, make it potentially worse in transition economies:

- small "gap" between the minimum wage and the poverty line, which implies that those who decide to look for a job might not (particularly in case of large families) increase their family income sufficiently to "escape" the "chopper of 100 percent withdrawal rate, and

- that in many FSU countries in particular several benefits are "triggered" by the same income threshold. Then increase in pre-social assistance income beyond that
threshold might lead to the loss of all benefits, implying a withdrawal rate in excess of 100 percent, that is, a reduction in net income.\footnote{Very often one finds that the same income threshold is used to determine eligibility for social assistance, subsidized utilities and child care, lower transportation fare etc. By going over that threshold, family might lose more in lost benefits than it gets in higher money (pre-social assistance) income.}

**MIG vs. ITS: A Comparison**

**High percentage of targeting errors.** Let us look first at the targeting issue if the minimal income guarantee is adopted. The key issue is how to identify the poor, that is, ascertain the exact amount of income. This is difficult because a large part of income of the poor and the "near poor" is derived from informal activities which are almost impossible to monitor. In addition, even formal sector income from the small legalized and legitimate private businesses often goes unreported to tax authorities. What in addition makes targeting difficult is that at some realistic minimal guaranteed income, lots of people are both slightly below that income or slightly above. That means that approximately, 10 to 12 percent of the population might find itself within 10 percentage point of the MIG. (These values are derived from the elasticities ranging between 0.5 and 0.6, discussed in Section 2.) Many of these people may try to claim the benefit. As the data from a Polish study show, the "excess" error (benefits given to those whose income is above the poverty line) is concentrated in income groups slightly above the poverty line (see Figure 6). Forty percent of the "excess" error (both in terms of people and money spent) concerns those with income 30 percent or less above the poverty line.

**Figure 6**

_Distribution of the non-poor who receive social assistance_  
_(Poland, 1993)_

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure6.png}
\caption{Distribution of the non-poor who receive social assistance (Poland, 1993)}
\end{figure}

**Notes:** All the non-poor who have received social assistance = 100.  
Poverty line = minimum pension.
If many of the poor and the "near-poor" claim the benefits, their numbers will overwhelm social assistance offices. This has a further negative effect on targeting: identification of the poor becomes worse. The "failure" errors rise as the proportion of the poor in a given group of people increases. It is relatively easy to identify the poor in a group where poverty is rare. For example, if one takes a group composed only of household with two employed persons and one child, living in a town, poverty in such a group is rare, and those households that happen to be poor are relatively easily identified. The situation is very different when one deals with households where poverty is prevalent. For example, if one takes households with 4 or 5 children where one member is unemployed and who live in rural areas, many of them may be around the poverty line. It then becomes very difficult to tell those who should receive social assistance from those who should not. This is what may be called the "easy discrimination effect": among the people who share some demographic and social characteristics common to the rich, it is easy to target well because the poor stand out.

Using the Polish 1993 data, we have plotted the "failure" error, that is, of not giving social assistance to those who are poor, against the specific group poverty rates. We divide the population into 83 exclusive and exhaustive groups, using as "dividers", the socio-economic group (6 such groups), the place of residence (5 types), and the type of household (3 types: single parents regardless of household size, and small and large households). This gives a total of 90 groups but since some of them are empty, we end up with 83 groups. For each group we calculate the "failure" to deliver as:

\[
\frac{\text{Number of poor households without social assistance}}{\text{total number of poor households}}
\]

and the poverty rate in the usual fashion as the number of the poor over the total group population. The results show that the "failure" error is strongly associated with the group poverty rate (see Table 10).

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Std.err.</th>
<th>Adj.R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2099**</td>
<td>0.0338</td>
<td>0.3144</td>
</tr>
</tbody>
</table>

**: Highly significant (1%).

If we the extend the findings on the "excess" and "failure" errors to the level of the country as whole, it means that in countries where there are many potential claimants for aid, as in all transition economies, the frequency of both types of errors will be high. In countries where the number of potential claimants is small, errors will be less frequent. The poor will be more easily identified. This outcome does not depend on the intrinsic quality of social assistance.
offices (as it does not depend in the example of Poland quoted above) which also may be expected to be better in richer countries.

High percentage of targeting errors means that the costs of poverty alleviation will be high. As discussed in Section 1, one cannot assume that the costs of poverty elimination based on perfect targeting (i.e. assuming that all of the money goes only to the poor and in the exactly required amounts) are anything to go by. These costs, which range, for realistic poverty lines, between 2 and 3 percent of GDP (see Milanovic, 1994) must not be increased only by a factor of about 2—a number derived from Western experience, but by more. The formula is:

$$\frac{PD^*}{GDP} = \frac{HC \cdot sh}{GDP} \cdot \left[1 + ERR(HC)\right] = \frac{PD}{GDP} \cdot \left[1 + ERR(HC)\right]$$  

where PD*/GDP is the "effective" poverty deficit (PD) as a percent of GDP. This is equal to the headcount (HC) times the average shortfall of the poor below the poverty line (sh) divided by GDP—that is the PD/GDP "calculated" under the assumption of perfect targeting—"grossed up" by an error factor which is a positive function of the poverty headcount (HC). In Poland, a country with a reasonably developed social assistance system, the "gross up" factor amounted in 1993 to 2.3. About 44 percent of all social assistance was paid to the poor and was not in excess of the poverty line; 15 percent was the "spillover", and 41 percent was paid to the non-poor.  

Since ITS system relies on more restrictive conditions than the MIG (low income plus some dysfunctionality—most commonly zero elasticity of supply of labor), the numbers of potential claimants will be less. This is because fewer people will expect to get social aid and fewer will apply. Fewer applicants in turn implies that both the "failure" and "excess" errors will be less frequent, (not only in actual numbers, which is obvious because the number of applicants under ITS will be less than under MIG) but in proportion to the applicants.  

Fewer number of applicants and less frequent errors will both tend to reduce costs of poverty alleviation under the ITS system. Smaller HC will tend to reduce the value in equation (1) through both channels: lower "calculated" PD/GDP (under perfect targeting), and lower error factor.

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7See World Bank (1994, Chapter 4).

80This follows from the assumption that the percentage of errors is a function of the number of potential claimants. Although the number of targeting errors (individuals who are wrongly excluded or included) will be the same, with the given number of applicants, under ITS or MIG system, the expected greater number of applicants under the MIG system will raise the expected proportion of errors under MIG.
**Scrambled incentives.** The next problem with the minimum income guarantee has to do with incentives. If MIG is set at some realistic level, sufficient for subsistence, then MIG in transition economies will hardly be less than the minimum wage. The ratio between the minimum wage and the effectively used poverty line in transition economies ranges between 1 and 1.6 (see Table 12 below, and Krumm, Milanovic and Walton, 1994, p. 16). In some countries (Russia, Latvia), the effective minimum wage is about the same (or lower) than the poverty line. That in turn means that almost all additional earnings of a poor person will be taxed at the rate of 100 percent (see discussion related to Figure 7 above). The person would lose one dollar of social assistance for each extra dollar of earnings. Although this is a feature of all similar systems (that do not have tapering off of benefits), it is particularly grave in this case because the average tax rate on extra earnings is also close to 100 percent. If the minimum wage is 4 times the MIG, a person who gets a job will indeed lose the MIG, but his average withdrawal rate will be 25 percent. If the minimum wage and the MIG are the same, his average tax rate is 100 percent. Incentive to join the labor force instead of remaining dependent on handouts will be low. Further weakening the incentives will be the fact that leisure is preferred to work (so that the same income without work will be positively preferred to income from work).

The incentive effect can be formalized. Consider two possible choices facing an individual. The first is to work informally earning \( \beta W_m \), where \( W_m = \text{minimum wage} \) and \( \beta < 1 \), with the probability \( p \) of receiving social assistance \( \alpha W_m \) (where \( \alpha < 1 \)) while claiming that his actual income is zero. His/her expected income will be:

\[
\beta W_m + p(\alpha W_m) = (\beta + p\alpha) W_m
\]

The second choice is to earn the minimum wage \( W_m \). Disutility of labor is the same in both cases. To illustrate, let, for the moment, both \( \alpha \) and \( \beta \) be 0.8. Then for all \( p > 0.25 \), it will be preferable to rely on social assistance. So long as he/she has more than 1 chance in 4 to "cheat" the social assistance office, he would rationally choose to do so.

Clearly, the decision will critically depend on the parameter \( \alpha \). We can assume that \( \beta \)'s will be more or less the same across the countries, i.e. there would be always some, rather given, cost of working informally. But \( \alpha \) moves from 1 in poor countries that would like to introduce MIG like Russia to 1/5 in rich countries with steep incentives like the UK. In countries where the minimum wage is at least five times higher than the social assistance benefit, it would not pay at all to try to "cheat". Even if probability of success were 1, a person would still be better off working in the formal sector at the minimum wage than working informally and trying

---

81The official minimum wage is lower because it is only used as a scalar to determine the wage scales and other benefits. Hardly anyone (0.2 percent of the employed in October 1994) is paid the minimum wage in Russia ($8). About 4 percent of workers receive the minimum wage ($25) in Latvia.

82In developed economies, the ratios range between 3 and 8 (see Krumm, Milanovic and Walton, 1994, p. 16).
to claim social assistance. In countries where $\alpha = \frac{1}{4}$, like in the US, the chance of success in cheating should be at least 80 percent. But in countries, like Poland and Russia, where $\alpha$ is between $\frac{1}{2}$ and 1, the $p$ need not be greater than 40 and 20 percent respectively for cheating to pay off.

Compared with MIG, the ITS system scores much higher here, simply because social assistance is given only to those with zero or close-to-zero elasticity of labor supply, so the incentive problems are minimized.

**Administration.** A final problem with the guaranteed minimum income is the problem of administration. As mentioned before, social assistance offices are likely to be swamped by the high number of claimants. Officers may be unable to deliver the benefits. Or, an increase in the number of offices, employees, and thus costs may be needed to deal with the prospective claimants.

Now, the problem of administration is present in both MIG and ITS. Under ITS, as under MIG, social workers will need to gauge incomes. They are not, however, required to make good on the income shortfall below the poverty line (which may save some time). On the other hand, officials will probably have to spend more time checking the exact family circumstances. Time-costs *per claimant* may be even higher under the ITS variant. But since the overall number of claimants will be less, the two effects may, in the aggregate, balance off each other.

In conclusion, ITS system appears preferable in terms of targeting, costs and incentives. There is no clear difference in terms of administration costs (see Table 11).

**Table 11**

**Summary comparison of Minimum Income Guarantee (MIG) and Income-testing as Screening (ITS) systems**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Preferred system</th>
<th>Why</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeting</td>
<td>ITS</td>
<td>More restrictive conditions and &quot;failure&quot; and &quot;excess&quot; errors are less.</td>
</tr>
<tr>
<td>Costs</td>
<td>ITS</td>
<td>More restrictive conditions; less leakage.</td>
</tr>
<tr>
<td>Incentives</td>
<td>ITS</td>
<td>Assistance given only to those unable to work.</td>
</tr>
<tr>
<td>Administration</td>
<td>no difference</td>
<td>Case-load heavier under MIG; but time required per each case greater under ITS.</td>
</tr>
</tbody>
</table>
Some essential rules for transfer payments

The administration problem common to both variants suggests that, whatever variant is adopted, some simple rules regarding the relationship between the minimum wage, the minimum pension, the minimum unemployment benefit and the poverty line need to exist. The purpose of these relationships is to exclude from the purview of authorities some of the potential claimants, and thus diminish the pressure on social assistance offices. To illustrate: if the minimum wage is higher than the poverty line, then no individual living by himself and having a job, is likely to apply for social aid. His case will be automatically dismissed. If this is not the case, the officials will have to spend time finding out if his income is or not below the poverty line.

The poverty line must be set at such a level which will make ineligible for social assistance: (1) those who have a job (implying that the minimum wage must exceed the poverty line for a single adult), (2) pensioners (ditto for the minimal or social pension), (3) recipients of unemployment benefits. It must also exclude those who, in addition to the above characteristics, have children in respect of whom are paid family allowances (FA). This means that a standard family of four, where the adults are either employed at the minimum wage or unemployed or pensioners and children receive family allowance, must be above the poverty line. These rules would leave as potential claimants for social assistance only the truly vulnerable: those whose unemployment benefits have expired, whose spouse has no source of income, who are handicapped etc.

Written in a formula form, the rules are:

\[ W_{\text{min}} > UEB_{\text{min}} > SA_1 \]
\[ P_{\text{min}} > SA_1 \]
\[ 2UEB_{\text{min}} + 2FA > SA_4 \]
\[ P_{\text{min}} + UEB_{\text{min}} + 2FA > SA_4 \]

The first relationship above shows the minimum wage \((W_{\text{min}})\) must be greater the minimum unemployment benefit \((UEB_{\text{min}})\) and both, of course, greater than the social assistance line (=effective poverty line) for a single individual \((SA_1)\). The same applies to the minimum pension \((P_{\text{min}})\). The last two equations show the relations that must hold for the standard (2 adults, 2 children) household.\(^4\)

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\(^3\)The role of family allowances or other universal (or quasi-universal, in the case when some rough income-testing is used to disqualify "rich" households) is very important because their existence can substantially cut on the number of social assistance claimants.

\(^4\)Since the minimum wage is already defined as higher than the unemployment benefit, the relations will hold a fortiori for the minimum wage. We also do not consider because it is unrealistic the family composed of two adults who are both retired and two children.
Table 12 documents these relationships using the data from several transition economies. For Hungary and Poland, all individual relation are "right": the minimum wage, the minimum pension and the minimum unemployment benefit are all greater or equal to the poverty line (in both countries, the minimum pension is used as the "screening" poverty line). In Estonia, the individual relations are also "right" with the exception of unemployment benefit that is less than the poverty line. In Russia and Latvia, on the contrary, the poverty line for an adult is several times greater than either the minimum wage, the minimum pension or the unemployment benefit.

When we look at the situation of a "standard" family only in Hungary does it stay ahead of poverty regardless of whether its adults members are employed, unemployed or retired. This is due to relatively high family allowance.\textsuperscript{55} In Poland and Estonia, however, a standard household would stay ahead of poverty only if both adults are employed. Otherwise, its income will be about 10-20 percent lower than the poverty threshold. In Latvia and Russia, the "standard" household is deeply below the poverty line (and thus can, at least in principle, try to claim social assistance) whether its members and unemployed, retired or work at low wages. The poverty lines are set unrealistically high. It clearly does not make sense to have a poverty line of $45-$50 per adult when the minimum wage is $25 as in Latvia, or about $15 as in Russia. In effect, Latvian government is in the process of revising the poverty line.\textsuperscript{86}

\textsuperscript{55}The minimum income requirement for a standard 4-member household is, based on the OECD equivalence scale, assumed to equal 2.7 adult units.

\textsuperscript{86}The World Bank suggested lowering the current poverty line to about $22 per capita per month.
### Table 12
Relationship between the poverty line, wages, pensions, unemployment benefits
(in current dollars, per month)

<table>
<thead>
<tr>
<th></th>
<th>Latvia end-93</th>
<th>Estonia beg. 94</th>
<th>Russia April 94</th>
<th>Poland end-93</th>
<th>Hungary Q2/93</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty line per 1 adult</td>
<td>50</td>
<td>22</td>
<td>45</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>Minimum pension</td>
<td>21</td>
<td>23</td>
<td>10</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>Minimum wage</td>
<td>25</td>
<td>23</td>
<td>15*</td>
<td>92</td>
<td>115</td>
</tr>
<tr>
<td>Average wage</td>
<td>83</td>
<td>92</td>
<td>110</td>
<td>240</td>
<td>325</td>
</tr>
<tr>
<td>Minimum UEB</td>
<td>18</td>
<td>14</td>
<td>10</td>
<td>74</td>
<td>97</td>
</tr>
<tr>
<td>Family allowance per one child a/</td>
<td>11</td>
<td>9</td>
<td>7</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>Income of the standard household as % of the poverty line</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both adults unemployed</td>
<td>41</td>
<td>77</td>
<td>28</td>
<td>90</td>
<td>139</td>
</tr>
<tr>
<td>One unemployed, one retired</td>
<td>44</td>
<td>93</td>
<td>28</td>
<td>87</td>
<td>120</td>
</tr>
<tr>
<td>Both adults employed at minimum wage</td>
<td>52</td>
<td>108</td>
<td>36</td>
<td>110</td>
<td>151</td>
</tr>
</tbody>
</table>

**Notes:**
- Domestic currency converted at current exchange rates.
- Cells where the poverty relationships are satisfied are shaded.
- a/ Family allowances vary in function of number of children and their age. An approximate average value was chosen in each case.
- *= The effective minimum wage in Russia is higher than the official minimum wage of approximately $10 (see footnote 35 above)
Section 4
CONCLUSIONS

What do our seven stylized facts suggest for the future?

High elasticity of poverty with respect to income was responsible for fast increase in the number of the poor. Can we expect a symmetrical movement which, accordion-like, after having pushed people below the poverty line, rises them above as incomes pick up? This depends on the shape of future growth. If income growth occurs first at the top and in the middle of income distribution, inequality will continue to rise and poverty will remain stable. This seems to have been the case in Poland, the only transition economy whose real GDP has been growing for three consecutive years. While GDP in 1994 is 10 percent higher than in 1991 (and real personal incomes 7 percent higher), the poverty rate in 1994 is about the same as in 1992, and inequality has risen.

But, then, when growth "trickles down", there could be sharp declines in poverty as relatively large segments of the population now bunched around the poverty line are pulled up. How likely is such a scenario? Several elements lend support to this optimistic view. Unlike in Latin America, the poor do not represent a distinct "underclass". Their poverty is "shallow": the income of an average poor in the transition economies is some 20 percent below the poverty line; in Latin America, it is 40 percent below the same poverty line. The educational achievements of the poor seem reasonable and not too different from the rest of the population. Their access to social services, ownership of consumer durables and apartments is also close to the average. The declines in their incomes are recent and have not yet been reflected in a marked deterioration of their asset position. Up to now, it looks more like a transitory income shock. The key infrastructure for the resumption of normal life (e.g. reasonable dwellings, school attendance, health care) is still there. If the "trickle down" does not take too much time to come around, large numbers of the current poor could be pulled up relatively quickly. But, if the "trickle down" takes a long time, these favorable elements will gradually be lost. In terms of durable goods ownership and human capital, the poor may gradually acquire characteristics different (inferior) from the rest of the population. Growth may then come too late for them.

One conclusion, and a possible concern, emerging from the results of the labor market studies on Poland, Hungary, Czech Republic, Slovakia and eastern Germany, is that what

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87 In Poland, the household heads of the poor households have, on average, 9.4 years of education, the non-poor, 10.6 years (the difference of 12 percent). In Argentina, the bottom quintile household heads' average years of education are 6.6 vs. 8.8 for the rest of the population (the difference of 25 percent); in Chile, 6.1 vs. 8.6 (the difference of 30 percent). (For Argentina, Chile and other Latin American countries, see Psacharopoulos et al, 1992, Annex tables).

88 Trying to "guess" who is poor based on asset-ownership or access to social services fails (see Dupre 1994 on Russia). If income of the very poor is written as 100, incomes of the "middle poor" and the non-poor in Poland are respectively 109 and 133; letting ownership of consumer durables, measured by a synthetic indicator, be 100 for the poor, the values for the "middle poor" and non-poor are only 106 and 114.
happens to the unemployed poor will greatly depend on what happens to the people with vocational education. Their position, compared to other educational groups, has deteriorated since the transition possibly due to their pre-transition oversupply.\footnote{This point is made by Flanagan (1993). Vodopivec and Orazem (1994, p.14), Chase (1995, p. 15), Bird, Schwarze and Wagner (1992, p. 12), World Bank (1994, p. 92) all find the decline in the position of those with vocational education compared to people with general secondary or university education.} The problem can be solved in two ways: either there would be an increase in demand for their skills or they would have to be retrained. The first solution is unlikely because their skills seem to be in low demand in a market economy. This then puts the onus on retraining. Retraining is expensive. How will countries that already have grave problems controlling social expenditures succeed in financing training is a mystery. One possibility is, of course, proportionate cuts elsewhere. For unless something is done regarding the people with vocational education, a possibility that an "underclass" appear cannot be ruled out.

What will be the outcome of the key tradeoff faced now, that between the elderly and children?

A reduction in pension spending should allow for some increase in other social transfers, in particular for family allowances and large poor families, a segment of the population the most affected by negative aspects of the transition. A shift in transfers, away from the elderly and towards children can be justified on two grounds.

- Children are now the most vulnerable group with poverty incidence about 1½ times higher than country-average (see Figure 6); the aged are probably the least vulnerable as a group although there are obvious differences among them.\footnote{Elderly living alone, particularly women, have very high poverty rates.}

- Children, who are future citizens and workers, should be spared as much as possible the worst pain of the current crisis. This is not purely a social but also an economic argument because impairment at an early age translates into lower education attainment and productivity later in life. If the countries in transition aspire to regain growth and become developed economies, they will need an educated and hard working labor force. None of this would happen if children are stunted in their development at a young age.\footnote{An illustration of the severity of the problem is provided by a survey conducted in ten largest cities in Russia: almost 50 percent of children report being hungry at least from time to time and one child in eight misses either breakfast or dinner (see Rimashevskaia, 1993, p. 47).}
The real key issue is not whether this change is desirable but whether the shift in priorities, from the elderly towards children, is politically feasible. It is a very difficult change because the elders are a very powerful and vocal political group. The same problem is on the agenda in the developed economies as well. Modest success it has met so far does not bode well for the reforms in transition economies. In addition, the transition economies need to effect this major realignment in conditions where some of them are barely starting to emerge from the depression with levels of income 15 to 20 percent below those of 10 years ago, while others are still mired in depression.
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