

Report No. 28024-MD

Recession, Recovery and Poverty in Moldova

November 2004

Europe and Central Asia Region
Human Development Sector Unit



Document of the World Bank

Currency Exchange Rates
Currency Unit: Lei (September 2004)
12.07 Lei = US\$1

Weights and Measures
The Metric System is used throughout the report

FISCAL YEAR
January 1 to December 31

ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
CIS	Commonwealth of Independent States
CSEC	Central and Southern European Countries
DSS	Department of Statistics and Sociology
EGPRSP	Economic Growth and Poverty Reduction Strategy Paper
GDP	Gross Domestic Product
HBS	Household Budget Survey
HFA	Health for All
LFS	Labor Force Surveys
MR	Mortality Rate
OECD	Organization of Economic Cooperation and Development
PPMU	Poverty and Policy Monitoring Unit, Ministry of Economy
PSU	Primary Sampling Unit
TB	Tuberculosis
TIMSS-R	Third International Mathematics and Sciences Study (Repeat)
UNDP	United Nations Development Program
WHO	World Health Organization

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Preface

The preparation of this report has coincided with the preparation of Moldova's Economic Growth and Poverty Reduction Strategy (EGPRSP). To inform this process, intermediate findings of the report were disseminated and discussed with a variety of Moldovan stakeholders. The first phase of preparation of the report, done in close collaboration with Moldovan counterparts (particularly in the Department of Statistics and Sociology (DSS), Ministry of Economy, and Ministry of Labor and Social Protection), focused on the approach to poverty measurement in Moldova, trends in poverty and the poverty profile, thus contributing to the debate on poverty lines and the initial diagnosis underlying the EGPRSP. The results from this phase were disseminated and discussed in Chisinau in March 2003, at a seminar hosted by the Ministry of Economy and sponsored by the UNDP and the World Bank, and attended by various Government and non-government stakeholders involved in the preparation of the EGPRSP, the academic and research community, and members of the donor community.

In the second phase, intermediate findings and policy recommendations emerging from the analysis of different sectors (e.g. such as rural poverty, labor markets, health, education, social protection) were discussed in a series of workshops in July 2003, attended by a similarly broad set of stakeholders, and particularly sectoral working groups preparing the EGPRSP.

This report, "Recession, Recovery and Living Standards in Moldova", is part of an ongoing dialogue on poverty and living standards in Moldova. It finalizes and synthesizes the analysis from the two phases of collaboration and consultation discussed above. This main report provides a comprehensive summary of the main findings and policy recommendations. The additional technical background papers (available upon request) contain the detailed technical analysis on which this main report is based.

The report was prepared by a World Bank team led by Reema Nayar. Background papers or short notes were prepared by Emily Andrews, Kathleen G. Beegle, Maria-Eugenia Bonilla-Chacin, Paulette Castel, Nora Dudwick, Monika Huppi, Hanan Jacoby, Diana Marginian, Meritxell Martinez, Andrei Munteanu, Reema Nayar, Guido Porto, Jan Rutkowski, Akshay Sethi, Jose Signoret. Additional comments and inputs were provided by Anush Bezhanyan, Lawrence Bouton, Rena Eichler, Henry Gordon, Betty Hanan and Alan Thompson. Jariya Hoffman, Maya Sandu, Viorica Strah were instrumental in coordinating the consultation process and linking with EGPRSP working Groups and local stakeholders. Ian Conachy and Nadejda Mochinova provided able support with the production of the report.

The team would like to acknowledge helpful comments from the peer reviewers, Margaret Grosh and Giovanna Prennushi. We are also grateful to Gordon Betcherman for his helpful review and comments on the labor markets papers. The team would like to thank Luca Barbone and Edward Brown for their leadership and guidance, and Arup Banerji for his comprehensive comments and guidance on earlier drafts. Additional comments from Mamta Murthi, Ellen Hamilton, and Asad Alam are also gratefully acknowledged.

Last but not the least, the World Bank team is extremely grateful to all the local stakeholders and donors in Moldova who participated in the various discussions and workshops. We would particularly like to thank the Ministry of Economy, the PPMU, the DSS and the line ministries (Health, Agriculture, Education, and Labor and Social Protection) for their collaboration. Special thanks are due to DSS staff and Department heads responsible for the HBS, LFS and the Annual Census of Enterprises, for their patience in responding to the various detailed questions of the team, and to Mr. Valcov, Director General, for his leadership in encouraging the open collaboration and exchange.

Recession, Recovery and Poverty in Moldova

Executive Summary

I. Introduction

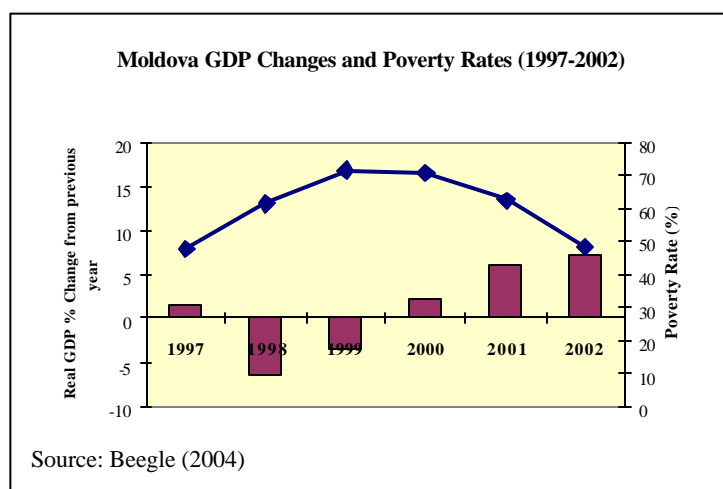
1. Following the collapse of the Soviet Union, Moldova faced the deepest and most prolonged recession among transition countries, and the resulting increase in poverty has made it the poorest country in Europe today. Although substantial progress was made in financial and macroeconomic stabilization through mid-1998, 1998's Russian financial crisis was a major blow to the economy, due to the strong trade and migration links between the two countries. After nearly a decade of economic decline, economic activity turned around in 2000, with GDP growing at an average of over 5% per year. The improved growth performance has been due to an increase in consumer demand (as a result of marked increases in inflows of worker remittances and real wages), recovery of demand in Moldova's main trading partners (Russia and Ukraine), the legacy of the positive structural developments during the 1998-2001 period, and the sustained pace of fiscal consolidation that followed the Russian financial crisis. The growth achievements, however, are fragile and medium term prospects are uncertain, while the recent slow progress on structural reforms have aggravated Moldova's vulnerability to external shocks.

2. The main objective of this report is to update and assess poverty in Moldova in its multiple dimensions, with a view to informing public policies. It focuses on the period of recession that followed the Russian crisis and the subsequent recovery. In terms of geographical coverage, it focuses only on the Right Bank of Moldova. The report draws on a variety of data sources, but particularly on the Household Budget Surveys collected by the Department of Statistics and Sociology between 1997 and 2002. These population based surveys permit an analysis of the welfare status of households and provide additional value to administrative data by allowing us to look at households that do not participate in public services and programs.

II. The Dynamics of Poverty

? ? *Poverty in Moldova is strongly linked to economic growth.*
? ? *Investing in quality human capital is a "luxury good" in Moldova.*

Figure A: Growth and poverty are closely tied in Moldova



3. *Growth and income poverty are closely tied in Moldova—poverty rose sharply and became deeper and more severe during the recession that followed the Russian Crisis but the rate, depth and severity of poverty began to recede with the subsequent recovery.* The poverty rate increased sharply and continuously in the recession that followed the Russian crisis. By 1999, 71% of the Moldovan population was poor, up from 47% in 1997. The turnaround in economic activity starting in 2000 was accompanied by reductions in poverty, and by 2002, the poverty rate had nearly returned to its level just before the

Russian Crisis (Figure A). The estimated elasticity of poverty with respect to growth in average consumption was about -2.9 (that is, for each 1% increase in growth, poverty fell by 2.9%), indicating a level of responsiveness that is comparable to, or slightly higher than, that observed worldwide. Other measures of poverty showed a similar pattern – poverty became deeper and more severe with the recession, but the depth and severity of poverty started to recede with the recovery. Inequality, as measured by the gini coefficient for consumption, increased slightly during the crisis, but by 2002, was comparable to 1997.

4. ***Growth was the key factor driving poverty reduction, but location was a factor in its effect on the poorest.*** In rural areas and large cities, the poorest sections of the population faced the smallest proportional falls in consumption during the recession, and the largest proportional increases during the recovery. This likely represents the relative stability provided by subsistence agriculture in rural areas and low-paid trade jobs in large cities. In small towns, in contrast, the poorest sections faced catastrophic falls in consumption during the recession and the largest proportional increases during the recovery. For most others, annual changes in per capita consumption, especially during the recovery, were very similar: it is particularly striking that consumption per capita increased at a uniform rate during the recovery (of about 10% per year) for all but the poorest households across all rural areas, small towns, and large cities.

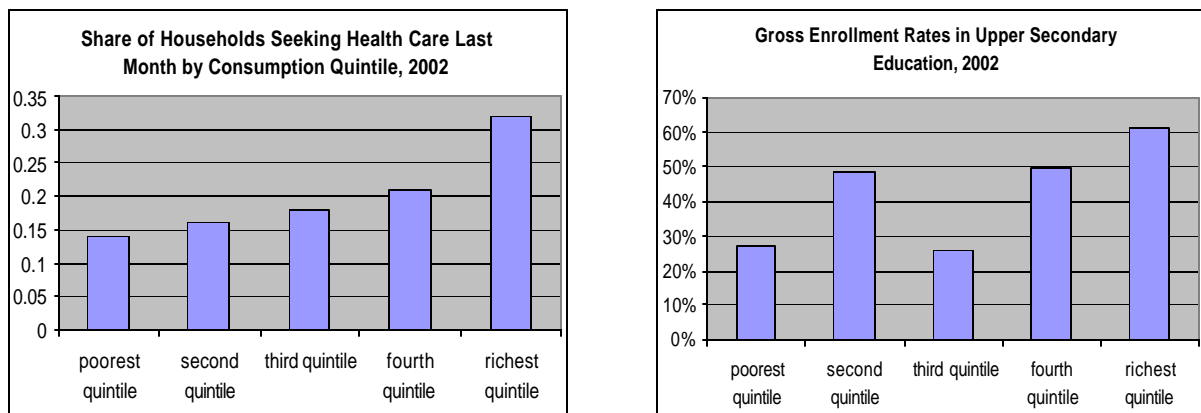
5. ***The period between 1997 and 2002 also saw some changes in poverty risks for different groups.*** Poverty risks by location widened: by 2002, reflecting the improved standard of living in Chisinau and Balti, residents of these large cities were even less likely to be poor compared to the rest of the population than they were in 1997. Similarly, individuals with higher education fared even better in the labor market in 2002 than they did in 1997 and as a result, people in households headed by these individuals found their relative risk of poverty fall further. On the other hand, the relative poverty risks increased substantially for children, for people in households with many children, as well as for people in households whose head was engaged in agriculture, especially as hired workers.

6. ***The close link between growth and poverty means that while sustained growth will result in further poverty reduction, a substantial fraction of the population are vulnerable and are likely to fall into poverty in the event of an economic crisis.*** Maintaining continued growth is essential for further reductions in poverty. Without any significant changes in the structure of consumption, even if Moldova grew at 8% a year over five years, over one in five Moldovans would still be poor in 2007. On the other hand, if the Moldovan economy faces a similar shock as the Russian crisis, the poverty rate would increase immediately by at least 25%. Although a substantial segment of the population is vulnerable and likely to fall into poverty in the event of a crisis, there is a sizeable core group of about a quarter of the population that has stayed poor throughout the period of recession and recovery – a group which is disproportionately represented by households with many children and whose head has less than college education.

7. ***Persistent or increasing disparities in access to health care and education are changing the distribution of economic opportunities in Moldova, and will increase differences in future welfare between the rich and poor.*** Investing in quality human capital is a “luxury good” in Moldova. Although all households reduced their use of health care facilities during the recession, the increase in the use of health facilities during the recovery has been mostly driven by better off households. In the case of education, enrollment rates were remarkably resilient to the crisis – the main exception being pre-school enrollments. During the recovery, enrollment rates among children of secondary and particularly of university age have increased, but particularly the latter were driven almost entirely by increased participation of better off households. Thus in 2002, poor households were substantially less likely to utilize health care facilities at all levels and to invest in the education of their children – particularly at upper secondary and higher levels (Figure B). Since higher levels of education are precisely – and

increasingly – the levels that are associated with higher welfare, this reinforces a process by which poverty is transmitted from one generation to another.

Figure B: Poorer households are less likely to seek health care or invest in the education of their children



Source: Huppi and Jacoby (2204) and Bonilla-Chacin and Nayar (2004)

8. **Disparities in health care utilization occur at all levels of care, while in education they begin to emerge from the end of basic education.** In the case of health care, low rates of utilization among poor and rural populations occur for both primary care and hospital care. In the case of education, the disparities begin to emerge towards the end of compulsory schooling as poor and rural children are more likely to drop out before completing the cycle, and thus less likely to carry on to upper secondary and university. Although Moldova compares favorably with other CIS countries in basic education enrollments, upper secondary enrollments are substantially lower – reflecting to a large extent the much lower continuation rate onto this level by rural and poor children.

9. **The high cost of services relative to their perceived usefulness appears to be the primary reason for low utilization by poor and rural populations.** Public expenditures on health care and education fell dramatically as a result of the fiscal adjustment in the aftermath of the Russian crisis. In both cases, they have begun to increase but remain substantially below their levels in 1997. This fiscal adjustment was accompanied by increased out of pocket financing. In the case of health care, households cited financial constraints as the overwhelming reason for not seeking care: poor and rural populations were more likely to report financial barriers as a constraint or to cite lack of need. In the case of upper secondary education, the low perceived benefits relative to costs (including opportunity costs) of continuing with education appears to be the primary reason for not continuing on to this level. Lower pre-school enrollments reflects primarily inadequate facilities in rural areas.

10. **Poor households spend less on health care and health care expenditures do not have a significant impoverishing effect on the poor, primarily because lower income groups simply forgo care.** Richer households spend more on health care than do poor in absolute terms, but also as a share of their overall expenditures. Poor households simply forgo seeking care because they cannot afford it, and not surprisingly the impoverishing impact of health care is not large: health care expenditures contribute to at most a 1.4% point increase in poverty. Pharmaceuticals account for the largest share of household expenditures. About a quarter of the population made informal payments and about a fifth of all out of pocket payments were informal – poor and rural populations were more likely to make informal payments. While poor households spend less on health care, public expenditures also favor the better off.

Despite considerable restructuring, public spending continues to be biased in favor of hospital care, which is relatively more likely to be used by the better off.

11. ***The burden of out of pocket expenditures on education is highly unequal.*** Richer households spend more on education in absolute terms but as a share of total expenditures, the poorest quintile spends twice as much as the richest quintile. Among CIS countries, only Armenia has a similar inequality burden. University education is the most expensive – with formal contract fees being the major cost item – an appropriate policy in view of the high private returns at this level. However, the highest incidence of informal payments are reportedly observed in connection with admission to universities. Even secondary education is expensive – the payments made by households are a third of the per capita consumption of a household at the poverty line for each enrolled student. Even at the compulsory levels, per student costs are not negligible. At compulsory and upper secondary levels, informal contributions account for about a quarter of household expenditures. Public expenditures on education do not especially favor the poor. While basic education expenditures are weakly progressive, those at upper secondary and higher education are pro-rich, reflecting sharp differences in enrollments between poorer and richer households.

12. ***There is some evidence of improvements in the quality of education (as measured by student performance), but challenges remain and inequities persist.*** At the peak of the Russian financial crisis in 1999, Moldovan students performed poorly in an international study of achievement in mathematics and science (the TIMSS-R study). Since 1997, the Government has been undertaking systemic reforms, though resources in schools are still lacking and absenteeism is still a problem. There is some evidence (from a grade 6 sample study as well as the modernized grade 4 and 9 assessments) that – possibly due to the reforms as well as the improving socioeconomic situation of households – student performance is gradually improving. However, gaps in performance between urban and rural students have widened for the most part.

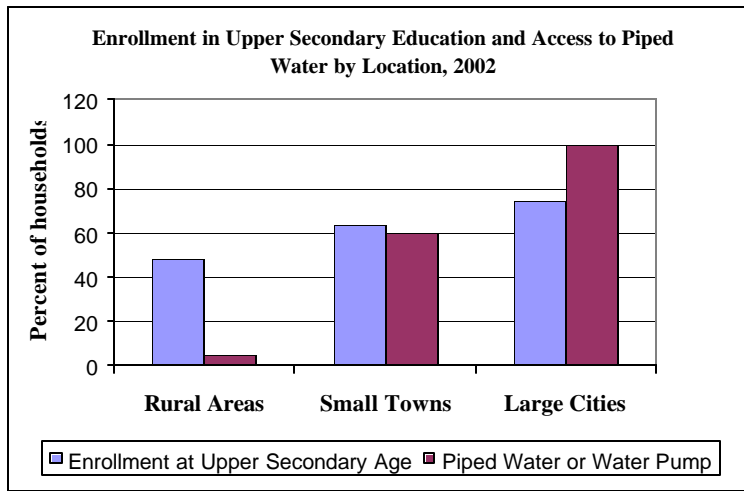
III. Location and Poverty

? ? ***There are sharp divergences in poverty between large cities (Chisinau and Balti), small towns and rural areas.***

? ? ***Increased land ownership has resulted in only modest improvements in rural welfare.***

13. ***Income deprivation is lowest in the two large cities (Chisinau and Balti), primarily due to better employment opportunities, while widespread land ownership reduces poverty risks in rural areas compared to the small towns.*** In 2002, 63% of the residents of small towns were poor, compared to 52% of rural residents and 29% of the people living in large cities. The substantially lower risk of income poverty in the large cities reflects, primarily, the better employment opportunities. However, rural residents are better off than residents of small towns who have neither the benefit of the safety net provided by land that rural residents do, nor the employment opportunities of the residents of large cities. Although the risk of poverty is highest in small towns, because the majority (63% compared to 16% for small towns) of the population lives in rural areas, rural poverty predominates and 68% of all Moldova's poor – or 1.2 million poor people – live in rural areas.

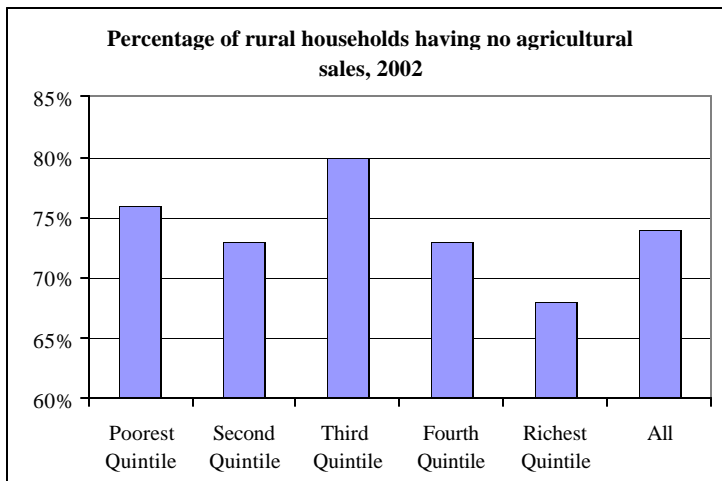
Figure C: There are sharp divergences between locations in non-income dimensions of well being



Source: Household Budget Survey 2002

available, the finding that access to piped water has declined between 1997 and 2002 – in rural areas and small towns – is of concern.

Figure D: Nearly three-quarters of all households do not report sales of crops or agricultural products



Source: Jacoby (2004)

half their land, most likely leasing out the remaining land to the “leaders” or former managers of defunct farms. The typical rural household is cultivating mainly for its own subsistence: nearly three-quarters of households do not report sales of crops or agricultural products (Figure D) and agricultural sales – although an important source of cash income for households – account for under 10% of the value of total production. There is some evidence that the rudimentary rural transport network might be a factor behind the reduced incentive to produce for the market.

16. *As of 2002, increased land ownership has resulted in only modest improvements in the welfare of the typical rural household.* The promise of land privatization as a means of assuring rural livelihoods has yet to be fully realized. Per capita consumption for the typical rural household increased by 6% over a two year period as a result of increased land ownership – which is modest in comparison to the average increase in land ownership of 67% over the same period. This is because most households are still

14. *There are also sharp divergences between locations in non-income dimensions of well being.* Health care utilization, completion of compulsory schooling and continuation onto higher levels – are all systematically lower among rural residents (Figure C). As in other poor countries, indoor plumbing is largely absent in rural Moldova: the majority of the rural population draws water from wells. While recent reliable information on the quality of well water is not

15. *Despite extensive land privatization, the typical rural household is not producing for the market.* The recent distribution of formerly collective land has resulted in a highly egalitarian ownership of private land in rural Moldova. Although average land ownership in 2002 was still small, at 2 hectares, the poorest households owned at least as much land on average as the richest. A striking feature of Moldova’s transition to private farming, however, is that cultivation by peasant households has changed very little. By 2002, the average rural household was cultivating only

producing primarily for their own subsistence. They are unable to farm their newly allocated land shares efficiently and lease most of it out on unfavorable terms to “leaders” who have considerable market power.

17. ***Government transfer payments – especially pensions – have become the second major source of subsistence for rural families.*** In the years since the Russian financial crisis, rural households have become increasingly dependent on government transfer programs – particularly retirement pensions. In 2002, rural households received 16% of their income from Government transfers, compared to 10% in 1997. This is mainly a result of the increase in the proportion of households receiving retirement pensions – from just under 30% in 1997 to 44% by 2002 – due to clearing of pension arrears and the aging of the rural population. Without the increases in government transfer payments since 1999, poverty would have been 8% points higher in 2000, and remained higher in subsequent years.

18. ***But the low level of contributions from current farmers means that future old age security of rural families is at risk.*** Although they reduce rural poverty, retirement pensions (primarily intended to smooth consumption during old age) are not a particularly efficient mechanism for poverty reduction. In particular, the present system entails substantial transfers from urban workers to farmers and the low levels of contributions of farmers undermines the fiscal sustainability of the pension system. From a welfare perspective, tightening of the linkage between contributions and benefits (in line with the spirit of the 1999 pension reform and essential for fiscal sustainability) means that unless the contribution levels from current farmers increase, in the future, many retired farm households will receive considerably smaller pensions than today’s retirees. Unless the state steps in, the resulting retirement income gap will have to be filled by accumulated savings, transfers, or longer working lives.

IV. Pathways Out of Poverty

? ? ***Well paid employment is a strong pathway out of poverty in Moldova, but job creation is much lower than job destruction.***
? ? ***Only new private firms and small firms are net providers of jobs, but these are still few in Moldova.***

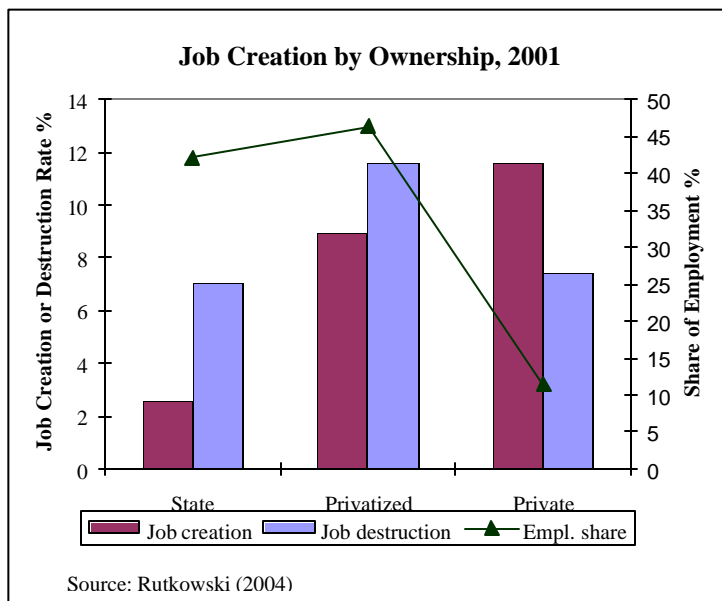
19. ***Well paid employment could provide a strong pathway out of poverty, but the Moldovan labor market is depressed and characterized by many jobs of low productivity.*** In Moldova, as in some other CIS countries, employment does not substantially reduce the risk of poverty. In 2002, the poverty rate among people living in households headed by the employed was comparable to that for people living in households with inactive heads (mainly pensioners). This reflects, on the one hand, the poor earnings opportunities for the majority of workers, and on the other, the income maintenance provided by pensions. Nearly three quarters of the poor live in households whose head is employed. Among the employed, those who work in the formal sector are at slightly lower risk of poverty, but about 40% of formal sector workers are also poor. Even many regular jobs in Moldova are associated with low productivity or underemployment (and a high incidence of part time work), in part because many firms in the formal sector are struggling to survive or are on the brink of collapse. This low productivity translates into lower earnings and thus lower welfare. Although open unemployment – at 7% – is not particularly high, it nearly doubles if those workers who are discouraged and have left the labor force are included.

20. ***The poor labor market outcomes reflect the poor conditions in agriculture but also insufficient creation of formal sector jobs outside agriculture – job creation is much lower than job destruction in Moldova.*** Agriculture accounts for just under half of all employment, but fewer than a third of all paid jobs, over three-quarters of all part time work, and the largest share of informal employment. Poor labor market outcomes also reflect insufficient job creation in the formal non-agricultural sector. Moldova is undergoing a widespread process of downsizing of inefficient firms and elimination of overstaffing and non-viable jobs, typical of transition countries. The main problem in Moldova is that old jobs are not

being replaced by new, more productive jobs at a sufficiently fast pace, and the significant gap between job creation and job destruction negatively affects workers' chances of moving from less productive to more productive employment.

21. *The non-government services sector has yet to emerge as a significant provider of formal sector employment.* As in most other transition countries which undergo restructuring, most of the new jobs are being created in the services sector, while jobs that are being destroyed are mainly in manufacturing. However, in sharp contrast to other transition countries, the services sector does not create enough jobs in Moldova and is unable to provide employment to workers who lose their jobs in manufacturing or to those who are underemployed in agriculture. This has led to a situation where the share of services in employment has fallen while agriculture has acted as the “shock absorber”. The regional distribution of employment opportunities is also very uneven: the only region where employment opportunities is growing is the Capital region. In all other regions, the destruction of old jobs has not been followed by the creation of new jobs. Thus, those who are unable to avail of the limited employment opportunities in the capital region either fall back on subsistence agriculture or leave the country in search of employment. The number of Moldovans seeking employment abroad or working abroad has increased dramatically and, in 2002, nearly a quarter of the Moldovan labor force had left the country in search of employment.

Figure E: Only private firms are net providers of jobs but the size of this sector is small in Moldova



22. *Only new private firms and small firms are net providers of jobs, but these are still few in Moldova primarily because of the high cost of doing business.* In the non-agricultural business sector, the new private sector is the only source of employment growth. As a result of its high job creation rate and modest job destruction rate, it creates jobs on a net basis – in contrast, both the state owned and privatized sectors destroy jobs on a net basis. The new private sector tends to be more represented by small firms – in contrast privatized and state owned firms are typically larger. As in other countries, in Moldova too, smaller firms are much more dynamic in creating jobs. The new private small firms tend to be the most productive and could

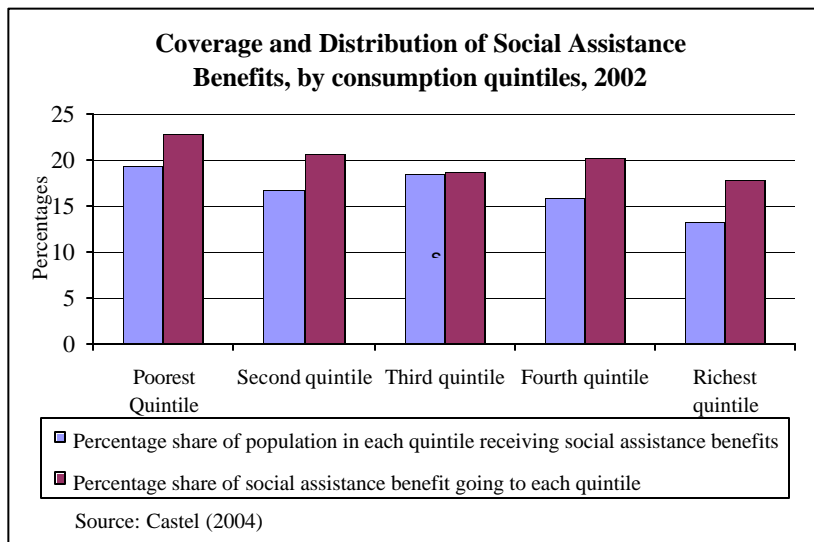
potentially provide a pathway out of poverty for many Moldovans. However, the problem in Moldova is that the share of these job creating sectors are still small (Figure E). The primary factor behind the low job creation rate is the high cost of doing business in Moldova. The environment of excessive regulations, bureaucratic discretion and associated corruption and the underlying philosophy of taxing businesses are the root cause of depressed activity in Moldova. This discourages firm entry and expansion, especially by smaller firms, and translates into fewer jobs and ultimately higher poverty.

V. Coping with Poverty

? ? *Social insurance programs reduce poverty, but social assistance has failed to adequately protect the poor.*
 ? ? *International migration is a central coping strategy and the resulting remittances have likely lifted many households out of poverty. However, it has high social costs and poses significant personal risks for many.*

23. *Social insurance programs, and especially old age pensions (the largest program) have high coverage now, and as a result reduce poverty today.* As in other transition countries, Moldova has an extensive social protection system which reaches about half the population. Social insurance programs (primarily intended to smooth consumption shocks for example due to loss of earnings capacity) are the largest, accounting for about 6.6% of GDP. Old age pensions, the largest social insurance program, covered about 90% of the elderly in 2002. Because of their high coverage, social insurance programs reduce poverty among recipients and their households. If social insurance benefits were suddenly eliminated, the incidence of poverty would increase by anywhere between 4.5 and 11.2 percentage points. The high coverage of today's elderly, however, reflects the rights acquired by current retirees prior to the transition. The lower contributions and coverage of much of today's workforce – farmers, unpaid workers, and part time and casual workers – means that as the links between pension contributions and entitlements are tightened, a significant share of current workers will either not be entitled to pensions, or will receive considerably smaller pensions than today's retirees when they retire.

Figure F: A large share of social assistance goes to the better off



24. *In contrast, social assistance programs fail to adequately protect the poor – due to their low coverage, poor targeting performance, and benefit levels that do not adequately match needs.* Social assistance programs (intended to be the direct instrument for poverty reduction) account for 1.4% of GDP; nominal compensations (gas and energy subsidies) are the largest. If social assistance programs are suddenly eliminated, the impact on poverty incidence is much lower than in the case of social

insurance programs – between 0.3 and 1.4 percentage points. The poor targeting performance (Figure F) is in part due to the reliance of social assistance programs, and particularly the nominal compensations program, on targeting of by categories of the population (such as single pensioners) that are perceived to be particularly poor, but are not. In addition, social assistance programs have much low coverage, and reach only under a fifth of the poorest quintile. Finally, benefits are either too large or too small and are not well directed to the needs of the poor. Among social assistance programs, child benefits are the most efficient in reducing poverty, while nominal compensations are the least efficient.

25. *International migration in search of employment opportunities is an important poverty reduction strategy for many Moldovan households.* An increasing number of Moldovans have sought employment and improved living conditions outside Moldova. Migrants are predominantly younger men from rural areas, but approximately 30% of migrants are women. Although there has been some brain drain, migrants from Moldova generally tend to be workers with average educational achievement:

university graduates who have better employment opportunities in Moldova are less likely to leave, while graduates of secondary vocational education are more likely to leave. The largest proportion – over two-fifths – of private transfers (which include some remittances), go to the richest quintile. However, many poor also receive private transfers. Because the levels of private transfers received are, on average, larger than the per capita poverty gap of households, and substantially larger than social assistance benefits, private transfers push many recipients out of poverty.

26. ***But it has high social costs and poses significant personal risks for many.*** Most migrants are illegal workers in the host countries, and many of the poorest and youngest females become victims of trafficking in the foreign sex trade. Migration has also contributed to some important – and disconcerting – changes in family structures and relationships: in particular, there has been a dramatic increase in the number of children who do not reside with their mother, particularly in rural areas and small towns (reaching 10% in 2002). The full implications of these changes in family structure are yet to be understood.

VI. Policy Directions for Poverty Reduction

27. The following priorities emerge for the design of poverty reducing policies:

I. Sustaining economic growth and reducing macroeconomic vulnerability. To reduce poverty and vulnerability, Moldova will need to sustain or increase the present strong growth performance. A prerequisite is maintenance of macroeconomic stability but it will also be essential to take steps to strengthen the fundamentals for sustained growth which means that:

A. *Growth will need to be accompanied by improved employment and incomes.*

- a. To improve rural incomes, investing in rural infrastructure (roads and irrigation) and strengthening rural institutions (with a focus on land markets) are key – and defensible – areas for Government intervention. Sustainable investments in rural infrastructure call for substantial local participation and long term Government commitment. Given the limited commercial orientation of household farms, interventions focused on production incentives (e.g. improving marketing channels for farm produce, providing formal credit) will need to be carefully targeted in order to provide medium term benefit to Moldova's poor.
- b. To encourage the creation of productive non-farm employment in the private sector, radical reforms to reduce the extent of regulation of business activities – and thus to reduce the cost of doing business in Moldova – are called for. It will also be important to reduce the discretionary power of the bureaucracy and the associated corruption. Continued restructuring of state enterprises is essential to release resources (including labor) tied up in less productive firms. Finally, investments in basic infrastructure, particularly outside the capital region may complement improvements in the investment climate to improve incentives for generation of private sector employment opportunities.

B. *Growth will need to be accompanied by reduced vulnerability to economic downturns.* In addition to interventions to strengthen the fundamentals for sustained growth discussed above, which will reduce economic vulnerability, continued efforts to diversify export markets (beyond the present two main trading partners – Russia and Ukraine), and to diversify the export base (beyond agricultural products) will further reduce vulnerability to external shocks that lower growth and welfare.

II. Enabling the poor to invest in their human capital. It will be essential to address non income dimensions of well being, and in particular the widening inequities in opportunities – which eventually means higher future inequity and therefore lower poverty reduction. This calls for:

- A. *Improving access of the poor to health and education services.*
 - a. To reduce out of pocket costs for the poor, there is a need to introduce or expand targeted subsidies to reduce formal costs of health and education – at all levels. Targeted subsidized coverage of the poor in proposed health insurance reform (in addition to defining fiscally sustainable benefits) would be essential to avoid exacerbating recent inequities in access. Reducing informal costs requires ensuring broad access to information on health care and education rights and obligations, and steps to increase accountability of providers. Making some part of social assistance benefits conditional on utilization of preventative care and school attendance and completion could additionally help address demand side constraints for access to services.
 - b. Address supply side constraints for pre-school education through encouragement of non-governmental and community provision with targeted public financing.
- B. *Improving the quality and effectiveness of services, with a particular focus on those used disproportionately by the poor.*
 - a. Reallocation of public expenditures towards improving the quality of primary health care and basic education through restructuring and optimization or closure of underused facilities.
 - b. Strengthening public health and monitoring and improving nutritional outcomes, through continued focus on infectious disease programs, ensuring adequate water and sanitation in rural areas, fortification of foods, and community based nutrition interventions.
 - c. Continued improvements in education quality, with a focus on rural areas, by deepening the present reforms beyond centralized provision of inputs to a focus on incentives for providing improved quality and increasing the accountability of providers. Review and enhance the relevance of upper secondary education programs (including vocational programs) available to rural and poor students.

III. Strengthening the safety net. Social protection programs and institutions need to be reformed to ensure that they provide efficient and effective security. It will be important to:

- A. *Strengthen the public safety net.*
 - a. Continued reform of the pension system: to ensure fiscal sustainability and provide the needed old age security. Reform of farmer’s pensions to increase contributions – given the practical difficulty associated with assessing farmers incomes, one practical solution is to introduce a flat rate contribution and flat rate benefit for all land owning farmers, while providing all agricultural workers with the opportunity to contribute and receive more on a voluntary basis. Similarly pension reform options must explicitly consider the risk of lower future entitlements as a result of the lower contributions and coverage of today’s workforce.
 - b. Overhaul social assistance: through continued efforts to improve targeting and define benefits in line with needs while increasing resources to poverty focused programs. Consideration should be given to concentrating resources on one type of cash program directed to poor households. In the short run, actions to improve the targeting performance of the nominal compensations program are especially urgent, for example through the introduction of means testing (as was recently done with some child related benefits).
- B. *Enhancing the positive welfare impacts and reducing the negative impacts of migration.*
 - a. Undertake efforts to facilitate cost effective transfer of remittances for poverty reduction through efforts to ensure reliable, safe and low cost mechanisms to channel remittances to household members. Moldovan policy makers may also want to explore the relevance of experiences – such as those in El Salvador – with encouraging the use of remittances for local social investment projects.

- b. Address the social costs associated with increased migration through a better understanding of the impacts of migration on children left behind and possible tailoring of targeted social services. Broader reforms that address the high rate of institutionalization of children – essential to reduce social exclusion – will also likely benefit this group.
- c. Reduce personal risks associated with increased migration: for example, through stricter oversight of recruitment agencies, international collaboration on channels for legal migration and exchange of information on labor market opportunities.

IV. Improving poverty monitoring: As Moldova looks ahead to the implementation of its Economic Growth and Poverty Reduction Strategy, policy makers will need continuous information on poverty and the impact of public policies. It will be important to build on recent efforts to strengthen poverty monitoring through:

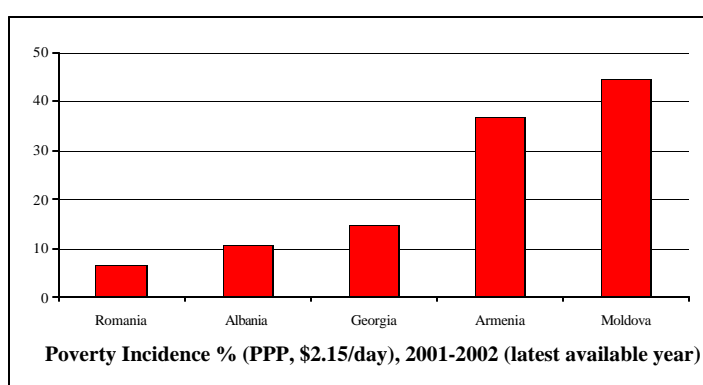
- A. *Improving the information base for poverty monitoring.*
 - a. Urgent implementation of an updated population census is critical to provide a reliable and updated sampling frame for the poverty monitoring data.
 - b. Expand the regional coverage of poverty information through implementation of plans for an improved sample design for the household surveys. Importantly, the completion of the 2004 population census is critical for the construction of a poverty map, potentially a very important tool to target public investments and policies.
 - c. Strengthen the database to better measure – and monitor – income poverty as well as non-income dimensions of wellbeing. Some work on this has been initiated by the DSS; further work should emphasize coordination with appropriate line ministries and agencies.
- B. *Improving institutional arrangements for poverty monitoring, and strengthening poverty analysis and dissemination.*
 - a. Clarify institutional arrangements and strengthen coordination: through clarification of institutional responsibilities for poverty monitoring, delegation of a single government agency for determining the official methodology for the poverty line, and obtaining consensus (and adoption of national legislation) on the poverty line and the poverty information necessary to inform public policies.
 - b. Strengthen poverty analysis and data dissemination through continued efforts to make data available to potential users, training and capacity building within and outside the Government on poverty analysis, and establishing feedback mechanisms from data users.

Recession, Recovery and Poverty in Moldova

I. Introduction and Key Findings

Following the collapse of the Soviet Union, Moldova faced the deepest and most prolonged recession among transition countries, and the resulting increase in poverty has made it the poorest country in Europe today (Figure 1). The initial transition recession was exacerbated by the Transnistrian secession in 1992, which further eroded Moldova's industrial base. Despite this, through mid-1998, substantial progress was made in financial and macroeconomic stabilization, as part of Moldova's transformation to a market economy. The Russian financial crisis, which struck in August 1998, was a major blow to the economy, due to the strong trade and migration links between the two countries. Output declined further, macroeconomic imbalances surged, and the financial situation became fragile.

Figure 1: Moldova has the highest poverty incidence in Eastern Europe and the Caucasus



Source: World Bank data, from Table 1

After nearly a decade of economic decline, economic activity turned around in 2000, with GDP growing at an average of over 5% per year. Growth has largely been demand driven with consumer spending fueled by a marked increase in real wages and sizeable inflow of workers remittances. The recovery of demand in Moldova's main trading partners – Russia and Ukraine – has also allowed Moldova to slowly recapture markets lost following the 1998 regional

financial crisis. The improved growth performance is also in part a legacy of the positive structural developments during the 1998-2001 period, and the sustained pace of fiscal consolidation that followed the Russian financial crisis. The growth achievements, however, are fragile and medium term prospects are uncertain. The slow progress on structural reforms since 2001 have aggravated Moldova's vulnerability to external shocks, while growth prospects are also constrained by the worsening financial situation, and slow progress in settling the conflict with Transnistria.

The main objective of this report is to update and assess poverty in Moldova in its multiple dimensions, with a view to informing public policies. It focuses on the period of recession that followed the Russian crisis and the subsequent recovery. It draws mainly on the Household Budget Surveys (Box 1), collected quarterly by the Department of Statistics and Sociology, between 1997 and 2002, although the analysis is supplemented as needed by information from other surveys collected by Moldova's Department of Statistics and Sociology (DSS), from administrative data sources, from existing qualitative studies, and from studies by local researchers and other donor organizations. It should be noted that the HBS is a population based survey. By providing detailed information on the consumption of households, it permits an analysis of income (consumption) based welfare. In addition, by providing information on those who do not utilize public services or programs, in addition to those who do, it provides additional value to administrative data in the analysis of non-income dimensions of poverty such as access to health care or education. As such, the distribution of users of public services such as health care services (for example by rural and urban location) is likely to be different from that obtained from administrative data (typically based on information from facilities). Finally, due to data limitations, the analysis focuses on the Right Bank of Moldova.

Key Findings

The Dynamics of Poverty

1. Poverty in Moldova is strongly linked to economic growth. As growth rates averaged 5% a year between 2000 and 2002, poverty fell from 71% of the population to under 49%. This was a mirror image of the situation between 1997 and 1999, when average economic declines of about -4% a year led to poverty rising from 47% to 71% of the population. Maintaining continued growth, therefore, would result in lower poverty over time. Still, even if Moldova grew at 8% a year over five years, over one in five Moldovans would still be in poverty in 2007. And this strong growth link also means vulnerability – if there is another sharp economic downturn, poverty is likely to escalate.

2. Investing in quality human capital is a luxury for many Moldovans. Increasingly, the rich use both primary care facilities and hospital care much more than the poor, who simply forgo care unless it is absolutely critical. Informal payments for health care are also more likely for the poor, further lowering demand. Although access to compulsory schooling is fairly uniform across income groups, many children from rural areas and poor families drop out before completing compulsory schooling. Children from better-off and urban families are also more likely to proceed to higher levels of education. Unfortunately, since higher education is significantly correlated with lower poverty, this reinforces a process by which poverty is transmitted from one generation to the next.

Location and Poverty

3. There are sharp divergences in poverty between large cities (Chisinau and Balti), small towns and rural areas. This is both for income poverty risks and for non-income dimensions of poverty. People in the two large cities have the lowest risk of poverty. The risk of poverty is highest in small towns, reflecting both a lack of employment opportunities and the absence of subsistence farming as a safety net. About 63% of people in small towns were poor in 2002, compared to just over half of all rural residents and about 28% of urban residents. In non-income dimensions of poverty, rural areas are systematically disadvantaged in educational attainment or health utilization. There are also systematic differences access to basic utilities – such as water and sewerage facilities.

4. Increased land ownership has resulted in only modest improvements in rural welfare. Despite extensive land privatization, the typical rural household is not producing for the market. Instead, rural Moldova is still overwhelmingly dependent on subsistence agriculture. Government transfer payments – essentially pensions – have become the second major source of subsistence for rural families. In fact, without the increases in transfer payments to rural households, the rural poverty rate would have been 8% points higher in 2000, and would have also remained higher in subsequent years.

Pathways Out of Poverty

5. Well paid employment is a strong pathway out of poverty in Moldova, but job creation is much lower than job destruction. High rates of job destruction are typical, and necessary, in transition countries; but new jobs need to be created at a faster rate. The services sector in Moldova has yet to emerge as a significant provider of formal sector jobs, and its share in employment has fallen steadily – a sharp contrast with other transition countries. Those who fail to avail of the opportunities typically turn back to subsistence farming for their livelihoods, or migrate to other countries in search of employment.

6. Only new private firms and small firms are net providers of jobs, but these are still few in Moldova. The new private sector is the only source of employment growth in Moldova, increasing its employment by 4% per year. But these firms account for only a small share of non-agricultural employment. The high cost of doing business is the main reason why this job creating sector is small.

Coping with Poverty

7. Social insurance programs reduce poverty, but social assistance has failed to adequately protect the poor. Social insurance programs reduce poverty by between 5 and 11 percentage points, due to their high coverage. In contrast, social assistance programs, which are meant to be direct instruments of poverty alleviation, fail to make much of a dent – because of lower coverage, poor targeting, and a mismatch of benefit levels with needs.

8. International migration is a central coping strategy, but it has high social costs and poses significant personal risks for many. Nearly a quarter of the Moldovan workforce has left the country. Remittances to family members have likely pulled many out of poverty. But migration has also led to considerable disruption in personal lives and family relationships. More and more Moldovan children, especially in rural areas and small towns live without their mothers. Most migrants work illegally in host countries, and many young women have become victims of trafficking.

Box 1: The Household Budget Surveys

The primary data for monitoring and living standards in Moldova come from the Household Budget Survey (HBS). The HBS is a survey of private households in Moldova, collected by the Department of Statistics and Sociology (DSS).

Periodicity. The HBS is conducted quarterly starting in the second quarter of 1997.

Content. The HBS includes a diary of household consumption, a roster of household members including their education and labor force status, information on amenities including characteristics of housing, and ownership of financial and durable assets.

Sample. Each quarter, the HBS interviews about 1,600 households. A sub-sample of these households is maintained as panel observations in an elaborate rotation scheme. The survey design follows a common two-stage sample design. Primary Sampling Units (PSUs) were selected in the first stage, derived from the polling lists of the polling districts from 1996. In the second stage, households are selected from the household listing in each selected primary sampling units (PSU).

Regional coverage. The original stratification of the HBS designated primary sampling units in four strata: Chisinau, Baltsi, other towns, and rural areas.* As in most household surveys, due to the two-stage sample design and sample size, it is not feasible to reliably compute indicators at lower levels of observation (by *judet*, for example). Due to the high degree of clustering, Chisinau and Baltsi are combined into a single stratum (large cities) in practice.

* This discussion focuses only on the sample from the Right Bank.

II. The Dynamics of Poverty¹

The link between income poverty and growth

Growth and income poverty are closely tied in Moldova. The poverty rate increased sharply and continuously in the recession that followed the Russian crisis. By 1999, according to the measure of poverty used in this report (Box 2), 71% of the Moldovan population was poor, up from 47% in 1997. The turnaround in economic activity starting in 2000 was accompanied by reductions in poverty, and by 2002, the poverty rate had nearly returned to its level just before the Russian Crisis (Figure 2). This trend does not depend upon the absolute poverty line chosen. The estimated elasticity of poverty with respect to growth in average consumption was about -2.9 (that is, for each 1% increase in growth, poverty fell by 2.9%), indicating a level of responsiveness that is comparable to, or slightly higher than, that observed worldwide. Regionally, the elasticity lies between that observed in Romania (average -2 between 1999-2001) and that in Poland (average -3.4 between 1998-2001). Other measures of poverty showed a similar pattern – poverty became deeper and more severe with the recession, but the depth and severity of poverty started to recede with the recovery (Box 3).

Box 2: Measuring Poverty in Moldova

Poverty is a multidimensional concept encompassing numerous aspects of well-being. In practice, no one indicator can capture all dimensions. For the purpose of ranking households, this report uses a consumption-based measure of welfare. The welfare measure is corrected for price differences across locations and over time. To obtain the extent and profile of poverty, it is evaluated against an *absolute* poverty line determined by the “cost-of basic needs approach.” The poverty line thus determined represents the cost of a bundle of essential commodities. Those whose consumption is below the poverty line are considered “poor”, while those above “non-poor”.

To set the absolute poverty line, a food poverty line is first established. This is determined as the cost of purchasing 2,100 calories per person per day, given the actual consumption patterns of the poor population. This food poverty line (about 172 lei per capita per month in 2002) is used to characterize “extreme” poverty, and all those with per capita consumption below this line were considered “extremely poor”. To obtain the total poverty line, a non-food allowance is added to food poverty line according to the non-food consumption pattern of those households in the vicinity of the food poverty line. The value of the poverty line in 2002 was 202 lei per capita per month. This poverty line is slightly higher than the poverty line obtained using the \$2.15 PPP per capita per day which is equivalent to 193.7 lei per capita per month.

Although per capita consumption is employed as the basic welfare measure, a sensitivity analysis of the poverty profile to different assumptions about economies of scale and needs of different household measures was conducted. The results reported here are robust, except under more extreme assumptions about economies of scale.

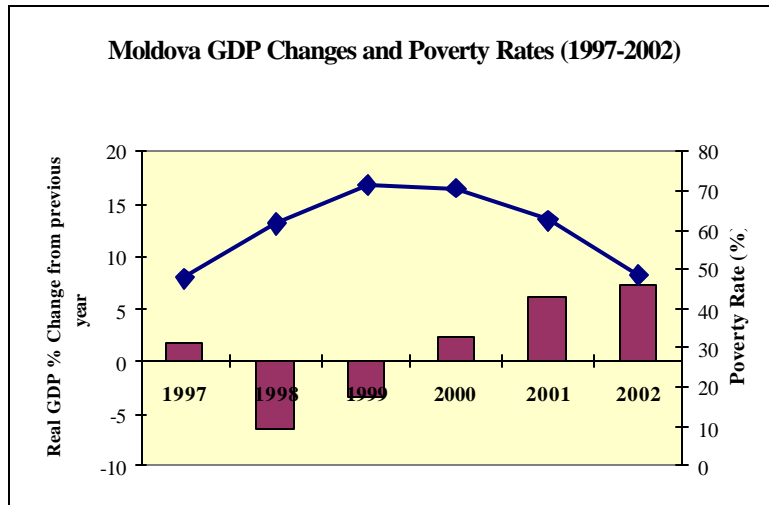
The preparation of this report and the report’s approach to poverty measurement has contributed to the discussions on poverty measurement within Moldova in the context of the EGPRSP and to the development of poverty measures under the implementation of Resolution No. 619 of May 2002. The methodology (prepared by the PPMU and approved in November 2003 by the DSS Collegium) is presently being discussed by the Government of Moldova for official adoption, and incorporates many features of the poverty line used in this report. There are some important differences that arise from differences in the construction of the welfare measure, the definition of the “poor” groups whose consumption patterns serve as a reference in the construction of the food poverty line as well as the minimum calorie requirement used, the price indexation methodology, and the equivalence scale. However, many basic results on trends and profile are similar.

Although a monetary indicator is used to rank households, to consider poverty in its multiple dimensions, other indicators such as education, health, housing and security, and their differences by income levels and poverty are examined.

Note: See Signoret (2004) and Beegle (2004) for a more comprehensive discussion on the approach to poverty measurement used in this report.

¹ This section is based on the background papers by Beegle, “Living Standards and Poverty in Moldova,” Signoret, “Poverty in Moldova”, and Porto, “Economic Growth and Poverty Reduction.”

Figure 2: Growth and poverty are closely tied in Moldova

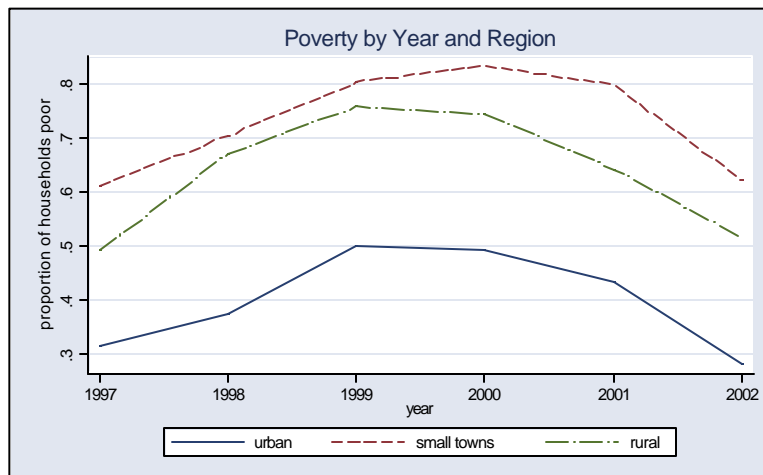


Source: Beegle (2004)

Across locations, poverty increased with the recession and fell with the recent recovery. The directions of change were the same in rural areas, small towns and large cities. There were some differences in the rates and duration of changes, with small towns facing the most prolonged increases in poverty and the two large cities facing the sharpest falls (Figure 3). By 2002, only large cities had lower poverty rates, depth and severity relative to 1997.

Inequality increased slightly during the crisis, but by 2002 inequality was comparable to 1997. Overall, inequality changed very little during this period at the national level, with the exception of small increases in 1998 and 2001. The gini coefficient was 0.34 in 2002 compared to 0.35 in 1997 (Box 3). Inequality, as measured by the gini coefficient of consumption, followed slightly different patterns between regions: in particular in large cities it increased gradually until 2001, before sharply falling back to its 1997 value in 2002. In 2002 inequality was lower than in 1997 only in rural areas, likely reflecting the increasing importance of land for poorer families.

Figure 3: Poverty fell in all regions with the recent growth



Source: Jacoby (2004)

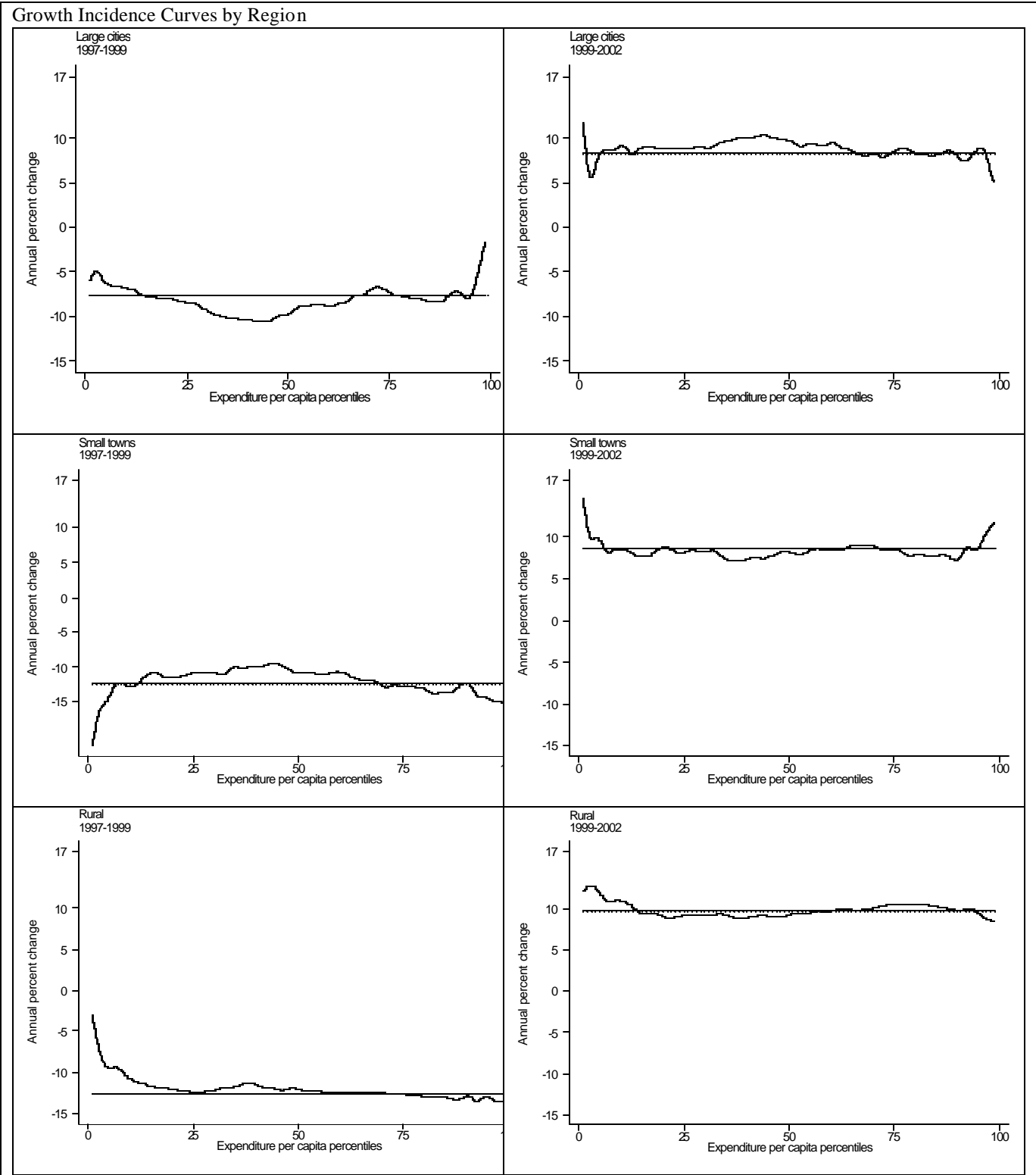
Note: "Urban" refers to Chisinau and Balti

Falls in consumption during the recession and increases during recovery have been comparable for all – except for the poorest decile. Although growth was the key factor driving poverty reduction, it affected the poorest sections of populations differently. Overall, they faced the smallest proportional falls in consumption during the recession, and the largest proportional increases during the recovery. This likely represents the relative stability provided by subsistence agriculture in rural areas and low paid trade jobs in large cities. In contrast, the poorest in small towns faced catastrophic falls in consumption during the recession and gained the most during the recovery (Figure 4). In large cities, it was the population in the middle of the distribution that fared the worst during recession. Annual changes in per capita expenditure were quite similar across all others in all regions. It is particularly striking that consumption per capita increased at a uniform rate during the recovery (of about 10% per year) for all but the poorest residents across rural areas, small towns, and large cities.

The close link between growth and poverty means that while sustained growth will result in further poverty reduction, a substantial fraction of the population are vulnerable and are likely to fall into poverty in the event of an economic crisis. Looking ahead five years, and without any significant changes in the structure of consumption, a growth rate of per capita consumption of 8% per year will result in a poverty rate in 2007 that is just below half of 2002 levels. Annual growth of 5% per year until 2007 will bring the poverty rate down by one-third, while a sustained 2% annual growth rate will only reduce poverty by about 12 percentage points. On the other hand, if the Moldovan economy were to face a similar shock as the Russian crisis, the poverty rate would increase immediately by about 25%.

Between 1997 and 2002, the relative risk of poverty increased for people in households with many children and in households where the head is hired in agriculture, while it fell for residents of large cities, and people in households where the head had higher education. Reflecting the improved standard of living in large cities, by 2002, people living in Chisinau and Balti were even less likely to be poor compared to others. In other words, differences in poverty risks by location widened. Similarly, reflecting improved opportunities in the labor market for individuals with higher education in 2002 relative to 1997, people in households headed by these individuals found their relative risk of poverty fall further. On the other hand, the relative poverty risks increased substantially for children, for people in households with many children, as well as for people in households whose head was engaged in agriculture, especially as hired workers.

Figure 4: Falls in consumption during the recession and increases during the recovery have been comparable across income groups – except for the poorest deciles in all regions and the middle income groups in large cities



Source: Beegle, 2004

Box 3: How Much Poverty and Who Are the Poor?

How much poverty? In 2002, Moldova was the poorest country in Europe and among the poorest in the Europe and Central Asia region (see figure 1 and table 1 for international comparisons of poverty and inequality). Per capita GDP was \$447, \$1,431 in PPP terms. Inequality, though not especially high by international standards, was among the highest in the region. Depending on the measure of absolute poverty used, between 40–50% of residents in the Right Bank of Moldova are poor and the majority of them can be considered extremely poor. Using the World Bank estimate for poverty headcount, there were 1.75 million poor in Moldova in 2002.

While the poverty headcount concept, in and of itself, is a powerful tool, it provides a partial picture of poverty. Other related measures include the poverty gap (the gap between the expenditure of the poor and the poverty line), and poverty severity (measuring how far the poor are from the poverty line). The table below provides the evolution of various poverty and inequality measures over time.

Evolution of Poverty and Inequality Measures in Moldova (1997-2002)						
	1997	1998	1999	2000	2001	2002
<i>Poverty Line (Lei p.c. per month)</i>	99.3	104.7	130.0	175.2	193.1	201.8
Incidence	47.4	61.6	71.2	70.6	62.4	48.5
Gap	16.5	25.1	29.7	28.9	24.0	16.5
Severity	7.9	13.2	15.7	15.0	12.0	7.6
<i>Extreme Poverty Line (Lei p.c. per month)</i>	85.5	88.4	107.8	147.5	163.4	171.6
Incidence	37.5	51.7	61.3	60.9	52.0	37.8
Gap	12.0	19.3	23.0	22.2	18.0	11.6
Severity	5.6	9.7	11.5	10.8	8.4	5.0
<i>International Line \$2.15 PPP per day (value in Lei p.c. per month)</i>	85.0	91.6	127.6	167.5	183.9	193.7
Incidence	43.4	57.7	67.6	67.1	58.4	44.6
<i>Inequality Measures</i>						
Gini coefficient	0.35	0.37	0.35	0.34	0.36	0.34
90/10 decile ratio	9.9	11.1	9.6	9.3	10.0	9.0

Source: HBS 1997-2002

Similar broad trends are observed in [Poverty and Policy Monitoring Unit Estimates](#) of poverty. At a poverty line of 271 lei per adult equivalent per month, and extreme (food) poverty line of 212 lei per capita per month, the PPMU estimates in 2002 were: *Poverty Headcount: 40.4%; Extreme Poverty Headcount: 26.2%; Poverty Gap: 12.4%, and Severity: 5.2%*

Who are the poor? Main poverty diagnostics in 2002.

- ?? There are sharp divergences in poverty by *location*; poverty rates are highest in small towns (63% poor) followed by rural areas (52%), but lowest in large cities (29%)
- ?? Although residents in small towns are at highest risk of poverty, because the majority of the Moldovan population lives in rural areas (63% in 2002, compared to 21% and 16% respectively in large cities and small towns), rural poverty predominates and 68% of all poor are in rural areas.
- ?? *Demographic* characteristics are also important: in particular, people living in large households, and households with many children and elderly are more likely to be poor. Poverty rates increase sharply with the number of children and on average poverty rates are higher among children than among adults or elderly. These results are remarkably robust to different equivalence scales (which assume that larger households can benefit from economies of scale and adjust for differences in age structure of the household), and only shift under more extreme assumptions (see Beegle 2004).
- ?? People living in households whose heads have higher *education* are significantly less likely to be poor, but, reflecting the transition labor market, people in households whose heads have completed secondary education are not significantly better off than those in households whose heads have lower levels of education.
- ?? *Employment* does not protect adequately from poverty: poverty risks for people in households headed by the employed are not significantly lower than people in households headed by the inactive (mainly pensioners). The majority (73%) of the poor live in households where the head is employed.
- ?? *Pensioners* are not at particularly high risk of poverty: their poverty risk is similar to that of the average Moldovan.
- ?? People in households whose heads are engaged in *agricultural activities*, especially as agricultural workers are at highest risk of poverty.

Table 1: Moldova fares worse than regional comparators on many dimensions of living standards

Country	Survey Year	2002 GDP/Capita PPP, current international \$ ^A	Poverty headcount (\$2.15) 1996 PPP ^B	Gini Coefficient, consumption based ^C	Electric Power Consumption kwh/capita (2000) ^D	Percentage of rural households having access to piped toilet/flushing toilet ^E	Percentage of rural households with access to piped water ^F	Gross Enrolment rates, basic (2000) ^G	Gross Enrolment rates, secondary (2000) ^H
Albania	2002	3973	10.8 %	0.28	1073	54.5 %	25%	107	78
Armenia	2001	2957	36.8 %	0.28	1154	25 %	64%	78	73
Georgia	2001	2190	14.8 %	0.36	1235	-	66%	95	73
Kyrgyz	2001	1572	53.6 %	0.30	1606	4.1 %	1%	101	86
Moldova	2002	1431	44.6 %	0.34	720	3 %	5%	95	42
Tajikistan	2003	916	56.6 %	0.33	2137	-	-	104	79
Romania	2002	6326	6.8 %*	0.29	1513	32%	-	99	82

Sources:

?? A – World Bank estimates
 ?? B,C, E, F – most recent World Bank Poverty Assessments
 ?? E & F calculated for the given survey year
 ?? D – WDI, The World Bank, 2003
 ?? G, H – Bonilla-Chacin and Nayar
 ?? * - “Making Transition work for everyone”, The World Bank, 2000 (headcount for Romania is for 1998)

The Russian crisis impacted different households differently – better off households were hit hardest. Panel data from the HBS indicate that there was a high degree of transition in the relative position of different households – with some households relatively better off and others in a worse situation. Only 28% of households remained in their pre-crisis ranking by consumption quintiles in the period just after the crisis. Households that were initially better off were more likely to face expenditure declines than poorer households and also faced the largest proportional declines in welfare, with the crisis leading to an increase in the poverty rate (Table 2). Other than households with higher initial consumption, households hit hardest by the Russian crisis – i.e. facing the largest proportional falls in consumption – were households living outside of large cities, particularly those in small towns, those whose heads did not have higher education, households with many children, and households with their head employed in non-agricultural activities.²

Although the vast majority of the population was exposed to poverty over the period 1997–2002, there was a sizeable core group of households that stayed poor throughout the period. The vast majority of the population was exposed to poverty over the period 1997-2002. Only 14% of households were not poor in four consecutive survey rounds in this period. Nevertheless, a quarter of households stayed poor throughout the period – this group was disproportionately represented by households with many children and those whose head had less than college education. Chronic poverty³ accounts for as much as 90% of overall poverty.

² Signoret and Murrugarra (2003).

³ Chronic poverty is calculated assessing the poverty rate when each panel household is assigned their average consumption per capita over the 4 interviews. The ratio of the chronic poverty rate to the average poverty rate is used to compute to extent to which poverty is chronic – over 90% in this case. See Signoret (2004) for details.

Table 2: The better off households were hit hardest by the crisis

Average proportional changes in consumption from Pre-Crisis to Post-Crisis		
	<i>Prop. Change</i>	<i>% of households with drops</i>
<i>All</i>	-0.008	62.7
<i>By Pre-crisis quintile</i>		
Poorest 20%	0.487	30.4
20-40%	0.051	58.2
40-60%	-0.128	68.7
60-80%	-0.144	72.2
Richest 20%	-0.304	83.9

Source: Signoret and Murrugarra (2003),
 Note: Based on 2-year panel HBS households; “pre-crisis” data corresponds quarters and years: 1997 Q4-1998 Q2 and “post-crisis” to 1998 Q4-1992 Q2

At particular risk for being trapped in poverty are socially excluded groups such as children in institutions, street children, youth, some elderly, and the Roma. Although not captured in the large scale quantitative surveys, qualitative and in-country research suggests that cumulative barriers to assets, as well as impediments imposed by social barriers and norms, make these groups particularly vulnerable (Box 4).

Box 4: Socially excluded groups in Moldova

The household surveys have assisted with the identification of those who are poor – as measured by consumption. Many of those who are income poor suffer from multiple dimensions of deprivation – for example, they are unable to access basic services or invest in the human capital of their children. In addition to these cumulative barriers to assets, many groups additionally face impediments imposed by social barriers and norms – their multiple levels of deprivation are compounded by social exclusion and discrimination within society. Some of these groups, who are not often adequately captured in household surveys, are described here.

Children in institutions: Poverty related family instability has led to a situation where institutionalization of children has become the response of the social welfare system for low income, abandoned, or disabled children. At the beginning of 2001, there were 13,207 children in institutions in the Right Bank of Moldova. The condition of children in institutions leaves much to be desired. Mentally and physically disabled children are often grouped together in the same institutions, with little specialized care or opportunities for reintegration. Children leaving institutions are particularly disadvantaged due to their social isolation and poor educational opportunities and constitute the core of the severely poor in the future. Disabled children also face heightened risks of survival: the mortality rate among disabled children is ten times higher than the average child mortality rate.

Street children, abused children, children who are exploited, trafficked or in conflict with the law constitute new highly vulnerable groups. The level of abuse and neglect is higher in low-income families, where they tend to go unrecognized, undocumented and unsanctioned. Many children who run away from dysfunctional or violent families or institutions end up on the street. There were an estimated 1000 homeless children on the streets of Chisinau in 1998. Many street children have lost contact with parents due to migration or other causes. But many street children are not homeless – three quarters of them reportedly sleep at home, many of them dropping out of school to travel daily to the capital from nearby suburbs to earn money through begging, unskilled work, petty theft, and street commerce. Many are exploited by “protectors” or group leaders, who take a portion of their earnings. On the other hand, the justice system fundamentally treats juveniles 14 and older in the same way as adult offenders, holds them in adult detention facilities, and imposes long sentences for minor crimes, many of which are linked to alcoholic and dysfunctional families.

Roma According to the 1989 census, there are 11,571 Roma in Moldova, although a 2001 NGO survey puts the number at 20,000. The Roma are reportedly among the poorest in Moldova, are more likely than others to be unemployed because of low educational attainment, decline of traditional occupations and discrimination. Child labor is high among Roma, many of whom do not even attend primary school. Exclusion from social services is an additional problem for Roma children, many of whom do not qualify for child allowances or other social benefits because they lack official birth certificates. Many Roma communities are supplied neither with electricity, nor potable water, and lack paved roads linking them to nearby communities. Severe unemployment, especially in rural areas, has encouraged male seasonal migration, while women and children may engage in local wage labor. Unemployment is also linked to illegal activities and drug addiction, especially among young Roma who additionally suffer from media stereotypes as criminals and drug dealers. Roma are also subject to racial violence, but have little official recourse. Political participation is reduced because authorities do not set up polling stations near Roma communities.

Youth and elderly. Although youth and elderly are not at substantial risk of income poverty, these groups are vulnerable in many respects. Many young people of secondary school age enter the labor market and face high unemployment, or the perils associated with informal employment. Poor knowledge about sexual health, limited access to birth control methods, and failure to seek medical assistance has led to an increasing number of teenage pregnancies and STDs and HIV/AIDS infections. Nearly half of all registered cases of HIV infected persons are between 14 and 29 years old. Moreover teenagers represent 15% of drug users. Among youth, rural youth are particularly vulnerable. Moreover, young people with parents working abroad have taken on emotionally and physically demanding responsibilities at the expense of attending school, doing their school work or participating in age appropriate recreation. In some cases, these children fend for themselves with only minimal supervision, and are at risk of school failure, delinquency, and other anti-social behaviors. Although the sociological literature demonstrates that disadvantages during youth can significantly impact outcomes later in life (the disadvantage being worse for girls), few services focus on the specific needs of adolescents. Many elderly people are not particularly income poor but are particularly vulnerable to high medical expenses, and because they have lost many subsidized services and goods that previously supplemented pensions. Many cope by begging or seeking in-kind assistance from local officials.

Source: This box draws heavily on UNICEF (2000, 2002), and Gomart (2000)

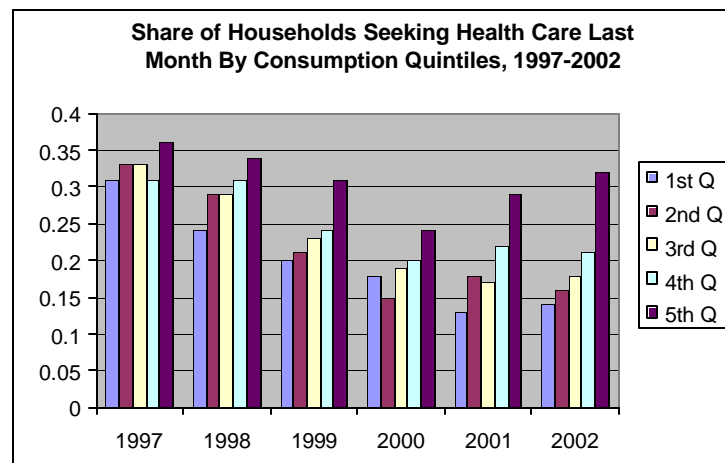
III. Investing in Quality Human Capital – a “luxury good” in Moldova?⁴

Persistent or increasing inequalities in access to health care and education are changing the distribution of economic opportunities in Moldova, and will increase differences in future welfare between rich and poor. Access to health care services – both primary care and hospital care – are becoming increasingly unequal. The utilization of services by poorer households has not recovered after the crisis, while that of better off households is increasing. The low rates of utilization by the poor is likely to lead to poorer health outcomes, and so their productivity and future well being are at risk (see box 5 on health status in Moldova). In education, participation in the compulsory levels was remarkably resilient to the crisis, for poor and non-poor alike. However, the poor are less likely to avail of post-compulsory education. The persistent disparities in enrollments starting from the final years of compulsory schooling and continuing into university education means that attainment gaps – between rich and poor, rural and urban populations – are not closing. Given the finding that households with higher education are increasingly more likely to be better off, and since they are better able to invest in the education of their children, the persistent disparities at higher levels reinforce a process by which poverty is transmitted from one generation to the next.

Access to health care

All households reduced their use of health care facilities during the recession, but the increase in the use of health facilities during the recovery has been mostly driven by better off households. Thus, by 2002, health care consumption was significantly more skewed in favor of wealthier groups compared to 1997 (Figure 5). This pattern was observed for both visits to outpatient facilities as well as to hospitals. By 2002, the percentage of individuals from the top income quintile seeking care was more than six times more than those in the bottom quintile, and urban individuals were nearly twice as likely to seek care compared to those in rural areas. Financial constraints are cited as the overwhelming reason for not seeking care: poor and rural populations are much more likely to report financial barriers as a constraint or to cite lack of need.

Figure 5: The increase in health care utilization during the economic recovery has been driven by better off households



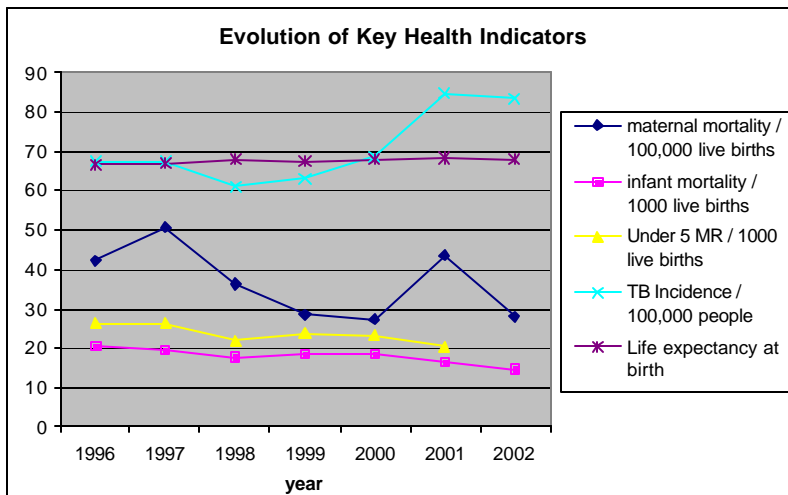
Source: Huppi and Jacoby (2004)

⁴ This section is based on the background papers by Huppi and Jacoby, “Poverty and Health Care”, and Bonilla-Chacin and Nayar, “Poverty and Education in Moldova.”

Box 5: Health outcomes in Moldova

Health outcomes during and after the crisis:

After beginning to recover in the mid-nineties, leading health indicators have shown some improvement, but they faced another setback during the Russian crisis. Nevertheless, they resumed their upward trend by 2000, and by 2002, most health status indicators (other than the incidence of AIDS and TB) showed an improvement relative to 1997.



Source: WHO – HFA database. <http://hfadb.who.dk/hfa/>

Information on *nutritional status* is scant. Although broad based access to land may have prevented much of the population from severe under-nutrition, falling incomes appear to have been associated with serious micro-nutrient deficiency. Anemia, a reflection of iron deficiency, continued to increase throughout the period and by 2002, it affected 28% of children under the age of five and every fifth woman of reproductive age. Over a third of all children aged 8-10 exhibit signs of goiter.

Health Status compared

Health indicators are worse than in Central and Southern European countries, while some – particularly mortality rates from digestive track diseases, respiratory track diseases, stroke, and heart disease – compare poorly even to other CIS countries (Table 1). Moldova has one of the highest incidences of breast and colon cancer in Europe and the CIS, and the incidence of tuberculosis is only slightly lower than the average for CIS countries. The prevalence of anemia and goiter are high compared to other countries in the region (except Central Asian countries).

Table 1: Health Status Comparisons

	Moldova (2001)	Europe (2000)	CSEC (2001)	CIS (2001)
Life Expectancy				
male	64.5	69.7	69.4	61.8
female	71.9	77.8	77.2	72.9
Infant Mortality per 1,000 life births	16.4	9.7	10.5	16.5
Maternal Mortality	43.1	18.1	13.0	34.2
Standardized Mortality rate (per 100,000) all causes	1390	964	988	1371
standardized mortality rate diseases of circulatory system	816	475	524	773
standardized mortality rate ischemic heart disease	558	99	185	407
standardized mortality rate malignant neoplasms	149	181	204	166
standardized mortality rate digestive tract diseases	128	39	47	48
standardized mortality respiratory tract diseases	80	63	44	69
Incidence of Tuberculosis (per 100,000)	85	44	49	88
Incidence of AIDS (per 100,000)	0.2	1.3	0.4	0.3
Prevalence of Diabetes (%)	0.7	n.a.	2.5	1.3

Source: WHO - HFA database

Unfortunately, reliable health status indicators by income and location are not available at present, although the DSS is implementing a new survey that could potentially permit this.

As public expenditures on health care have fallen, households have increasingly financed health care themselves. Public health care expenditures fell as a result of the significant fiscal adjustment in the aftermath of the Russian crisis, and although they increased with the recovery, they remain below their levels in 1997 – both as a share of GDP (4%) and in real terms. Still, public health expenditures as a share of GDP compare favorably to other countries (3.2% on average internationally, and 2.4% in countries with comparable incomes to Moldova). Household out of pocket spending on health care, on the other hand, has increased in importance: from about 27% of total health care expenditures in 1997 to almost half in 2001 and 2002. Households across all income groups spent less on health care in the aftermath of the Russian crisis, but out-of-pocket expenditures on health care rose again significantly in 2001 and 2002 as poverty rates fell and overall expenditures increased.

Poor households spend less on health care both in absolute terms and as a share of total expenditures, while public health care expenditures also favor the better off. On average, people in the highest quintile spend almost twenty times more on health care per month than those in the lowest quintile, with the top quintile spending almost three times the national average. Contrary to some other low income countries, lower income groups spend a lower share of their overall expenditures on health care than do wealthier households. Although the considerable restructuring in the health care sector has resulted in a reduction in the share of public sector spending going to hospitals (63% in 2002, compared to 75% in 1998), the continued bias of public spending in favor of hospital care results in regressive public expenditures on health care. The non-poor account for about 80% of hospital visits and two thirds of ambulatory care visits.

Pharmaceuticals account for the largest share of household expenditures, and informal payments are prevalent despite the introduction of formal co-payments in 1999. Expenditure on drugs accounted for about 74% of private expenditures on health care, while just under 10% each went to consultations, in-patient, and dental care. About half of those seeking care incurred expenditures for consultations, in-patient, or dental care, while virtually every individual seeking care incurred expenditures on drugs. Although informal payments (payments for services that are meant to be free or supplements to officially established payments) cannot be measured directly, about a quarter of the population made payments that did not go through formal channels (cashiers' office), accounting for about a fifth of total payments made. Informal payments represent a double burden for the poor – a third of the poor make these payments although they can afford them less. Non-poor and urban populations were found to be less likely to make informal payments.

The very low levels of utilization of and expenditure on health care by the poor means that health care expenditures do not have a significant impoverishing effect on the poor, primarily because lower income groups simply forgo health care until it is absolutely critical. Contrary to the experience of some other countries, the share of those spending in excess on 10% or 20% of total expenditures on health care – which could be considered catastrophic levels of expenditure – remains consistently higher among the upper income groups. This seems to reflect a situation where lower income groups simply forgo health care until it is absolutely critical. Not surprisingly, the impoverishing impact of health care expenditures is not large – health care expenditures contribute to at most a 1.4 percentage point increase in poverty in 2002, although they increase the incidence of extreme poverty by about 2.7 percentage points. It should be noted, however, that the impoverishing impact has increased over the years.

The recent move from budget financing to health insurance in Moldova may further limit health care utilization by poor and rural populations. As of January 1, 2004, health insurance has replaced budget financing of health care.⁵ There is a risk that the poor, the majority of whom are not employed in the formal sector, will not make the required contributions (which amount to 35–40% of

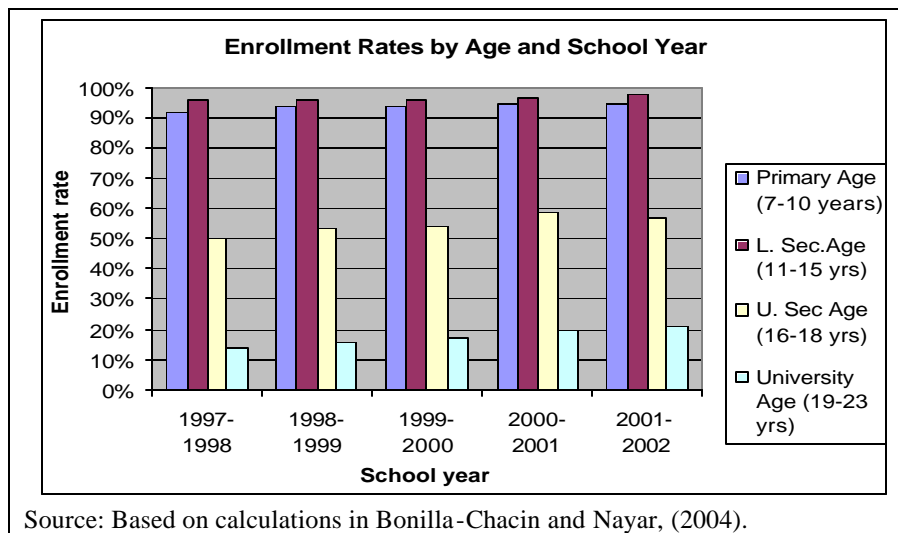
⁵ See World Bank (2003a) for a discussion of health insurance in Moldova.

their per capita expenditures) and that this will exclude them from gaining access at reduced or no cost at the point of service. State and local government budgetary funds are expected to make contributions on behalf of certain target groups – children and students, invalids, pensioners and the registered unemployed. However, these groups do not necessarily coincide with the most needy, and no mechanisms have so far been worked out to assure coverage of health insurance, and thus access to basic care by lower income groups from other categories, such as the working poor.

Access to education

For the most part, enrollment rates in education were remarkably resilient to the Russian crisis. Despite the strain on incomes and public budgets and the dramatic fiscal adjustment during the crisis, enrollment rates – other than at pre-school levels – were maintained while those at higher levels (especially university) increased (Figure 6). This suggests that overall the reduced employment opportunities kept the majority of children in school, dominating the need to supplement family income through work.⁶ By 2002, participation in upper secondary and university had increased compared to 1997, while participation in basic education was stable. Only pre-school enrollments saw a decline resulting from the closure of pre-school facilities that started before the Russian crisis. By 2002, participation rates in Moldova were still lower than in Central and Eastern European countries and the Baltics, but compared favorably to those in other low income CIS countries (Table 1). The major exception is enrollment in upper secondary education, where levels in Moldova are far lower than in these countries.

Figure 6: Enrollment rates were remarkably resilient to the crisis



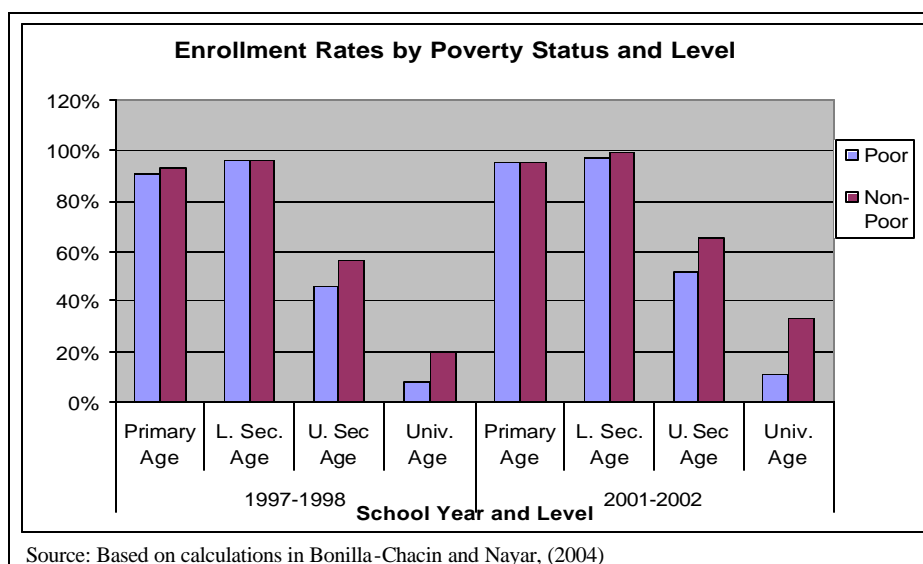
However, inequities in access to non-compulsory levels of education – which begin towards the end of the compulsory cycle – have persisted or increased. By 2002, the average Moldovan between 18 – 30 years of age had completed about 12 years of education. However, the average resident of Chisinau or Balti has completed 2 more years of formal schooling than the average rural resident, the non-poor about one year more than the poor, and the average woman about half a year more than her male counterpart. Between 1997 and 2002, disparities in enrollment – between poor and non-poor, rural and urban – have persisted at upper secondary levels and have increased at higher levels (Figure 7). The disparities start from the end of the compulsory cycle of 9 years, as poorer children are more likely to discontinue their

⁶ The peak of the crisis did however see an increased likelihood of dropout by rural teenagers with many young siblings. See Signoret and Murrugarra, 2003.

studies. Poorer children also start their education later and many do not participate in the last year of pre-school that is compulsory, putting them at a disadvantage when they do join. Thus the gaps in educational attainment are likely to persist or increase. Disparities in enrollments between males and females, however, did reduce, and at the secondary level they closed. Between 1997 and 2002, boys increased their participation in upper secondary at a much higher rate than girls, so that by 2002 enrollment rates at this level were equal.

Both demand and supply side factors appear to be behind the lower enrollment rates at non-compulsory levels. Supply side factors appear to be the primary constraint at pre-school levels- where lack of availability or closure of the pre-school facilities was cited by three out of every five households. In contrast, demand side factors – or the low perceived benefits relative to costs (including opportunity costs) of continuing with education, are most important among 16-18 year olds. About 73% of those who are not enrolled in secondary education are from rural areas, and nearly 86% of these individuals are working. There is some preliminary evidence that children whose mothers are not living at home – most likely because they have left the country in search of employment, are less likely to continue with upper secondary education.

Figure 7: Enrollment disparities between poor and non-poor at non-compulsory levels have persisted or increased



As public expenditures on education have fallen, private payments have become more important. As in the case of health care, the collapse in public education expenditures was accompanied by increased household financing of education. In 2002, private expenditures on GDP accounted for between 1.6 to 1.8% of GDP, while public expenditures were about 5.5%. Just under 40% of private expenditures are incurred at college and university levels – mostly by better off households – but nearly half are incurred at basic education. The high share of private expenditures at college and university levels reflects the policy of formal fee payments at this level: about 70% of university students were fee paying students in 2002, according to the HBS.⁷

⁷ This is the practice of “contract” places in universities. Contract fees represent a high level of cost sharing, representing close to 90% of total per student expenditures at the university level. See Berryman, Tibi and Peleah, (2002) for details.

In addition to formal payments that are now required at non-compulsory levels, many households make informal contributions, with the high out-of-pocket expenses at these levels discouraging poorer students. University education is prohibitively expensive. At about 223 lei per month, household payments per student are higher than the per capita consumption of 202 lei of a household at the poverty line. Formal fees are the largest component of costs at university levels. Although cost recovery at university is an appropriate policy in view of the high private returns, only those households that are able to access subsidized education send their children to university. Moreover, the highest incidence of informal payments are reportedly observed in connection with admission to universities. Even secondary education is expensive – at about 60 lei per month – the average household payment per child is just under a third of the per capita consumption of a household at the poverty line. Although compulsory education is officially free, per student costs even at these levels are not negligible, and are about half those at upper secondary. At compulsory and upper secondary levels, informal contributions and supplements to schools and PTA associations account for about a quarter of household expenditures. The remainder are primarily contributions for supplies, and extracurricular activities at compulsory levels, and at upper secondary, additionally for formal fees, textbooks, and private tutoring, presumably to secure better results and therefore better access to higher education institutions.

The burden of private expenditures on education in Moldova is highly unequal. The poor spend less than the better off households in absolute terms: on average the poorest quintile spends 18 lei per month and the richest about 34 lei per month on education. The differences reflect differences in ability to purchase higher (and more expensive) and higher quality schooling. However, as a share of total expenditures, the poorest quintile spends twice as much as the richest quintile. In 2002, household expenditures on education were just under 9 % of total consumption for the poorest, but about 4% of total consumption for the highest income quintile. The shares of private education expenditures in total expenditure in Moldova are among the highest – and most unequal – among CIS countries. Only Armenia has comparable levels and inequality burdens.

But public expenditures on education do not especially favor poorer households. Public expenditures on basic education are weakly progressive- a reflection of the near universal enrollments, the more or less equal numbers of students across the quintiles, and the limited share of expenditures targeted to the poor. Expenditure on pre-schools do benefit the poor but this is not driven by higher utilization of pre-school facilities by the poor. Rather, this is a result of the predominance of younger children in poorer families. In the case of upper secondary, the pro-rich benefit incidence reflects the difference in enrollment rates across the consumption quintiles. Although higher education expenditures are regressive in Moldova, they are somewhat less regressive than in other countries in the region or than would be suggested by the distribution of enrollments. Thus the concentration ratio for public expenditures on higher education in Moldova was 0.17, compared to 0.36 in Albania and 0.3 in Bosnia and Herzegovina.⁸ In part, this is because the majority of enrolled students pay fees, and in part because only those poor students who receive public funding can afford to attend.

The average efficiency of public expenditures in education seems to be improving, as suggested by improvements in the quality of compulsory education (measured by student performance) despite lower public expenditures. In 1999, Moldovan 8th grade Moldovan students performed poorly in the 1999 International Math and Sciences Study (TIMSS-R). The average score of Moldovan students was statistically and significantly below the international average (of the 38 participating countries), the average for the other countries from Europe and Central Asia, and the average for OECD countries. However, Moldova was the poorest country in the sample, and the study coincided with the peak of the

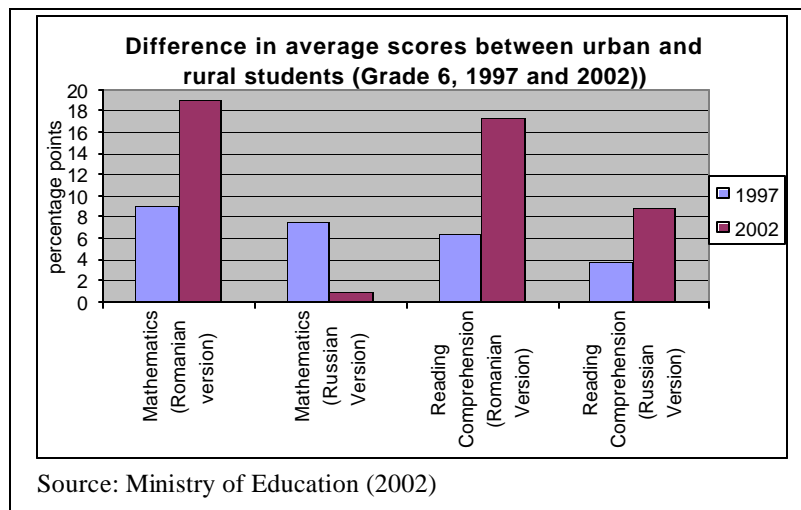
⁸ The concentration ratio is a concept analogous to the Gini coefficient. Its values range from [-1,1]. Positive values indicate a pro-rich distribution of public expenditures, negative values the opposite.

crisis when poverty was highest and resources at schools were at their lowest point. The TIMSS-R study suggests that possible explanatory factors for Moldova’s relatively poor performance were insufficient school resources, poor school and class attendance, outdated curriculum, and inadequate preparedness of the teachers. Since 1997, the Government has been undertaking reforms to modernize curricula, provide affordable textbooks, and some basic training to teachers, and modernize national assessments. The results of a comparable study of 6th graders before and after the initiation of reforms show improvements in student performance in mathematics and reading comprehension between 1997 and 2002, for the majority of students. This is likely to be in part due to the reforms, and in part due to the improving socioeconomic conditions of households. Similarly, new national tests at grades 4 and 9 show gradually (but not linearly) improving performance – mainly among 4th graders.

Yet, challenges remain for education quality. Despite the overall trend of improving student performance, further efforts to improve quality are needed – the results show that many Moldovan students score poorly on basic literacy and numeracy skills (grade 6 study), and in problem solving and independent writing (grade 6 study but also grade 4 and 9 tests). Resources are still lacking in schools and absenteeism is still a problem in compulsory schooling. In 2002, approximately 5% of students reported that they missed more than a month of school in the past year.

Moreover, inequities persist, as shown by the performance gaps between urban and rural students in compulsory schooling. The follow up study of 6th graders shows that the gap in performance between urban and rural students have increased in three of the four tests (figure 8). This is mainly a result of the much greater increase in performance of urban students relative to rural students.(figure 8). Although the gap appears to have fallen in one test (Russian language version of the mathematics test), this reflects primarily the smaller fall in performance by rural students⁹. Similarly results from the grade 4 and grade 9 national tests show consistently that urban students do better than rural students. It is not surprising, then that drop out rates from compulsory schooling are higher and participation rates in non-compulsory schooling are lower for poorer and rural children who bear greater private costs but fare worse and are less able to compete for places at higher levels.

Figure 8: The gap in performance between urban and rural sixth grade students has increased



⁹ The trends in performance in the Russian version of the mathematics test are not easy to interpret and need further investigation.

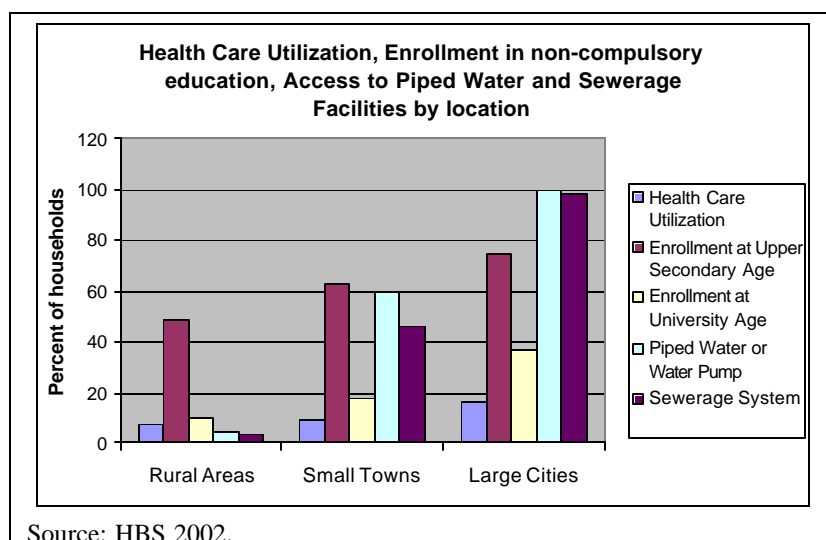
IV. Location and Poverty¹⁰

Sharp divergences in poverty by location

There are sharp divergences in poverty risks between large cities (Chisinau and Balti), small towns and rural areas – with households in the small towns being at largest risk of deprivation. Location is one of the strongest correlates of poverty. People in the two large cities have the lowest risk of poverty, and this risk has fallen during the recovery. In 2002, the risk of poverty was 47% lower for households living in large cities compared to the rest of the population. In 1997, it was 39% lower. In small towns, about 63% of households were poor in 2002, compared to 52% of rural residents and 29% of households living in the two large cities. Although the risk of poverty is highest in small towns, because the majority (63% compared to 16% for small towns) of the population lives in rural areas, rural poverty predominates and 68% of all Moldova’s poor – or 1.2 million poor people – live in rural areas.

The main reason for these differences is the uneven distribution of land and of income earning opportunities. Rural residents fare better than residents of small towns mainly because income and consumption from land, while better non-farm income earning opportunities reduce the risk of poverty most in Chisinau and Balti. By 2002, rural residents had twenty times the land area of small town residents. Rural residents are also distinct from residents in small towns and large cities in their dependence on agricultural activities: over the years, they have derived on average about 73% of their gross income from agricultural activities. However – as discussed below – the full potential of land ownership is yet to be realized. On the other hand only the Capital region is providing new employment opportunities to replace the jobs lost in transition. Most other regions – and particularly small towns that were heavily dependent on a handful of public firms prior to the transition – have simply not seen the emergence of good employment prospects. This difference is the primary reason for the much lower poverty rates in the two large cities compared to rural areas and small towns.

Figure 9: Rural residents are systematically disadvantaged in all non-income dimensions of well-being



¹⁰ This section draws from background papers by Jacoby, “Rural Poverty in Moldova,” and Beegle, “Living Standards and Poverty in Moldova.”

There are also sharp divergences between locations in non-income dimensions of poverty.

There are large differences in health care utilization and participation in non-compulsory levels of education – with rural residents systematically disadvantaged (Figure 9). As in other poor countries, indoor plumbing is largely absent in rural Moldova; the majority of the rural population draws water from wells. Recent reliable information on the quality of this well water relative to piped water is not available. Of concern, however, is the apparent decline in access to piped water in rural areas and (to a smaller extent) in small towns. On the other hand, access to electricity is nearly universal and access to in-home telephone coverage expanded across rural and urban areas (although it remains the exception rather than the norm among rural residents).

Land privatization, public transfers and rural livelihoods

The recent distribution of formerly collective land has resulted in a highly egalitarian ownership of private land in rural Moldova. In 1999, the vast majority of rural households had less than a hectare of land, much of it in a parcel adjacent to their house. The physical allocation of collective farmland began in earnest in 2001-02, and began to dramatically increase the amount of privately-held land in rural Moldova. In 2002, average land holdings (although still small) was 2 hectares. Just prior to full-scale privatization, in 1999, the poorest households had slightly less land than other households. This situation reversed itself as a result of the progressive nature of the de-collectivization, and by 2002 the distribution of private land in Moldova was highly egalitarian: the poorest quintile owned on average between 2 and 2.5 hectares, while the richest owned about 1.9 hectares. The distribution of livestock is more skewed in favor of wealthier households, but still is fairly equitable. Ownership of other farm assets – tractors, farm equipment – and access to irrigation facilities by the typical household farm is rare.¹¹

A striking feature of Moldova's transition to private farming is that cultivation by peasant households has changed very little. In 2002, most households were still cultivating less than a hectare of their own land. Average cultivated area rose by 64% between 1997 and 2002, from just under half an acre, at the same time as average owned land has rose by about 300%. By 2002, the average rural household was cultivating only half their land – 44% among the lowest quintile, rising modestly to 52% among the highest. The remaining land is, for the most part, being leased out to large farms often run by the former managers or “leaders” of defunct farms. Rental markets for the land shares carved out of the former collective farms are likely to be monopsonistic – land is immobile, and “leaders” who already cultivate a large chunk of land from a particular former collective have considerable market power. Peasant households who face difficulty self-cultivating their newly allotted share get very little for their leased land.¹²

¹¹ Given the small size of household plots, ownership of tractors or other large pieces of equipment would make little economic sense; however it appears that rental markets may not function well. See World Bank (2002), Lerman (2001).

¹² The HBS does not explicitly ask about land leasing. However a study by CISR (2001) indicates that lack of access to farm machinery may be an important reason for leasing out land by peasant farmers. Further rental payments are mostly in-kind, and are therefore not captured in the data on cash income. Anecdotal evidence on low returns from land leasing is supported by the indirect evidence on the modest improvements in welfare from substantially increased land ownership.

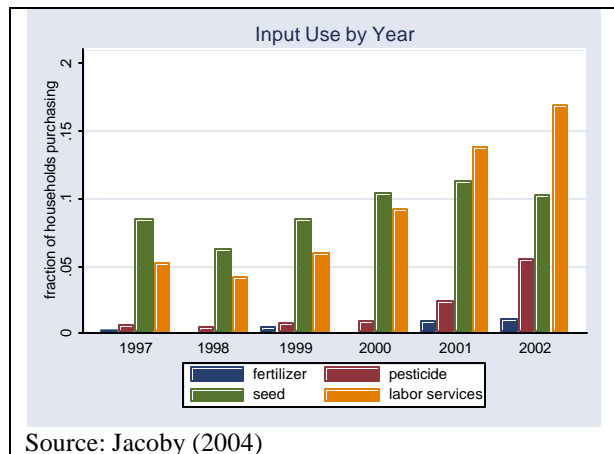
Table 3: The typical rural farmer does not produce for the market

Agricultural Sales of Rural Households, 2002			
<i>Expenditure Quintile</i>	<i>% of households with sales</i>	<i>Sales as share of total production</i>	<i>Sales as share of cash income</i>
Poorest	24%	12%	19%
Second	27%	8%	19%
Third	20%	5%	13%
Fourth	27%	7%	17%
Richest	32%	10%	20%
All	26%	8%	17%

Source: Jacoby (2004).

The typical rural household is cultivating mainly for its own subsistence, and poor infrastructure may play a role in reducing the incentive to produce for the market. Only about a quarter of rural households report sales of crops and/or livestock products. Unlike cultivated area, prevalence of agricultural sales increases as household expenditures increase.¹³ The ratio of agricultural sales to the value of total production, another measure of commercial orientation, is low, at under 10% (Table 3). Nevertheless, sales are an important source of cash for rural households, accounting for nearly 20% of cash income for almost every quintile. The lack of commercial orientation of agriculture is also reflected in the relatively low use of purchased inputs (Figure 10). Moreover, input expenditures per hectare rise strongly by consumption quintile.¹⁴ The fraction of households selling agricultural products drops dramatically with increased distance to markets (Figure 11), suggesting that the rudimentary rural transport network in Moldova constrains agricultural commercialization.

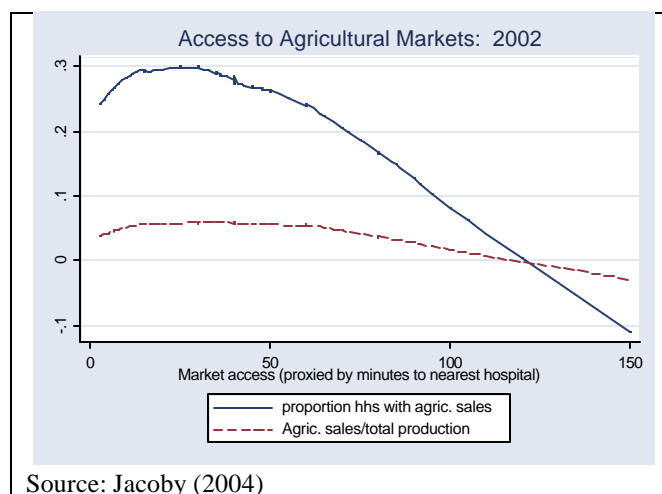
Figure 10: Use of purchased inputs is still limited



¹³ Although table 3 shows a somewhat U-shaped distribution (the third quintile is the least likely to have agricultural sales), a comparable table for previous years shows that the prevalence of agricultural sales increases strongly across expenditure quintiles (Jacoby, 2004).

¹⁴ Differential access to formal credit does not appear to be driving this – practically no one reports receiving bank loans. However, differential access to informal credit – loans from friends and relatives – may at least partly underlie this finding.

Figure 11: The rudimentary rural network constrains agricultural commercialization



As of 2002, increased land ownership has resulted in only modest improvements in the welfare of the typical rural household. The promise of land privatization as a means of assuring rural livelihoods has yet to be fully realized. Per capita consumption for the typical rural household increased by 6% over a two year period as a result of increased land ownership – which is modest in comparison to the average increase in land ownership of 67% over the same period. As discussed above, this is because most households are still producing primarily for their own subsistence, and are unable to farm their newly allocated land shares efficiently and lease most of it out on unfavorable terms.

Table 4: Rural households have become increasingly dependent on Government transfers

<i>Year</i>	<i>% of gross income from Government transfers</i>
1997	10%
1998	7%
1999	5%
2000	9%
2001	13%

Source: Jacoby (2004)

In the years since the Russian Crisis, rural households have become increasingly dependent on government transfer programs. The proportion of rural households' gross income derived from Government transfers rose steadily between 1999 and 2002, and was substantially higher than the pre-crisis share (Table 4). Retirement pensions account for the bulk of Government transfers. This is primarily a result of the increase in the proportion of rural households receiving pension incomes (from just under 30% in 1997 to 44% by 2002), due to the clearing of pension arrears and the aging of the rural population. Some of the increase, especially after 2001, is due to the effect of the recalculation of pension benefits to compensate for past inflation. The analysis in the report suggests that without the increases in government transfer payments to rural households, the rural poverty rate would have been 82% (instead of 74%) in 2000 and remained higher in subsequent years as well (see Box 6 for a discussion of the methodology).

The present system of farmers' pensions entails substantial transfers from urban workers to farmers. In the present system, farmers contribute to the pension system on the basis of the size of their landholdings at a fixed rate of 1.7 lei/ha in 2002; which with average landholdings of 2 hectares in 2002 amounts to a miniscule 4 lei per household in contributions – and this is in the unlikely case of actual collection of contributions due. For recent retirees, realized income has thus been largely independent of contributions. This implies an aggregate fiscal imbalance in the farmers' pension system and effectively amounts to transferring of income from urban workers to farmers. Although rural poverty is high, the pension system is not a particularly efficient mechanism for redistributing resources. In particular, there is considerable heterogeneity in welfare levels – and it is unclear why a poor urban worker should subsidize a fairly well-off farmer.

Without higher pension contributions from younger cohorts of rural farmers, their future welfare is at risk. Since 1999, Moldova has initiated fundamental reform in its pension system. The spirit of the pension reform is to tighten the linkage between pension benefits awarded and contributions actually paid. If implemented as originally conceived, these reforms could strengthen the ability of the pension system to provide old age security in a fiscally sustainable manner. However, the tightening of linkages between pension contributions and entitlements means that unless the contribution levels from current farmers increases, in the future, many retired farm households will receive considerably smaller pensions than today's retirees. Unless the state steps in, the resulting retirement income gap will have to be filled by accumulated savings, transfers, or longer working lives.

V. Pathways out of Poverty¹⁵

Employment and poverty – the depressed domestic labor market

Well paid employment could provide a strong pathway out of poverty in Moldova, though employment does not substantially reduce the risk of poverty. In 2002, the poverty rate was 50% for people in households whose head was employed, compared to a poverty rate of 46% among people in households whose heads were inactive (mainly pensioners). This reflects, on the one hand, poor earnings opportunities for the majority of workers, and on the other, the income maintenance provided by pensions. Although the unemployed are at greater risk of poverty; open unemployment is not high in Moldova. Not surprisingly, nearly three-quarters of Moldova's poor live in households whose heads are employed. This reflects, then, the importance of encouraging the creation of more and better – more productive – jobs.

Among the employed, those who work in the formal sector, or have multiple jobs, fare better. The poverty rate is significantly lower among workers with regular paid jobs in the formal sector. However, these workers account for only a quarter of the working age population. A very small share of workers who hold multiple jobs fare best. Although they are not a significant share of the population, they are a larger share of rural and agricultural employment, suggesting that those agricultural workers who are able to combine work on household plots with other economic activities are better off. Poverty is highest among the 10% of workers who are unpaid or face wage arrears. Poverty rates are about average for those who primarily do unpaid work on household plots, representing the income maintenance role played by subsistence farming.

Table 5: Paid formal employment reduces the risk of poverty

Poverty and Work in Moldova, 2002		
Work status	Poverty rate	% of W.A. population
Formal paid work	37.4%	25%
Informal work (non-agricultural)	47.3%	5%
Informal work (agriculture)	40.2%	8%
Multiple jobs	25%	3%
Household plot work	46.9%	27%
Other unpaid workers	63.8%	10%
Unemployed	59.9%	2%
Out of labor force	46.5%	20%
Total	45.2%	100%

Source: HBS 2002

Despite signs of improvement in domestic labor market conditions since 1999, the Moldovan labor market remains depressed. Real wages have increased (at an impressive rate of 11% per year) during the expansion, and the share of the work force that is unemployed or discouraged (and had given up actively seeking a job) has fallen. In 2002, open unemployment was 7% – not particularly high compared to transition countries. However, employment has stagnated and the employment rate¹⁶ – a better measure of utilization of the labor force – has remained unchanged and is well below the average for OECD countries. Moreover, many jobs are of low productivity. The growth in real wages has exceeded the growth in labor productivity, reflecting in part large increases in public sector wages.

¹⁵ This section is based on the background papers by Andrews, “Participation, Employment and Unemployment,” and Rutkowski, “Firms, Jobs and Employment in Moldova.”

¹⁶ The employment rate is defined as the percentage of the working age population that is employed.

Although the number of discouraged workers has fallen, if these workers are considered unemployed, the unemployment rate is nearly double.

As a result, an increasing number of Moldovans are seeking employment abroad. The number of Moldovans seeking employment abroad or working abroad increased dramatically even during the years of economic recovery in Moldova. If it is assumed that all these workers are successfully employed abroad, the sharp increase could be interpreted as substantially improved labor market opportunities for Moldovans in the global labor market. Accordingly the employment ratio of Moldovans in the global labor market increased from 44% to 48% of the potential labor force. However, as discussed below, not all of these individuals succeed in the global labor market, and many face significant risks.

In the domestic labor market, even being employed is not necessarily associated with high productivity and earnings, or regular or full employment. As discussed above, a large share of workers work outside the formal sector, in unpaid or subsistence farming, perform casual plot work, or have otherwise not been paid. In addition, many regular jobs are associated with low productivity and underemployment, in part because many firms are struggling to survive and are on the brink of collapse. In 2002, nearly a third of all workers in Moldova worked fewer than 30 hours per week. This low productivity translates into lower earnings and often leads to poverty.

The poor labor market outcomes reflect the poor conditions in agriculture and the scarcity of productive employment opportunities outside agriculture. Agriculture accounts for just under half of all employment, but fewer than a third of all paid jobs (reflecting both unpaid family work as well as significance of wage arrears). Over three-quarters of all part time workers are engaged in agricultural activities, and just under half of these are workers who work on their own plots for consumption. In fact, agriculture accounts for the largest share of informal employment. Real wages and labor productivity continued to decline in agriculture through the recovery years, although at a slower rate than previously; not surprisingly, wages were the lowest in agriculture compared to other sectors. As discussed below, with insufficient productive opportunities being generated in the non-agricultural formal sector, more and more Moldovans have returned to agriculture. Table 6 shows that only about 30% of the income of Moldovan households, and only a quarter of that of the poorest households, is derived from wage employment. Agricultural self employment and pensions are the primary sources of income, especially for poor households.

Table 6: Income from wage employment accounts for only a quarter of the income of the poorest households

Share of income by source and expenditure quintile, 2002							
	Poorest Quintile	Second Quintile	Third Quintile	Fourth Quintile	Richest Quintile	Total	
Agricultural self-employment	49.8%	46.9%	45.4%	45.1%	34.5%	44.3%	
Wages	25.4%	26.4%	27.4%	29.0%	38.4%	29.3%	
Non-agricultural self-employment	0.3%	1.0%	0.9%	1.0%	1.9%	1.0%	
Pension	14.0%	15.1%	15.8%	12.5%	7.4%	13.0%	
Government transfer	2.1%	1.7%	1.5%	1.4%	1.5%	1.7%	
Private Transfer	6.9%	7.9%	7.8%	9.4%	14.4%	9.3%	
Other income	1.4%	1.0%	1.1%	1.6%	1.9%	1.4%	

Source: Beegle (2004)

The formal sector – few firms and few jobs

As in other transition countries, the destruction of jobs in the formal sector in Moldova is quite high. This high rate of job destruction is due mainly to firms shedding redundant labor; exit of inefficient firms is limited and firm closure is not an important factor behind job losses. As in other transition countries, Moldova is undergoing a widespread process of downsizing of inefficient firms and elimination of overstaffing and non-viable jobs. The majority of existing firms are shrinking and over 60% of formal employment is in shrinking firms. Such high job destruction should be viewed as a positive development in so far as it leads to firms being more competitive and productive. The job destruction rate in Moldova is comparable to that in other more dynamic labor markets, such as that in Lithuania.

The main problem in Moldova is that old jobs are not being replaced by new, more productive jobs at a sufficiently fast pace. The rate of job creation in Moldova is lower than that at which jobs are destroyed, and is only two-thirds of that in Lithuania. The low rate of job creation reflects both the low (and declining) rate of firm entry,¹⁷ but also the low rate of job creation in existing firms. The significant gap between job creation and job destruction in Moldova is a source of labor market slack, which negatively affects workers' chances of moving from less productive to more productive employment, and limits industrial restructuring. This translates into lower rate of productivity growth, lower income growth, and ultimately lower poverty reduction.

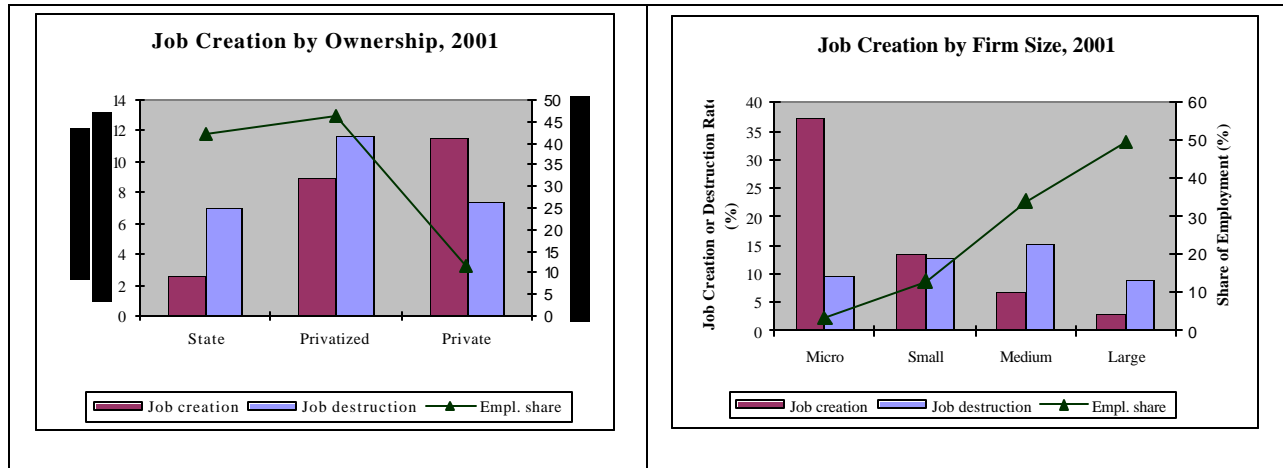
Only new private firms and small firms are net providers of productive jobs. In the non-agricultural business sector, the new private sector is the only source of employment growth. As a result of its high job creation rate and modest job destruction rate, it creates jobs on a net basis and increases its employment at about 4% per year. In contrast, both the state owned and privatized sectors destroy jobs on a net basis (Figure 12). Reallocation of jobs from declining to expanding firms is highest in the privatized sector – about 9% of all jobs in privatized firms are moved away from the declining firms towards expanding firms.¹⁸ As in other countries around the world, smaller firms in Moldova are much more dynamic in creating jobs than are larger ones (Figure 12). There is a strong positive correlation between labor productivity and employment growth in Moldova. The job creation performance of firms visibly improves with greater labor productivity. An important implication of this is that labor reallocation leads to productivity gains, as jobs are being moved from less to more productive firms. In Moldova, the privately owned and small firms also tend to be the most productive. This suggests that the new private SME sector, by generating productive employment opportunities, could potentially provide a pathway out of poverty for many Moldovans.

However, the small share of these job-creating sectors severely limits their potential to contribute to employment growth and reduce poverty. The size of these job creating segments are small in Moldova – the new private firms account for only 11% of non-agricultural employment and only 17% of all workers are employed in small firms (compared to almost one-third in Lithuania).

¹⁷ Limited firm exit could be one reason for low firm entry and therefore job creation, and may be a result of complicated or costly closure or bankruptcy procedures. Resources, including labor, are frozen in non-viable firms, which inhibits restructuring and productivity growth.

¹⁸ This points to a fair amount of heterogeneity among privatized firms. Some behave like private firms and showing potential for growth, while others still resemble the state owned enterprises and reduce employment.

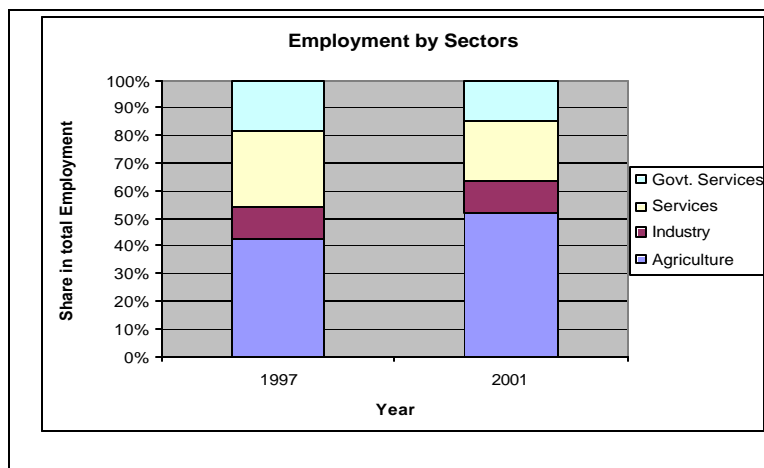
Figure 12: Only small private firms are net providers of jobs but the size of this sector is small in Moldova



Note: Data refers to continuing firms in the Annual Survey of Enterprises (between 2000 and 2001). "State" includes municipal and mixed state/private ownership.
Source: Rutkowski (2004)

The non-government services sector has yet to emerge as a significant provider of formal sector employment – this is in sharp contrast to other transition countries. As is in most other transition countries which undergo restructuring, most of the new jobs in Moldova are being created in the service sector, while jobs that are being destroyed are mainly in manufacturing. However, the services sector as a whole does not create enough jobs in Moldova. It is thus unable to provide employment to workers who lose their jobs in manufacturing, or to those who find sufficient opportunities to workers who are underemployed in agriculture. This has led to a situation where the share of services in employment has gone down, while agriculture has acted as the “shock absorber” of the economic transition (Figure 13). This is in contrast to the developments in other transition economies, where the service sector has been the main provider of new jobs.

Figure 13: The share of services in employment has come down while agriculture has acted as the “shock absorber”



Source: Based on Porto (2004)

The regional distribution of employment opportunities is very uneven: the only region where employment opportunities are growing is the Capital region. In all other regions, the destruction of old jobs has not been followed by the creation of new jobs, implying large employment losses. As discussed earlier, the lack of emergence of good employment prospects outside of the capital region is a primary reason for the much higher poverty rates in small towns and rural areas. Low regional job creation rates, falling uniformly short of job destruction rates across regions, leave little room for regional restructuring – there are no expanding regions (except for the capital region) that can absorb labor resources released from contracting regions. Regional employment growth is determined by job destruction rates, rather than job creation rates. The strong concentration of regional employment opportunities in just one region could lead to a “backwash effect” whereby labor, especially skilled labor, and capital move from depressed peripheral regions to the expanding capital region, further weakening the already poor development prospects of the backward regions.¹⁹

The primary factor behind the low job creation rate is the high cost of doing business in Moldova. Moldovan employment protection legislation appears stringent, and in theory could discourage hiring by raising the costs of adjusting employment levels. However, the high job destruction rates and employers’ perceptions suggest that these are not presently binding in Moldova. Direct and formal costs associated with firm entry regulations are not excessive by regional standards but far exceed those in high job creation economies, while bribes and informal payments raise these costs. Overwhelmingly, however, the evidence points to the high costs of doing business as a primary cause of low job creation. Moldovan employers cite severe impediments from high (monetary – both formal and informal – and procedural) costs associated with obtaining permits, certificates and licenses, with the complicated customs procedures, and with the frequent and lengthy inspections. Survey evidence confirms that business regulations in Moldova impose a huge burden on management time and firm resources.²⁰ These costs are high even by regional standards. There is no single element responsible for the business environment being unfriendly in Moldova. Rather, it is the whole environment of excessive regulations, bureaucratic discretion and associated corruption, and the underlying philosophy of taxing businesses that are the root cause of depressed activity in Moldova. This discourages firm entry and expansion, especially by smaller firms, and translates into fewer jobs and ultimately higher poverty.

¹⁹ These ideas have their origin in the works of Hirschman (1958) and Myrdal (1957).

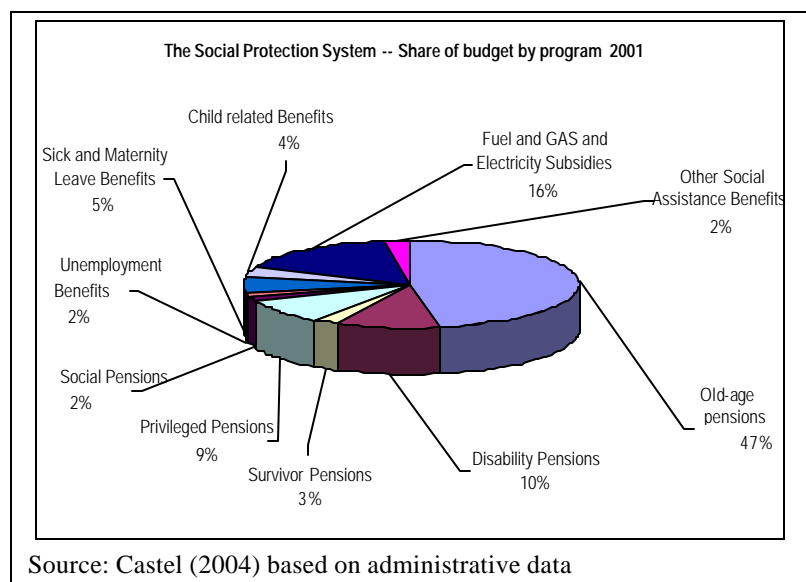
²⁰ See Rutkowski (2004) and World Bank (2004c) for results from the Business Environment and Enterprise Performance Survey (BEEPS II), Regulatory Cost Assessment Survey 2000-2002, as well as focus groups with employers.

VI. Coping with Poverty²¹

The public safety net

As in other transition countries, Moldova has an extensive social protection system reaching about half of the population. In 2002, social protection expenditures were just under 8% of GDP, on a variety of different programs. Together, they reach about half of the population, when families of beneficiaries are included. Social insurance programs account for the majority of expenditures and beneficiaries of social protection programs (about 6.6% of GDP). Social assistance programs accounted for 1.4% of GDP. Social assistance programs are intended to be the direct instrument for poverty alleviation. In contrast, social insurance programs are intended to smooth income shocks due to loss of earning capacity – for example as a result of old age or sickness – and entitlements depend on previous enrollment in social security. The four largest programs in terms of expenditures are: old age pensions, gas and energy compensations (social assistance), disability pensions, and privileged pensions, respectively (Figure 14).

Figure 14: Old age pensions are the largest program, followed by gas and energy compensations



Old age pensions are particularly successful in covering today's elderly but future entitlements from the pension system will be lower. Old age pensions covered over 90% of the elderly in 2002. The high coverage to a large extent reflects the rights acquired by current retirees prior to the transition, when coverage in social security was nearly universal. Although today's elderly are well covered by the pension system, a significant share of current workers will either not be entitled to pensions or will receive considerably smaller pensions than today's retirees when they retire – as the links between pension contributions and entitlements are tightened. In part this is due to the lower contributions of groups such as farmers. In addition, coverage of today's workforce by social security is also lower because of the large share of workers that are dependent on part-time jobs, casual employment, or jobs with low or irregular wages.

²¹ This section is based on the background paper by Castel, "Moldova Public and Private Safety Net," and the note on migration compiled by Dudwick and Sethi.

However, in the aftermath of the Russian Crisis, the increase in pension arrears led to greater poverty increases among households with pensioners relative to the rest of the population – while those who received them, primarily pensioners in large cities, were protected from large falls in consumption. The actual reciprocity of pensions by the elderly is a recent achievement – pension arrears increased dramatically in 1998 and 1999 following the Russian crisis as expenditures on social protection collapsed. Although pension arrears were completely cleared in 2001, in part due to the initial impacts of the pension reform, households facing arrears in pension payments were especially vulnerable to the crisis and faced larger falls in consumption. For example, consumption fell by an average of 13.3% for those households who did not receive pension benefits in 1998, while it dropped on average by only 4% in households not affected by pension arrears. Virtually all pensioners in rural areas and small cities faced pension arrears, while pensioners in large cities were less likely to face arrears. While this bias may have been justified in part because rural pensioners had access to land as a safety net, in fact it contributed to greater poverty increases among pensioner households in rural areas and small towns compared to those in large cities.

Table 7: Pensioner households in rural areas and small towns faced larger increases in poverty than the rest of the population, while pensioners in large cities were relatively protected

Rate of growth of poverty for pensioner households versus total population between 1997 and 1999		
	Total population	Households with pensioners
Large cities	59%	43%
Small towns	32%	48%
Rural areas	54%	61%

Source: Castel (2004)

Many social insurance recipients supplement their incomes through work, but privileged pensioners are best integrated in the labor market. Although the range of social insurance benefits is wide, the majority of pensioners receive relatively low pensions. For example, in 2002, about 87% received pension income below the poverty line. Many pension recipients try to supplement their incomes with part time or casual employment. Casual employment – most likely work in subsistence agriculture – is most common. However, a small but significant share of pensioners are engaged in full time work. Those that appear best integrated in the labor market are the privileged pensioners, who tend to be younger. Over 18% of privileged pensioners work at least part time and earn over 40% more than other workers of comparable age. They are thus less likely to be poor. In comparison, 12% of disabled pensioners and only 6% of old age pensioners are employed in part time or full time jobs (Table 8). Thus eliminating privileges is appropriate from the point of view of equity within the reform of the pension system, and also improves the effectiveness of pensions within the safety net.

Table 8: Many pension recipients work – but privileged pensioners are best integrated in the labor market

Distribution of pension recipients by labor market status, 2002 (%)						
	Social Pensions	Old Age Pensions	Old Age Pensions-Privileged	Disability Pensions	Survivor Pensions	Veteran Pensions
Full time	1.4	2.2	14.7	8.3	8.3	0
Part time	1.4	3.9	3.7	4.1	4.1	0
Casual Work	47.6	73.5	58.3	61.7	61.7	65.4
Inactive and unemployed	49.7	20.4	23.2	26	26	34.6
Total	100	100	100	100	100	100

Source: Castel (2004)

Box 6: Estimating the poverty impact of public and private transfers

Estimating the poverty impact of transfers requires a comparison of poverty in the absence of transfers (the counterfactual) with observed poverty (i.e. after transfers). This requires a calculation of consumption before and after the transfer. Because households are likely to change their behavior in response to government or private transfers, it is not sufficient to mechanically subtract the amount of the transfers from observed consumption to determine the *ex ante* consumption or consumption in the absence of such transfers. In fact, the impact on consumption of eliminating or substantially reducing the transfers would most likely be lower as many households would try to offset the loss of transfer income by using their savings, selling their assets, increasing their working hours, having new members entering the labor market, or relying on family support.

What is needed is an estimate of how consumption would change for a given change in transfer income – or an estimate of the marginal propensity to consume out of transfers. This is done in this report by using consumption and transfer changes for the HBS panel of households. Details of the estimation technique can be found in Jacoby (2004) and Castel (2004). The main results are as follows. For social insurance (mostly pensions) a 1 lei drop in pension income leads to a reduction in consumption by 0.33 lei. (For rural pensions, the corresponding drop is 0.25 lei). A drop of 1 lei in social assistance leads to a reduction of 0.17 lei in household consumption. A drop of 1 lei in private transfers leads to a reduction of 0.20 lei in household consumption.

To obtain the *ex ante* consumption or consumption in the absence of the transfer, the actual transfer is multiplied by the propensity to consume from the observed consumption and the result is subtracted from observed consumption. Thus consumption in the absence of social insurance is estimated as observed consumption minus 33% of the social insurance benefits. Consumption in the absence of social assistance is estimated as observed consumption minus 17% of the social assistance benefits. Similarly, consumption in the absence of private transfers is estimated as observed consumption minus 20% of the private transfers.

This estimated consumption in the absence of transfers is used to measure the incidence, depth and severity of poverty in the absence of transfers. It is also used to assess the targeting performance of transfers (and is used to rank households into pre-transfer consumption quintiles, for example in Figures 15 and 17). For comparison purposes, this main report presents the poverty impact of transfers as a range, with the upper bound being the impact under the hypothetical situation when all of the transfer income supports consumption and no other income source can be used to replace social protection benefits if they are suspended.

Note: See Jacoby (2004) and Castel (2004) for complete results

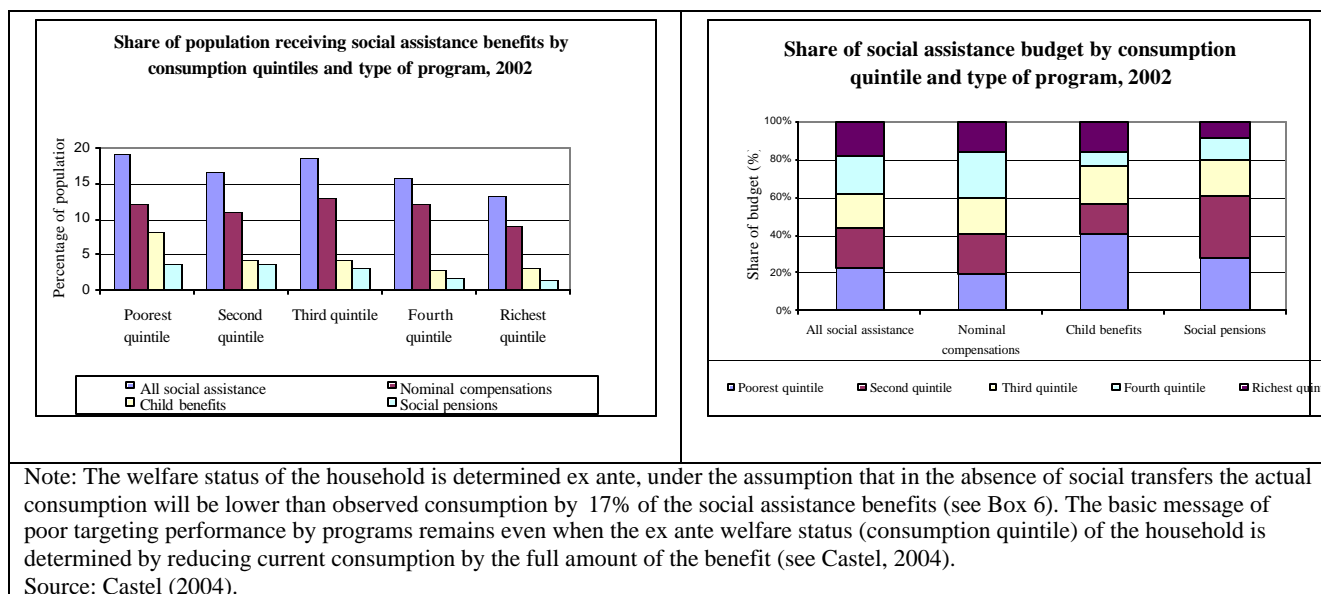
Social insurance programs reduce poverty but social protection programs fail to adequately protect the poor. If social insurance benefits were suddenly eliminated, the incidence of poverty would increase by anywhere between 4.5 and 11.2 percentage points. The upper bound is the maximum impact, in the unlikely situation that households are unable to offset this loss with other resources (see Box 6). If

social assistance programs are suddenly eliminated, the impact on poverty incidence is much lower – between 0.3 and 1.4 percentage points. Similarly, social insurance programs have a significantly larger impact on the poverty gap (the average shortfall of per capita household consumption from the poverty line) and severity, relative to social assistance programs. For example, they reduce the poverty gap by between 5.1 and 15.3 percentage points, while social assistance programs reduce the poverty gap by between 0.4 and 2.1 percentage points.

Contrary to popular perceptions, single pensioners are no more likely to be income poor; using this as a category to identify the poor has contributed to poor targeting of programs. The lower poverty among single pensioner households was observed for almost all years examined in the study and for all regions, although rural single pensioners were particularly less likely to be poor than other rural pensioners. The results hold even if one adjusts for the higher costs of running a single person household. In 2002, for example, the poverty rate among rural single pensioners was 26% compared to 52% for the population in rural households with pensioners; poverty rates are highest for pensioners living in large households. The lower poverty rate among single pensioners demonstrates the weakness of programs such as nominal compensations (energy compensations), which rely on targeting by categories that are perceived to be poor or more vulnerable.

The relatively low poverty impact of social assistance programs is due to their low coverage, poor targeting performance and benefit levels that do not adequately match needs. Social assistance programs do not adequately cover the poorest people: under a fifth of the poorest quintile is covered by social assistance. While the poorest quintile is better covered than other quintiles, the difference is not very large. In particular, 13% of the richest quintile is also covered by social assistance (Figure 15). Of the three programs social pensions and child benefits are more likely to reach the poorest. Still, there is still significant leakage of resources in all social assistance programs, and between 20-40% of resources go to the richest 40% of the population (Figure 15). Finally, benefits are either too large or too small and are not well directed to the needs of the poor. Among the poor covered by social assistance, 14% receive twice as much as they need to pull them out of poverty while, at the other extreme, 73% of extremely poor have less than three quarters of their need covered by social assistance (Castel 2004).

Figure 15: Social assistance benefits, and particularly nominal compensations are not well targeted and a large share of the budget goes to the better off



The targeting performance of the nominal compensation (energy subsidies) program is the worst. The poor performance of the social assistance programs to a large extent reflects the poor performance of nominal compensations: about 40% of all resources from this program go to the two richest quintiles. As discussed earlier, this is due to the still heavy reliance of this program on targeting to categories that do not coincide with the poorest groups, such as single pensioners²².

Child benefits is the most efficient poverty reduction program, while nominal compensations are the least efficient program in Moldova. Targeting performance, coverage and benefit levels can be combined to define a measure of program efficiency: or the amount of poverty reduction that can be achieved for each percent of GDP spent on the program. For 1% of GDP spent on child benefits, poverty was reduced by at most 4.2 percentage points. The performance of social pensions was next – with the same resources reducing poverty by at most 1.9 percentage points. On the other hand, 1% of GDP spent on nominal compensations reduces poverty by at most 0.2 percentage points and on veterans pensions reduces poverty by at most 0.9 percentage points. It should be noted that the efficiency of child benefit programs has improved over the years. In part this is due to the recent introduction of income testing in some child related benefits. In part this is because benefit levels have increased while poverty has decreased, so that on average, benefits cover a larger share of the poverty gap.

The double edged sword of international out-migration

Migration in search of employment opportunities abroad is an important poverty reduction strategy for many households. As opportunities for Moldovans within Moldova have remained limited, an increasing number of Moldovans have sought employment and improved living conditions outside Moldova. Migrants are predominantly younger men from rural areas, but approximately 30% of migrants are women. Although there has been some “brain drain,” migrants generally tend to be workers with average educational achievement. Thus university graduates account for just 7% individuals seeking employment abroad, compared to 14% of those employed at home. In contrast, graduates of secondary vocational education are more likely to leave – over a third of workers abroad have secondary vocational education compared to a quarter of workers at home. In part, this reflects the better employment opportunities for graduates of higher education in Moldova.

However, international migration has high social costs and poses significant personal risks. Most migrants are reportedly illegal workers in host countries; many of them leave Moldova with the help of middlemen or travel agencies. It can be costly, and in the case of less successful migrants, has contributed to family indebtedness. Very little is known about migrants once they have left the country, although there is evidence that many of the poorest, and youngest female migrants will – wittingly or unwittingly – become victims of trafficking in the foreign sex trade (Box 7). Migration has also contributed to some important – and disconcerting – changes in family structures and relationships. Notable has been the increase in the number of children without one or both parents (Figure 16). Nearly 50% of children in village schools may have one or both parents working abroad, and by 2002 about 10% of children in rural areas and small towns did not live with their mother. The large number of street children and children in institutions has also been attributed in part to the migration of their parents.

²² The existing social protection system, and nominal compensations in particular, were established through Law no. 933 – XIX of April 14, 2000 on Special Social Protection for Certain Categories of the population. Nominal compensations are provided to 11 categories of the population including invalids, single pensioners, mothers with many children, etc. The compensations are made for utility services: heating and electricity, cold and hot water, natural gas, liquefied gas, waste disposal, coal and wood.

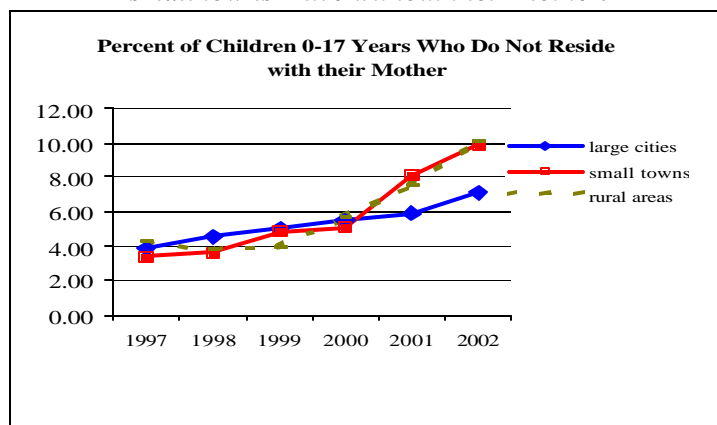
Box 7: Human trafficking

Moldova is a major sending country of trafficked women and girls. While estimates vary widely on the total number of women trafficked, Moldova had the second highest (after Albania) number of identified and assisted trafficked women within SEE Countries. Most women are trafficked to Kosovo and Bosnia and Herzegovina, but within Western Europe, to Italy, Belgium, and Greece. Recruiters tend to be most active in Cahul; along the border with Romania; and in Transnistria, where state controls are weak. Unlike some of their neighbors who have gained EU membership, Moldovan citizens still require visas for entering countries in Western Europe, even for durations of less than three months. This leads to a higher dependence on brokers and traffickers to facilitate entry in search of employment, and likely explains the relatively higher incidence of trafficking in Moldova.

Moldovan trafficking victims are likely to be mothers, either married or separated, who have left their children with relatives, mainly with grandparents, or in some cases, in residential institutions. Lack of formal and informal support networks in Moldova may be important push factors that force women into trafficking. As in other countries, other “push” factors for Moldovan women appear to be poverty, lack of opportunities, and gender-based domestic violence. In many cases trafficking leads to child neglect, deprives households of expected remittances, and even threatens communities and families by depleting human capital. Studies have also ascertained that trafficking contributes to the rise of STDs. Although HIV/AIDS prevalence rates remain low in much of ECA, trafficking may be linked to the increase of HIV/AIDS in South Eastern European countries, including Moldova.

Source: Based on Clert and Gomart (2004).

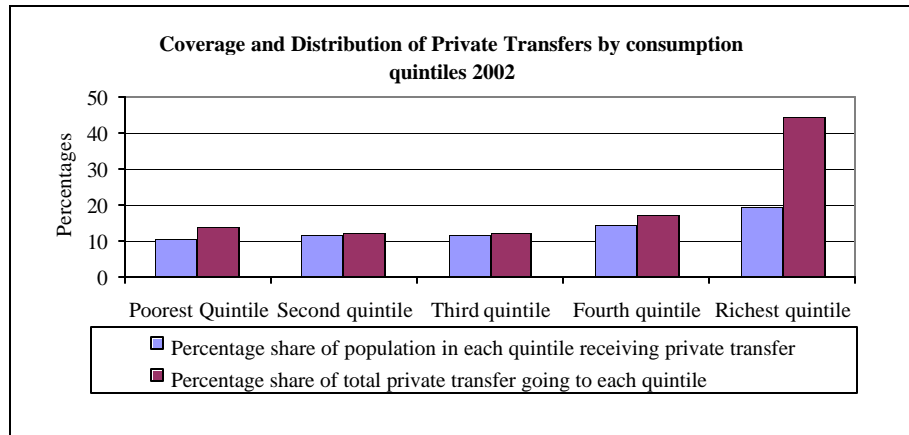
Figure 16: Because of migration, more and more Moldovan children – especially in rural areas and small towns – live without their mother.



Source: Beegle 2004

Private transfers are more likely to reach better-off households, but they push many households out of poverty. By 2002, remittances, at US\$ 275 million, were 2.5 times that in 1997 and accounted for 17% of GDP (compared to 6% in 1997). As a share of GDP, Moldova is among the top 10 countries in the world in receipts of private transfer; among transition countries, only Albania receives as much in remittances. Although “private transfers” reported in the HBS are much lower in magnitude and include transfers other than remittances, they still account for about 5.5 % of GDP in 2002. Private transfers are more likely to reach better off households (Figure 17, see Box 8 for a discussion of other characteristics of private transfer recipients). Although a large proportion of private transfer resources go to the better off, many poor also receive private transfers. Moreover, the levels of private transfers received on average are larger than the per capita poverty gap of poor households, and larger than social assistance benefits. It is not surprising, then that private transfers push many recipient households out of poverty. The lower poverty rates among recipients of private transfers relative to the rest of the population (33.5% relative to 51%) is thus partly because most recipients are significantly less poor, but partly because a non-negligible number of families are able to escape poverty.

Figure 17: The better off are more likely to receive private transfers.



Note: Welfare status is determined on the basis of ex ante consumption (observed consumption less 20% of private transfers) – See Box 6.

Source: Castel (2004)

Box 8: Some characteristics of recipients of private transfers

According to the HBS, private transfers amount to about 5.5% of GDP, and reach about 13% of the total population. Estimates of private transfers – and especially income from remittances – are likely to be underestimated. Nevertheless, according to the HBS:

- ?? 45% of transfer recipients live in large cities, 41% in rural areas and 13% in small cities. But transfer recipients represent a much smaller share of recipients in rural areas (8.7%) and small towns (11%), compared to large cities (28%). In other words over a quarter of all residents in large cities receive private transfers.
- ?? Women account for at least three quarters of all recipients. Although private transfers here are not limited to remittances, the larger share of women is among transfer recipients is consistent with larger migration of younger males.
- ?? Over half (55%) of older transfer recipients live alone, and three quarters either live alone or with another elderly person. By contrast 93% of younger recipients live with other young family members. This suggests that there are two groups of households that benefit from transfers - the older, usually pensioner households, and the younger nuclear households.
- ?? Nearly 80% of older recipients are pensioners. This suggests that many pensioners supplement pension incomes with private transfers in addition to work.
- ?? Younger recipients receive larger private transfers (601 lei) than older recipients (average 348 lei). This may be because older recipients are also more likely to have access to public transfers and families take that into account.
- ?? Among the younger population, recipients are more likely than non-recipients to have many children. Recipient households are somewhat less likely to be single women with children than the rest of the population. To the extent that private transfers are to a large extent remittance income, this reflects either the co-existence of transfer recipients with other working age adults, or the drying up of transfers among single women left behind with their children
- ?? Private transfer recipients are more likely to have tertiary education than other households Combined with the findings from the Labor Force Survey that emigrants have average education, this suggests that (a) there are other private transfers that are important among more educated households; and (b) higher education emigrants are more likely to transfer resources to family members at home (presumably also with higher education). Interestingly, however, male recipients of private transfers are also more likely to have only primary education – consistent with the importance of income from migration and transfers for families with lower levels of education.

Note: Based on findings in Castel (2004)

VII. Policy Directions for Poverty Reduction

The following priorities emerge for the design of poverty reducing policies.

I. Sustaining economic growth and reducing macroeconomic vulnerability. The strong linkage between poverty and growth means that Moldova will need to sustain or increase the present strong growth performance. In addition to maintaining macroeconomic stability through tight fiscal and monetary policies, Moldova will need to take steps to strengthen the fundamentals for sustained growth:

A. Growth will need to be accompanied by improved employment and incomes.

?? Improving agricultural incomes: The analysis in this report suggest the following policies will have the most impact, especially in the medium to long term:

- i. Investing in rural infrastructure. The evidence suggests that the rudimentary rural transport network in Moldova constrains agricultural commercialization. Roads and irrigation are critical needs in Moldova's countryside which will eventually help a broad class of rural farmers make the transition from subsistence to market-oriented production. Greater local participation and long term Government commitment are essential elements of any rural infrastructure policy that will reduce the likelihood of lack of maintenance or mismanagement.²³
- ii. Investing in rural institutions. In Moldova, the focus should be on land markets. Income gains from land leasing activities have been modest at best. Strengthening of land rights and the provision of legal aid information to farmers could potentially improve the situation. It is unlikely, however, that such measures alone will redress the underlying asymmetry between leaders and the landowners from whom they lease.²⁴ It is, therefore, important to better understand the major barriers to entry into large-scale farming so as to find ways to mitigate the monopsony power of land leasees. This will, however, require improved data collected at the level of the agricultural enterprise.
- iii. Effective targeting of any policies and programs focused on production incentives (such as improving marketing channels for farm produce, providing formal credit, facilitating input use). Given the limited commercial orientation of household farms and the sparse use of modern inputs, unless such interventions are carefully targeted, they are unlikely to provide much medium term benefit for Moldova's poor.²⁵
- iv. Improving the understanding of the linkages between agricultural production and poverty, and of the constraints in overall agricultural productivity. This will require a comprehensive farm-level survey, covering both household and corporate agriculture.

²³ Evidence from the parallel Trade Diagnostic study suggests that the broad range of transportation (poor quality roads, delays at customs) and logistic issues (insufficient intermediaries, lack of cold storage) are significant constraints to accessing domestic markets and increasing Moldova's competitiveness in its "low value, time sensitive goods" which constitute the bulk of its trade to the West.

²⁴ Policies that expand the scope of the tractor rental market may be useful in this regard, as they will remove one artificial source of scale economies in agriculture.

²⁵ Large farming entities are in a much better position to take advantage of subsidized credit and inputs than are individual households, and it is yet unclear how the productive gains to the former would translate into poverty reduction for the latter – especially given the limited importance of wages from agricultural enterprises and low incomes from leasing.

?? Encouraging the creation of productive non-farm employment in the private sector. The following emerge as actions that are likely to have the most impact on the generation of productive non-farm jobs, and thus on providing a pathway out of poverty:

- i. Radical reforms to reduce the extent of regulation of business activities – and thus to reduce the costs of doing business in Moldova. There is need to sharply reduce the number of permits, certificates and licenses needed to run a business.²⁶ Although entry regulations are not excessive by international standards, the regulations in Moldova far exceed those in high job creation economies, and there is scope to reduce these.²⁷ It is essential to reduce, also, the frequency of inspections and audits. Reductions in regulation will need to be accompanied by concerted actions to reduce the associated monetary costs.
- ii. Reducing the discretionary power of the bureaucracy and the associated corruption. Reducing regulatory requirements will reduce the scope for discretion by public officials, and thus the associated informal costs and bribes. It will also be essential, however, to introduce clear rules and transparent criteria in administrative decisions that affect businesses, and to take actions to increase the accountability of public officials.
- iii. Continued restructuring of state enterprises. This is essential to release resources, including labor that are tied up in less productive firms.
- iv. Investments in basic infrastructure (roads, water, sanitation) outside of the capital region. Together with improvements in the overall investment climate, this may improve incentives for the generation of employment opportunities by the private sector and possibly address regional differences in employment opportunities. However, further understanding of constraints to regional development and potential rigidities in regional labor markets is needed. This, in turn will require richer data – on labor markets, economic conditions, infrastructure, and poverty at the regional level.

B. Growth will need to be accompanied by reduced vulnerability to economic downturns.

- i. Improving the business environment for private sector led growth, reducing government interference in private sector activity, and continued restructuring of state enterprises will strengthen the fundamentals for sustained growth, and contribute to reduced vulnerability.
- ii. An important reason for Moldova's economic vulnerability is its heavy dependence on the good performance of its two main trading partners, Russia and Ukraine. Moreover, its main exports are agricultural products which are subject to price and weather related shocks. Continued efforts to reach other exports markets and to diversify Moldova's export base beyond agricultural products will further reduce vulnerability to external shocks.²⁸

II. Enabling the poor to invest in their human capital. The present skewed access to health care and education and consequent widening of inequities in opportunities inevitably means higher future inequality and therefore lower poverty reduction. Addressing non-income dimensions of wellbeing is also important in its own right.

²⁶ Employers point to the high (monetary and procedural) costs of obtaining permits, certificates, and licenses, to complicated custom procedures, and to high costs associated with various inspections as the most severe constraints on business activity – see Rutkowski (2004) and World Bank (2004c) for details. These perceptions of employers are confirmed by the results of the Regulatory Cost Assessment Survey for 2000-02 (ProEra, 2003).

²⁷ The World Bank Doing Business database (<http://rru.worldbank.org/Doing Business>).

²⁸ These issues are looked at in greater detail in the ongoing Trade Diagnostic Study.

A. *Improving access of the poor to health and education services.*

?? Reducing out of pocket costs – both formal and informal – for the poor. This could be done through:

- i. Introducing or expanding targeted subsidies to reduce the formal costs of health and education – at all levels – for the poor and rural populations. In the case of health care, this will be particularly important with the recent move to health insurance. Unless steps are taken to provide targeted subsidized coverage for the poor, and benefits are strictly defined to fit within the available resource envelope,²⁹ the anticipated reforms could further exacerbate the present inequities in health care utilization. In the case of education, targeted subsidies are needed for the poor to reduce costs associated with the completion of compulsory education and continuation to upper secondary. There is also need to review the present approach to the award of subsidies for higher education, to include means as well as merit. As in the case of social assistance, however, the challenge in implementing these actions will be in identification of the of the poor.
- ii. Reducing informal costs of health and education for the poor and rural populations. Wider information on health care and education rights and obligations (including entitlements under health insurance), and steps to increase accountability of providers (e.g. complaint mechanisms, greater community oversight), could go a long way in reducing the incidence of informal payments.³⁰
- iii. To the extent that demand side constraints are important determinants of health care utilization and completion of compulsory education, consideration should be given to making some part of social assistance benefits conditional on utilization of preventative care and completion of compulsory schooling (box 9 provides information on such a program that has been highly successful). In designing the program, however, it would be important to ensure that benefit amounts adequately capture all direct and indirect costs associated with the utilization of the services. In the case of health care, further investigation on the extent to which quality deters use would be desirable to determine whether such a program could be effective.

?? Addressing supply side constraints – where relevant. The closure or non-availability of adequate preschool facilities are clearly a problem for accessing pre-school education in rural areas. As in other countries, encouragement of provision of pre-school and early childhood facilities by non-governmental organizations and communities, with some targeted public financing may be one way to tackle this constraint. For the last year of pre-school, consideration may be given to integrating this year into existing primary schools.

B. *Improving the quality and effectiveness of services – with a particular focus on those used by the poor:*

?? Redirecting public expenditures towards services used disproportionately by the poor. In the case of health care, this means continued restructuring of hospital facilities and moving further resources from hospital care to primary care. In the case of education, this means a continued

²⁹ The present basic package envisages a number of essential services and drugs – but excluding non-emergency hospital services – for the entire population irrespective of insurance status.

³⁰ In the case of higher education, the streamlining of entrance examinations and procedures could reduce the potential for discretion associated with admissions, and the associated bribes.

emphasis on basic education – although accompanied by improvements in the efficiency of resource use away from funding underused facilities and under-staffed classrooms.³¹

- ?? Strengthen public health and monitor and improve nutritional outcomes: As seen in Box 5, Moldova has relatively high incidence of infectious diseases and there is evidence of serious micro-nutrient deficiency. Although information on health outcomes by poverty status is not available, across countries the poor are typically disproportionately affected. The following actions could strengthen public health and improve nutritional outcomes:
- i. Continued focus on infectious diseases; strengthening programs to address TB and AIDs, investigate adequacy of access to water and sanitation in rural areas and small towns and address if necessary.
 - ii. Addressing micro-nutrient deficiencies through cost effective interventions – such as fortification of foods (iron, iodine, etc.) – and improved monitoring of nutritional outcomes among children.
- ?? Continued improvements in the quality of education, with a particular focus on rural areas.
- i. Deepen reforms to improve quality of compulsory education. Available evidence suggests that quality has improved, although much remains to be done to prepare Moldovan children to succeed in the labor market. Deepening the present reforms by moving beyond centralized provision of inputs, to addressing incentives (by teachers, schools, local governments) for improved quality and increasing their accountability to citizens is the obvious next step.³² The persistent or increasing differences in student performance between rural and urban children needs to be better understood, but suggests that a strategy to improve the quality of rural education is warranted.
 - ii. Increase the benefits to poor and rural populations from continuing beyond compulsory schooling. Poor and rural families, for whom quality secondary education in lyceums and universities seems out of reach, are likely to be more dependent on general secondary and vocational education. The policies in this area need to be reviewed. In particular, demand for secondary vocational education appears to be falling, and graduates of these institutions appear to face more problems finding good employment in the domestic labor market. Reducing early specialization, improving the relevance of vocational education, improving the quality of general secondary education in rural areas may be a priority.

³¹ Moldova's demographic profile has led to significant under-use of capacity in the education system – and the underutilization is likely to get worse unless steps are taken to rationalize human and physical resources – See Tibi, Berryman and Peleah (2003).

³² Anecdotal evidence suggests that rural areas find it particularly (and increasingly) difficult to attract good teachers.

Box 9: Increasing human capital investment by the poor: Mexico's *progres*a program

*Progres*a, the Education, Health and Nutrition Program of Mexico, introduced a set of conditional cash transfers to poor families – if their children were enrolled in school and if family members visited health clinics for check ups and nutrition and hygiene information. The program was designed to address the lower ability of the poor to invest in human capital. It recognized the interdependencies among education, health and nutrition. To stretch limited resources, it linked cash transfers to household behavior, aiming to change attitudes. To reduce political interference, the program's goals, rules, requirements and evaluation methods were widely publicized. It was started by the administration of President Ernesto Zedillo, but was embraced by the government of President Vicente Fox, which built on the program using the evaluation results, and renamed it *Oportunidades*. By the end of 2002, about one fifth of the Mexican population benefited from the program. The success of the *progres*a program has led to similar programs, especially in other Latin American countries (Columbia, Honduras, Jamaica, and Nicaragua).

Comprehensive Design:

- ?? Children over 7 were eligible for the transfers. Benefits increased by grade (since opportunity costs increase with age) and were higher for girls in middle school, too encourage their enrollment. To retain the benefits, children needed to maintain an 85% attendance record and could not repeat a grade more than once.
- ?? Eligible families also received a monthly stipend if members got regular medical checkups and mothers attended monthly nutrition and hygiene information sessions. Households with children under 3 could receive a micronutrient supplement.
- ?? The transfers went to mothers, who were thought more responsible for caring for children. A monthly ceiling per family was imposed. In 1999 the monthly transfer per family was nearly 20% of mean household consumption before the program. Transfers were also inflation indexed every six months (today the maximum is \$95 and the average is \$35 per family)
- ?? The program is highly centralized and has just one intermediary between program officials and beneficiaries – a woman community promoter chosen by a general assembly of households in targeted communities. She can also liaise between beneficiaries and education and health providers.
- ?? By the end of 1999, the program covered about 40% of rural families and a ninth of all families in Mexico. The program budget was about 0.2% of GDP and 20% of the federal poverty alleviation budget.
- ?? Almost 60% of program transfers went to households in the poorest 20% of the national income distribution and more than 80% to the poorest 40%.

Impacts

- ?? Girls enrollment in middle school rose from 67% to around 75%, and boys from 73 to 78%. Most of the increase came from increases in the transition from primary to middle school . The program worked primarily by keeping children in school, not by encouraging those who had dropped out to return. It also helped reduce the incidence of child labor: labor force participation decreased by about 20% for boys. Still a large number of children from poor families continue to combine work with school.
- ?? The impact on learning are less clear. Teachers report improvements as a result of better attendance, student interest, and nutrition. But a study conducted one year after the program started found no difference in test scores.
- ?? The program helped reduce the high incidence of stunting – low height for age – among children one to three years old. On average height increased by 1-4% and weight by 3.5% for children covered by the program. These gains were only in part due to the micro nutrient supplements; part of the effect came from the nutrition information sessions which led to higher consumption of more nutritious food.
- ?? The program substantially increased preventive health care visits. Visits by pregnant women in their first trimester rose 8%, keeping babies and mothers healthier. Illnesses dropped 25% among newborns and 20% among children under 5. The prevalence of anemia in children two to four years old declined 19%. Adult health improved too.
- ?? The program is not only raising incomes temporarily, it should help raise future productivity and earnings of the children benefiting. Modeling exercises find that nutrition supplements alone would boost lifetime earnings by about 3% and education impacts would increase them by 8%.

Source: World Development Report (2004)

III. Strengthening the safety net

A. Strengthening the public safety net:

?? Continued reform of the pension system:

- i. Social insurance programs, and especially pensions, have a significant impact on poverty reduction. To continue to play this role, however, fiscal sustainability is key. The 1999 pension reform was a landmark in initiating significant reforms in this direction. However, implementation has been slower than foreseen. The key element of the reform – moving to system of pension payments based on actual contributions – is yet to be implemented. To maintain pension reform, pensions need to be indexed at least to prices: Moldova has chosen the Swiss model for indexation taking the average of wage and price inflation³³. However, any *ad hoc* changes to pension policy – such as the recent attempt to index pensions by increasing all pensions by a flat rate – undermine the pension reform while producing a long term pension promise with short, medium and long term fiscal consequences. Consistent implementation of the pension reform will be essential if it is to provide intended old age security. Together with continued efforts to reduce the non-compliance in the system, it could also help reduce contribution rates in the future. This would reduce one element of formal labor costs and the associated incentives for informality.
- ii. Address farmers pensions. As discussed, rural Moldova is increasingly dependent on retirement pensions. Extending the pension reform to farmers and increasing contributions from farmers is essential, to improve fiscal sustainability and to reduce the inefficiencies associated with the present redistribution. Moreover, without increased contributions from farmers, the tightening of linkages between contributions and benefits means that most farmers will receive considerably lower pensions than today's retirees-with possible consequences for old age welfare. Given the difficulty associated with assessing farmers incomes, one practical solution is to subject all land owning farmers to a flat rate contribution which would earn a flat rate pension benefit. Hired farm workers (on larger farms) could contribute a percentage of salary in the same way as industrial workers. In addition, all agricultural participants in the pension scheme should be given the opportunity to contribute more and receive more on a voluntary basis.
- iii. Given the low employment rates at present, and the large share of unpaid of informal employment, implementation of the pension reform will undoubtedly lead to a situation where many will reach retirement age with little or no entitlement to pensions. To the extent that individuals are unable to work longer, or increase savings, this will have implications for future vulnerability. Pension reform options must explicitly consider this risk.

?? Overhaul social assistance The analysis clearly demonstrates the ineffectiveness of social assistance programs to alleviate poverty. The following directions are suggested:

- i. Continue efforts to improve targeting and define benefit levels in line with needs, while increasing resources to poverty focused programs. There is some evidence that proxy means testing can improve targeting in Moldova³⁴. Improved targeting will not resolve the problem, however, if resources for social assistance remain too limited. Consideration should be given to concentrating resources on only one type of cash program directed to poor households³⁵. Armenia, with similar budgetary limitations has successfully increased social assistance

³³ This model provides a real increase in pension value when wages are rising faster than prices.

³⁴ The Ministry of Social Protection with the support of USAID/LIESAP has developed a model for proxy means testing (METSA). An evaluation of the METSA model is presented in Remco H. Oostendorp (2003).

³⁵ More attention also needs to be paid to benefit levels and matching these with the needs of different households to attain a minimum standard of living.

- efficiency by reorienting its budget in the financing of a unique family benefit (See Box 10 for a brief description of the Armenian program).
- ii. In the short run, actions to improve the targeting performance of the nominal compensations program are especially urgent. One approach may be to introduce means testing as has recently been done in the case of some child related benefits.

Box 10: Some features of the Armenian family poverty benefit

In 1999, a major reform of the social assistance system was introduced in Armenia: 26 fragmented, categorically targeted cash benefits inherited from former Soviet Union were consolidated into a single family poverty benefit. The new program built on the experience -in database and procedures- acquired through the humanitarian aid distribution in the aftermath of the catastrophic 1988 earthquake. This program has proved to be particularly efficient although limited resources allocations (under 1% of GDP in 2003) limit its current overall impact on poverty.

A regularly updated proxy means-testing mechanism: Households are eligible for a poverty benefit according to a formula. The formula is regularly updated based on the findings on the poverty profile from the most recent household survey as well as on the observations of social workers in the field. A qualifying score is assessed for each household depending on the family and family's members "social risk", housing location, household size, car ownership, private business opportunities and overall household income. The Minister of Labour and Social Welfare is responsible for the database that describes the characteristics of the households of applicants. This database is linked to other data bases relevant for cross-checking of the economic and social situation of the families of the applicants (electricity consumption, telephone bills, customs records, the list of pensioners, etc.). Social workers perform an additional screening of the applicants. The benefit is awarded for a period of 12 months. After this period, recipient households have to apply again for assistance and go through the same eligibility testing procedure.

Households' qualifying score is also used when temporary subsidies are introduced: In 1999, when electricity tariff was increased significantly in Armenia, the government decided not to introduce any additional benefit. Instead, households whose "score of needs" was in a certain range were awarded specific compensations for a period of one year.

Local participation and supervision: The program is administered by a nationwide network of territorial centres for social services. In order to increase community involvement, local social protection councils have been established, with representation from NGOs. These councils review applications, consider complaints and allocate one-time benefits to some poor families that have not been entitled to the family poverty benefit.

A relatively efficient program: The system of social assistance in Armenia appears to be relatively efficient: leakage is small (only 9% of the "pre-assistance" non-poor receive benefits), and benefit levels are well targeted (the poorest segments of the population receive on average the highest level of benefit). As a result, 45% of recipients come from the bottom "pre-social assistance" consumption quintile, and receive 51% of the social assistance budget. Overall, 2.4 percentage points of poverty are eliminated for each percentage point of GDP that is spent on transfers (3.1 percentage points in the case of extreme poverty).

Caveats and direction for improvement of screening procedures: According to the Household Survey data of 2001 illiterate household heads, rural landless and rural families with only farming activity are in fact not particularly well covered by social assistance although poverty incidence in these groups is higher than in the rest of the population. Moreover, screening between the poor and the non-poor that do not report any income appears to be particularly difficult. Including the visits of benefit administrators to families as an obligatory element of the eligibility assessment, and increasing the role of the social protection councils by authorizing them to officially audit the decisions of the territorial centres for social services should further strengthen the program.

Note: The Armenia Poverty Assessment (2003) provides a more detailed description of the variables and the formula used.

B. Enhancing the positive welfare impacts and reducing the negative impacts of migration.

?? Facilitating cost effective transfer of remittances for poverty reduction. Given the importance of remittances for household welfare, efforts to ensure reliable, safe and low cost mechanisms to

channel remittances to household members could greatly enhance the positive welfare impacts of migration on family members in Moldova. In addition, some countries have been piloting mechanisms that would facilitate the channeling of remittances through the banking system or for microfinance and thus to facilitate their use for productive investments. Box 11 discusses the El Salvadorian experience with encouraging the use of remittance income in local social investment projects. The relevance of these for the Moldovan experience could be explored. Reducing social costs associated with increased migration. For those- especially children – left behind, a better understanding of the impacts of migration and the changes of family structure is needed. Based on this, some targeted social services and support could be designed. To the extent that migration is associated with higher rates of institutionalization of children, broader reforms that address the high rate of institutionalization in Moldova – essential to address social exclusion – will also likely benefit the children left behind.

?? Reducing personal risks associated with labor migration. Stricter oversight of recruitment agencies to reduce the incidence of trafficking- in collaboration with other governments is called for. International collaboration on channels for legal migration and exchange of information on labor market opportunities could also reduce risks for migrants.

Box 11: El Salvador: including immigrants in local social development

More than 2.5 million Salvadorans live outside their country, and the community of Salvadorans living abroad accounts for approximately 1% of total number of immigrants worldwide. Income from remittances represents a little over 14% of the GNP in El Salvador. Remittance income is generally used for consumption, and as in Moldova, has contributed directly the pulling families out of poverty. In addition, recent studies suggest that an estimated 2-4% of remittance income is reportedly being used for the establishment of micro businesses, a result of special policies for channeling remittances for microfinance. Finally, there were several cases where the money contributed to local social investment projects.

To build on and to continue to encourage the latter trend, the Salvadoran Government delegated the Social Investment Fund for Local Development in El Salvador (FISDL) the responsibility of facilitating the inclusion of the Salvadoran communities outside the country in local development processes. Initially, the FISDL offered information services and linkages with the local environment, in order to show outside communities the priorities and needs of the country’s municipalities. These were based on local participatory processes, and the FISDL offered technical support and communication. In the second stage, FISDL proposed concrete mechanisms at the local and governmental levels to facilitate and expand the social investment coming from Salvadoran communities abroad. This developed into the “Unity for Solidarity Program”.

The objective of this program is to create partnerships between Salvadorans outside the country, the local organizations, and central government, in order to maximize resources aimed at poverty alleviation. At the operational level, the Salvadoran associations and committees outside the country submit one or two projects, specifying the amount of contribution for its implementation. FISDL reviews the inventory of proposals available, and assigns complementary resources, according highest priority to those requests that offer the greatest share of counterpart funding. According to the results to date from 14 rounds of the Unity for Solidarity Program, the Program has implemented 45 projects involving support from Salvadoran organizations outside the country. The total value of the projects is \$11.45 million, of which FISDL contributed \$6.92 million, the Salvadoran organizations abroad provided \$2.13 million, municipal governments \$2.28 million, and other institutions of the central government \$0.12 million. These projects have benefited the poorest (mainly rural) communities, for example, by helping with construction of public services and through the associated provision of temporary employment. Most importantly, they have provided an opportunity for the Salvadoran Diaspora to participate in the development of their communities of origin.

IV. Improving poverty monitoring in Moldova. As Moldova finalizes its Economic Growth and Poverty Reduction Strategy, and looks ahead to implementing it, it will be important to ensure continuous monitoring of poverty and its profile, evaluate the impact of public policies, and adjust public policies

to this information. Recently, many important steps have been taken to strengthen poverty monitoring: plans have been made to improve the sampling frame for the household surveys (HBS and LFS), improved survey instruments in health and education have been piloted, and an official methodology to monitor consumption based poverty and to establish an absolute poverty line for Moldova has been proposed and circulated (Box 12)³⁶. There is need to build on these efforts. Moreover, the value of the poverty monitoring data – whether collected by the DSS or by line ministries – ultimately depends on the analysis and dissemination of the information contained in this data. The following are priorities for further strengthening poverty monitoring in Moldova.

A. Improving the information basis for poverty monitoring

- ?? Urgent implementation of updated population census. The last population census was carried out in 1989, and there have been significant changes in population structure and distribution since then. A new demographic census is critical to obtain reliable information to design social policies. In addition an updated census is essential to provide a reliable and updated sampling frame for existing population based surveys, and in particular the HBS household surveys which are the basic surveys for poverty analysis.
- ?? Expand the regional coverage of poverty information. The planned implementation of a new sample design will expand the regional coverage of the HBS and the LFS, beyond the broad distinctions of rural areas, large cities and small towns. The completion of the population census will permit the construction of a poverty map for Moldova, using state of the art techniques that combine the population census and household surveys.³⁷ This could be a potentially very useful tool to target public investments and policies-based on geographical targeting.
- ?? Strengthen the database to better measure – and monitor – income poverty as well as non-income dimensions of well being: The DSS has initiated efforts to improve the survey instrument to provide a more comprehensive welfare measure of income poverty. It is also essential to implement plans to regularly monitor non-income dimensions of well being; and to monitor – for example health utilization patterns by the poor as health insurance is implemented, or private costs to the poor in education. An important gap is the lack of information on health and nutritional outcomes – ideally by poverty status – from population based surveys. The DSS has started to address some of these issues; further work should emphasize the coordination with appropriate line ministries and agencies addressing public policy in Moldova.

B. Improving institutional arrangements for poverty monitoring and strengthening poverty analysis and dissemination

- ?? Clarify institutional arrangements and strengthen coordination: There is lack of clarity on institutional responsibilities for poverty monitoring and no single agency has been delegated the responsibility of determining the official methodology for the poverty line to be adopted. Multiple agencies continue to develop their own welfare measures based on different approaches, resulting in a variety of (often very different) statistics on poverty – and lack of consensus on which are most appropriate for informing public policy.
- ?? Strengthening poverty analysis and data dissemination: In an important initiative, the DSS has recently made the unit-record HBS data available on its website: an important step to facilitate poverty analysis by interested government and non-government users, and to obtain potentially useful feedback to improve the quality of the data. However, for these to serve their intended

³⁶ Many of these efforts reflect the implementation of the Resolution of the Government of the Republic of Moldova No. 619 of May 16, 2002. There is need to update this resolution and reflect outstanding priorities.

³⁷ These are based on the equally outdated 1996 Presidential electoral lists.

purpose, it will be essential that this be accompanied with sufficient documentation to potential data users. Importantly, capacity for poverty analysis remains limited in Moldova – both within and outside the government and needs to be enhanced – much of the valuable data is simply not used for in-country analysis of poverty and the impact of public policies. It will also be important for the DSS to establish mechanisms to encourage and gather information from data users within the government, as well as from the non-government research community and donors.

Box 12: Recent developments and issues in poverty monitoring in Moldova

- ?? **Sample Listing.** Starting in late 2001, in some urban PSUs, the master listing of households from 1997 had become exhausted and new listings were undertaken to refresh the sample lists. Meanwhile, for other PSUs, the sample list used is the original listing from 1996. The outdated listing of households means that any significant population shifts across strata (or internationally) after 1996 will not be captured in the HBS. Although the HBS is at present the best – and only – source of information on poverty in the country, this outdated sample listing thus *could* affect the extent to which the data are representative of the population, and could introduce a bias in the analysis.
- ?? **Regional Coverage.** The HBS sample consists of 45 PSUs across 3 main strata (as described in box 1). Because the sample is highly clustered, there is a loss in the precision of indicators measured with the survey. Moreover, lower levels of regional disaggregation – which are from the point of view of policy design – are not feasible. While the DSS was considering redesign in the sample that would result in more PSUs and more precise estimates of indicators, this has yet to be implemented.
- ?? **Survey Instruments.** The DSS in 2002 piloted revised HBS survey instrument to strengthen the database in terms of measuring income and non-income dimensions of well-being. These efforts focused on revisions to the education and health modules of the questionnaire. In order to make the HBS timely to the social and economic environment, such initiatives need to be continued and coordinated with ministries and others to revise the HBS while also maintaining comparability.
- ?? **Analysis.** Since the inception of the HBS, the DSS has produced quarterly reports of poverty indicators based on the income information in the HBS. More recently, the Poverty and Policy Monitoring Unit (PPMU) in the Ministry of Economy has calculated poverty measures based on consumption expenditures in the HBS. The Annual Social Report of the Ministry of Labor and Social Protection has sometimes included poverty calculations. This overlap comes at high costs. Repeating the same analysis is not an efficient use of limited human resources. Meanwhile, more extensive analysis of the HBS (such as use of the panel component) has only been undertaken more recently in the context of the background reports for the World Bank.
- ?? **Methods.** The DSS calculates a “Subsistence Minimum” and uses a relative measure of this amount to define the poverty threshold. This threshold is compared with per capita income (not consumption expenditure) to compute poverty statistics. On the other hand, the PPMU follows an approach more closely aligned with the methods of the World Bank for poverty measurement. They measure poverty on the basis of an absolute poverty line and per adult equivalent consumption. The vast differences in methods leads to differences in poverty rates and (sometimes) profiles.
- ?? **Dissemination.** The unit-record HBS data have recently been made available on the DSS website (www.statistica.md), although they are not accompanied by much documentation to facilitate their use. Reports by the PPMU are available on the internet.

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- World Bank, 2004c. *Moldova Investment Climate Assessment*, Washington, D.C.
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